

CINEMATOGRAPHY IN PRODUCTIONS

of the curriculum of cinema and audiovisual schools and the GLOBAL DURATION OF STUDIES

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Introduction.

In the article "Teaching cinematography in film and audiovisual schools" (Jarry, 2011) (1), I compared the organization of the pedagogical curriculum of cinematography in thirteen European film and audiovisual schools, as regards the first three years of study at Bachelor level under the European directive of 1999, so-called Bologna.

I will now complete this research, still carrying on the work of cinematography, but this time in the productions included in the programs of these first three years. Meanwhile, I will extend it to the curriculum that go beyond to fourth and fifth year, which match the Master's level under the directive of Bologna. I will also investigate on some cycles that go till the Doctorate.

Why combine these two points?

For students, productions mean primarily making films. It is what they "look for when coming" to these schools. They expect it with great impatience, especially for the shooting, and they give it a particular importance. In the curriculum, mostly at the beginning, in the first but also in the second year, these productions are over all intended for the implementation in real conditions of the major basic principles taught in classes. It is then important that they are supervised by specifications that follow a very accurate gradual progression in both the artistic ambitions and the structures of narratives, and in the provision of practical means.

On the other hand, as we have seen (Jarry, 2011), for the third year, far more focused on the graduation productions where each holds the position of his specialization, students already apply with much greater confidence the methods and the working protocols very close to real conditions of their future profession. But, in the meantime, they realize that it is still a long way to go, as far as these films of graduation may be sent to festivals where they find themselves competing alongside short films produced by production companies. Often, students live with deep apprehension and intense emotion this confrontation with an audience that is one of their first direct and concrete contacts with the professional world, which at the end of bachelor program may already be open to them. Hence, the needs perceived by some to improve and continue their studies, one or two years or more as appropriate, to feel better armed before taking their first jobs. The remark of Peter Slansky of HFF Munich (2011) is very eloquent when he argues on account of the fourth year in his school: "when they [students] show the greatest interest..." This assessment also retains its full relevance if it is so narrowly reversed "when the school (studies) becomes even more interesting for students."

Method.

Again, I work on information gathered from the officials of schools that I've visited, (Jarry, 2011) - four state colleges, four schools within universities, five private or public schools - where I interviewed officials and teachers of cinematography departments, teachers of directing and of editing, as well as study directors and general managers. I also met with students, attended classes and the filming preparation sessions, assisted at shootings, at faculty meetings and at directory board meetings. I was as well invited to screenings and to be a jury member of

graduation film screenings. To supplement this information, I exchanged emails with colleagues, consulted the information brochures and relevant websites.

Today I extend this study to four other European state schools in Germany, Czech Republic, Slovakia and France: the HFF Potsdam, the FAMU, the VSMU, and the ESAV. (See Appendixes 1 to 3)

Productions in the curriculum of the first three years - the bachelor level.

In this profession, productions fall into two broad areas, the fiction and the real. Fiction evokes the movies, the feature films, the cinema on the big screen, without minimizing, it also makes its specific marks on the small screen, with TV movies, series and sitcoms. As for the real, it covers the news stories, magazines, documentaries, broadcasted almost exclusively on television, and without minimizing either, that the documentary is still present in the cinemas nowadays.

The Fiction and the Real.

These two areas are found in all the investigated pedagogical programs, but with significant differences concerning the priority given to each of them. For some schools, fiction and real are two distinct specializations, particularly in Germany, at FABW, at HFF Munich, and at HFF Potsdam, but also outside of Germany, at FAMU and VSMU. However, for others like, INSAS, IAD, ARFIS, WFS, 3iS, they cover both in the same programs simultaneously. So it is for the LFS, a news reporting, specifically mentioned as "non-fiction", is planned at the end of the first year. The goal is to expose students to the filming of "real world" (brochure, 2010) subjects. But at this beginning of the program; special attention is precisely put on the fiction as for learning the first basic concepts. Some organizations are more specific. At ELO, in the first year, in parallel of fiction, the initiation of the shooting of real subjects is an approach in mini DV. At the ESRA, the documentary appears only in third year and only in television directing department, where a period of two months is dedicated. We can notice the same orientation, within the first two years' multidisciplinary program, fiction is preferred for the acquisition of fundamental principles. At the SAS on the contrary, the documentary has in the curriculum a much more constant place from first to fourth grade. In ESAV, production of real images, named as "portrait", is also scheduled for the first year. The pedagogical aim is clearly stated by Hubert Guipouy (2011), "to unsettle the border between fiction and documentary." This question, appeared at the dawn of cinema industry, resurfaces often and deserves our attention. The mainstreams of documentary have each brought a different response. I find it particularly fair and appropriate that this substantive issue is a central concern of school's pedagogical program. Somehow, the ESAV also brings its response by choosing (before this "portrait") a short fiction as the very first production. It is a film that must be shot in editing order, entitled "16mm gâchette" ("16mm trigger"), for it is shot in 16mm standard with a Paillard Bolex camera. The film is screened as it is shot, without any cut in editing in order to put students in the situation to discover "the power of direct cut [editing]", Hubert Guipouy (2011). The affirmation of this major basic principle of putting to images is still very relevant today, so to keep the link between shooting and editing, which can be disrupted with current technology that the non-linear editing can offer.

Already we can identify an important pedagogical axis: a clear priority for fiction for the first productions in teaching programs. It is actually more favorable to the discovery of film language, for the cinematography of course, but also for other disciplines. This choice is also found implicitly in all schools that have a specialization in documentary, where students can also choose to make a fiction within this curriculum. This is the case at the HFF Munich, for the third film in the sixth semester, on which the remark of Heiner Stadler (2011) is quite revealing: "nearly half of the students choose a topic of short fiction, to assess their ability to tell a story ...

[their first two films have been documentaries]".

Shooting the real demands being able to adapt oneself very quickly in the field where the shooting conditions evolve and change very often and sometimes at the last moment. It is then logical that beginners, not being yet capable to set up the alternatives very quickly, and meanwhile, have to keep the coherence of the subject and, in parallel to apply technical rigors that they do not master fully, have much difficulty to "bring back" the rushes (either images or sounds) that are cuttable. Among these, one of the greatest for them is to restructure a script editing in situation that is coherent to the subject. In light of these findings, an important choice was made in 3iS where originally the first production was a reportage. After thinking very specifically about this point, the pedagogical team has finally decided, in September 2005, replacing it by a short fiction of ninety seconds, with one constraint that it is directed with six shots direct cut (as one can see again) so that students can immediately visualize and discover the relationship between the final editing and the script editing, which is previously worked during supervised preparation sessions. They are thus in a better position to acquire more precisely the reflex about the choice of focal length, of camera positions, of shooting angles and of the most appropriate shot sizes. After several years of practice, this option turns out very satisfactory and has been confirmed. From the autumn of 2011, in order to perfect the effectiveness of this first putting to images around a subject, the "6 shots" has become an "8 shots" so to give a little more ease in the narrative, but it remains on the same principle and keeps the same duration. However, the shooting is not supervised.

The shock of the shooting.

A production, it is not just the shooting. It composes of several major chronological stages: writing, adaptation, preparation, shooting, editing, postproduction, color grading and not to forget the mixing. In all these schools, from the initiation stage, the emphasis has been put on the importance of each stage, and especially for the preparation, which is determining for the shooting, by far the most eagerly anticipated by students, to take place optimally. Some schools even give it particular importance, like the ARFIS or WFS, where it is supervised systematically by all the heads of different departments, so "that many trainers' eyes rest on the project...", Peter Hort, WFS (2008). In ELO, complete files are made obligatorily, with photos and storyboards. At the VSMU too, the preparation work is greatly enhanced after the first script editing.

But, despite all that, the shooting is experienced as a real "shock" for students. Unlike the very first exercises of camera handling, they discover that the application of techniques and principles, which they have begun to learn, is totally conditioned by the way "to tell the story". It is certainly obvious, even a truism, but in practice at the beginning, it is far to be the case. In short, they discover actually in real situation that the rules of cinematography language are at the service of the subject chosen by the direction. This is what expresses quite accurately Laora Bardos (IAD), when she evokes the supervision of her students, regarding their fictions of the second year: "get out of the paper work and plunge into the heart of the intentions of the director..." (2011).

This awareness arises especially with the camera, when students look through the viewfinder, when it is set up, with a chosen focal length, in the reality of a set, I would even say in the topography of a set. They are then faced with a concrete image and no longer with the idea that they could still make mentally at the stage of preparation. They measure the difference between what "the camera sees" and what they could see in their imagination. This is first of all quite confusing for them. "They [students] discover the impact of a focal length only from the second year..." Denis Morel, ESRA (2010).

The supervision of teachers shows then all its worth and its strength, it is to guide them to train their eyes as a future cameraman and a future director of photography, but also as a future

director for those who choose this profession; teaching them to look through the viewfinder, not as they use to do now: having a rapid and general glance on the screen of mobile phone or digital photo camera held at arm's length, but by affixing their eyes accurately and professionally to the eyepiece, no longer see an image trivially and mundanely, but to learn to look at it in the smallest details, to analyze it so to conceive it with precision and yet, at the same time, caring the sense and the impact it can have on an audience.

With these early films, students must first visually take possession, of an environment and manage to set up there an action to make it "pass through the lens". More than on the substance of the filmed story, which certainly must maintain its coherence, their attention at this stage should be focused on the fundamentals of shooting. This is what we find at ESRA who has chosen an audio slideshow based on still photos as the first production of the curriculum. Students should not employ actors to prevent the directing taking up too much. They are then in the conditions and in the frame of mind that are favorable to discover, above all, the vast field of possibilities of meanings that an image can represent so to make their subject understandable.

For the same purpose in the first year several schools made a similar choice. In WFS, there is no actual production. Shot frames are still exercises, some of which can be based on still photos (24x36). In IAD, there is also no established request of production, but students have the opportunity to practice on a short fiction in 16mm standard, sometimes silent, shot then edited within each specialization group, two to three minutes of final duration, with six minutes of rushes at the start. An instructor supervises them approximately half the time of the shooting. The screening for the critique takes place only into each department. Such a principle exists also in ELO. Still in the first year, the images, either shot on film or with digital Alexa camera, remain in the form of rushes. And so it is in the second year. "Instead of making a rather big film...we make shorter assignments which will grow to be bigger assignments and finally end up being the film in the third year finalizing everything..." Timo Heinänen (2012). Students can then evaluate during the screening with lecturers, who are present also during the shooting, if these shots were shot with the minimum required quality for being cuttable.

This arrangement offers the advantage to introduce students to the richness that can be obtained from a session of rushes, in which the vast majority of the unit met in working session, out of the set, giving the distance that allows to have an exceptional direct exchange, where everyone, seeing the pictures and listening to the direct sounds, may clarify one's intentions, wishes, points of views.... But above all, each unit member can fully listen to the suggestions or arguments that are put forward to decide to bring rectifications or not, as for the technical choices but especially in terms of aesthetic choices related to the intentions of direction, concerning the scenes to shoot in the following days. Unfortunately in today's professional reality, these sessions are less and less carried out in this form: daily, at the end of each shooting day.

The "fake film".

Some schools have implemented an original and interesting module that could be called: "Learn to shoot...".

At the ESRA, the production following the slideshow in the first year is a fiction of about five minutes, in movie, in super 16mm. But before this shooting, each unit is put under real conditions for another shooting, which acts as a model, allowing a full-scale dress rehearsal, in order to reveal the shortcomings of beginners, "for avoiding to uncover them on the set [of real film]", Denis Morel (2010). Students must conceive a scenario of a simple story whose subject is free of choice, but it must be different from the one for the "real film". They have two days for shooting with the camera, lighting and sound equipment, which is identical to those that will be used on production. They must plan indoor and outdoor scenes so to familiarize with the

artistic principles and techniques of light and as well in manipulating of lighting equipment in divers situations. As still in the multidisciplinary year, they must also swap posts from one scene to another in order to practice each key posts, in cinematography, in sound and also that of gaffer. On the set of "real film", each deals with his/her precise function. For this practical, two instructors supervise them, one for cinematography and the other for sound.

This "fake film" will be edited with the sound, without going further to the mixing. It will then be analyzed and commented during a screening-critique session with teachers from various disciplines, to fully put in evidence on the screen the shortcomings and the observed mistakes and also to assess the merits or demerits of the solutions chosen on the set.

The ZHDK develops a module of an equivalent principle, which also plays the role of a model the "10 images". "This is a seminar designed as a shooting... The story is the structure... The aim is not the finished product but the process [of production]...", Pierre Mennel (2011). This is a short film with sound, of a duration ranging from thirty seconds to two minutes, whose history must be understood in ten edited shots. Unlike the previous example, it is not for beginners and is scheduled for the second year and the third year, but only for students of the specialization in cinematography. Besides the work of cinematography, each of them must take on all stages: writing, directing, shooting, and editing; so to better understand the other disciplines, practicing them. Throughout this exercise, they are supervised by the head of the cinematography department to apply the different light atmospheres that occur in almost all movies: the various effects of day, night, outdoors, indoors with artificial light, direct and reflected lighting, and the filtering. The shooting lasts from one to two days.

In addition to reveal and to allow to bypass the initial hurdles of beginners, in one hand or in the other hand to confirm and to push further the first gained knowledge, these experimental exercises are of great interest. The students edit frames they shot by themselves, they are thus able to note directly on the editing table or the editing board that it is impossible to modify them, therefore, have to be used as they are. They can then understand in depth that the frames are created during the shooting and therefore integrate better the notion of original frame and the need to work with precision and rigor that are required on the set. I make it clear to my students particularly that: "in the shooting, it is still possible to.... But at editing, it is not anymore the case...".

To succeed as early as possible in making this direct link between the shooting and the editing is essential for those who choose cinematography as specialization. It allows to initiate the process of understanding regarding how much work that must be made for lighting and for exposure and as well to which part of work should be left to the color grading, thus facilitating their dialogue with future directors and future producers to decide jointly, for example, whether to take the time to make one more shot or not; or else, to succeed in convincing them to spend some extra dozen of minutes necessary to refine a lighting, thereby, making the desired effect more powerful on the screen than, perhaps, with a post production process.

It goes without saying that the current evolution of nonlinear editing (NLE) and digital grading in post production extend considerably the scope of possible corrections in brightness, in colorimetric and in contrast, but also in terms of reframing post shooting, and even sharpness. Nevertheless, even at this technology level, such modifications have limitations. One of the major pedagogical goals of teachers and lecturers will be making it clear to students that NOT "all things can be made up in editing and/or in post production", preconceived ideas fairly widespread now amongst the students when entering school.

From this first productions stage, I put the emphasis on the fundamental conditions that must be satisfied in the shooting, such as reframing the shot, a reflex that students do not have naturally yet. They need a lot of time to gauge its importance, after attending many screening critique sessions and after facing practical difficulties regarding matches from shots to shots in

editing. Precise reframing is one of the essential elements in shooting to capture the audience's attention. In this regard, note that one of the first productions of ESAV - a fiction of about ten minutes, named "premier baiser" ("first kiss"), which principle is, to be designed and shot in editing order with solely fixed shots - includes also reframing in the basic principles. For that, I again stressed the importance with which one should look very precisely the picture through the viewfinder to acquire, for these future professionals, the intimacy between a cameraman and his frame that can only be gained by affixing closely the eye to the eyepiece. The actual generalization of the monitors on the sets does not tend to preserve it. This personal discipline, which so far gives the cameraman a chance to be totally abstracted from the environment of the set so to be fully and solely concentrated on the action as in a movie theater, seems to require a pretty big effort from students. I remain amazed at how many times that, from a year to another, I have to tell them systematically to "stick their eye to the eyepiece...".

To confirm the interest represented by these rehearsals shootings, I make a break from the cinematography and investigate the section of the specialization of script-direction assistantship, created recently (in 2008) and provided in the third year's program in 3iS, where such a "model module" has been set up. Students must, based on a scene in an existing film, to prepare and to shoot it in video SD with a minimum of means to give the priority to the acquisition on situation of techniques and practices that they will need to apply on their graduation films, coming very soon. They occupy, there again, all the positions in addition to their own specialization and are supervised simultaneously by two instructors - an assistant director and a continuity girl, who help them to experience, in preparation and on the shooting, the reality of the functioning of a set what they particularly appreciate. To perfect the effectiveness of this learning principle, this video sequence will also be edited and used as a base for assessment debriefings after the screening of the actual production.

The practical details of the organization of these productions.

The durations of various films.

The final durations are very important, even crucial, because they have a direct impact on the script and also on the way to shoot and to implement. The vast majority of surveyed schools have made almost equivalent choices regarding this point. In the first year, the fictions are about five to six minutes. In the second year, they are around eight to nine minutes, and in the third year, between fifteen and twenty minutes, with some exceptions up to thirty minutes. It should be noted that the film durations in Master program are very similar to that of the third year at the end of bachelor. At INSAS, the choices are more flexible; the durations can be of three to fifteen minutes. "Time is not a guarantee of quality..., we work on a more reflection / conception oriented objective...", Serge Hannecart (2011). It should be however noted that, in HFF Munich, the films are in general longer: the first year, around twelve minutes; up to twenty minutes maximum for the fiction produced in the second year, and up to forty-five minutes for documentaries. In the third year, the duration is left free of choice. In the fourth year, for the fiction department, the limit is set between thirty and sixty minutes and totally free of choice for the documentary department. These durations are closely related to the film distribution standards, as most graduation films from this school are co-produced with professional structures, thus leading them to adopt some of their measures, as we will see further on.

Unit composition.

In the first year, students are generally left free to build up their own team. At this stage, they will favour the criterion of affinities. The pedagogical officials validate this fact mostly to avoid difficulties of understanding, so as well not to impede too much the discovery of the reality of the relations among different posts on a set. Yet, they reserve themselves the right for "a say...

to ensure a fair and impartial distribution...", Alessandro Usai, IAD (2011), and sometimes, to break the 'deadlock' when the relations deteriorate too badly. However, it is important and fair to note that this criterion of affinity is not the only and sole highlighted. Many students take advantage of this flexibility to perform in a different post from that is felt for their future specialization, thus giving themselves other elements of comparison in order to confirm or not their first choice; also giving themselves the opportunities to benefit from additional and complementary experience during their studies.

In the second year, the importance of the responsibility of each post held on the set and the importance of the coordination among them will be used as the criteria for forming units. The experience of the previous year allows students to better understand the role of each post. Those who direct begin to have a better overview in the part they should spend on the technical arrangement and the part that they must reserve to work with their actors, without losing sight on keeping the cohesion of their films. All students increasingly appreciate the usefulness of the work of the assistant director. It is the same for that of the continuity girl and his invaluable relation with the cinematography unit. The work for live sound on the set, including booms and microphones positions, is more accurately felt; and all the part concerning room tones and the sound atmosphere, the techniques and methods of mixing starts to be thorough at this stage. For cinematography, students are brought to practice as director of photography and as cameraman with more precisions; they now see better the complementarities of each post. The work in film, still quite present (Jarry, 2011), also leads them to discover the post of the assistant operator in all its dimensions.

In some schools, more stringent rules are applied. In ARFIS, from the second year, students must submit a dossier to justify their wishes to assume certain posts, such as the director of photography. By taking into account the student's attendance record, his involvement in the studies and his interest in the cinematography, a committee composed of only teachers will validate or not his request. It is the same doing in WFS, where a dossier of motivation will also be asked for the same purpose and will be studied by all teachers before being accepted.

In the third year, students occupy effectively the chosen post for their specialty. This does not prevent, sometimes, difficult relations to happen within some units. As the courses at this stage are much centered on the development of the productions, the instructors that supervise them have more time to smooth over the disagreements. At this level, it becomes easier to highlight the professional arguments of which students are now much more receptive to solve these relation problems in the best conditions.

At HFF Munich, the productions as well as the general courses are organized within each department (Jarry, 2011). It is hence the same for the unit building. However the curriculum for students of the cinematography section envisages that, in addition to the films of their specialization, from the third and the fourth years, but also sometimes in the first and the second year, they may participate in the shootings of the fiction and documentary departments. At VSMU too, students of the cinematography specialization are brought to take the post of cameraman and of director of photography in the sections specializing in direction of fiction and direction of documentary of the same grade.

As the numbers of students are quite different from one school to another, pedagogical officials must ensure to maintain a coherent distribution of posts necessary for each shooting group. Though at ELO, "the building [of units] is done automatically, based on the number of students...", Kirsi Rinne, (2010), in most other schools, there is a general way, widespread enough, to build well-balanced units : the posts of gaffer, grip are often held by students of early years, thus, they can benefit from the experience of the senior students and especially from the guidance of lecturers. At 3iS, it is more of an option for first graders, depending on the needs of the productions of the second and third years; but also in accordance with their availability vis-à-vis their schedules. However, in the schedule of the preparatory class, the

participation in a shooting of the third year is arranged for each student. Some schools formalize this principle even more clearly. In WFS, the participation of second year students in the shooting of the third year is inscribed in the programs. At FAMU, more than elsewhere, "it is mandatory..." Ladislav Sery (2011), and it is also compulsory for students of higher grades to be, for example, directors of photography or cameraman on productions of lower graders; unlike other schools that do not practice the reinforcement of teams from one year to another in this sense. In the LFS, we observe also this principle, but even much more integrated into the general organization of courses where students occupy different leading posts in a unit, following a planned regular alternation, for the production attached to each term, structuring the progress of the studies (Jarry, 2011).

This kind of organisation becomes more systematical for the master program when students already have a consistent experience. At ZHDK, students in third year of bachelor are directors of photography for master students of direction. At IAD and INSAS, with a close principle, curricula are harmonized so that students in master of cinematography can do the shootings in master of direction. However, at FAMU, arrived at this stage of studies, "it is rather exceptional," Ladislav Sery (2011).

The choice of the scripts of fictions.

In the first year, students are rather free for the content of the story they build in their scripts. But for these first putting to images, it is very important to make sure that the subjects are not too close to their personal life, because they do not yet have the experience or hindsight to ensure that their energy is not mobilized solely on this concern, potentially risky in diverting their concentration on practicing fundamental methods of work, which must remain a priority at this stage. To avoid this too personal involvement, general themes are often imposed, from which the subject will be conceived and structured. This is the case in VSMU where they are obligatory until the third year, for example, "the chase or the gift for Grandma..." Maria Ridzonova Ferenchuova (2011). Yet, students have a second possibility, they can choose the subject themselves, but they must respect a specific genre: comedy, musical film, portrait...etc. This original arrangement merit our attention because it offers the advantage in learning to keep the coherence of a narrative, while leaving some freedom that these beginners need at the same time. The INSAS also establishes, for the first two years, the principle of a general guideline. Afterwards, it will not be compelled, especially not for the graduation film.

For the second year, the surveyed schools are divided following two diametrically opposed options. Some, the bigger group, keep the principle of free choice on the subjects of scenarios. This is the case, both for the fiction department and the documentary department, at the HFF Potsdam, the FAMU, and also the HFF Munich. It is the same situation in ELO, ZHDK and ESRA. And also for 3iS, nevertheless, there is a particular feature to be taken into consideration: since 2010, the pedagogical officials has shifted the second year's fiction production to the television series of three episodes, each of about eight minutes. From one episode to another, students of the same unit exchange their posts. So each time there will be a different director, who keeps his freedom in writing but must simultaneously inscribe it in the principle of the general theme, which is in fact imposed. Vincent Mottez (3iS) plans for next year to entrust the writing of these episodes to students of the future specialization scenario, due to open in October 2012.

However some schools clearly prefer the principle of imposing the scenarios, though applied with different modalities. The IAD has taken this approach for its only fiction production in the second year. It has chosen the remakes in order to avoid the choice of too close subjects. This putting to images, for which we will discuss in details later, is based on a sequence of an existing film, therefore, the problem of too deep personal involvement in the content is no longer a concern. It is then important and interesting to note that the investment of students is nonetheless equally strong, as stated Alessandro Usai (2011), "Anyway, every year, they

[students] amaze us with their imagination and their willingness to carry out their little movie...", when he refers to a preparation session designated to select the sequence to recreate.

The ARFIS and WFS take the same direction but with a more strict principle: students who write the scenario do not direct the film. And inversely, those who direct must not direct a scenario they have written themselves. It is interesting to note that these two schools do not have screenwriting specialization in their respective curriculum, and yet, they apply the same principle as those who developed these departments, such as the HFF Munich, HFF Potsdam, FAMU and the VSMU where scenarios are written but not systematically used for directing, so to better differentiate the writing and directing.

From the third year, students are able to tackle topics and structures of narrative more ambitiously, "with increasing difficulties," Denis Morel (2011), which then allows them to approach more personal topics with more confidence, as they are now better tuned in to the advices given by the instructors who accompany them in writing, when they are warned of the pitfalls they may encounter.

The limits regarding the technical means.

All this brings me back a bit more precisely to the cinematography concerning the camera equipment available for these various productions. The cinematography materials, film 16mm, Super 16mm, 35mm, or video SD, HD or digital cinema, are generally determined when programs are established, (Jarry, 2011). From the third year and sometimes even from the second year, students are involved in making these choices.

In terms of grip and lighting equipment of, which can be quite large and imposing, it is important to limit the scale at the stage of the first year and even in second year to avoid the too ambitious and too heavy installations, which by nature retain students' interests but also tend to make them complacent about the importance of the application of fundamental principles, such as the places for camera, the angles to shoot, and the accuracy of the shot sizes.

Taking for example the tracks and dollies, so keenly desired, it is wise not to encourage its use for these early productions. Why avoid it? There are several different reasons. First, students in charge with shooting and machinery are not well used to the installation of the equipment, which will require much time and above all may take up their full attention. Choosing where to put a track or a dolly is only effective when one has actually fully understood what a point of views represents and why it may be necessary to vary it by changing the point of view of the lens, and in doing so, move the camera. In parallel, students in directing have not gained enough overall sense of the rhythm of a film to anticipate the consequences on the final editing that, vis-à-vis the shot durations, the internal durations of actions and internal durations of actors' movements, these related camera movements would induce. It has to wait till the second year, even the third I would say, so that these concepts begin to be clearly better perceived.

It is the same for the equipment of lighting. In the first and also the second year, students design the lighting too unilaterally from the point of view of the director of photography. They often have good ideas that they firmly put forward to justify the use of an important device. To limit allocated equipment teaches them to adapt to the realities of film making, making them aware that achieving the artistic goals is far from being dependent only on the number and power of the spotlight.

From the third year, however, they are able to design their lighting plans, reconciling more easily the wishes of direction and the limits of equipment; specially as in most schools, at this stage, the extra equipment rentals are possible according to a defined budget managed jointly with the unit. They are then in face with questions concerning the directing, the

cinematography and the production that arise on all film, making, such as: for which scene, a track or a dolly? Shall we rather favour a reinforcement of light on another scene?...etc. To bring the proper answer, the help of instructors or supervisors will be essential.

Supervision of students on productions.

I shall put aside the monitoring in editing and in post-production, where in general the students are followed up closely. For practical reasons, the habitual teachers of these disciplines often ensure the supervision; it is to facilitate a regular presence in the rooms throughout the periods of editing, which are actually quite long. At this stage while the film is taking up its final form, the availability of instructors is highly expected by students, in order to view the different intermediate versions of the film together. An outside view is indispensable to obtaining advices to make different choices. It is the same for the color grading in the laboratory.

As we have seen, the most important and the most difficult step remains the shooting. Students approach it with a great desire for freedom, as "a full moment for themselves", but also with great concern as to how to proceed. To guide them, their instructors play a key role. It seems to me interesting and important to question about the very good remark of Roland Mönch: "it is difficult to find a place for the instructor on the set ..." (2009). It is true indeed. This is THE key point from which the surveyed schools differ most radically.

For still a fairly large majority of them, about two-thirds, in Germany, in Great Britain, in Czech Republic, in Slovakia and in Switzerland, the instructors accompany the projects primarily in the preparation stage and are not usually present on the set, only occasionally. Notably at ZHDK, "the responsibility [on students] should be part of pedagogical program..." Lucie Bader, ZHDK, (2008); "The preparation should allow to anticipate problems at most..." Peter Mennel, ZHDK (2008). At SAS too, the presence of instructors is important in preparation and they are not on the shootings. Similarly at DFFB, "they [students] call me in case of difficulties... when I go on the set, it's more to reassure them..." Sophie Maintigneux (2009). From a similar point of view, Harriet Cox in LFS (2009) estimates that there are "moments for teaching..." and later while shooting, students must apply it directly in situation, making their own decisions. Letting them make their own mistakes remains a major teaching principle of this school. However, Harriet Cox guides them directly on the set for the pre-lighting. For other schools, the instructor may be present but he stays behind to supervise through observing and makes comments during debriefings. This is the case at FAMU, "rather by far... more particularly for the lighting...", Ladislav Sery (2011). At the VSMU, the guideline is also "rather staying far from...". However, note that instructors are present to the sequences lit in the studio but are not for those shot outdoors.

It is important to note, with these examples, that mentoring is mainly necessary for the practical and the design of lighting.

In Belgium and in France namely, the other schools have different approaches. The instructors are much more directly involved during the course of shooting. Jerome Gay (ARFIS) thus argues this presence from the first year, "otherwise they [students] do not know..." (2008).

This raises the question of the number of instructors from different disciplines present simultaneously on the same production. In ARFIS, they are two on each film, one for the cinematography and the other for the sound and, at the same time, the production and the directing are overseen by the same person – an assistant director, who punctually shows up on each shooting in collaboration with the teacher in production. This arrangement is the same for the second year. At 3iS, within three years' courses, there is only one instructor from the preparation to the shooting, he supervises students in all disciplines: directing, cinematography and sound; he must also see to the general problems of productions. It is the

same at ESRA where, however, the pedagogical approach is different: the instructor is on the set but his participation is at the request of students, again, with this, we find the principle "by far...".

The choice of ELO appears to be a good balance of these two options: "in first year, the instructors [of several disciplines] are present, but set back...; in the second year, on the request...; in the third year, it is not necessary", Timo Heinänen (2010).

Note that, at ENSLL (2) and FEMIS (2) in France, several professionals of different posts are also present simultaneously with students in certain productions.

It is important to observe that this direct supervision on the set diminish gradually along with the progress in the curriculum; students have much more practice in the third year. Hannecart Serge (2011) states: "much in the first year and less and less over the years..." and also adds, as for the third year, "discrete visit [of the instructor]...to launch the shooting..." (2010). However, the ARFIS goes against this general practice. In the third year mentoring for the preparation and the shooting is still important. But the instructors are then chosen out of those students already have in theory courses to teach them to solve problems that they will encounter, facing professionals they do not know, as they will need to do when school will (imminent) come out.

For some schools, namely the HFF Munich, FAMU and the VSMU, but also the FABW, following different years, the production department may be closely involved in supervising the production, especially at HFF Potsdam.

The IAD has chosen a very enhanced supervision of students for the remakes, the only fiction production in the second year that as we recall is considered as the most difficult year (Jarry, 2011). This principle being put into practice for many years in many schools (often also called "à la manière de..." : "in the way of...") consists of recreating a specific scene from an existing film, like the practice of copying a master's piece in the schools of painting. The instructors will be five in number on the set, one for each main post: for the directing, for the cinematography, for the sound, and for the continuity girl; and also, for a punctual reinforcement of the directing on certain scenes, for directing actors. "It costs us a lot..." Michel Wouters, (2008). But it is of great benefits for students regarding the availability that each of these professionals will be able to grant them. This synergy will give them the advantage to acquire, quickly and with great efficiency, the overview of how a shooting crew work on real situation, which I think is the biggest challenge for them.

Having attended the shootings of these remakes, I saw the richness and the preciseness that this arrangement may bring at the mid-term of undergraduate program. I will develop in much greater details some of these gracious moments that the students were able to live with their instructors.

Take firstly the example of the post of assistant director, which is particularly complex to learn. After an initial set up, when everyone goes back to the starting point for the next, the instructor in directing can, with peace in mind knowing that his colleagues are looking after other students, thus ensuring at best all risk of wavering, take the time necessary and essential to show the person assuming this position what are the different problems of each person busying across the set at that very moment; to teach him to rank them in order of importance and priority and, therefore, can explain to him what are the methods to refocus the unit, which are actually not so complicated but are far from appearing as such for beginners; and, if only, just to teach him the right way and the right time to ask: "the silence, please ...". They will be able to say it efficiently and with astonishment only when they finally realized that this sentence, yet highly symbolic in film making, is primarily a marker and not an invective. During the same time, the instructor responsible for the directing of actors can show and

imitate how an actor's movement would be more in accordance with the meaning of the scene. Students and actors mobilized all their attention and lost neither a gesture nor a word of the explanation. The students working as boom operators can have at their disposition totally the instructor of the sound to guide them, through the rehearsals and the numerous takes, to acquire the so difficult physical posture of arms extended in the air, while holding key positions for microphone with precision at any given moment of the shot; and to teach them at the same time how to get about to move their boom properly during camera movement. Another interesting example, the instructor of cinematography can also take time to evoke, from the experience of the moment, broader and more specific issues but no less crucial, such as the difference between reframing and camera movements: "reframing, it is like breathing..."Alessandro Usai (2009), or more: "framing with the handle is more instinctive, using the cranks proceeds with more of the reflection...", Alessandro Usai (2008), there again, the comments were listened with great attention. Over all, students with one certain specialization can also fully enjoy the contributions of supervisors of other disciplines, as with this example where the continuity girl instructor had been able to take time to explain in detail jointly to the student cameraman as well as the director one that not only the way one frames a character in foreground over the shoulder is important but he must also ensure that the gesture of this actor is directed with the same accuracy for the reverse shots, exactly as it was for the shot.

To enhance the efficiency of the supervision of this production, in the pedagogical specifications, for each shooting day, the assigned schedule should be strictly respected. There is no overflow allowed. The shooting day starts at 9 a.m. and ends at 6 p.m., not a minute more, no matter the work plan is achieved or not. If all shots have not had time to be shot, students will have to measure the consequences in editing at first and in the screening later. This constraint may seem rough at first. But the accurate control of the course of a shooting day is also fully in line with the apprenticeship of teamwork on a set. To overcome the limitation of time, students tend to want to go a little too fast at the expense of the rigor that they are just about to integrate and to take risk in rushing some shots, so to nonetheless "finish the day". Four to five instructors on site are really not too much to coach them how to set up a good working tempo and especially how to hold it to the end, while respecting the fundamental and essential basis to preserve the quality of the putting to images.

Note that at ESRA we also found this principle of strict control on the duration of a shooting day. Pedagogical board has set it for nine hours for all kinds of productions, so to bring students, as early as possible, to face the professional contingencies. For any overrun, the instructor on set must obtain the agreement of the production administration, which, before giving its approval, looks closely at the reason to see whether the setback could have been anticipated at the stage of preparation.

Productions devoted to artistic creation.

We have already seen that artistic concerns play a privileged role at the core of the curriculum in all these schools (Jarry, 2011). We have also just seen that students express a strong demand to deepen their knowledge of the main principles of lighting set-up. Along with learning rigorous and indispensable working methods, it is essential that they can express their artistic sense and develop it by granting the time for research. To this end, an interesting solution has been implemented in several schools.

Rather short productions of three to five minutes are dedicated to the creation and also to experimentation, like the principle of freestyle figure in ice-skating. Recall that if we speak of freestyle figures, this sport also has its compulsory figures in parallel, which are taken into account for the final result. At ELO, from the second year, the initiation on video filming is centered on two fictions, for which a large autonomy is allowed to develop creativity. These

assignments named "sketches" are shot with DSLR and in the third year, named "exercises of atmosphere", they are free to be shot with super 16mm, but must follow the guideline of a giving topic like "telling a story in light", which gives priority to the work of lighting, whose importance is once again highlighted. At 3iS, in 2005, I introduced in the third year of cinematography specialization; a production called the "parti pris" (bias option), it aims at combining constraints and free aesthetic creation around a bias option of frame and/or light. Students of cinematography should also assume design, directing and editing, as is the case for the "10 images" at ZHDK, mentioned earlier. Similarly, at IAD, students of cinematography in third grade shall ensure the directing for a shooting module of documentary dedicated to the section of their specialization. After having gained their experience in fiction, it is possible to give them more autonomy to film real subjects of their choice, in favoring cinematography quality distinctively, as shown in the specifications, "be able to conceive photography in the purpose of reporting an event that he [the cameraman] transmits to the audience according to his point of view..."(IAD documentation, 2011). In the same way, at the INSAS, in the third specialized cinematography year, a production must be shot in super 16mm, blown up in 35mm, with only natural day light, in a chosen indoor set, without any artificial lights adding. Here again a theme must followed, as "one afternoon in spring", Serge Hannecart (2010).

The Live Broadcasts on TV

Most schools include in their programs specific periods devoted to TV shows shot on live; as after graduation, students may find some of their first jobs in this type of production. It is therefore important for them to have a first experience on the specificity of devices, set and control room working simultaneously and in real time.

This module is generally scheduled at the end of bachelor program. The working environment is new to most disciplines, not only for the directing, for which the work is radically different from that is practiced in fiction. So it is for the continuity girl job, which is totally another one. Regarding the sound, its facilities are close to those in the sound recording studio, but with extensive use of lapel microphones. In contrast, for cinematography, there are important differences: though the use of light sources is based on the same principles, an adaptation should be made as to how to choose the main lights and back lights directions in order to meet the different shooting axes of the three, four and five (or more) cameras. The principles of the composition of frames and the focal length renderings remain the same, but the students discover the different approach of the viewfinder, the movements of camera with two handles and especially the transmission of orders from the director in the control room through the headphones. They also discover the position in charge of equipment and the post of the vision engineer.

To incorporate these arrangements and to allow students to "take possession" of this particular universe, the supervision remains decisive. Experience shows that a minimum of three supervisors is necessary. Firstly, one instructor for the post of vision engineer, which has not been practiced previously. Then, a second instructor in charge of the cinematography oversees the lighting, the cameras' positions and the compositions of the frames. And the third instructor for the directing ensures the coordination between the set and the control room in the rhythm of live broadcasting. We must not forget a fourth instructor for the sound.

In parallel, the practices of the live broadcasting production will be helpful for the shooting of real subjects in magazines or news reportings that are incorporated in.

Introductory modules to these techniques are often scheduled before the shooting of the show. This is the case in 3iS, where all disciplines of specializations are concerned; each student assumes the position of his specialization before the shooting of the actual show, in which the subjects and the general organization of the flow are to the initiative of the production section,

which students investment is significant.

I shall emphasize the importance of such initiation modules for this kind of shows as well. The role of the real size mock-up, as we have seen above, turns out to be always necessary and very beneficial. Effectively, complying with the specificities of live broadcast shooting, students quickly resume the tendency observed throughout the curriculum: as soon as they are facing problems and new environments, and need to be concentrate upon them, they forget easily what they have learned and get back quickly into their first flaws.

In light of this example, we will now examine the opportunity of a longer study time so to confirm the assimilation of this large amount of data.

Curriculum beyond three years.

We have seen so far how the productions mark out the undergraduate programs. For the curricula going beyond the bachelor, masters and also doctorates, we will now see how they are organized. Students no longer quite beginners, their demands and expectations are different. They need above all to be able to take time to have hindsight on projects or to study specific issues. Let us listen to them regarding an essential preliminary question: "How many students want to study longer?" Max Azoulay, ESRA (2009). Here are some statistics that can provide an initial response: in ZHDK, 60 to 80% wish to continue, in IAD 70%, in INSAS 80%, at FAMU from 50 to 60%...

Faced with this significant proportion of candidates, how the programs are established and organized in these years of study?

Twelve of the seventeen surveyed schools, an overwhelming majority, extend their curriculum beyond three years. Their development and establishment are conditioned by problems specific to each country, notably due to terms, features and often ancient traditions education system. In Great Britain, in the four-year university study, the first two are likened as the bachelor program and the master program as the last two. In Germany, four-year program, off system of bachelor and master, is to be linked to existing national education structures of long standing. It is the same at FAMU and VSMU, but here the fourth and fifth years are part of master program, followed by a doctoral cycle. At ELO, the master cycle was founded about twenty years ago. It can also be extended to four years of doctorate studies. For other cases, nowadays, one also has to take into consideration the European directive of Bologna, which, for example in Switzerland, has led to allocate various disciplines of master program in film schools of different cantons. Taking cinematography for example, the master was developed in the school of Zurich. Students from other schools across the country will have to come to the ZHDK if they want to go to this level in cinematography study.

The master program.

In terms of cinematography, some schools list it as an extension of the bachelor and always center around the productions, such as at FAMU and VSMU where the two-year master's programs are organized in the same way as the curriculum of first three years. It is the same at IAD, albeit with some differences: program of cinematography only lasts a year, ends as Master 1; but it lasts two years for direction till Master 2. The respective organizations allow students of master of cinematography throughout the whole year, to practice each one of the three main posts in cinematography: the director of photography, the cameraman and the assistant operator in the productions of master of direction. For reasons related to general education system in Belgium, it is the same in INSAS, where the cinematography program is equally finished at Master 1, but for direction, Master 2. At ZHDK, the pedagogical aim of the

two-year master of cinematography is much more focused on the post of assistant operator, being one of the professions in which students will have direct access right out of school. At SAS the first year corresponding to the master program is basically courses and seminars, the second year being dedicated to free shooting projects.

Let's see some different approaches of production in master program, comparing to the ones in bachelor curriculum.

At IAD, the production is considered as graduation evaluation, named "fin d'études" ("end of studies") the principle is a fiction of about fifteen minutes, shot with HD video XDcam, by two co-directors in master of direction. Then each of these two students makes their own editing from the same rushes. One can however ask some additional specific shots during the shooting in view of his own version. For students of cinematography, this double reflection on the same subject is extremely rich and pushes them further in questioning the way to shoot and, hence, becoming more creative and capable to offer their ideas on shooting to (future) directors. The screening, one after the other, of these two different versions with their subtle differences is a strong and rich moment for students who participated in the project. Their reactions and their emotions demonstrate the significant investment they have put and also the great lessons they have learned.

At ELO, the approach is entirely different. There is an interesting pedagogical will to clearly differentiate the curriculum of cinematography in bachelor to the one in master, where "It is not just to make one more film, but deepen the knowledge of film making in workshops..." Heinänen Timo (2010). Here, students work on specific issues, more like working on rather short experimental films, which are not well polished films but rather just scenes to research and study genres or techniques within the chosen content. The focus is put on precise cinematography and set and costume design problems. The interest of these students at this level is "much more about lighting... but also for an other part with special techniques, like 3D and also camera tricks like, models, mate painting...", Timo Heinänen (2012).

We see also, at this level, that the further studies on the practice of lighting still remains a strong demand from students. This confirms that a further program beyond the three years in cinematography is apposite. I would say indeed necessary. I also think that the same is true for other disciplines.

At ESRA there is a fourth original year off the master track, which takes place entirely in New York. It is open to students who have completed the general curriculum and who wish to apply. This yearly module is very close to the third fiction direction year; with American instructors, actors and suppliers for their productions. The courses are given in English. The pedagogical objective is to perfect their third year by exploring a different professional and cultural environment. This uncommon organization may also allow interesting hindsight on the past three years.

As part of German academic tradition, at HFF Munich, the curriculum is of four years, specifically eight semesters (Jarry, 2011), which do not correspond to the principles of bachelor and master programs. The diploma is obtained in two steps; for the "pre-diploma" the production of the second year is decisive. The diploma will be validated with the production of the fourth year, which, in some cases, may not be accomplished at the end of the eighth semester. Therefore, for students involved in these units, who sometimes start their first job at the same time, their studies can last two, three or four years, if not more, until the film is finalized. For these graduation productions, school encourages co-production with partners outside of school, who may be organizations, foundations, private producers or regional / federal television channels. It then adapts itself to the constraints of these professional organizations directly related to the market and particularly in regard to the finishing time. That is why the agreements are given to students who need to go beyond the four years of study.

When this film is completed in order to obtain the diploma, it will be evaluated by a jury that will be composed only of members from each department of the school.

We can see that the pedagogical choices, the program structures and the organizations of these master studies always differ quite significantly from one school to another. However, as for the principle of the supervision on shooting, which remains the most radical divergent point in the first three years, it becomes the same at this level of study due to the demand of students and the almost constant availability.

The Doctorate.

Among the surveyed schools mainly the ELO, the FAMU and the VSMU provide the doctorate programs. These programs are quite similar to doctorate study in other disciplines outside the cinema and audiovisual sectors. Students commit to do the research on a specific topic, for which they will have to write a thesis. They will have considerable autonomy to organize their time freely for documenting and writing. The notion of courses evolves primarily for the sake of methodology seminars. However, the doctorate candidates will be asked to give several hours of lecturing in their specialty for the lower grades. This is the practice in VSMU but also at FAMU, for at least two hours per week. It is the same in ELO, but only for master level.

Supervision joins the general form that we found to set up at master level already. One or more advisors or supervisors will be nominated throughout the term till the thesis defense. At ELO, they may be one or two. At FAMU, there will be only one but who can be joined by two consultants for more specific issues. They will be in constant contact with students and set up their meetings or remote working sessions together.

The duration of this cycle may vary. At VSMU, it is for three years, and so as at FAMU where an extension up to five years is possible. At ELO, four years, including the thesis writing. For this school, the program is also open to students who are graduated from other universities or schools and from other countries. At FAMU, this is also common.

In general, in order to concentrate on their research, students are not asked to submit practical work. At FAMU, this is nonetheless possible depending on the subject. But in ELO, it is strongly recommended and encouraged. Arrangements are currently being set up within the university to facilitate the implementation, along line with a general governmental policy actually in Finland, which extend to all artistic disciplines.

A Ph.D. program is also proposed in WFS, but students must obtain the master diploma in other establishments as it is not provided in this school.

Discussion.

For these students, the productions - fiction or real - prefigure very accurately their future professional life. It is therefore important to set them very strict rules that correspond to those that they will have to adopt because the move from school to professional world is carried out without any real transition.

I noticed that if we let free these beginners, their natural tendency will primarily consider the shooting as a testing ground for their creative desires. At any problem or just any doubt, their immediate reaction is: "Let's try...". To try means for them concretely to take time to do it, to re-do it, again and again, without setting up precise methods; and, above all, to discuss and discuss profusely on the set. This attitude, if settled in, will certainly not help to trigger the mechanism of indispensable reflection and, does not allow them either to learn to manage their

working time. Time that in real professional conditions, we must work on the principle that they will never have, as they wish to. They will be requested before all to go straight to the point. Bring this awareness to students is one of the key points to achieve during the curriculum. For this, the role of teachers who supervise them, very present or much less on the set, depending on each case as we have seen earlier, remains crucial. Very often students think that a literal compliance with these rigorous measures will be at the expense of their creative sense. Another, and not least, pedagogical goal to be achieved is to get them to realize that on the contrary this restraint will be liberator to their artistic sense.

Facing the reality, I must of course bring some weighting to this radical pedagogical position. It is true that the tendency to "try", even to improvise, also happens and even quite often on professional shooting set. But these veteran units have the experience and know the guardrails to set up in order to compensate for possible skidding. As beginners, students have not yet acquired enough experience, nor the hindsight. However, at the same time, we also know and understand very well that the actual discovery of the set reveals to them the problems they are not yet in a position to detect at the stage of preparation, so complete it would be. And it is the same to find the most appropriate solutions, both technical and artistic. Therefore, it is essential, throughout the entire program, to maintain this delicate and fragile balance between making room for the creative spirit and confining it so to enhance it with strict, precise and effective methods, which have proved themselves largely. The answer to the question raised by the words of Roland Mönch (see above) about the place of the instructors on the set to assist the students, in my view, is right here.

The shooting is the most crucial step of artistic creation of films since the beginning. And it is always so, as our students feel and express fully. The shooting is to materialize on the screen the illusion identical to the real life. The precise crossing point is the camera lens, bound for about a hundred years to film, that fixes the original images, with 16 and then 24 frames per second, in order to restore the movements of this life, created and desired by the direction. "It's funny that in our days, still half of the shootings are shot in films" Heiner Stadler (2011), talking about the productions of his department.

During this first century of existence, always to give more strength to the cinematography, the gains have been enormous in the constant improvements of the rendering of lens quality, of emulsions quality and of techniques in laboratories. It is the same in artistic aspect, and especially concerning the main principles of lighting, for which, unanimously observed in all schools, students continue to show strong interest. Lighting is one of the major aspects of shooting for creating the original frame, and in which meet the artistic and technical talents of the director of photography and those of the director.

But today, the film may no longer be available in face with the growing importance of digital technologies. From here, what must be call the disappearance of film; this development also entails a change of working methods, which is observable by the large part taken gradually and constantly by post-production from the shooting, and to which the original frame is also misplaced. I think it's a revolution. And how far will this go? The shooting will it become a mere formality?

Conclusion

If the video sensors called to replace the film allow large room for work on the frames after shooting in post-production, the first frame that comes to them is always built in the same way by a lens on the camera.

Therefore, still today, we know to reproduce real moving frames on a screen (excluding animated or synthesized frames) only with lenses. The sensors are usually rectangular; the

frames they transmit on the screen, which are also always rectangular, meet the same two-dimension perspective rules inherited from the Renaissance, as for the film. Thus, the basic principles of framing remain the same. Conditions are à priori met for the work methods proven on a set to keep their chances to last.

But again we wonder, given the importance taken by the in lays on a green curtain, for example, how far the post-production techniques will go: to revise the renderings of perspectives transmitted by lens, or even the positions of actors within the filming space, which would then radically become a graphic space?

The direct transcription of the movements of life, which is the major element of cinema, that has retained so many spectators in the movie theaters since the first public screening on December 28, 1895 at the Grand Café in Paris, will she succeed to stay on the screens?

Appendix 1: alphabetical list of surveyed schools

ARFIS

Private school, Villeurbanne (France)

DFFB

Deutsche Film und Fernsehakademie, Berlin
School of the Federal State of Berlin, Berlin (Germany)

ELO Film School Helsinki

School of Motion Picture, Television and Production Design
University of School of Art, Design and Architecture, Helsinki (Finland)

ESAV

Ecole Supérieure d'AudioVisuel
University of Le Mirail, Toulouse (France)

ESRA

Ecole Supérieure de Réalisation Audiovisuelle
Private school, Paris (France)

FABW

FilmaKademie Baden-Württemberg, Ludwigsburg
School of the Federal State of Baden-Württemberg, Ludwigsburg (Germany)

FAMU

Filmova has Televizni Fakulta Academy Muzických Umeni V Praze
State School, Prague (Czech Republic)

HFF Munich

Hochschule für Fernsehen und Film München
School of the Federal State of Bavaria, Munich (Germany)

HFF Potsdam

Hochschule für Fernsehen und Film (HFF) Konrad Wolf Potsdam-Babelsberg
School of the Federal State of Brandenburg, Potsdam (Germany)

IAD

Institut des Arts de la diffusion,
School of free network, funded by the French Community of Belgium,
Louvain La Neuve (Belgium)

INSAS

Institut National Supérieur des Arts du Spectacle et des techniques de diffusion
State School, Brussels (Belgium)

LFS

London Film School
Private School, London (Great Britain)

SAS

Screen Academy Scotland, School in partnership with Napier University and College of Art,
Edinburgh (Great Britain)

VSMU

Vysoka Skola Muzickych Umeni
State School, Bratislava (Slovakia)

WFS

Westminster Film School.
School of media art and design, photography and movie department
University of Westminster, Harrow (Great Britain)

ZHDK

Zürcher Hochschule der Künste
Cantonal school, University of Art, Zürich (Switzerland)

3iS

Institut International de l'Image et du Son
Private school, Elancourt (France)

Appendix 2: alphabetical list of cited persons and meeting dates.**Azoulay Max**, Managing Director, **ESRA**

Interview at school, in June 2009

Bader Lucie, Director of Studies of the Master program, **ZHDK**

Interview and tour of the school in June 2008 and the second interview in April 2009 in Paris

Bardos Laora, intervener script, **IAD**

Interview and tour of the school in February 2008 and the second meeting, in March 2009

Cox Harriet, Head of image, **LFS**

Interview and tour of the school in November 2009

Gay Jérôme, General Manager, **ARFIS**

Interview and tour of the school in July 2008 and the second interview, in July 2009

Guipouy Hubert, Deputy Director, Head of Cinematography, **ESAV**

Interview and tour of the school in February 2011

Hannecart Serge, Lecturer and coordinator of the cinematography courses, **INSAS**
Interview in October 2010 in Brussels

Heinänen Timo, Official of cinematography Department, **ELO**
Interview and tour of the school, in May 2010, second meeting April 2012 in Munich

Hort Peter, Pedagogy Director, **WFS**
Interview and tour of the school in July 2008

Maintigneux Sophie, Co-Head of Cinematography department, **DFFB**
Interview and tour of the school in February 2009

Mennel Peter, Official of Cinematography Department, **ZHDK**
Interview and tour of the school in June 2008

Mönch Roland, Official of Cinematography Department, **FABW**
Interview and tour of the school in August 2009

Morel Denis, Director of Studies, **ESRA**
Interview at school, in October 2010 and July 2011

Mottez Vincent, Deputy Director of Studies, responsible for direction, **3iS**
regular professional contacts

Ridzonova-Ferenchuova Maria, Head of External Relations, **VSMU**
telephone conversations and exchanges of emails, in February 2011

Rinne Kirsi, Director of studies at the doctorate level, **ELO**
First meeting and tour of the school in May 2010, the second and third meeting in December 2011 and april 2012 in Paris

Slansky Peter, Head of Technology, **HFF Munich**
Meeting and tour of the school in April 2008, second meeting at school, April 2012

Stadler Heiner, Official of Documentary Department, **HFF Munich**
Exchanges by e-mails in August 2011 and meeting at school, April 2012

Usai Alessandro, Official of Department Cinematography, **IAD**
Meeting and tour of the school in February 2008 and the second interview, in March 2009.

Wouters Michel, Deputy General Manager, **IAD**
Meeting and tour of the school in February 2008 and the second interview, in March 2009.

Appendix 3 - alphabetical list of people also met during visits and festivals but not directly cited.

Bernstein Alan, Director of Studies, **LFS**
Meeting and tour of the school in November 2009

Beznosiuk Alexandre, Director of Studies, **ESAV**
Meeting and tour of the school in February 2011

Block Axel, Head of Cinematography Department, **HFF Munich**
Meeting and tour of the school in April 2008 and second meeting at school, in April 2012

Charnley Diana, Head of decoration, **LFS**
Meeting and tour of the school in November 2009

Degimbe Nathalie, Director of External Relations, **IAD**
Meeting and tour of the school in February 2008 and the second interview in March 2009.

Dufour Jean-Louis, Director General, **ESAV**
Meeting and tour of the school in February 2011

Flamé Serge, Director General, **IAD**
Meeting at the screenings of year-end in June 2008, June 2009, June 2010, June 2011

Gibson Ben, Director General, **LFS**
Meeting and tour of the school in November 2009

Gillett Suzy, Head of External Relations, **LFS**
Telephone conversations and exchanges of emails, since April 2009

Gross Laurent, Director General, **INSAS**
Meeting at school in January 2009

Gulin Frédéric, Director of Studies and Development, **3iS**
Regular professional contacts

Holmes Paul, Lecturer in Direction, **Screen Academy Scotland**
Meeting and tour of the school in December 2009 and the second meeting in December 2010, in Poitiers (France)

Knapheide Bodo: Director of Studies, **DFFB**
Meeting and tour of the school in February 2009

Marx Cristina: festivals and distribution, **HFF Potsdam**
Meeting in December 2011, in Poitiers (France)

(1) **Bibliography: J.- P. Jarry (2011)**

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(2) **Schools cited in the article but not included in the study.**

ENSL

Ecole Nationale Supérieure Louis Lumière
State School, Noisy le Grand (France)

FEMIS

Fondation Européenne pour les Métiers de l'Image et du Son
State School, Paris (France)

(english translation, Mrs. **Lih Juang Fang**)