'CINEMATOGRAPHY IN PROGRESS'

Round Tables Report



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This is the concluding report of the Third International Conference on Teaching and Researching Cinematography, called 'Cinematography in Progress', which took place in Brussels in April 2019. The main venue of this event was the Royal Institute for Theatre, Cinema and Sound (RITCS), while some of the events were held at the Institut national supérieur des arts du spectacle et des techniques de diffusion (INSAS).

This conference was organised by the International Federation of Cinematographers (IMAGO) and The Belgian Society of Cinematographers (SBC), with the help of two Belgian schools, the Lusofona University in Portugal and Mediarte. It was chaired by Ella van den Hove and Marijke Van Kets, who were assisted by Tony Costa, the IMAGO chair education

committee, and the entire event was managed by Nina Payrhuber. The conference was very successful: ninety people from over thirty countries attended the conference, about twenty-five actively participated by giving papers, by presenting their research during poster sessions, or by offering their expertise in round tables, while many others contributed to the discussions.

The main goal of the conference was to think about methods to instruct future cinematographers about current trends in cinematography and how new didactical methods should be implemented in film schools and other educational facilities. The conference also focused on the connection between the methodologies of researching cinematography and teaching cinematography.

Thanks to Marijke's strict time management, we managed to host eleven papers on a variety of matters presented to all the participants during the three days of the conference. Simultaneously, we could also organise eleven poster sessions on four different topics: HFR/HDR Grading and Workflow, Cinematography Thinking, Alternative Teaching, and Teaching and Practice. These sessions were repeated twice. Most importantly, we organised six round-tables that were repeated in three different sessions to share thoughts, experiences, and practices between the participants on the following six topics:

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The aim of the round-table sessions was to listen and learn from the participants, to share the solutions they proposed and, through informal peer-to-peer exchange, to try to synthesise them as recommendations. These recommendations are presented below.

I. EMERGING CINEMATOGRAPHY PRACTICE

Head: Janet Tovey Expert: Ken Feinstein

How can we still teach cinematography in an all-digital-realm?

This session focused on the following question: Is the new cinematography a hybrid of traditional cinematography and computer graphics, such as computer-generated technology, performance capture and virtual set technology? Not surprisingly, this subject sparked a debate about who controls the image. More specifically, the discussion engaged with relationship between production (on-set dynamics), pre-production (who designs the pre-visualisation), and post-production (the visual effects artists contribution). This debate focused on the following questions: How do these new developments affect the creative decision-making process and how do they determine our didactical approach? Should we no longer call ourselves 'Director of Photography' but 'Director of Imaging' (as the GCI suggested)? And if that is the case, how does this affect our teaching?

2. Discussions

There was a consensus that it is of vital importance to continue to teach 'traditional' cinematography language and techniques, including analogue special effects (such as creating rain using a bucket), physical lighting effects and in-camera effects. However, there was an agreement that if the teaching schedule allows it, teachers should at least address various new filming techniques and workflow practices, such as:

- The relationship between the cinematographer and visual effects
- Virtual Reality and 360° filming
- Drones
- The cinematography in Gaming and terminology differences
- Coding, photogrammetry and Artificial Intelligence
- iPhone exercises

- Computational Cinematography
- Volumetric Capture Systems

To do this, teachers need to discuss – among each other as well as with their school boards – the issue of how to incorporate visual effects into their work planning. It is in that regard crucial to collaborate with VFX, computer science, gaming and animation, to rethink the production pipeline, and to pay attention to the agile programming model and pre-visualisation for colour correction.

Everybody agreed that it is necessary to implement new working methods in our teaching, rather than just reproducing old ones. Furthermore, we need to teach the difference between effectively learning to use the tools on the one hand, and creatively using them on the other. Yet, most important here, is that we must use the students' expectations and knowledge (as discussed in another round table) and address the changing responsibilities in a shifting workplace (which is also discussed below). In all of these cases, we kept coming back to the core values of cinematography: storytelling, framing, motion, attention, and emotion.

3. Conclusions

We need to rethink what a Director of Photography does and how we teach cinematography. Also, we should investigate how to incorporate the core values of cinematography into new emerging forms of image making. Ideally, cinematographers should involve themselves in both pre- and post-production, to ensure they stay in charge of the image – although concrete practice often does not allow for this.

II. TEACHING THE FOUNDATION OF CINEMATOGRAPHY FOR NARRATIVE CINEMA

Using celluloid film as a method to teach cinematography

Head: Jean-Paul Jarry
Experts: Timo Heinänen, Michael Boxrucker and Sergey Akopov

1. Do we still teach film as a didactical means to communicate the essential basis of cinematography?

When asked to use one word to respond to this question in a positive or a negative way, the participants gave us the following terms: 'discipline', 'rigour', 'thinking', 'understanding', 'curiosity', 'aesthetic', 'responsibility', 'texture', 'a different frame', 'no monitor', 'lack of labs', 'money', and 'magic'. No one used the concept 'nostalgia'. Thirteen of the thirty participants at the three sessions still use film in their school. The participants largely agreed that teaching film is a proper way to initiate students in the process of thinking about how to create an image.

2. Why should teachers use film?

Film is a very efficient medium to make students learn to communicate among each other as professionals within their units. It also gives them structure and discipline, since the process of working with film is marked by a number of constraints. For example, film works without monitors. For studying the work of cinematographers, film allows students to conceive a frame or a light before seeing it on the screen. For studying focus pullers, it offers a proper way to learn how to focus without delay. And it is a good way to save precious shooting time and to learn not to watch the takes on the shooting stage and 'not to shoot the rehearsals'.

3. What happens when students go back to digital?

The transition from film to digital does not seem to be a problem. Yet teachers must pay attention to keep the thinking process, the discipline, and the rigour learned when working with film intact. A useful tool to facilitate this transition is ARRI's EDC 16, a digital camera designed as a teaching instrument, which mimics the technical limits of working with film. Unfortunately, it is no longer produced.

Another factor that helps the switch from film to digital is the fact that, similar to working with film, it is easier for students to start with 16-millimetre film before moving to 35-millimetre film. Also, participants recommended to have students start working digitally with cheap cameras with smaller sensors before moving to larger sensors, like the Alexa. The latter is a good camera to advance, because it is designed by film camera makers.

4. Does digital technology and its new way of working imply new cinema?

Attention was paid not to choose one process over the other: film or digital. Most of the participants agreed that shooting digitally requires new ways of working, of creating a frame and, consequently, another way of telling stories. Obviously, teaching film is not aimed at a return to working only with this medium, as in earlier days. Yet the idea behind teaching film is to avail students with more tools and to teach them some basic principles about filmmaking.

5. Is film available for teaching process?

None of the participants seemed to have difficulties obtaining film equipment, such as cameras or lenses. Although many labs have disappeared, Kodak still produces rolls of virgin films and on its website proposes a list of labs that are still active. For some schools, it is quite impossible to set up filming exercises, since they do not have a budget for this purpose. Yet a

few other schools have set aside a budget specifically to introduce (or more precisely: reintroduce) film in the curriculum. A representative of Kodak, present at the round table, spoke of a 'film renaissance', with which he referred to the small increase in film shootings today. This, of course, raises the question whether film studies and the film industry are moving in the same direction.

III. FROM ARTS PRACTICE TO ACADEMIC RESEARCH: THE METHODOLOGY

Head: Marc De Backer and François Declercq Experts: Babak Jani and Klaas Tindemans

1. Aim

The aim of this session was to discuss whether the methodologies used in research reflect the cinematographic practice at different levels of higher education. Additionally, it aimed at investigating the variety of research procedures applied for gathering information within film-related studies.

Key Questions:

- Is it possible to apply the accepted principles and methodologies of academic research to arts-related practice?
- What are the pros and cons of the current methodologies being applied in higher education?
- Are there any new methods applicable for researchers as artists?
- How do we guide students to approach research and consider different methodologies in their practice?

2. The outcome of the roundtable

Cinematography has hardly been researched and does not yet belong to a specific group of research fields. For that reason, we need to build a bridge between academic research and the artistic practice of cinematography. Does it belong to film studies and thus to the academic field of communication science or rather to the field of artistic research? The artistic and the academic field have common grounds, i.e. they seek answers to certain questions and aim to communicate the emerging knowledge. Concretely, both fields of study offer a doctoral program. Yet both fields have diverging views on the methods for acquisition and the dissemination of the results. Artistic research methodologies might be a solution for the

practice-based cinematography studies, but the main problem remains. What needs to happen so that the output of this field is validated by academics? What are the paths, the tools and the standards necessary to attain this?

The outcome of practical research methods might not be considered (by academic standards) as the valid research data for complicated validation processes, especially at the doctoral level. However, it may be acceptable when it is accompanied by traditional research channels (such as journals and books), even it does not conform with the perspective of the majority of academics. Indeed, academia today tends to approach arts research in a rather traditional manner. Yet this is changing as the new generation of research supervisors is more acquainted with practice-based research methodologies. One of the advantages of new research models is that it allows us to approach the subject matter from a multi-disciplinary perspective, from which cinematography as a medium benefits.

Furthermore, the process of peer reviewing and the non-written outcome (exhibition, film screenings, video uploads, etc.) can be difficult to access or be considered as the only source of information with regard to the research topic. However, IMAGO or any other organisation could develop a platform for researchers of cinematography to discuss their ideas and seek peer-review of their work, to collect data and to publish the outcome. This would allow researchers to share their learnings without being tied to traditional academic restrictions.

Another idea with regard to authorship that emerged during this session was that cinematographers do not always take credit for the accomplished work, since they feel they are only a vector in the production process.

3. Suggestions

The IMAGO Education Committee can actively take part in the validation process of the research outcome by supporting a platform developed for cinematography researchers to present their experiences and practice-based research outcome. This could be done in collaboration with other organisations, such as CILECT, GEECT, Society of Cinematographers,

ASC, SBC, and BSC. This will help both researchers and practitioners to improve their skills and to create a reliable data base for practice-based cinematography research in the future.

Another suggestion is the introduction of new models of teaching to encourage students and researchers to apply new methodologies for learning. These can encompass emerging mediums (e.g. online screening platforms, mobile phone applications) that new learners frequently use today to gather information. Updating methodologies and considering these emerging concepts can create a better link between the experienced teacher and new researchers. IMAGO can actively create new guidelines to acknowledge this transition.

And finally, beyond suggestion, one question remains unanswered: PhD or not PhD?

IV. NEW DIDACTICAL TOOLS AND SYSTEMS TO TEACH CINEMATOGRAPHY

(flip classroom, auto-assessments and evaluation)

Head and conclusions: Philippe Cordey Experts: Robbie Delaere and Alvaro Cortes

1. Preliminary Questions

The vast majority of participants are teaching at universities, undergraduate schools, multimedia schools and film-schools. We asked them: What are your didactical tools? What would you change, why and how?

2. First output

From the first round-table session we realized that, while we are all working in the same way, there are differences within the didactical frameworks of the specific schools or countries. Moreover, we concluded that most of us are working with the 'new didactical tools' mentioned in the title: elearning, flip-classes, peer exchanges, in-out exchanges. Participants are in fact using these tools in various forms, mixing them. Some participants were extremely happy to attend this session because they consider changing their teaching practice from the established academic-style practice to the flip-classes practice. Yet the participants are facing many other challenges:

Scheduling & organisation:

We learned that many participants are teaching in university frameworks, in graduate schools (Ba and Ma level), in vocational training schools and in multimedia schools, rather than in so-called 'regular' film schools.

In that context, participants unanimously shared their everyday concerns and frustrations to teach complex topics in a rapidly changing educational environment that imposes strict schedules and programs. In fact, teaching schedules and frameworks are becoming increasingly fragmented: linear courses vs. block-based programs, three-hour courses per week for thirteen weeks, three-week programs 'kindergarten for filmmakers' (make a film from A to Z), block-based courses over the course of two or three weeks, film classes with 200 students, regular one-time workshops, and an infinite mix of these options were described as an everyday reality.

The main issues in this regard are not related to the relation between teachers and students, but have to do with schedules and academic constraints within the various frameworks and didactical programs that change on a regular basis. For example, in some universities, previously dedicated film courses are now embedded in a variety of non-film-related studies, thus making it increasingly difficult to have a relevant film-focused didactical continuity. Here, we are not talking about the film schools in particular, but about how 21st century film-teaching fundamentally embraces a more global and broader approach than regular film schools do: complete film-welt focused contents and teaching programs.

Students' mindset and attention:

Teachers today are met with demanding students who belong to the so-called 'Generation Z' or 'EasyJet generation'. They show an astonishing eagerness to learn, yet they seem impatient and perhaps even superficial, as they want immediate answers to their requests without trying to understand the basics. They also often have difficulties to focus more than 15 minutes. What is even worse, is that they perpetually do online fact-checkings during classes. This proves to be an immense challenge to teachers – who sometimes are no longer 'in the loop' – and students increasingly resort to self-teaching.

Teaching resources:

We already have a number of new didactical resources at our disposal. Flip-classes, e-learning, blended-learning, project-driven courses are widely used and adapted to the everyday reality of our own school and schedule. We found out that this is a global phenomenon. By using all these resources in every possible way and combination, we are able to mediate a sufficient quality-based knowledge to our students. However,

there is increasingly less time to teach them the same amount of knowledge, as it grows increasingly more complex. This leads to an immediate knowledge burden for teachers, who feel that have to know everything at all times.

3. Recommendations

Build a dialogue and transparent exchanges between teachers and students:

We have to communicate clearly to our students and make them aware of the false expectations they might have or develop about working in the film industry. Furthermore, we realize that there is too much social pressure as well as peer pressure linked to the many school assignments and projects they have to fulfil simultaneously. We need to ask them: How do you feel? Are you aware that your dreams may not be reachable? Can you manage immediate frustration? Can you accept a 'NO'? Can you manage the pressure set at school, the competition among students, the assessment goals and work pressure that might disappoint you? We should not intensify competition with too complex assessments. We need to choose the right words when we speak about failure and share our own failures and experiences in an open way. And finally, we have to consider them as future colleagues.

Courses preparation and content:

Demanding students need a great variety of assignments, quizzes and blended-learning courses – sometimes all of these simultaneously and with less time spent in class. For this, we recommend:

- Encourage the systematic use of every medium and modern didactical resources at hand (flip classroom, auto-assessments and evaluation, etc.).
- Systematise a free, high-speed broadband web access on the premises.
- Put material that is at first sight less appealing on the Cloud. Larger groups need a solid and powerful Learning Management System (LMS) like Canvas or a strong school-specific didactical IT-platform. Even though this takes time and money, it is three times faster for teachers to make assessments, it is enjoyable for students to use,

- and it allows them to self-manage and improve their learning skills.
- Design assignments with build-in restrictions: use the notions of restriction, expectation and frustration as a powerful learning tools. Students have to struggle autonomously with certain problems and solve them on their own.
- Convince students that errors can be productive and that school offers the opportunity to make them.
- Work in interdisciplinary projects with other departments and colleagues.
- Exchange best practices with international colleagues and schools.

Challenge student's knowledge and skills:

We need to understand students' eagerness for resources. We have to be able to persuade them to 'unlearn' their web-based knowledge, therefore using the argument that DIY web-based studies, tutorials, blogs, and all experts websites at hand are unreliable guides. Some participants vehemently oppose to this way of acquiring knowledge and prefer the old-school approach. Others aim to use this argument to challenge their knowledge acquisition strategies and reverse their teaching practices in order to foster exchange among students and – hopefully – with their teachers.

Let students be in charge of their learning journey:

- Have them build their own challenging assignments and present them to the class.
- Let students assess their own work: the learning process is way more effective when they correct their own mistakes on their own.
- Build a community of learners: student become peer-teachers, students teach teachers.
- Make them take handwritten, self-made open notes that can be used freely during exams. Have them also write down their own auto-evaluation.
- Let students move outside the school premises and out of their comfort zone: compel them to let go of their smartphones, build their own visual library, watch movies, learn to use an adequate vocabulary, take dance lessons.

Teach students to work as a group, as a crew:

Assign students randomly in groups because, in our industry, we do
not necessarily work with people we like and let them switch jobs in
groups during school projects.

Feedback, assessment and evaluation:

- Use peer-review and speed/auto-grader as powerful evaluation tools.
- Choose the appropriate vocabulary to make evaluations and make positive evaluations.
- Create an appropriate space (a 'safe place') for them to share their failures with you or their peers.

Become a mentor:

As a mentor, take a step back and let students create their projects in front of the class. Encourage them, lead them and, maybe, correct them. 'Maybe', because they might already have found the solution to their mistakes together.

V. HOW TO USE THE PRIOR DIGITAL KNOWLEDGE OF STUDENTS TO CREATE CINEMATOGRAPHY?

Head: Ella van den Hove Expert: Lucas Jodogne

1. What are the skills of the 'Generation Z'-students?

- Variety and disparity: these are both rich and disturbing.
- They are collectively working and building a relation of trust between them. Hierarchy is not their way to collaborate.
- They wish to skip stages in learning, building their careers and making films. The early starter may not look at the hierarchy in the career path as a virtue.
- They know the architecture of software and rapidly learn how to use it.
- In learning, they prefer speed above accuracy.
- They are critical of our teaching: our professional experience does not seem to fit their future aspirations.
- They know where to find the information to complete our teaching.
- They routinely multitask.

2. What strategies can apply?

Established cinematography didactics are applied to the current generation of students, but the approaches are different. We need to sharpen their pre-visualisation skills. To set the foundations of this, we suggest the 'crash' course: let students, with their own knowledge, find their own way to get the results they want and then show them why this is not enough to arrive at what they have in mind. Do the tutorial before the lecture. Show them that this is not an appropriate working method. After this course, we can return to the traditional system by stepping back to the cinematography course with a lecture followed by the tutorial. Here we first teach them theory and then let them apply it in exercises.

Another new strategy is to teach them to learn beyond the display or monitor. Students today show real interest in the medium of film. They are willing to take the limits of film and, specifically, the particular viewing in film as an exciting challenge. This fosters their ability to pre-visualise the image and develop their skills in movie making. Digital cameras can have their monitors taken down in order to achieve the same goal or the display can be switched to black and white. The idea is to create a substantial difference between the displayed image and the one observed.

3. Learning tools

- Film cinematography: students are very curious about film. Manipulating it as such would already be an experiment in itself.
- The Art of Lighting.
- Emphasis to the preproduction and production discipline: how do we behave on a set?
- Creating an image through pre-planned visualisation.
- Production exercises as part of every course.
- Designated cameras tethered to the exercise, because restraints are good.
- Cinematography for Visual Effects: for a generation that is focussed on the display, this seems a natural extension of their initial interest in the medium. Developing this notion will help them cycling back to image creation. These courses can be joined by students from animation or visual effects.

VI. TEACHING METHODS REGARDING RESPONSIBILITIES AND DUTIES OF THE CINEMATOGRAPHER

Head: Louis-Philippe Capelle Expert: Louis Van De Leest

1. Fields of responsibility

- Artistic or creative responsibility.
- Responsibility towards production.
- Responsibilities towards the crew (choice of the crew, competencies, human resource management).
- Responsibilities towards equipment.
- Responsibilities towards legal/insurance/contractual concerns.

Main concern:

It is hard to generalise the responsibilities of the cinematographer. There are basic rules (which can be applied on a wide scale), but then everything depends on the nature of the project. For instance, depending on the type of production (small scale vs. bigger projects) duties will shift and students should be informed how to function and behave within these particular production schemes.

Students must be made aware of the fact that duties and responsibilities are context-sensitive and territory-defined. In general, we are speaking about the same duties, but in smaller countries, the conditions and working environment can be more precise or defined.

Arguably, acting responsibly is a matter of common sense – something that is the product of basic education. From that perspective, no one can teach students how to act responsibly, as they should learn it on their own after. So, what should then be taught in film schools?

2. The grey zone of responsibilities

The notion of technical responsibility is quite clear in most of the film schools and it is generally defined within the didactical framework. Technical knowledge is rarely an issue as well, since students know already a lot about the latest technologies through the actual digital channels. The less defined part is the artistic responsibility and it remains a point of discussion. There is nothing wrong with today's various spectrum of output formats regarding audio-visual productions. The role of the cinematographer will be defined regionally too. Some countries consider that cinematographers are the author of the images, even the co-author of the film, whereas in other countries, they are 'only' technicians. Depending on the format and the scale of production, there is the question about who is responsible for the visual style? Is it the duty of the director? What if the director is also the cinematographer?

3. Communication

Communication deals with responsibility about human resources: the cinematographer is not alone on the set, but works within a team and this team should be managed in a fair way. Most of the students come out of school with an overdeveloped ego. Starting to work on the set should only be the next part of the learning process. Resilience should be learned by experience.

Which language is to be used to ensure a general understanding on the set? Everybody could be or feel like a director on the set, but apparently no one knows how to communicate with others. Hierarchy and workflow should be learned very quickly in order not to feel lost. Respect, listening and close communication are the key words. These values are to a certain extent already present due to basic education, its remaining aspects should be taught at school.

Students often forget the importance of the relation between the 'art' of the job (what they want to realise/produce as output) and the foreseen agreements on budget and production. Every pipeline is different and one cannot study a standard workflow. We need to teach students more usercases where the 'Dare to Fail'-principle is central.

Since cinematographers are human resource managers on the set, they should know what the duties of colleagues are and what impact their decisions have on the collaborative work. For that reason, we should invite or apply more external human resources to incorporate this in the lectures. For example, EQ-oriented classes, psychology basics, knowledge about how to deal with (difficult) people or colleagues both on and off the set, where working conditions and time pressure are not the most optimal, etc.

4. The role of sector organisations / national bodies

National bodies or sector federations should be more involved during the study years and should be a certified resource for all. Resources about today's working conditions, self-employment, legislation, rights of the creator, etc. are widely available, but unknown to most. Some of the organisations that are used as references could offer documents that are widely available. And maybe these topics should be taught not by cinematographers but by experts.

Sector organisations can also help to make the bridge between the schools and the professional industry. Together, we should involve more professionals from other fields of activity within the curriculum (self-employment / legal / pension / accounting).

5. Optimal Interference with other departments

Anybody studying cinematography should know more about the other job roles, the other departments and the other responsibilities that pop up during the production process. A broader involvement in pre-production, script, post, etc. is becoming crucial. Students should be able to identify what the key moments during a shoot process are. From the teacher's side, it is their duty to create (maximal) opportunities to collaborate with other departments.

There is an urge for multi-skilled profiles, which are often lacking in the film schools, as they are traditionally vertically oriented. We must realize that the non-linear production environment in which we live needs those profiles – as a creative individual but also as a people manager, since group dynamics change from production to production.

6. More headroom for debriefing/ reflexion

School is the only place where mistakes are still tolerated. Yet, to render mistakes useful, we should integrate more reflexion and debriefing moments after a production with the stakeholders. Here, one can reflect on what went wrong and how future failures can we prevented. At this point, mistakes are welcome and good feedback is crucial. This feedback can be directed towards the teachers as well: Do we teach too much? Do we need some spare time/empty blocks during the study? Schools and teachers are worried about empty blocks in the planning. However, such 'blank' moments could provide for more available time for personal initiatives, for students who are proactive and willing to learn and experiment, ideally with input or coaching from the professional world.

7. Responsibilities towards equipment

Teachers and professionals have noticed a rising amount of losses and defects in equipment. One could ask whether this is due to a lack of mechanical skills. It is crucial that schools teach their students to handle equipment with care. If it is misused, broken or lost, the damage goes well beyond the financial aspect only. The whole film school will suffer of the damage and will slow down the workflow of others.

CONCLUSION

Overall, the debates at the round tables were very lively and informative. Interesting to note was that the findings of the first round-table session could be transferred to the second and then to the third. There was clearly a surplus value to the fact that there was not only a chair at each round table, but also experts attending all three sessions. Their presence allowed for a sustained transfer of knowledge from one session to the next, which enabled us to make substantial progress.

Another positive aspect of the discussions was that the respective round-table topics, which at first glance had entirely different foci, became interlinked as a result of the exchanges. This was surely fostered by the way people rotated between the different round tables. They carried the acquired knowledge and ideas along to their next sessions. As a result, a number of synergies took place – not only between the sessions, but also between the round tables.

The general bottom line or conclusion of this report is that no matter what aspect of cinematography is being taught or researched, it is our task to engage and understand the myriad ways in which stories are created through moving images.