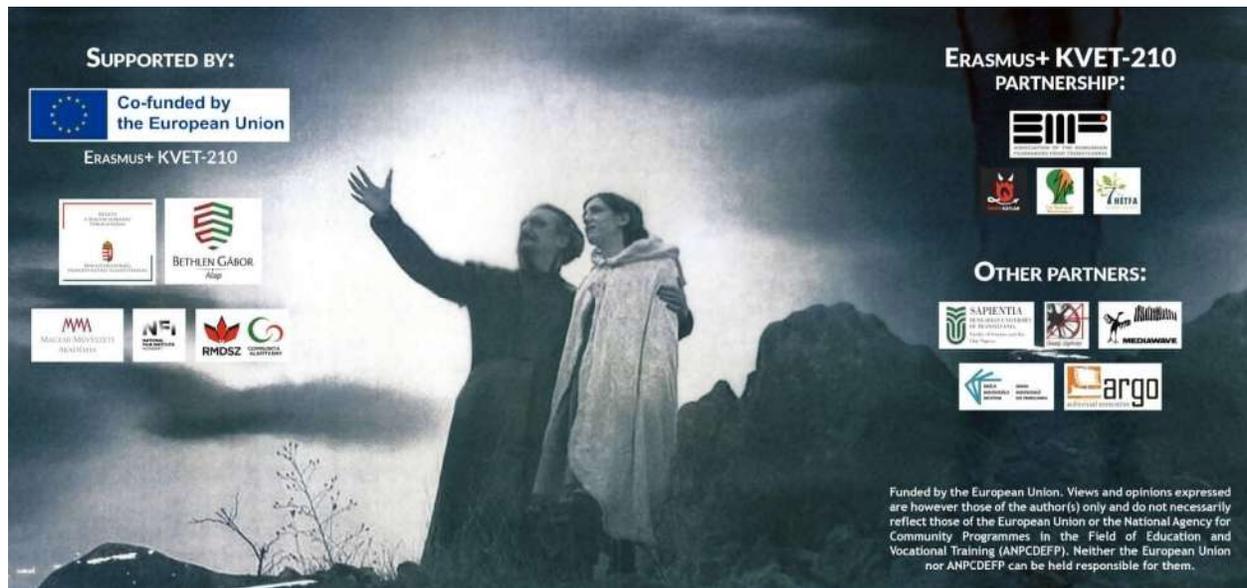


Lost Analogue

Exploring Film, Music, and Interdisciplinary Methods in Education



A filmmaking handbook lead by The Association of the Hungarian Filmmakers from Transylvania (Romania), with the cooperation of Association MiMo (France), and Ördökatlan Festival Association (Hungary)

Authors in order of the chapters: Róbert Lakatos, Alex Bőjthe, Michel Montanaro, Anita Totobé

Edited by: Róbert Lakatos and Zsófia Makkai



*Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the National Agency for Community Programmes in the Field of Education and Vocational Training (ANPCDEFP). Neither the European Union nor ANPCDEFP can be held responsible for them.

Table of contents

About the purposes and teaching methodology of this handbook	4
Shooting on analogue by Robert Lakatos	7
The Motivation for Shooting on Analogue in the Digital Era	8
Personal Motivation of the Project Leader:	8
Theoretical Assumptions About the Benefits of Analogue Technology:	8
1. Analogue Image: Texture and Power of Expression	9
2. Analogue Teaches Concentration	10
3. Understanding Analogue Aids in Mastering Digital	13
Planning the experiment	15
1. Purchasing cameras and film material	15
2. Defining the subject of filming	17
Film project development	20
1. The narrative structure:	20
2. The Audiovisual concept:	31
Specific technical and technological knowledge for shooting on analogue	37
1. Focusing	37
2. Exposure setting	48
Problems, mistakes and troubleshooting	56
1. Losing Film Footage in the Lab	56
2. Not Filming What We Thought We Already Had	57
3. Losing Footage in the Camera	57
4. Camera slowing down in cold	58
5. Unintentional ghosting effects:	59
6. Jumping images:	61
7. Out of focus images:	63
8. Day-for-Night Effect Problems:	65
Final Conclusions and Future Directions for Reinventing Analogue in the Digital Era	70
A Hybrid Approach to Filmmaking By Alex Bøjthe	77
Abstract	78

A short introduction to analogue and digital colour grading	79
Digital intermediate (DI) process in <i>The Death of Dracula</i>	80
The transition to working with scanned frames	85
The Dual-Camera Approach	88
Colour Grading <i>The Death of Dracula</i>	90
Achieving the Illusion of Night	93
Title cards.....	97
A Hybrid Approach to Analogue Cinema	98
Open music By Miquèu Montanaro.....	99
1. Open Music.....	102
2. Listening	114
3. Improvisation in reading.....	118
4. Reading in improvisation.....	122
5. Superimpositions of techniques	126
6. Sharing between generations	131
7. Playing with musicians of other styles.....	135
8. European Orchestra.....	137
9. Re-appropriation of a local theme that has become global.....	141
10. Film score.....	144
Conclusion	147
Note 1.....	149
Note 2.....	151
Interdisciplinarity in the practice of the Ördögkatlan Festival By Anita Totobé	153
Festival as a community experience	154
On the overall artistry of the Ördögkatlan Festival	155
1. Cooperation between Alexander Balanescu and Andrea Ladányi.....	156
2. Béla Bartók's Concerto at the Chapel of Reconciliation, choreographed by the Forte Company.....	156
3. Village tourists	158
4. k2 performances at the Ördögkatlan Festival	158
Collaborations between the arts	161
Cooperation with other organizations.....	163

Art workshops as a tool for intergenerational learning.....	165
Integrating the Lost Analogue project	168
1. Film and culture masterclass.....	169
2. Film music workshops	174
3. Photo exhibition.....	177
4. Work in progress test screening with cine-concert.....	178
Project impact on the operation of the Ördögkatlan Festival	182

About the purposes and teaching methodology of this handbook

Introduction by Robert Lakatos

This is an educational study based on artistic research, specifically focusing on the remake of the lost 1921 silent film *Dracula's Death*. It has two primary goals. First, it aims to provide a practical guide for emerging film professionals, highlighting the unique possibilities of using "old" analogue technology in today's "new" digital era. Second, it seeks to establish alternative and complementary educational methodologies for vocational education programs (VET providers) or optional courses in film schools (particularly at the MA level), with a focus on filmmaking and film music. Information regarding the online public release of the film will be accessible on the project's Facebook page, 'Lost Analogue - The Death of Dracula' (<https://www.facebook.com/profile.php?id=61560861332345>).

The rise of digital technology has largely replaced analogue in film production. Though initially met with scepticism by professionals, digital filmmaking—now more affordable—has surpassed analogue in image quality and offers far more possibilities for correction in post-production. As a result, most film schools swiftly adapted their curricula to focus on digital processes, leaving newer generations of filmmakers unfamiliar with analogue techniques. But should we completely abandon analogue filmmaking? Perhaps, but not before we explore its potential within the digital age. This led us to develop an experimental alternative educational program, aimed at investigating the value of analogue technology in education, while also rediscovering its aesthetic possibilities in the context of contemporary filmmaking.

Handbooks and guides on using specific tools are helpful and necessary, but they are not sufficient on their own. You cannot learn to make films solely by reading such a handbook. Professional guides on screenwriting and directing are also valuable, but they too have their limitations. Just like in mathematics, learning a formula does not automatically mean you can apply it in practice; you need to develop the skills to use it. This requires not only seeing examples – problems solved by others – but also practicing and developing your own problem-solving abilities. General

information often lacks the depth needed to address the specific challenges you might encounter, and particular solutions are not always broadly applicable.

No handbook can anticipate every problem that might arise during a creative process. That's why artistic education relies not just on informative courses (teaching formulas) and “laboratory” work (hands-on problem-solving), but significantly on “case studies” – analysing how specific challenges were addressed in particular works of art. The goal of such case studies is not to copy other artists' solutions (though copying shouldn't be feared, as the copier's personality inevitably influences the process, making the result unique), but to develop an intuitive understanding of the mechanisms behind those solutions. These artistic solutions are often a product of the subconscious – much like dreams – while being structured by the conscious mind of the artist. This understanding is never fully conscious, which is why case studies are so crucial in artistic education. The more examples we have, the better we can learn. This process is similar to Carl Gustav Jung's advice to psychologists: study as many cases as possible, and when encountering a new one, set aside what you've learned and follow your intuition.

The professional literature is filled with handbooks on using analogue technology in filmmaking, as well as on the basic knowledge needed for filmmaking or music composition. You don't even need to visit a library – typing a couple of keywords into a search engine provides a wealth of information on almost any topic you're looking for. However, as mentioned earlier, case studies remain scarce. That's why we chose not to create a compilation of general information that is already widely available. Instead, we structured our handbook around our own specific experiences.

For example, rather than describing the mechanics of the old Krasnogorsk 3 camera – something you can easily find in numerous online tutorials—we share our unique experience: how the camera slowed down in cold weather, leading to overexposure and a comical, exaggerated movement of the actors. Similarly, instead of reiterating how to create a beautiful day-for-night effect on black-and-white film using a red or orange filter on a sunny day (which is covered in countless publications), we share our experience of waiting for sunshine with our rare red filter in hand, eager to achieve that classic effect – only for the sunshine never to come.

In our view, these specific insights are the most relevant in the context of an already abundant professional bibliography. Based on our experience in education, we also believe that information presented out of context and in a generalized form tends to fade quickly from memory, whereas information delivered as a solution to a specific problem is more likely to stick. Knowledge framed as a solution to a specific problem resonates more deeply with readers. This is another reason we present professional challenges as stories – difficulties and obstacles as conflicts or turning points, reflections on potential solutions as the story’s development, and the final chosen solution as the resolution. This narrative approach not only enriches the content but also makes it more engaging and memorable for readers.

Our book is divided into three main chapters. The first chapter, led by the Association of Hungarian Filmmakers from Transylvania (Romania), explores the filmmaking process, addressing both artistic and technical aspects through a combination of general concepts and specific examples drawn from our experiences. The second chapter, guided by the Association MiMo (France), focuses on the process of composing film music, offering insights into creative and practical approaches. The third chapter, developed by the Ördögkatlan Festival Association (Hungary), examines how cultural festivals – such as Ördögkatlan and Mediawave – serve not only as platforms for reaching wider audiences but also as creative hubs that inspire collaboration and innovation among artists.

Some people learn from their own mistakes, while others learn from the mistakes of others. Given the unique nature of our experiences, we often had to rely on trial and error, learning valuable lessons along the way. In this book, we share our problem-solving approaches and insights so that readers can benefit from our journey. We hope that our storytelling approach makes these lessons more engaging and easier to understand. Wishing you an enjoyable journey through our adventure!

Shooting on analogue

by Robert Lakatos



Still photo by Orsolya Salamon, cyanotype print by Mira Mārincaš

The Motivation for Shooting on Analogue in the Digital Era

Personal Motivation of the Project Leader:

To summarize briefly: I, along with other senior faculty members of the film department at Sapiientia University of Transylvania, originally learned filmmaking using analogue technology. After completing our studies, we witnessed the digital revolution in filmmaking. We embraced its advancements, celebrated its benefits in audiovisual education, and appreciated the convenience it brought to our own projects. However, we couldn't shake the feeling that something was lost with the decline of analogue filmmaking.

We believed that learning to use analogue technology could provide a deeper understanding of the filmmaking process. Yet, we couldn't require all students to work with film, as many had no intention of using it in their future careers, and the costs associated with analogue technology were quite significant.

Another personal motivation stemmed from revisiting my old analogue films. I felt a deep nostalgia for the unique texture of the analogue image and began to appreciate the imperfections in the film material—imperfections we once worked hard to eliminate. In hindsight, I regretted not embracing those flaws as tools for artistic expression when analogue technology was dominant.

I came to believe that analogue filmmaking still has untapped artistic potential, something worth revisiting and exploring. This realization inspired me to make up for missed opportunities and expand my creative toolkit, revisiting analogue as a medium with renewed curiosity and a sense of purpose.

Theoretical Assumptions About the Benefits of Analogue Technology:

It's true that digital imaging technology, after a lengthy period of development, has surpassed analogue in many areas—not just in cost-effectiveness but also in its ability to replicate reality.

Digital has gradually outperformed analogue in terms of resolution, dynamic range, depth of field, and overall manageability. It even appears to be eco-friendlier. So, why keep analogue alive?

1. Analogue Image: Texture and Power of Expression

Just as oil, acrylic, and watercolour paintings are different, or wooden, marble, and bronze sculptures are distinct. In short, the analogue image has a unique charm; it feels less sterile compared to digital. This inherent difference continues to attract filmmakers, even though digital tools can now mimic the analogue look – complete with moving grain effects that contrast with the fixed pixels of digital images.

I once read that when electric lights replaced oil lamps, some artists lamented that electric light was too stark compared to the warm, full-bodied glow of oil lamps. Yet, over time, electric light became the norm, with oil lamps reserved for special, romantic moments. The same can be said of digital images today. Digital is now the standard, but analogue remains an option for those who seek a particular aesthetic or emotional quality.

The distinctive look of analogue film is often used as a powerful tool for artistic expression. In many films, the story may call for footage with an archival or "found footage" aesthetic – commonly associated with formats like Super 8, Regular 8, or 16mm film. While such footage is often shot digitally and then altered to achieve an analogue appearance in post-production, creating an authentic look requires a solid understanding of the technological "imperfections" characteristic of film.

These imperfections include dirt, scratches, film grain, frame instability in the film gate, fluctuations in camera speed (frame rate instability), flickering, dynamic range limitations, and unique colour profiles. Although various plugins are available online to simulate these effects, I have yet to find one that produces convincing results. The most glaring example was when I encountered digitally generated horizontal scratches on an image. This error reveals a lack of understanding of film mechanics. In traditional cameras or projectors, film moves vertically, meaning scratches typically occur along the vertical axis. For a horizontal scratch to appear

consistently for one second of footage, all 24 frames (or 18 in the case of Super 8) would need to be scratched in the same horizontal position – a scenario that no standard equipment would produce. Although there have been cameras that transported film horizontally for wider formats and higher resolutions, this technology never gained mainstream use. The anamorphic lens and cinemascope format became the standard, making horizontally transported film visuals exceedingly rare – accounting for less than 1% of productions.

Digitally generated horizontal scratches likely result from a lack of professional knowledge. While it's true that "film lies" – manipulating reality for artistic purposes – our fabrications should at least strive for credibility. Mastery of analogue aesthetics is essential to ensure that even our artistic lies feel authentic.

Some might argue that if the analogue look can be replicated digitally – more affordably and comfortably – and everything about it can be explained theoretically, why bother with the expensive and stressful process of shooting on analogue film? The answer lies in the necessity of hands-on experience. Artistic creation is always a spiritual journey, and from this perspective, even though the "analogue look" can be recreated digitally, the experience itself is different. The tactile quality of analogue film cannot be fully replicated by digital means, and the process of revealing the hidden latent image on film brings a unique sense of mystery and depth to the creative process. These factors significantly influence the spiritual aspect of artistic creation.

2. Analogue Teaches Concentration

Film shooting is inherently stressful, as it requires managing multiple aspects simultaneously: acting, actor movements within the scene, camera movement, composition, lighting, image focusing, and more. Additionally, time is a critical factor, as "time is money" – equipment rentals, crew wages, and other expenses add up quickly.

Digital cameras offer significant advantages, such as instant playback and inexpensive reusable memory, which make the process more user-friendly. However, this convenience can sometimes lead to a lack of concentration during filmmaking, especially in a learning environment.

In contrast, shooting on analogue film is a demanding process. Since you cannot review footage immediately, the material must first be developed. Even in the best-case scenario, you'll only see the results at the end of the shooting day – often when it's too late to reshoot at the same location. This inherent limitation heightens the stakes, encouraging focus and precision during the shoot, making stress a positive force for learning.

Conversely, the ease of digital filmmaking can lead to costly inefficiencies. Repeated takes due to lack of preparation can waste time, increasing the risk of running out of schedule and necessitating expensive additional shooting days. Another pitfall of digital convenience is the assumption that any technical issue can be corrected in post-production. While many problems can indeed be fixed, such corrections often result in exponentially higher post-production costs.

Using analogue technology inherently promotes accuracy, as it compels filmmakers to get it right during the shoot. This discipline not only reduces potential costs but also builds vital skills essential for precise and efficient filmmaking.

In the analogue era, fundamental shooting techniques were developed for capturing "controlled action." One of the key techniques is the Master Scene Method. This involves starting each scene by filming the entire sequence in one long take, using a wide-angle shot that captures all the essential elements. After that, you move on to shoot coverage shots, such as over-the-shoulder, medium, and close-up shots. No matter how well you've prepared your shooting script or planned the scene, something can always go wrong or get missed. In such cases, you can fall back on the master shot during editing to ensure continuity. This method is primarily used for dialogue scenes, as it would be difficult to recreate action sequences exactly the same way for each coverage shot.

Another technique is the Overlapping Method, also known as the Triple-Take Method. This approach is useful for scenes where it's difficult to repeat the action exactly the same way. It works by overlapping the end of one shot with the beginning of the next. To achieve this, the action from the end of the first shot is repeated at the start of the second shot, allowing the editor to cut seamlessly between them. Unlike the master scene method, this technique avoids repeating the entire scene, focusing only on overlapping the start and end of each shot. While this method offers the advantage of precise continuity, it requires meticulous planning and carries the risk of producing a scene that feels overly mechanical or lacking in spontaneity.

Both of the aforementioned methods come with their respective advantages and disadvantages. In the analogue era, the master scene method was costlier due to the high price of film stock, meaning only high-budget productions could afford to use it. However, in the digital era, the relatively low cost of digital storage has made this method more accessible, even for low-budget productions. While this shift has its benefits, it also reduces the need for meticulous pre-production planning. The deep analysis of every detail – such as point of view, framing, and lens angle – that was once essential to filmmaking can now be overlooked. This planning often led to creative solutions and new expressions in the film language. On the other hand, shooting on analogue revives the need for the overlapping method, which forces filmmakers to engage in more thoughtful preparation before filming. This deeper consideration is not only beneficial for the learning process but also encourages the discovery of original visual techniques.

If filmmaking could be mastered solely through theory, there would be no need for student films. Students would simply study the theory, then immediately produce Oscar- or Palme d'Or-winning films.

The truth is, no great film is born from a bad concept, but even a good concept doesn't guarantee a successful result. Filmmaking involves managing countless variables simultaneously, and success often feels like the result of divine intervention. To invite that "Hand of God," a filmmaker must do their utmost – requiring practical experience, focus, and a meticulous work plan to minimize errors.

Analogue filmmaking, where mistakes can have significant financial consequences, is particularly effective at fostering these skills. Knowing that each press of the camera button costs at least a dollar, forces filmmaker to think twice before acting. This discipline, born out of necessity, cultivates habits of precision, concentration, and strategic decision-making – skills essential for creating great films, whether analogue or digital.

3. Understanding Analogue Aids in Mastering Digital

Digital imaging technology is incredibly user-friendly. An amateur can capture decent footage without needing to understand what happens inside the camera. However, professionals are expected to have a deep understanding of the technology, as this knowledge allows them to fully exploit the creative possibilities of their equipment.

Digital imaging technology was built on concepts rooted in analogue systems. For instance, some digital cameras use the concept of shutter angle, even though they lack a mechanical shutter and, therefore, cannot physically have an angle. Shutter angle is merely a convention—a carryover from the analogue era—used to explain the otherwise intangible processes occurring within a digital camera.

Analogue technology, with its tangible, mechanical functions and manual (non-automatic) controls, provides a clearer understanding of how imaging works. By working with analogue, one gains a hands-on understanding of processes that can then be applied to digital systems. In this way, analogue serves as a valuable foundation for mastering the intricacies of digital filmmaking.

The concept of image log profiles is heavily inspired by the characteristics of analogue technology. In analogue filmmaking, the film negative inherently possesses a wider dynamic range than the film positive onto which it is copied. This means the negative captures more detail in both shadows and highlights compared to what will appear in the final positive print. During the process of creating the positive, decisions must be made about which details to preserve and which to sacrifice for the final image.

This dynamic range logic is more intuitive to grasp when working with the tangible negative-positive process of analogue filmmaking. By understanding this physical workflow, it becomes easier to comprehend how digital log profiles function, as they follow a similar principle of capturing maximum detail to allow greater flexibility in post-production.

Log image profiles have significantly expanded the dynamic range of digital cameras. Without log profiles, in most cases a digital camera's basic video output offers a dynamic range no greater than

that of traditional film stock. In fact, the introduction of log profiles was a key factor in allowing digital technology to surpass analogue in terms of dynamic range.

However, log profiles come with their challenges. The image captured appears very flat, with low contrast and desaturated colours, making it difficult to visualize the final result during shooting. This flatness can create a false sense of security, as it may seem that the lighting is fine. But once you begin post-production – enhancing contrast and restoring colours – problems can emerge. For example, you might discover that the contrast between highlights and shadows is too extreme, or that the colour temperature differences are more pronounced than anticipated.

Using log profiles much like with analogue technology, you don't see the final image during capture. While you can switch your camera to a standard video profile for reference, this too can mislead, as the overly high contrast and vibrant colours in the video profile differ from the desired final look.

The solution lies in adopting tools and techniques from the analogue era. Using a light meter to measure exposure accurately can be a valuable supplement to analysing histograms or employing the false colour method. Conducting sensor tests tailored to your specific digital camera – much like filmmakers once tested various film stocks – further enhances your approach. These practices establish a solid foundation for achieving your desired final image.

At least, those were our assumptions before embarking on this methodological experiment—an artistic research project designed to lead us to more profound conclusions through direct experience. With this in mind, and for the reasons mentioned, I, along with the other members of the Association of Hungarian Filmmakers from Transylvania, decided to organize a series of workshops aimed at exploring the educational and artistic potential of analogue filmmaking technology. These workshops were designed for emerging filmmakers who have trained in digital filmmaking but have not had the opportunity to work with analogue techniques.

THESIS: We hypothesized that the experience of shooting with analogue technology offers unique creative inspiration in the artistic process and provides significant educational benefits.

Planning the experiment

1. Purchasing cameras and film material

The first step in planning what to shoot was familiarizing ourselves with the available tools – cameras and film stock – to determine which types of projects we could execute. The second step was deciding on the specific scenes we would film during the workshops.

Given that digital technology has largely overtaken analogue, we concluded that it wasn't necessary to invest in high-end, expensive film cameras (such as Arriflex, Aathlon, etc). Rather than striving for technical perfection, we wanted to embrace the unique qualities of analogue film that digital lacks – its imperfections. These include frame rate instability, the shifting position of the film in the gate, flashes (overexposures at the beginning or end of shots), grain, moving dirt, scratches, and other unpredictable elements. With that in mind, we opted for relatively inexpensive, older film cameras. Since 35mm film technology was still out of our budget, we focused on spring-wound 16mm cameras (Bolex, Krasnogorsk, Pathé), Super 8 cameras (Canon, Elmo, Quartz), Double Super 8 (DS8) cameras (Quartz, Elmo, Pathé), and Double 8mm cameras (Canon, Quartz, Elmo, Bolex). Aside from the Canon and Elmo models, all these cameras were spring-wound (operating without electric motors) and had fairly noisy mechanisms. This made it impossible to record sound during shooting, requiring us to plan for all sound to be added in post-production.

We chose black-and-white film stock: 16mm from Kodak and Orwo, Double 8 and Double Super 8 from Foma, and Super 8 from Kodak. But after some tests we decided to begin our long-term celluloid journey with the 16mm film material.



The first DOPs of the project: Ádám Török (with the Krasnogorsk 3 camera) and Endre Dózsa with the Pathé Webo super 16 camera. Photos by Kata Lestyán and Orsolya Salamon



With the Bolex camera the DOP of the last episode: Csaba Dénes, with camera assistant Viktor Paszterkó and script supervisor Lehel Fazakas. Photo by Hilda Sárkány

2. Defining the subject of filming

The educational framework for experimenting with different film materials was established, but we felt it was important to further motivate participants by setting a concrete, appealing goal: the production of a film that could capture an audience's interest. To raise the stakes, we aimed for a longer film than what the participants had previously made, something feature-length, to challenge them creatively. We decided on a sketch film, where each episode would be created by different filmmakers but still function as a cohesive, unified whole.

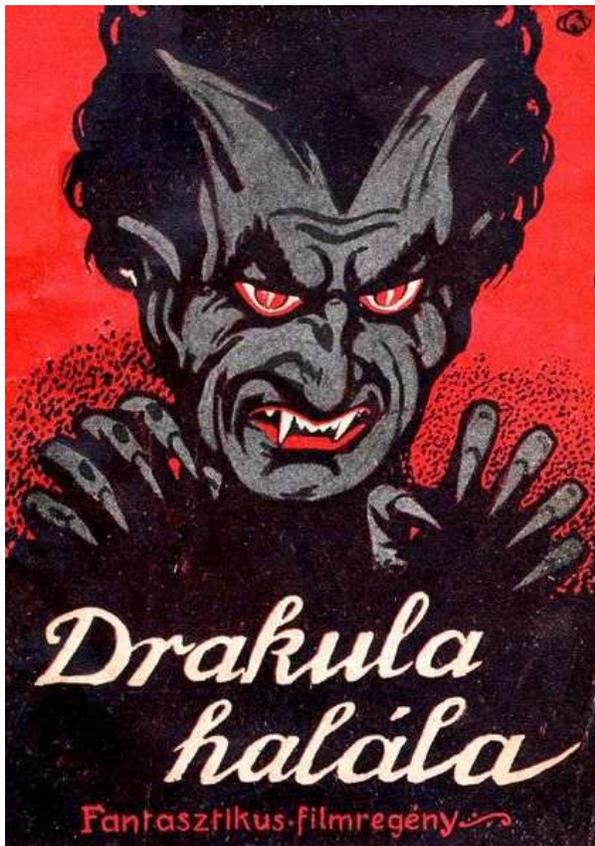
Sketch films, even those made by famous directors – such as *Boccaccio '70* – have a strong tradition, and not just at the beginning of a filmmaker's career. Feature-length films generally have a better chance of reaching a larger audience than shorts, so participating in such a project would be especially attractive for young, emerging filmmakers who haven't yet had the opportunity to work on a full-length movie. This concept seemed like a strong choice to boost their motivation, encouraging them to take the workshops seriously and engage fully in the creative process.

We also believed that by having all participants contribute to one "bigger whole," they wouldn't see the creators of other episodes as competitors – something that can be an issue in artistic education. Instead, they would understand that the audience would judge the quality of the film as a whole, not just individual episodes. The success of each episode would depend on the quality of the others. This would foster a collaborative spirit, where participants are motivated to help one another and cheer for the success of the entire film, not just their own segment.

At first, we planned to create something quite experimental on Super 8 film, based on literature where each chapter could function independently but also contribute to a cohesive whole. We even found a literary work that would have suited this approach content-wise – a book of short stories interconnected by their themes and the central character. However, we soon realized that the highly experimental nature and the wide range of visual concepts from different filmmakers would prevent the project from forming a unified piece. It became clear that we needed a set of defined visual rules to give all the episodes a cohesive look. This is when the idea of remaking a lost silent film seemed like the perfect solution.

We remembered learning, a few years prior, about a silent film called *Dracula's Death* – a Hungarian-Austrian-French co-production, and likely the world's first Dracula film, made in 1921, one year before Murnau's famous *Nosferatu*. Unfortunately, all known copies of the film were likely destroyed during World War II. Given this background, we decided to remake this “lost analogue” movie, which fit perfectly with our vision for a unified visual style.

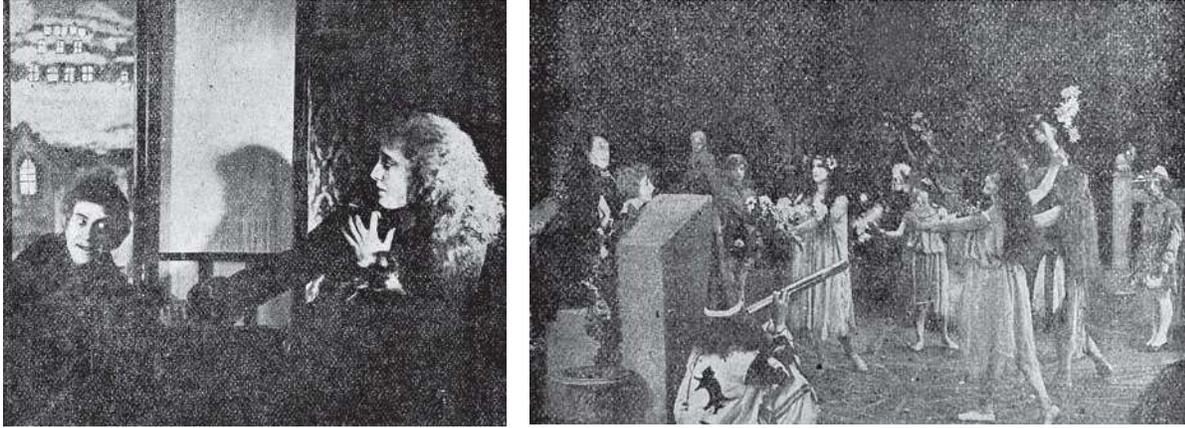
We found only three still photos and a so-called “fantastic film novel” with the same title, written in Hungarian, at the National Széchényi Library in Budapest. The novel, published in 1924 – three years after the film's release – was likely written for audiences who couldn't see the movie in theaters. It was written by Lajos Pánczél, a Hungarian journalist and film critic from Timișoara (RO)/Temesvár (HU), a city in the Banat region near Transylvania, which was part of Hungary before World War I and became part of Romania afterward.



The cover of the “fantastic film novel”

Paul Askonas in the role of Dracula

Source: Képes Mozivilág (Illustrated Cinema World) magazine 1921/3



Stills of Dracula's Death. Source: Képes Mozivilág (Illustrated Cinema World) magazine, 1921/1

The story bears little resemblance to Bram Stoker's *Dracula*, which is largely a fantasy disconnected from the geographical, historical, and ethnographical realities of Transylvania – essentially an artificial myth Stoker projected onto the region. *Dracula's Death*, in contrast, contains traces of authentic folk mythology, particularly the mythical tale of the "dead fiancé" (an incubus) who returns for his bride, trying to take her to his world of the dead. This mirrors the Lenore legend, a Western European legend, a story with many variations in Romanian and Hungarian folk mythology from Transylvania and surrounding areas.

The *Dracula's Death* from 1921 was directed by Károly Lajthay (actor, director, and producer) from Transylvania, born in Târgu Mureș (RO) / Marosvásárhely (HU), though he mainly worked in Budapest and later Austria. According to various sources, he directed several films, but we could only locate one – *Vorrei morire* from 1918. Film language evolved rapidly during this period, so we couldn't draw any solid conclusions about the possible visual aesthetic of *Dracula's Death* based on that film alone. We also tried to track the work of the cinematographers, Eduard Hoesch (Austria) and Lajos Gasser (Hungary), but couldn't find anything they worked on immediately before or after 1921. Consequently, we didn't uncover anything particularly relevant from a film history perspective. Some sources claim *Dracula's Death* was influenced by *The Cabinet of Dr. Caligari* (1920), but given that Lajthay was likely already filming at that time, I have serious doubts about the accuracy of those claims. The available information is often contradictory and confusing. However, it's not important for us to correct or highlight these inconsistencies.

Film project development

The core elements of the creative phase of a film project – following the outline and synopsis, which serve as an introduction – are the script and the director's concept. The director's concept encompasses reflections on the narrative structure, the acting style and approach to guiding the actors, as well as an audio-visual concept, typically with a stronger emphasis on the visual aspects. However, before writing the script, it's useful to develop a director's pre-concept, as these considerations will directly influence the style and tone of the script itself.

1. The narrative structure:

The book is written in a literary style, with lyrical descriptions and often abstract, emotional passages, far removed from the concrete action of a film script. It primarily focused on the characters' thoughts and feelings, something that film scripts avoid, making it feel more like a work of literature than a screenplay. This presented us with challenges similar to those faced when adapting literature for film. Additionally, the novel contained long dialogues that were too extensive for silent-film text inserts, requiring significant editing and shortening. Some of the actions described were so naïve that filming them as written would have resulted in a grotesque comedy rather than a horror film. However, once we stripped away these elements, an intriguing plot emerged, one that fit well with the atmospheric horror films of the post-World War I era.

We had the basic structure of the script, using the chapters of the book more like synopsis than a detailed treatment.

The main character of *The Death of Dracula* is Mary (Enikő Varga), a young woman living in a Transylvanian village. In the first episode, titled *The Letter*, she receives a message from the hospital urging her to hurry if she wishes to see her father while he is still alive.



Film frames from the first episode, The Letter. Dir. Attila Gödri, DOP Ádám Török



On the set of the second episode, titled Shadows. On the left side Dir. of the episode: Gyopár Buzási. Photo by Robert Lakatos

In the second episode, titled *Shadows*, Mary goes to the city hospital, only to discover it's actually an asylum for the mentally ill. Witnessing the patients deeply disturbs her, causing her to begin hallucinating.



Film frames from the second episode titled Shadows, Dir. Gyopár Buzási, DOP: Ádám Török

There she meets at first Dr Tillner (Lehel Salat) her father's primary physician, and Dracula (Tibor Pálffy), who is also a patient of the asylum. She becomes fascinated by Dracula, and in the episode titled *Mirage*, she fantasizes about marrying him.



*Cyanotype prints of film frames from the episode *Mirage*, by Mira Mărincaș*

In our film, this episode differs from the book. In the book, Mary remembers Dracula as her music teacher from primary school. However, we decided to replace the flashback scene depicting her adolescent fascination with a current, imaginative scene.



*DOP Endre Dózsa with Dir. Flóra Kovács (*Mirage*), Dir: Szabolcs Benedek (*The Two Doctors*) with DOP Ádám Török, Photos by Kata Lestyán*

In the next episode, titled *The Two Doctors*, while Mary waits for Dr. Tillner, she is accosted by two other doctors (performed by Lóránd Váta and Ervin Szűcs) who aggressively attempt to perform brain surgery on her.



Film frames from the fourth episode, titled The Two Doctors, Dir. Szabolcs Sztercey, DOP: Ádám Török

Mary is saved by Dr. Tillner. It turns out that the two doctors are also patients, deluded into believing they are physicians. Mary is given a sedative and falls asleep.

At the beginning of the next episode, *Dracula's Attempt*, Dracula awakens her, warning her of danger and proposing an escape together.



Cyanotype prints of film frames from the fifth episode, titled Dracula's attempt, Dir. Orsolya Orbán, DOP: Balázs Rokaly. Prints by Mira Mărincaș



Dir. Orsolya Orbán checking the digital backup near D.O.P. Balázs Rokaly (photo by Roland Péter) on the set of Dracula's Attempt, probably of the shot from which the double exposure was made in digital post production.

Their adventurous escaping journey – where it's unclear if it's a dream or reality, though seemingly inspired by the Legend of the Dead Fiancé – culminates at Dracula's castle in the sixth episode, *The Wedding*, where Dracula intends to marry her.



Cyanotype prints by Mira Mărincaș of stills by Orsolya Salamon from the episode The Wedding, Dir: Boglárka-Angéla Farkas, DOP: Balázs Bodor



Dir. Boglárka-Angéla Farkas, with D.O.P Balázs Bodor on the set of The Wedding. Photos by Orsolya Salamon



Film frames from the episode The Wedding

Scared, Mary manages to escape, loses consciousness, and in the seventh episode titled *On the Path of Death*, awakens from nightmares in the bed of a villager couple who found her. Dracula appears, posing as a doctor. He tells the villagers that Mary escaped from the asylum. However, when a real doctor arrives, Dracula vanishes.





DOP Gergő Jancsik and Dir. Nóra Miklós on the set of On the Path of Death, photos by Orsolya Salamon, and film frames from the same episode

In the final episode, titled *The Death of Dracula*, Mary wakes up in the asylum and ventures into the garden. There, she finds herself surrounded by other patients, each immersed in their own subjective imagined realities. Her unease grows when the Joker, cracking silly jokes with the other patients, startles her by showing her a rat.





Film frames from the last episode, The Death of Dracula, Dir. Zsófia Makkai, DOP. Csaba Dénes

When a new patient is brought in by the police, the Joker seizes the opportunity to steal the officers' gun and begins to terrorize the other patients with it. Unfazed, Dracula challenges the Joker, urging him to shoot as a chance to prove his immortality. The Joker fires, and Dracula collapses, lifeless. This becomes too much for Mary, who spirals into a crisis, desperate to escape and return home. However, Doctor Tillner reassures her, explaining that the asylum is, in fact, her true home. The story concludes with Mary resigning herself to her fate, taking her place among the other patients.



Dir. Zsófia Makkai, D.O.P. Csaba Dénes, and the crew on the set of the last episode. Photos by Hilda Sárkány

The plot changes (compared to the original *Dracula's Death* from 1921), including those mentioned in the brief description of the episode *Mirage*, were not significant in terms of content. From this perspective, there were no major deviations from the original film novel, except for one: we decided to remove the character of Mary's real fiancé. This character served no real dramatic purpose, had no influence on the plot, and was only briefly mentioned in the book's introduction before reappearing at the end to take Mary home from the asylum, providing a happy ending. The director of the final episode, Zsófia Makkai, chose to omit this character entirely, leaving Mary in the asylum as one of the patients – a decision that aligns much better with the spirit of the original film's era. We all agreed with her choice.

Nearly all the episodes required plot changes compared to the book. While *The Two Doctors* and *On the Path of Death* remained relatively faithful, the other episodes demanded significant reworking, replacing most of the book's plot details with concrete actions that conveyed equivalent content. The episodes *Dracula's Attempt* and *The Wedding* provided the least guidance from the book, challenging their creators to work with minimal source material. However, I deliberately avoided calling this the "most difficult job," as both "creating something from almost nothing" and "finding alternative, more cinematic solutions for less cinematic content" are equally challenging in their own ways.

In terms of narrative structure, each episode presents a unique perspective on reality. One depicts the external reality of the main character, Mary; another portrays her distorted and subjective perception of reality. A third delves into her imagination, while the fourth blurs the lines between reality and fantasy. The fifth might represent a dream, the sixth feels like a nightmare, the seventh is grounded in reality, and the final episode oscillates between nightmare and reality.

If the last episode is indeed reality, then the first episode, which we initially thought was reality, may instead be part of a dream or Mary's sick imagination (paranoia). Conversely, if the last episode is a nightmare, then the first episode could be real.

This narrative, in which Mary constantly tumbles from one nightmare into another, leaves us uncertain about what is real and what is imagined. Because of this, we embraced the idea that different nightmares within the story could be expressed through distinct visual styles, allowing for a variety of artistic approaches across episodes while still supporting the fragmented and surreal nature of the narrative.

2. The Audiovisual concept:

Our film consists of eight episodes, each directed by a different filmmaker, with most episodes also featuring a different director of photography. To ensure the film functions as a cohesive "bigger whole," the episodes needed to maintain a certain level of stylistic uniformity. Therefore, we established some common rules from the very beginning to create this sense of visual and thematic consistency across the different segments.

A remake doesn't need to follow the original's style in every detail, but the original serves as a valuable source of inspiration. At the very least, we need to understand what aspects to preserve and why. If we choose to do something differently, there should be a clear reason and justification behind it. With this in mind, the participants conducted thorough individual research on the film language of the silent era, uncovering many fascinating techniques they hadn't fully explored during their initial film history classes – whether because they hadn't yet been taught or simply

hadn't paid enough attention. I must admit, when I was a student, I found the film history of the silent era (covered in the first year) quite dull – a feeling I later came to regret.

What matters is that we chose not to adhere strictly to the film language of the original era. While we drew inspiration from silent film techniques – such as stop motion, double exposure, and other visual tricks – we allowed ourselves to incorporate elements that weren't possible during the silent era, like certain camera movements and lighting techniques. Our goal was to create a silent film that remained faithful, to some extent, to the aesthetic of early silent cinema while simultaneously making it clear through its film language that this is not a piece of found footage, but a contemporary creation. We believed that the texture of black-and-white film, combined with the consistency of the story, soundtrack, and acting style, would create enough unity across the episodes to be perceived as a cohesive feature-length film, rather than separate shorts. Even though the episodes might employ different stylistic elements – for example, one using stop motion and double exposure, another incorporating unique camera movements, and a third using painted clouds and drawn storm lightning it wouldn't be jarring. These variations would enhance the narrative structure, staying true to the spirit of the project.

The subtle differences in visual styles across the episodes are intentionally tied to their thematic content, as each episode represents a distinct perception of reality. The first episode depicts reality (or at least what we accept as reality). In the second, hallucinations emerge, visualized through techniques like stop motion, double exposures, and half-frame tricks. The third episode delves into imagination, while the fourth likely returns to reality but shifts into an aggressive scene – or, if not reality, then paranoia, conveyed through unusual camera movements and damaged footage. The fifth episode transitions from a romantic dream – featuring smoke effects, painted clouds, a Moon, and drawn storm lightning – into a nightmare. The sixth episode remains firmly in the realm of nightmares, the seventh returns to reality, and the final episode blurs the line between reality and nightmare. These varied contents justified the use of diverse visual styles, while the consistent texture of the film material, acting, and music provided the necessary cohesion across the episodes.

Since we decided to make a narrative film based on an original shot on 35mm, we temporarily set aside all 8mm technologies and opted for the closer 16mm format. For the exteriors, we chose

Kodak 7222 (250 ASA in daylight), while for the interior scenes, we used ORWO material rated at 400 ASA (320 ASA under 3200K artificial light).

Why not use the 100 ASA ORWO for the exteriors? Most of our outdoor shoots took place in late autumn, winter, and early spring, when lighting conditions were less favourable. Only one shoot occurred during summer, where a less sensitive film negative would indeed have been ideal – but more on that in the troubleshooting chapter.

Additionally, we decided to create a digital backup of the footage using cameras with MFT sensors, to maintain a closer match between the sensor format and the dimensions of the 16mm film frame.

Regarding the visual style, we didn't have very strict rules from the beginning. The basic approach was to keep it as simple as possible – use natural light as much as possible, avoid camera movements unless necessary, and only use techniques from the silent era. We decided to shoot episode by episode in chronological order, see how the filmed material evolved, and make the next decisions based on the experience of shooting the previous episode.

The first three episodes were shot together, followed shortly by the fourth. Although the initial concept was to avoid camera movements unless necessary, we made an exception in the first episode. After Mary receives the disturbing letter and travels to the city, we decided to mount the camera on the chariot. This allowed the camera to move with her, capturing her agitated state of mind and showing details of the surrounding world from her point of view in motion.

In the second episode, set in the mental asylum, Mary's confusion intensifies. The visual style here reflects the influence of Gyopár Buzási, primarily an animated film director. To represent Mary's distorted perception of reality, Buzási planned to use techniques such as pixilation (shooting the actors frame by frame), double exposure, and the half-frame trick – splitting a character's face mid-frame and delaying one half, creating the effect of eyes moving independently. During these shots, the camera remained stationary. However, later in the episode, when Mary's fear causes her to jerk her gaze back and forth, the camera breaks from the stillness of the silent-era aesthetic. It becomes handheld, mimicking her agitated movements. When Mary falls, the camera adopts a low, frog's-eye perspective, aligning with her point of view. The rapid camera movements along the portraits of the mentally ill patients are foreshadowed by the sped-up motion achieved through pixilation in

earlier scenes. These techniques prepare the audience for the handheld camera work in the aggressive scene from the later episode, *The Two Doctors*. In that scene, the camera no longer reflects Mary's subjective perspective but instead adopts the viewpoint of a participating observer.

Before this, we encounter the episode *Mirage*, a depiction of Mary's romantic hallucination. Here, there are no unusual camera movements. Instead, the visual style relies on aestheticized, non-realistic studio lighting. Strong backlighting creates an ethereal aura around the characters, isolating them from the infinite darkness of the unlit areas, symbolizing the subconscious.

In these four episodes, shot during the first production period, the foundation lies in an objective silent-era aesthetic. However, the film occasionally departs from this, stepping into the subjective and internal reality of Mary's consciousness.

The directors of the subsequent episodes did not employ similar point-of-view camera techniques, and the camera remains stationary until the end of the film. This choice was intentional, as there was no need for such subjective camera solutions. After Mary falls asleep under the sedative, it becomes evident that the 'objective reality' depicted in the next two episodes (*Dracula's Attempt* and *The Wedding*, shot in a simple, classical style) is actually her dream – an expression of her subconscious. These episodes utilize some 'early' visual effects, such as stop-motion to show Dracula disappearing into fog or smoke, and double exposure. However, the overall film language remains traditional and restrained. In the episode *On the Path of Death*, the distinction between Mary's subjective reality and the film's objective reality initially appears clear. We see Mary lying in bed, while her nightmare is visually separated from the rest. But as Dracula materializes from smoke, posing as a doctor, these two realities begin to merge. This lack of clear separation is intentional, creating an unsettling ambiguity – it blurs the line between what seems like objective reality and what is actually a product of Mary's subconscious. This lingering uncertainty carries through to the final episode, which is filmed entirely as though it represents the objective reality of the story – but perhaps it, too, is not.

I would be lying if I claimed we had such a comprehensive vision of the whole from the very beginning. At least, we weren't consciously aware of it in such a precise way at the time. However, we frequently revisited, reinterpreted, and reanalysed what we had already done, considering how each next step could align with the previous parts. When it came to new ideas, we relied more on

our instincts and intuition. The decision-making process was a blend of the rational and the intuitive – much like any artistic creation.

To maintain simplicity, we decided to shoot the outdoor night scenes using the day-for-night technique. The challenges we encountered with this approach will be discussed further in the *Troubleshooting* chapter.

We decided not to send the filmed material to a professional film lab but instead to develop it ourselves using Lomo tanks, processing 15-meter segments as dictated by the tank's capacity. My reasoning was that this method would introduce a certain inconsistency to the film material. In truth, my secret aim was to incorporate as many technical imperfections as possible into the film.

I anticipated that participants, many of whom were experiencing analogue technology for the first time, would inevitably make technical errors, and the old film cameras we used would contribute their own unplanned quirks. In a perfectly shot film, imperfections are perceived as mistakes. But when imperfections are abundant, they become a visual style. We deliberately sought to create a style that felt as though the film had been pieced together from discarded footage – the outtakes of a “technically perfect” version that likely wasn't perfect either, much like how I remember the images of silent films I saw years ago in the cinema.

Initially, I was alarmed when I watched silent-era footage online and found it much more polished than I remembered. However, I reassured myself that what I saw was probably digitally restored footage, far removed from the raw imperfections we intended to emulate.

Our embrace of visual imperfections was so successful that *Ádám Török*, one of the directors of photography of the first four episodes, was initially mortified by the results. He was so ashamed that he disappeared, refusing to attend the first test screening where we presented the edited episodes to visiting professors at the Sapientia University – D.O.P. *Francisco Gózon* and director *Ibolya Fekete*. When we finally reached him by phone to share the professors' enthusiastic praise for the material's visual style, he thought we were joking. Even now, I suspect he's not entirely convinced that he did well.

The other person who fell in love with the imperfections was *András Muhi*, a film producer and president of the Association of Film Artists in Hungary, who saw a poorly digitized work-in-

progress version of the film at the end of a film music workshop during the Mediawave Film and Music Festival in Hungary. After the test screening, he nearly convinced me not to create a better-digitized version, as it might lose its charm.

However, we were uncertain whether most of the audience (or at least some of them) would recognize from the unusual camera movements and lighting that the film was contemporary. With this concern in mind, we preconceived the idea of enhancing the sound design.

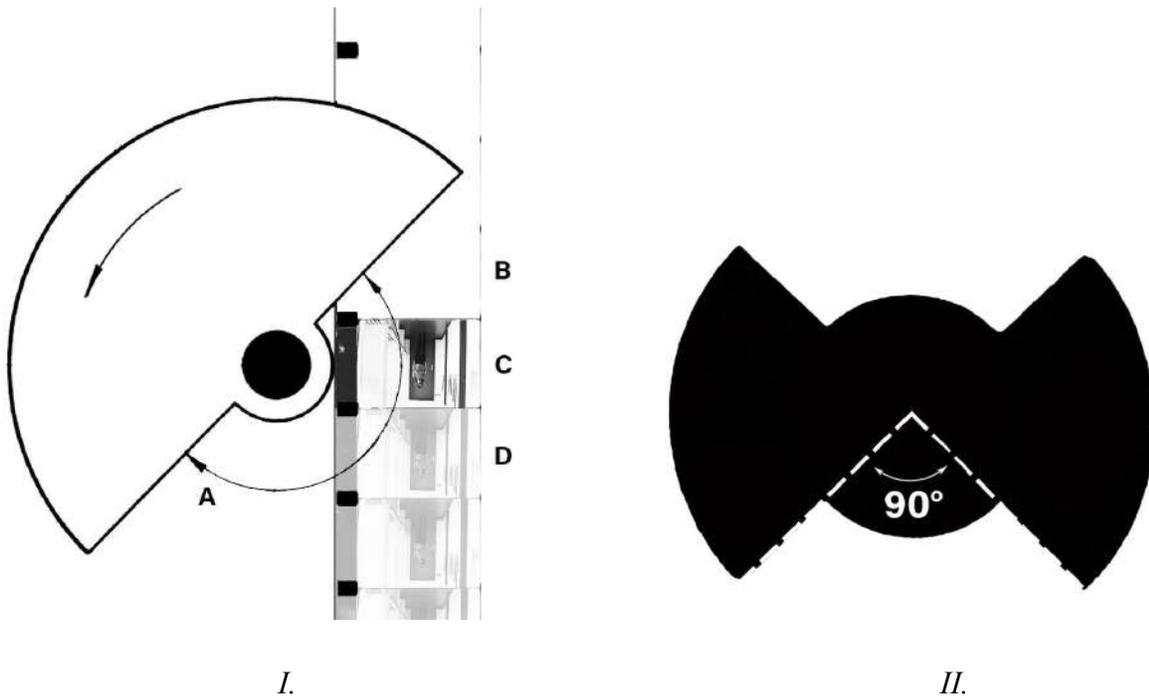
Initially, we planned to gradually introduce sound elements: starting with atmospheric sounds, followed by non-synchronous sound effects, and eventually incorporating synchronous sound effects. However, after discovering composer Michel Montanaro, we abandoned this approach. He proposed dividing the orchestra into two parts: one part – a classical string quartet – would perform the film's score, while the other part would improvise both synchronous and non-synchronous sound effects. This approach not only provided film music but also delivered the musical equivalent of contemporary sound effects, blending both worlds seamlessly.

Specific technical and technological knowledge for shooting on analogue

1. Focusing

To achieve proper focus in an image, it's essential to understand the camera's optical construction.

The object being filmed reflects light towards the camera lens, which captures and focuses it onto the film's surface, thereby producing an image. The shutter rotates in front of the film. When the shutter opens (allowing light to pass through), the light that forms the image enters through the camera lens, passes through the open shutter, and then through the film gate, finally focusing on the film's surface, creating the image.



In image I, you can see a shutter with a 180-degree opening. In image II, there is a shutter with two 90-degree openings. If the shutter in image II rotates at half the speed of the shutter in image

I, it produces the same exposure time. This means that although the physical angle of the shutter in image II is 90 degrees, its practical angle becomes 180 degrees due to the slower rotation. This explanation should suffice for now to avoid confusion with the upcoming images. We will explore this topic further in the next chapter on exposure.

In Image I, the shutter is open, exposing frame C. Frame D and those below it are already exposed, containing the latent (hidden, invisible) image, as the film moves from top to bottom. Frame B and the area above it are not yet exposed and thus contain no image. The image on the film is upside down because the lens projects an inverted image. This orientation is necessary; otherwise, with the film moving top to bottom, the resulting movement on the exposed film would appear backward.

The film must be loaded with the emulsion (the photosensitive surface) facing the camera lens, as this is where the image is formed. Loading it with the support layer facing the lens results in a slightly out-of-focus image (due to the support layer's glossiness and thickness) and a horizontally flipped image.

With double-sided perforated film, the chance of loading it correctly is 1 in 3, while with single-sided perforated film, it's 50%. The support layer feels glossy, while the emulsion layer is matte, so in a darkroom, you can identify the correct side by touch.

If you buy film on 100ft (30.5m) daylight spools, it's already correctly wound. However, if you purchase 400ft (122m) rolls and need to wind them onto 30.5m spools, you must be very careful to wind them correctly. This process requires developing a mechanical understanding of 3D spatial relationships – skills that may be less common among those born in the digital era compared to those with experience in analogue workflows.

Of course, you cannot see the latent image on the film immediately after exposure (as the illustration misleadingly suggests); it only becomes visible after the film is developed. I mention this seemingly obvious fact because, sadly, we've drifted so far from analogue technology that I've encountered young filmmakers – aspiring directors – who, after shooting their first roll of film, wanted to open the camera to view their photos.

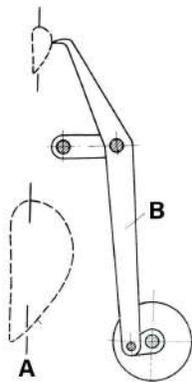
They didn't realize that exposing the film to light would immediately ruin the latent images. They hadn't made the connection that if light creates the correct latent image in just 1/60 of a second, then exposing the film to light for even one second would completely overexpose it, resulting in a fully black negative (or a completely white positive).

These weren't unintelligent people – they were smart and adept at using digital tools far more effectively than I do. However, this incident highlights a broader issue: while digital technology is incredibly helpful and powerful, it also risks disconnecting us from the physical world and its processes.

To ensure a sharp image on the film, two conditions must be met:

1. The film must remain stationary while the shutter is open.
2. The light rays reflected from the object must be focused by the camera lens onto the film surface.

The film remains stationary while the shutter is open, held in place by a pressure plate. When the shutter closes, a claw engages the perforations to advance the film.

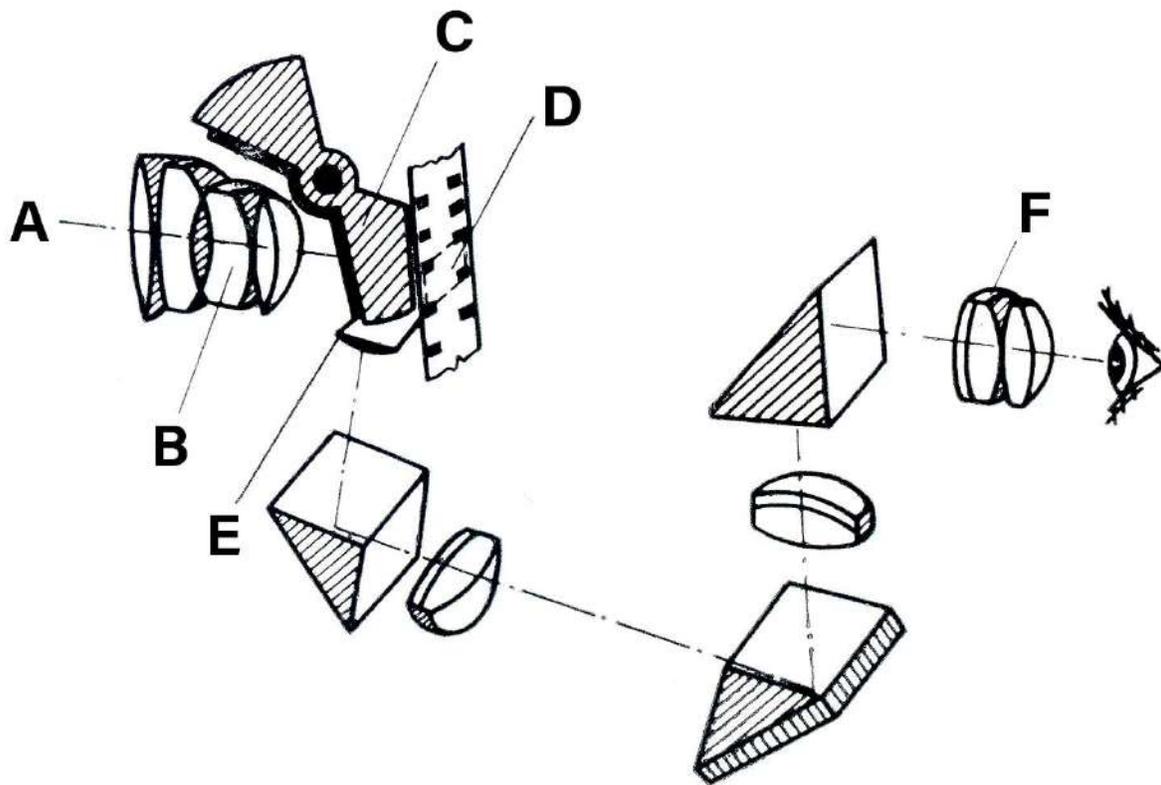


(Image source: Vásárhelyi István, A keskenyfilmezés, Műszaki Könyvkiadó Budapest, 1965)

In the image, Element B shows a model of the film transport mechanism positioned in front of the film gate, while Element A illustrates the claw's motion: entering the perforation at the top and exiting through the bottom of the straight section.

As the shutter rotates, it opens, allowing light to pass through the gate, and the pressure plate is keeping the film still while exposure occurs. The best cameras include an additional claw to hold the frame steady during exposure. However, most cameras lack this feature and rely solely on the pressure plate for stability. When the rotating shutter closes, blocking the light, the film is advanced to the next frame.

In mirror reflex cameras (such as the Krasnogorsk 2, Krasnogorsk 3, and earlier models like the Pentaflex), the shutter rotates in front of the film, not at a 90-degree angle to the optical axis (i.e., not parallel to the film surface), but at a 45-degree angle.



This image illustrates the path of light through a Pentaflex AK16 camera. (Image source: Vásárhelyi István, *A keskenyfilmzés*, Műszaki Könyvkiadó Budapest, 1965)

Light (A) enters through the camera lens (B) and reaches the shutter (C). The shutter surface features a mirror. When the shutter is closed, blocking the light from reaching the film (D), the

mirror reflects the image onto a matte lens (**E**). This allows us to view the image through the optical viewfinder (**F**) by looking at the surface of the matte lens. The light path to the viewfinder in the Pentaflex AK16 is quite complex because the film cassette extends deep into the camera body, forcing the light to navigate around it. In contrast, cameras like the Krasnogorsk models feature a much simpler optical design.

During exposure you cannot see the image, and when you see the image on the matte lens, the film is not exposed (because the shutter is closed while reflecting the image on the matte lens). Because the mirror reflects the image onto the matte lens, you see exactly what the film sees from the same point of view, without any parallax error – hence the name "mirror reflex camera."

In these cameras, the optical distance between the shutter and the film must be exactly the same as the distance between the shutter and the matte lens. This ensures that when the image is focused on the matte lens, it will also be focused on the film. To achieve accurate focus, the eyepiece diopter must be adjusted to your eye. This is the first step in ensuring proper focus!

To adjust the eyepiece diopter to your eye, the best method is to first remove the camera lens and manually turn the shutter to reflect light onto the matte plate. Then, point the camera towards a bright surface, preferably the sky, and adjust the diopter until you clearly see the grain of the matte lens. This ensures that your eyepiece (the diopter of the magnifying glass in front of your eye) is focused on the surface of the matte lens. When the image is focused on the matte lens, it will also be focused on the film surface, as the optical distance to the matte lens and the film is the same. In some cameras, guiding lines are drawn on the matte lens, and these should appear sharply focused as well.

Some manuals suggest that you don't need to remove the camera lens for this process. Instead, you should set the lens focus to infinity, point the camera at a distant object, and adjust the diopter to make the image as clear as possible – just like you do with digital cameras.

A common source of problems is that optical viewfinders in analogue cameras work differently than the digital displays found in modern cameras. In the optical viewfinder of an analogue camera, you can apparently see a focused image on the matte lens even if the eyepiece diopter is not properly adjusted to your eye. However, in this case, the image on the film will be out of focus.

With digital technology, this issue doesn't exist because the image in the digital viewfinder is taken directly from the same sensor that records the image. This means it's impossible to see a focused image in the viewfinder unless the image is actually focused on the sensor. Filmmakers accustomed to digital technology are at greater risk of overlooking this critical aspect of optical viewfinders in analogue cameras.

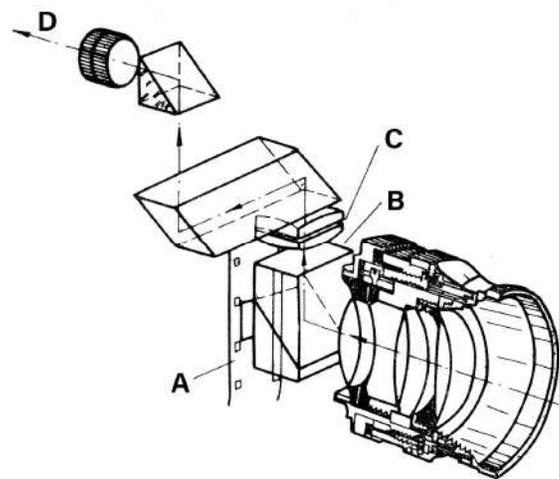
A common mistake occurs when the Director of Photography (DOP) adjusts the eyepiece to their eye, then leaves the camera on the tripod to attend to other tasks, like adjusting the lighting or measuring exposure. During this time, the director or someone else may look through the camera to check the framing and, in doing so, adjusts the eyepiece to their own vision. However, they often forget to reset the eyepiece for the DOP. In the chaos and stress of shooting, where attention is divided across multiple tasks, it's easy to overlook such seemingly small details – yet this can result in out-of-focus footage, rendering it unusable.

Even when the image is well-focused, it can be difficult to judge focus through an optical viewfinder. If the mirror on the shutter or the matt plate (or other optical element of the optical viewfinder) is not clean, it's like looking at yourself in a dirty mirror – clarity is compromised. Dust isn't the only culprit; temperature changes can also cause fogging on these surfaces. Additionally, while shooting, the image flickers because the shutter momentarily blocks the light from reaching the prism when exposure occurs.

When the lens aperture is set to the correct exposure value, the image in the viewfinder appears much darker than what you see with your naked eye. To get a clearer, brighter image for focusing, the aperture is usually opened fully before the shot and often kept open during rehearsals. However, this leads to another common mistake: forgetting to close the aperture back to the correct value before shooting. It's easy to open the aperture again to double-check focus, especially if there's concern that the focus ring may have been moved while adjusting the aperture, but then forgetting to close it afterward. This issue is specific to shooting on analogue film, as in digital cameras, you don't need to open the iris to see the correct image for focusing, so there's no need to remember to close it before shooting. When closing the aperture to the correct exposure setting, it's also important to avoid accidentally moving the focus ring – a common risk, especially with old, refurbished lenses where the focus ring may turn too smoothly.

In non-reflex cameras, the shutter rotates (or opens and closes) parallel to the film, meaning it cannot reflect the image for viewing. As a result, the only way to set the focus is by measuring the distance from the object to the film surface and adjusting this distance on the camera lens. However, this method relies on having a well-calibrated lens to ensure accuracy.

Some older 16 mm cameras, like Bolex Reflex and Pathé models, share similar shutter construction with non-reflex cameras. These are not mirror-reflex cameras but rather prism-based (like the Bolex) or plate-based (like Pathé) reflex cameras. In the Bolex, for instance, a prism located in front of the shutter reflects about 20% of incoming light to the optical viewfinder, allowing 80% to reach the film.



The image shows the light path in the Bolex H16, which is identical to the H8 model. (Image source: Vásárhelyi István, *A keskenyfilmezés*, Műszaki Könyvkiadó Budapest, 1965)

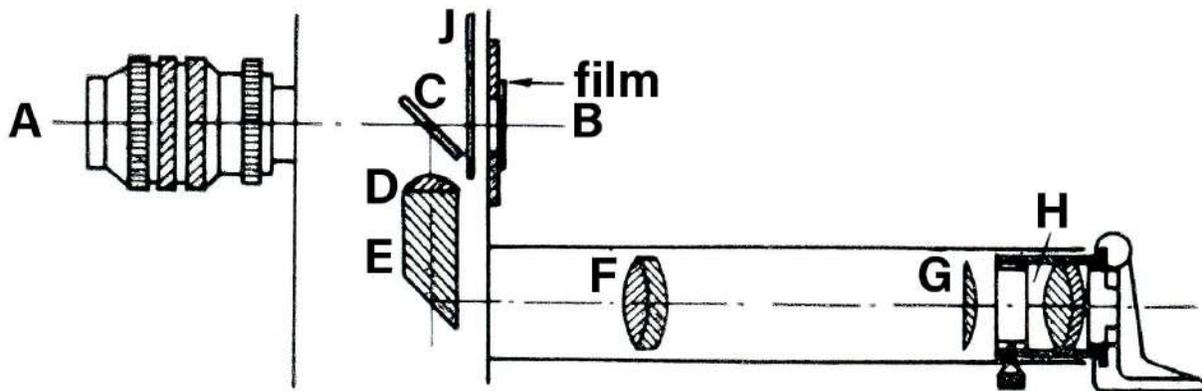
Element 'B' is the light-dividing prism that directs 80% of the light to the film ('A') and reflects 20% to the matte lens ('C'), which then transmits it to the viewfinder.

The advantage of this design is that it provides a non-flickering image during shooting. However, the major drawback is a darker viewfinder image (only 20% of the light passing through the lens is visible), making focusing more challenging and requiring the eye to adjust to the dimness during filming – an uncomfortable situation for the operator.

To address this, Bolex produced detachable non-reflex viewfinders, which provide a direct view of the scene but introduce parallax errors. Additionally, some zoom lenses feature separate viewfinders for framing, though these are ineffective for focusing. A common issue with external viewfinders is that if the operator forgets to close the built-in viewfinder after focusing, stray light may enter the camera through the uncovered viewfinder and inadvertently expose the film. To prevent this, these viewfinders are equipped with locks to block such "pirate" light.

Another disadvantage of these cameras is that the prism, due to diffraction, increases the optical path length, extending the distance light travels from the lens to the film. This characteristic means that lenses specifically made for Bolex cameras often aren't fully compatible with other cameras. They may fail to achieve proper focus, or the distance markings on the lens may be inaccurate when used on non-Bolex cameras. Similarly, lenses designed for other cameras can sometimes be used on Bolex models, but their focus distance markings will not align correctly with the Bolex system.

In contrast, the Pathé Super 16mm camera uses a thin (0,12 – 0,14 mm) glass plate instead of a prism. This plate reflects only 12% of the light to the optical viewfinder, allowing more light to reach the film. However, this design results in an even dimmer viewfinder image, making focusing even more challenging.



The light rays from the camera lens ('A') pass through the light divider plate ('C') and reach both the matte lens ('D') and the film ('B'). (Image source: Vásárhelyi István, A keskenyfilmezés, Műszaki Könyvkiadó Budapest, 1965)

This plate is much thinner compared to the prism in Bolex cameras, increasing the likelihood that lenses designed for other cameras (such as non-reflex models) will be compatible with Pathé cameras. However, even the small difference caused by diffraction in this thin plate makes the distance markings on those lenses inaccurate for the Pathé camera. Due to the plate, the lenses are calibrated to a 17.58 mm distance instead of the 17.52 mm standard for C-mount lenses. Even this 0.06 mm difference is enough to prevent achieving sharp focus in the same plane when using lenses designed for other cameras, compared to lenses specifically designed for Pathé cameras.

Focusing on digital cameras is much simpler, especially with zoom lenses, as you can zoom in, set the focus (which is easier to achieve in close-ups), and then zoom out to the desired framing. Some cameras even feature a focus-assist function, allowing you to press a button to temporarily magnify the image for precise focusing. This is particularly useful when using fixed-focus lenses instead of zoom lenses.

However, in fiction filmmaking, especially when using older equipment, zoom lenses are typically avoided because prime lenses (fixed-focus lenses) offer superior quality in terms of aperture and reduced aberrations. Without the ability to zoom in for close-up focusing, achieving precise focus through an optical viewfinder becomes more challenging. A practical technique is to focus on a sharply defined, high-contrast edge. For example, you can use a package with contrasting text, like a chocolate wrapper. If you need to focus on an actor's eyes, have them hold the package next to their eyes and use the contrasting text to set your focus.

When using older zoom lenses, extra caution is needed, as not all zoom lenses maintain focus while zooming out. This issue is more common with lenses that are adapted for a camera mount rather than designed specifically for it.

Some cinematographers feel uneasy relying solely on their eyesight for focusing, so they prefer to measure the distance from the desired focus point (usually the eyes of the actor) to the film plane – just as they've seen professionals do in behind-the-scenes footage.



On the set of Mirage. Photo by Orsolya Salamon

However, this approach should only be attempted with calibrated professional equipment and, ideally, lenses with bayonet mounts. Screw-mount lenses, such as the popular C-mount lenses used on many 16mm cameras, can be problematic. For example, you can never be entirely sure if the lens has been screwed in completely, and with some lenses, focusing can even be adjusted by how far they are screwed in or out. From the specifications of different C-mount cameras, like Bolex and Pathé models, you can learn about their optical differences and understand that lenses calibrated for one camera may not be fully compatible with another in terms of focusing range.

In the image above, a Krasnogorsk-3 camera is shown with its original lens. This lens, a zoom with an M42 screw mount, was tested in previous shoots to confirm it was well-calibrated for distance measurements. Even so, the filmmakers used it primarily for monitoring focus, which they adjusted by looking directly through the lens.

There are many lens adapters that allow photographic lenses (such as Nikon, M42, or L39 mount lenses) to be used on C-mount cameras. While these adapters are designed to maintain approximately the correct distance between the lens and the film plane, enabling full focusing range, they are not universally precise for all cameras. As a result, when using a lens adapter, you should not rely on the distance markings on the lens for accurate focusing.

Older lenses have often been refurbished or cleaned of internal dust and fungus, involving disassembly in various small repair shops. During this process, the lens calibration may not have been properly restored. Screw mounts can also be unreliable, as you can't always be sure they've been tightened correctly. Additionally, many lenses are compatible with Bolex or Pathé cameras via a C-mount, but these lenses often cannot achieve infinity focus on 16mm cameras due to the different distance requirements between the lens and the film or sensor plane. As a result, they function more as macro lenses in such setups.

In all these cases, it's best not to rely on the distance scales marked on old lenses. Trusting your eye, even if it's uncomfortable, is more reliable. For example, if you have astigmatism, you might perceive a point as a comma, which prevents you from achieving a completely focused image through the optical viewfinder. This occurs because your eye requires a cylindrical lens correction rather than the spherical diopter adjustments typically found on viewfinders.

Sometimes, we need to adjust focus during a shot as the actor moves closer or farther from the camera. Following an actor's movement with precise focus is challenging for the camera operator due to several factors. One camera may have a darker view because of a closed aperture and a flickering image from the rotating shutter. Another may have an even darker image due to the prism, and some cameras may have an even dimmer viewfinder.

Because maintaining focus is so demanding, especially with analogue cameras, it is typically the responsibility of a dedicated focus puller, even in digital filmmaking. However, pulling focus with small lenses designed for these older cameras presents unique difficulties. First, the focus puller must manually turn the focus ring smoothly with their fingers, as these lenses often lack compatible follow-focus rings. Second, the puller must memorize the focus positions for each key point where the actor stops – a demanding task for someone without experience.

A practical solution is to stick a piece of adhesive tape onto the focus ring and mark the key focusing positions. The focus puller then needs to carefully turn the focus ring without accidentally moving the aperture ring from its set position.

2. Exposure setting

To decide on the optimal aperture for the correct exposure, you need to know the film's ISO and the shutter speed.

Shutter Angle and Shutter Speed

The frame rate of the film (measured in frames per second) and the angle of the shutter disc determine how long each frame is exposed to light (the shutter speed). Shutters can have different angles, with the most popular – considered the default for 24 frames per second – being 180 degrees. Shooting with a 180-degree shutter angle is thought to produce motion blur most pleasing to the human eye. Some cameras offer variable shutter angles. With a larger shutter angle, each frame's exposure time increases, creating more motion blur and smoother playback.

The calculation for shutter speed is:

$$\text{Shutter speed} = (\text{Frame rate} \times 360) / \text{Shutter angle}$$

So, in the case of 24 frames per second with a shutter angle of 180 degrees:

$$\text{Shutter speed} = (24 \text{ fps} \times 360) / 180 = 8,640 / 180 = 48$$

This means the exposure time is 1/48 sec (shutter speed = 48).

For 25 fps, the shutter speed would be 50. However, not all cameras have a 180-degree shutter angle, so shutter speed is not the same across all cameras. For example, on the Krasnogorsk-3, the shutter speed at 24 fps is 1/60 sec. This indicates a shutter angle of:

$$\text{Shutter angle} = (24 \text{ fps} \times 360) / 60 = 144 \text{ degrees.}$$

We were interested in shooting with different frame rates because slow motion (48 frames per second), fast motion (12 or 16 frames per second, which creates a humorous, sped-up effect), and time-lapse (shooting frame by frame) were useful in visualizing the dreamlike quality of the scenes, enhancing the portrayal of hallucinations, imaginations, and dreams.

For the Krasnogorsk-3, we have the following values: 8 fps = 1/20 sec, 12 fps = 1/30 sec, 16 fps = 1/40 sec, 24 fps = 1/60 sec, 32 fps = 1/80 sec, 48 fps = 1/120 sec. According to the manual, the exposure for single-frame shooting is 1/30 sec.

The Bolex shutter is set at 180 degrees (or 170 degrees in some cameras). However, the viewing system uses a prism reflex instead of a mirror. This reflex prism diverts 20-25% of the light passing through the lens into the viewfinder, meaning only 75-80% of the light reaches the film plane. As a result, the light quality reaching the film is reduced by about 1/2 to 1/3 of an f-stop. Bolex specifies a shutter speed of 1/80 at 24 frames per second, which corresponds to an *effective* shutter angle of 133 degrees. This gives us the following shutter speeds: 12 fps = 1/40 sec, 16 fps = 1/55 sec, 18 fps = 1/60 sec, 24 fps = 1/80 sec, 32 fps = 1/110 sec, 48 fps = 1/160 sec, 64 fps = 1/220 sec

For single-frame shooting, the manual specifies an exposure time of 1/40 sec.

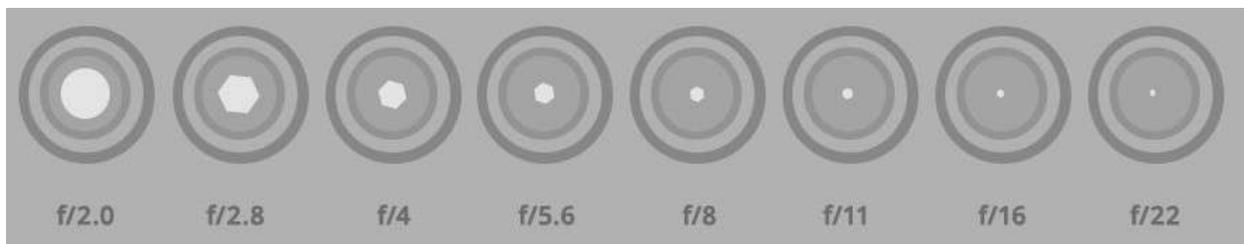
To compensate for the light reduction, Bolex introduced RX lenses calibrated to allow 1/3 more light than the aperture markings on the barrel indicate. For these lenses, Bolex determined that the standard effective shutter speed for the H-16 camera is 1/65 of a second rather than 1/80. However, when shooting modern negative film, this difference is minimal. Still, using RX lenses is beneficial because they counteract the spherical aberration caused by the Bolex prisms. The prisms in the Bolex bend the outer light rays from a lens at different angles than the central rays, preventing them from converging at the same point and causing blurriness on the film plane. RX lenses are specifically designed to correct this aberration. When using non-RX lenses of 50 mm or shorter, satisfactory results can still be achieved by stopping down to f/8 or smaller. The shutter speeds for RX lenses are as follows: 12 fps = 1/33 sec, 16 fps = 1/45 sec, 18 fps = 1/50 sec, 24 fps = 1/65 sec, 32 fps = 1/90 sec, 48 fps = 1/130 sec, 64 fps = 1/180 sec, and for single-frame shooting, the shutter speed is 1/30 sec.

For more information about Bolex lenses, visit: <http://bolexh16user.net/H16Lenses.htm>

Bolex cameras typically feature a variable shutter, designed primarily for in-camera fade-out and fade-in effects. This shutter can also be used for double exposures. In the golden age of Bolex cameras, these in-camera effects were highly valuable, as creating similar effects in a lab was costly. Today, these effects can be achieved more easily and precisely in digital post-production.

When there is too much light but you want a greater depth of field (requiring a larger aperture), a narrower shutter angle (higher shutter speed) can help reduce the amount of light reaching the film, much like in photography. This can be useful when you prefer not to use an ND filter. However, with narrower shutter angles, motion blur – typically pleasing to the human eye – diminishes, making moving subjects appear jittery on screen. This “strobe effect” can be disorienting for the audience, though it may also be used as an artistic tool.

The aperture is the size of the opening in a lens that controls the amount of light passing through. While some lenses have a fixed aperture, most photographic lenses feature variable apertures, allowing for greater flexibility in exposure control. The ratio between the aperture size and the lens's focal length is referred to as the f-number, f-stop, focal ratio, f-ratio, or relative aperture. Aperture values are arranged in increments known as exposure values (EV) or stops. The f-stop is defined as the focal length divided by the diameter of the effective aperture.



Graphic representation of apertures at different f-stops (source: [B&H Photo Video](#)).

However, this is only an illustration to help with understanding, as the diameter of the aperture opening varies depending on the focal length of the lens. This topic and its significance will be explored further in the Troubleshooting chapter.

The smaller the f-number, the wider the opening. The difference between these aperture values is called a stop. For example, $f/4$ lets in double the amount of light compared to $f/5.6$, and $f/5.6$ lets in twice as much light as $f/8$. So, $f/4$ allows four times more light through the lens than $f/8$, and eight times more light than $f/11$. This is because a difference of one stop means doubling or halving the amount of light.

These are the standard aperture values where each step represents a one-stop difference: 1, 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, 22, 32. On this scale, every second number is roughly double the previous

one. For instance, 2 is double 1, 4 is double 2, 8 is double 4, and so on. Similarly, 2.8 is double 1.4, 5.6 is double 2.8, and 11 is roughly double 5.6. This pattern comes from the formula for the area of a circle (π multiplied by the radius squared), which explains the doubling.

Some lenses offer intermediate aperture values, such as 1.7 or 4.5, which indicate one-third or two-thirds of a stop difference compared to the nearest standard value. These intermediate values mean less light compared to a full stop difference, but it's enough to memorize the standard values for everyday use.

ISO and ASA numbers are practically the same, and a change of one stop in sensitivity means doubling the number. For example, going from ISO 100 to ISO 200 is a one-stop difference, just as going from ISO 200 to ISO 400. This means that between ISO 100 and ISO 400, there's a two-stop difference, and between ISO 100 and ISO 800, there's a three-stop difference.

For instance, if a correct exposure at ISO 400 requires an aperture of $f/5.6$, in the same lighting conditions, you would need to set the aperture to $f/4$ at ISO 200 and to $f/8$ at ISO 800. Similarly, at ISO 1600, you would set the aperture to $f/11$.

To achieve the right exposure, you must know how much light is entering the camera lens. This is regulated by the aperture setting on the lens. To measure this light, we use light meters. These devices, based on the shutter speed and the film sensitivity (expressed in ISO, ASA, or DIN), indicate the appropriate aperture value for a proper exposure.

There are two main categories of light meters based on the type of light they measure: reflected light meters and incident light meters.

Reflected light meters measure the amount of light bouncing off your subject and entering the camera lens. Many photo and amateur film cameras have built-in reflected light meters, but for professional use, handheld reflected light meters are often preferred. These meters are calibrated to 18% grey (also known as "middle grey"), which means they give accurate exposure readings only when the subject reflects 18% of the light it receives.

In this context, 18% grey refers to a surface that reflects 18% of the light falling on it and absorbs the rest. While the term "relative luminance" might be more precise than "grey," the concept

remains the same. Ideally, black reflects 0% of the light (true black), but in reality, black reflects around 4%. White, which should reflect 100% of the light, reflects about 98%.

The limitation of reflected light meters is that they treat everything as if it were 18% grey. So, if you point the meter at a dark object (like black fabric), it will interpret it as middle grey and suggest an exposure that will overexpose the object, making it appear lighter than it should (practically, it will appear as if it were 18% grey). Similarly, measuring a bright object (like white fabric) will underexpose it because the meter assumes it's middle grey (the white surface will appear as if it were 18% grey in the image). For instance, if you measure the reflected light from a Caucasian person's face, which reflects about 25% of light, you might underexpose the face by around 2/3 of a stop.

Therefore, when using a reflected light meter, you need to consider how much lighter or darker your subject is compared to 18% grey and adjust the exposure accordingly.

The most accurate way to measure reflected light is to use an 18% grey card held in front of your subject. By measuring the light reflected from this card, you can set a proper exposure. Built-in meters in consumer cameras are useful for quick and convenient readings in average daylight conditions, as the overall scene's relative luminance often hovers around 18%. However, in professional settings – where additional lighting and artistic effects are used, such as for night scenes or dramatic dusk and dawn lighting – the relative luminance can vary greatly. In these cases, more precision is needed, which is why incident light meters are generally preferred for professional use.

With incident light meters, you measure from the side of the subject towards the camera. These meters tell you how much light is falling onto the subject, which will then be reflected to the camera lens, giving you the correct exposure value. Darker surfaces will reflect less light and appear darker, while brighter surfaces will reflect more light and appear brighter in the final image.

These light meters are also calibrated to 18% grey. They use a white, translucent dome in front of the sensor that collects light and allows 18% to pass through – essentially simulating the effect of measuring reflected light from an 18% grey card. Removing the dome allows these meters to also function as reflected light meters.

The dome's shape is designed to simulate a three-dimensional human face. This is helpful because in film, we often aim to avoid uniform lighting on faces, preferring a mix of light and shadow. By positioning the dome in front of an actor's face so that it captures the same balance of highlights and shadows as the face itself, you can quickly determine an exposure value for the average lighting of the face.

This three-dimensional quality of the dome can also be used to measure light on other three-dimensional objects. Some light meters include flat translucent filters for measuring light on flat surfaces. When using the dome, it's important to position it so that it collects light in the same way as your subject. For example, when measuring light on a person's face outdoors, you might need to tilt the dome slightly forward to avoid capturing too much light from the sky, which could cause underexposure of the face.



On the set of Shadows. Photo by Robert Lakatos.

How much should you tilt the light meter forward? The dome is designed to mimic the shape of the human face, so you need to observe how much light the face is reflecting toward the camera. Your goal is to position the dome so that it reflects the same amount of light toward the camera. This will become clearer in the following sections.

Manuals often recommend pointing the light meter from the filmed object toward the camera to determine the aperture value for optimal exposure (referred to as "the exposure key"). This simplified approach works well in cases of soft lighting or when there is little contrast. However, in scenarios with strong key lighting – such as when one side of an actor's face is brightly lit and the other is in deep shadow – using the light meter's reading as the exposure key can result in one side being overexposed and the other underexposed.

In practice, the situation is usually more complex. To achieve the right lighting for a scene, you should measure the different light sources separately. When the light source is not directly aligned with the camera, not all the light falling on the object will reflect back to the camera. A common method in such cases is to hold the light meter in the direction of the angle bisector between the camera's optical axis and the axis of the light source. This method works well if the angle between the camera and the light source is no greater than 90 degrees. However, results can still vary because the amount of light reflected toward the camera depends significantly on the shape and orientation of the filmed object relative to the camera.



On the set of The Wedding. Photos by Orsolya Salamon.

Just by looking at the picture on the left, some might assume that the DOP is making a mistake in how he's holding the light meter, as it appears to be tilted too far back. However, the picture on the right shows that the camera in this scene is positioned quite high, along with the lights. This suggests he's likely holding the light meter correctly, aligning it with the angle bisector between the camera's optical axis and the light source's axis. Additionally, he's mindful to avoid blocking the light with his body, ensuring the light meter's dome remains unobstructed.

For larger angles between the camera's optical axis and the direction of the light, things get more complicated. Usually, each DOP develops their own method based on personal photographic experience. I once heard a renowned DOP mention that he measures backlight using a half dome and adjusts it to match the exposure key measured this way. Another well-known DOP said he measures backlight directly with a full dome and sets it to be two or three stops over the exposure key. Ultimately, there's no universal method – each DOP should refine their approach through experience or test shoots, observing how the light interacts with the dome and how the subject reflects light toward the camera.

Problems, mistakes and troubleshooting

1. Losing Film Footage in the Lab

When we decided to process the film negatives ourselves, we knew there was a risk of losing some footage during development. We used 100 ft (30.5 m) daylight film spools in our cameras, but the Lomo developing tanks we had could only hold 30 m of film at a time, divided into two 15 m sections. This meant we had to cut the film in half before loading it into the tank.

This process made it likely that we would split a usable shot in two, and due to the nature of the loading method, we also risked losing a few frames from each take. As a result, even in digital post-production, it would be impossible to seamlessly stitch the two pieces back together.

To mitigate this, we decided to shoot duplicates with a second camera. We made sure to vary the timing so that if one camera's footage was split in the middle of a shot, the second camera's take would remain intact – specifically by starting a second take at the beginning of a new spool.

Unfortunately, despite our precautions, we still encountered issues. In some cases, the take that was cut in two turned out to be good, while the intact one had technical problems, rendering it unusable.

The Kodak film stock we purchased came on 100 ft daylight spools, whereas the Orwo film arrived as a 122 m roll. This meant we had to manually roll the Orwo film onto 100 ft daylight spools. Occasionally, we accidentally loaded more than 30.5 m onto a spool, leaving us in the darkroom with an extra 1.5 to 2 m of footage, which we had to cut and process separately. Inevitably, this sometimes resulted in cutting a useful take in half.

Losing 0.5 m from the 30.5 m footage during loading wasn't a significant issue. The part we had to cut off while loading the film into the 30 m tank was always the beginning of the spool, which didn't contain any useful shots, as that section was used for threading the film into the camera.

2. Not Filming What We Thought We Already Had

There were instances when the film ran out in the camera without anyone noticing, leaving us under the false impression that we had captured the shot – when, in reality, we hadn't. This issue often arises when the footage counter on the camera isn't reset to "0" before shooting, or when the counter isn't reliable.

In theory, you should be able to tell whether the camera is running with or without film based on the sound it makes. However, during the stress of shooting, it's unrealistic to expect the DOP to pay attention to this detail. Ensuring the film is properly loaded and tracking the footage count is the responsibility of the camera assistant, who must remain vigilant to avoid this mistake.

3. Losing Footage in the Camera

If the film isn't properly loaded into the camera or if technical mistakes are made, losing footage is an obvious risk. However, even when everything is done correctly, footage can still be lost – particularly when using older, unserviced cameras.

One of the most common issues is with the take-up spool. If it malfunctions and fails to wind the exposed film properly, the film will start to accumulate and crumple inside the camera, eventually causing it to jam.

This problem can occur for various reasons, even with spring-wound cameras that appeared to be working fine during testing. Unfortunately, mechanical issues with the take-up mechanism may only reveal themselves during an actual shoot, making it a persistent risk when working with older equipment. Another possible cause is temperature. In very cold conditions, the metal parts inside the camera mechanism can contract at different rates, and old grease or Vaseline in the camera can freeze, slowing down the mechanism.

We experienced this issue with one of our Bolex cameras. The first half of a 30.5 m spool was properly transported through the camera, but at some point, the take-up spool likely stopped

working, causing a large section of film to crumple and jam inside the camera. At the time, we couldn't figure out why it happened. If it had been a loading error, the entire roll should have had issues, but the first half of the footage was correctly wound and well-exposed.

The camera itself wasn't damaged – it worked fine the next day. It wasn't until we saw another camera slowing down in cold weather that we concluded the issue was likely temperature-related.

4. Camera slowing down in cold

We encountered this issue with the Krasnogorsk 3 camera while shooting the fifth episode, *Dracula's Attempt*. During an outdoor shoot in cold weather, the DOP noticed that the camera's sound didn't match its usual rhythm at 24 fps. Suspecting a problem, he took the camera into the car, placed it in a loading bag, and checked the film. Everything appeared to be loaded correctly.

To be cautious, he replaced the film spool and confirmed that the camera was functioning fine. However, after returning outside, the issue resurfaced – the camera slowed down again after two shots. Strangely, once the shoot was over, the camera worked perfectly indoors.

The following day, the crew made a point of keeping the camera warm between shots, and the issue didn't occur again. This experience confirmed that the cold temperature was affecting the camera's performance. We were quite surprised that the Krasnogorsk camera struggled in the cold. This led us to assume that the issue was more likely due to the old grease inside the mechanism freezing in the cold, rather than the contraction of the metal components. The DOP noted that the camera's sound at 24 fps was more like what you'd expect at 12 fps. At 24 fps, the shutter speed should be 1/60 of a second, but at 12 fps, it would be 1/30 of a second. This indicated that the film was overexposed by one stop. To compensate, we underdeveloped the film by one stop during processing. We ran development tests and managed to save the footage. In static shots, where the actors weren't moving, the difference was imperceptible. In shots with movement, the actors' actions had a slightly exaggerated, burlesque quality. However, this wasn't an issue, as we had already planned to incorporate such effects – particularly for long wide shots where we intended to subtly speed up the actors' movements as they crossed large landscapes.

5. Unintentional ghosting effects:

This refers to footage that appears out of focus and overexposed, giving the impression of a double exposure. However, the "second exposure" actually occurs while the film is in motion, rather than when it is stationary in the film gate. This results in a blurred, ghost-like effect, as the image is unintentionally exposed during the film's transport through the camera mechanism.



You can see that the characters dressed in white appear to have a reflection on the grass.



In these images, Mary's nose and hand appear to have a sort of aura.



In motion, it looks even more bothersome.

The initial assumption was that the pressure plate wasn't properly closed, causing the film to move during exposure. However, the issue persisted even after we double-checked that the pressure plate was securely closed. To rule out handling errors, we decided to close the pressure plate before loading the film and let the camera autoloading it, assuming that manually adjusting the plate after loading might have caused the problem. Despite this, the issue continued to occur sporadically. When it first happened with the Pathé camera, we suspected a synchronization problem between the shutter and the film transport mechanism – meaning the film was being exposed while in motion rather than when stationary. As a result, we decided to stop using that camera to avoid further problems. But later, the same issue occurred with one of the Bolex cameras. We looked into the problem on various online discussion forums, where opinions were divided – some suggested it was a synchronization issue, while others argued that this wasn't possible since, in the Bolex's mechanism, the shutter is mechanically linked to the film transport system. After testing the camera and finding that the issue didn't persist, we were inclined to agree that it wasn't a synchronization problem. Instead, we tend to believe the theory that:

Some people suggested that the issue might be due to the film loop above the gate being too short. According to them, when the loop is off by even a single frame, it affects the sound of the camera. Experienced operators can often recognize this by ear – if the camera doesn't sound right, it's likely a pulldown issue. If the loop is too tight, the spring pressure from the pressure plate may not be strong enough to keep the film perfectly flat in the gate during exposure, which could result in uneven images.

Another theory focused on the camera's turret. Some believed that the turret wasn't properly locked in place. Bolex cameras, they noted, are known for this issue, so it's essential to double-check that the turret is securely locked and stays that way during operation.

We're still unsure which of these issues caused the problem. To be certain, we'd need to shoot test footage deliberately recreating both errors. However, these are definitely potential mistakes we'll need to watch out for in the future. Fortunately, we were able to use some of the damaged footage as part of a sequence showing Mary being attacked by the two fake doctors. Unfortunately, most of the unusable footage had to be discarded.

6. Jumping images:



Full frames of the jumping image sequence

Upon inspecting the negative, we noticed that only every seventh or sixth frame was in focus, while the rest were blurred or misaligned. We somehow managed to create extreme close-ups of Mary's screaming mouth and terrified eyes that, when projected, appeared as jumping images.



We were able to use some of this damaged footage in the scene where Mary is attacked by the two fake doctors. However, this issue was probably the result of improperly formed film loops or shrunken film stock. Since our film stock was fresh and well-preserved, shrinkage wasn't the cause. Therefore, the jumping image was most likely due to incorrectly formed loops in the camera. Unfortunately, this problem affected several shots – practically an entire roll of film loaded into the camera. Thankfully, we had been using two cameras and captured the same shots with both, which allowed us to recover the footage.



In motion picture, it appears quite distracting and far less aesthetically pleasing than in still images. However, I can imagine that in certain contexts, this kind of unsettling footage could be intentionally used as a tool for artistic expression.

7. Out of focus images:

There are several potential reasons for ending up with out-of-focus footage, some of which we discussed in the chapter on focusing. However, one particular issue is worth repeating because it caused us to lose an entire chapter of our film. The DOP used a converted zoom lens mounted to the Bolex camera with a C-mount adapter. Instead of relying on his eye to focus, he measured the distance from the subject to the film plane and set the focus accordingly on the lens. This is a critical mistake – especially when using adapted lenses, older lenses, or cameras with prism reflex systems, such as the Bolex or plate reflex cameras like the Pathé. On these cameras, the distance from the back of the lens to the film is slightly longer due to the light-dividing prism or plate between the lens and the film gate. As a result, even a perfectly calibrated lens for a standard C-mount camera will not produce accurate focus markings on these reflex models. This makes relying on the distance scale of the lens risky, and it's always better to trust your eye when focusing, especially with older lenses. It was unfortunate to lose this footage, as the DOP did excellent work with the lighting and shot composition. However, luckily, he captured a backup of all the scenes using a high-quality digital camera, allowing us to recover the material in post-production by using the digital footage.

Another common cause of out-of-focus images is the use of low-quality filters. The blurred effect is often a result of internal reflections between the lens surface and the filter. This issue becomes more pronounced when using older lenses that lack advanced anti-reflective coatings. Additionally, mounting filters with step-up rings can worsen the problem, as the increased distance between the filter and the lens amplifies the reflections. To minimize this effect, it's essential to use high-quality filters and position them as close to the lens as possible.

Unfortunately, in our effort to achieve a greater depth of field, we used ND filters. Since our circular filters had a much larger diameter than the lens, we had to use several step-up rings to mount them. This setup significantly increased the risk of unwanted reflections.

The more optical elements you use in front of the lens, the more you increase the risk of reflections. However, for outdoor scenes, we were using Kodak 7222 film material with a sensitivity of 250 ASA for daylight, which was too sensitive in bright summer sunshine and required aperture settings beyond $f/16$. At such small apertures, diffraction aberrations can occur, especially with older lenses. The main reason we wanted to use larger apertures, though, was to achieve a more cinematic feel with a pleasing depth of field. Based on our experience with 35mm film, we knew that the most visually appealing depth of field for daylight scenes is achieved at an aperture of $f/5.6$, while for night scenes, when the natural depth of field of our eyes is shallower, $f/2.8$ works best.

Given the deeper depth of field associated with the smaller frame size of 16mm film, we determined that an aperture of around $f/4$ is ideal for daylight scenes, while $f/2$ works best for night scenes. Instead of using ND filters, we considered reducing the shutter angle, but we were hesitant to adjust it. Fortunately, we developed the film material on the same day we shot it and quickly realized that our experiment with ND filters and step-up rings wasn't successful. After that, we abandoned the use of filters and reassured ourselves that, during the silent film era, depth of field wasn't as shallow as what we were aiming for. Additionally, because of the moving grain in film material, a slightly deeper depth of field would be less distracting than it might appear in a digital image.

Thankfully, diffraction issues are less noticeable on black-and-white film compared to colour film, where diffraction can cause coloured fringes along sharp edges. The lenses we used weren't extremely old either – we used Nikon photographic lenses with Nikon F to C-mount adapters. However, we did notice a quality difference: footage shot in direct sunlight (with small aperture, so higher f stop value like: 11, 16) turned out worse than scenes filmed in the shade (with larger aperture, with f stop = 4 or 5,6), and indoor scenes with artificial lighting (f stop = 2 – 2,8) yielded the best results.

We also observed that footage shot with wide-angle lenses had worse image quality compared to footage shot with narrow-angle lenses. We believe this is due to the relationship between focal length and aperture size, as explained in the chapter on Exposure. According to the formula $f/\text{stop} = \text{focal length} / \text{diameter of the effective aperture}$, shorter focal lengths result in smaller effective aperture openings at the same f-stop value. This suggests that the lower quality of outdoor shots in direct sunlight, particularly with wide-angle lenses, was likely caused by diffraction resulting from the smaller effective aperture diameter.

At first, we believed the poor image quality was due to the film stock itself. We used 400 ASA Orwo for the indoor scenes and 250 ASA Kodak for the outdoor scenes, so we assumed the Orwo stock was simply superior to the Kodak. However, it's more likely that the issue wasn't with the film stock, but rather with aperture settings. Some Kodak shots, taken at mid-range f-stop values, turned out to have excellent quality. For instance, the shot of the patient eating a worm from the episode *Shadows* and several shots from the final episode featuring the character named Joker were so sharp and clean that I actually had to persuade the directors to degrade them in post-production to match the look of the rest of the footage. This further supports the idea that the quality issues were caused by diffraction, not by the film material itself.

8. Day-for-Night Effect Problems:

To darken the sky in black-and-white using red or orange filters, you need sunshine and the sun behind your back. These conditions create the blue sky you can filter out by blocking the blue component of the light, making the sky appear darker.

But what do you do if you've travelled far into the mountains with the whole crew, only to find that the weather isn't favourable? What do you do if you want the shot to look like *Image A* but the weather turns out to be more like *Image B*?



A



B

Director Orsolya Orbán and DOP Balázs Rokaly chose to work with the weather conditions they had and opted to darken the sky during digital post-production. The director, Orsolya Orbán, painted clouds, which were then incorporated into the scene by Alex Bőjthe, who handled all aspects of digital post-production, including colour correction and visual effects. Although Alex could have used real clouds, the team agreed that the painted versions better matched the aesthetic of early silent films. In another shot, they even added a painted moon for consistency with this artistic style.



In the next image, the conditions were more favourable. They managed to capture a nice backlight on the actors, and part of the sky was dark enough to achieve a workable result.



The problem with the painted clouds was that their image layer overlapped the filmed image, making it look like the clouds were covering the actors. More precise masking could have solved this, but it would have required a lot of work. The creators decided not to put in that effort and instead used only the parts of the shots where the overlap wasn't too distracting. On one image, they even left the effect as it was, showing the clouds passing over the tower.



Well, in reality, clouds would never pass over a tower like that. But since we're in a dream sequence set in a mysterious castle, and embracing the aesthetic of early silent films, this creative choice works. Gradually introducing this stylized look helps the audience accept other effects in the scene, such as the painted lightning and flashes created through simple overexposure in post-production – techniques that might otherwise seem unconvincing due to the absence of real shadow

play from actual lightning. Additionally, the flash of a painted skull replacing Dracula's face fits within this surreal, dreamlike logic. In one of the following chapters, Alex Bőjthe, the creator of these effects, explains how they were achieved.



In the dark forest scenes, where the sky was absent from the frame, achieving a day-for-night effect was much simpler. By using simple underexposure, the team managed to create a look that, while not entirely realistic, conveyed a conventional late dusk or early dawn atmosphere. The actress wore bright clothing, ensuring she remained visible on screen. The challenge, however, was with Dracula's dark costume. To address this, the team utilized fog and smoke from a smoke machine – classic elements associated with Dracula's presence – which also helped enhance visibility. Additionally, they painted some trees with white lines using eco-friendly paint to further improve their prominence in the frame.



Photo by Tamás Lőrinczi



Fragment of a film frame



Fragment of a film frame: Smoke in the background enhances the visibility of Dracula dressed in black.



On the set of Dracula's Attempt. Photo by Roland Péter

Final Conclusions and Future Directions for Reinventing Analogue in the Digital Era

The diversity of analogue film formats makes it impractical to draw broad conclusions applicable to all. Therefore, our findings are specific to our experiences with 16mm black-and-white negatives, captured using vintage amateur or semi-professional spring-wound, noisy cameras.

Our conclusions focus on two key areas: artistic expression and artistic education.

The most important conclusion is that this particular analogue technology derives its power of artistic expression not from the perfection of reproducing reality, but from its imperfections. Elements such as flickering caused by frame instability, image grain, irregular frame rates, over- and underexposure, and various forms of physical or chemical damage to the film material all contribute to its unique aesthetic. Before the rise of digital technology, most users sought to achieve perfection in analogue imaging. However, digital technology has clearly surpassed analogue in this pursuit. As Susan Sontag observed, photography freed painting from the compulsion to imitate reality, as the mechanical reproduction of reality was more credible than painting – even when photographs contained less visual information or detail.¹ This liberation allowed painting to explore new forms of artistic expression, and similarly, analogue film can now embrace its imperfections as a source of creative potential. Similarly, we can say that digital film technology has assumed many of the tasks traditionally associated with analogue film, liberating analogue technology from the compulsion to imitate reality. This freedom allows analogue technology to explore new avenues of artistic expression, particularly those rooted in its inherent imperfections. These imperfections are more than just aesthetic, they not only hint at the archival nature of the footage but also capture its evocative qualities, reflecting memory and the imaginative process. Our visual imagination is neither perfect nor fully detailed – it is inherently selective. Through our inner vision, we perceive fragments of imagined reality, often discontinuous and incomplete. To express the subjective, imaginative nature of footage – whether reflecting the

¹ Sontag, Susan. *On Photography*. Farrar, Straus and Giroux, 1977.

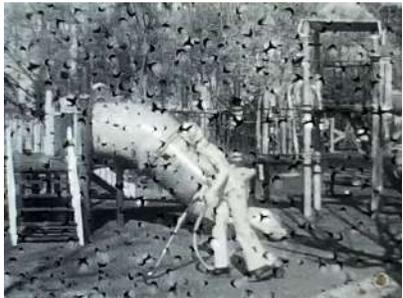
internal reality of the author or the characters – imperfections such as flickering, image instability, and other departures from realism become valuable tools.

When discussing analogue imperfections, it is essential to clarify that these imperfections are so only in terms of realism.

Many experimental filmmakers explore the creative possibilities of chemical processes, often achieving striking visual results. For instance, Hungarian filmmaker Péter Lichter is well-known internationally for his work in this field. Similarly, the Buharov brothers (Igor and Ivan Buharov, whose real names are Szilágyi Kornél and Nándor Hevesi) have been creating experimental films, including feature-length works, on Super 8. They are currently working with Foma's Double Super 8mm film, developing it using the caffanol formula, which is based on coffee and vitamin C. During workshops at the Mediawave festival, we even had the chance to see Lea Hoffart's film *Lecsó* (named after a traditional Hungarian vegetable dish), which was developed entirely with tomatoes. This experience introduced me to the idea that film can be processed with a variety of sustainable natural materials, including beetroot, dandelion, and others.

The visual results of these experiments are quite intriguing, and I believe it is time to explore their use not only in experimental films but also in narrative storytelling. At our suggestion, our collaborator, the film department of Sapientia University, has already organized a caffanol workshop. The following images show a sample of Double Super 8 film frames processed with the caffanol developer, taken during the workshop. The frames display the transition from the overexposed beginnings of the takes to the distinctive image damage characteristic of this method. Naturally, these visual artifacts do not remain static when projected; instead, they move at the same speed as the film grain, creating a dynamic flickering effect. This motion alternately obscures and reveals parts of the image, giving the impression of a dynamic puzzle constructed by someone's subconscious.







Additionally, we encouraged another collaborator, the Argo Audiovisual Association, to work with Igor Buharov and his company in Berlin on an educational project titled *Reinventing Analogue in the Digital Era*. Our association will not participate in this project as an official partner, but our members will be involved as tutors, participants, and workshop collaborators. This project will focus on shooting primarily with Double Super 8 black-and-white FOMA film (and Kodak Super 8, if it becomes available again), using alternative development methods such as caffenol, tomato, beetroot, and similar natural, sustainable materials. The project will culminate in the creation of an educational handbook, much like this one. Given the uncertainty of achieving usable images

with such experimental techniques, participants will also shoot digitally as a backup. In post-production, they will work to combine the analogue footage with the digital material. Ultimately, the quality of the final result will depend heavily on the creativity and expertise applied during digital post-production. Alex Bőjthe, president of the Argo Audiovisual Association, was responsible for the entire digital post-production of our film *The Death of Dracula*. Drawing on this experience, he also authored the next chapter of this handbook, focusing on combining digital and analogue footage. Given this expertise, we believe that coordinating this project aligns perfectly with the profile of the Argo Audiovisual Association. That said, we, the members of the Association of Hungarian Filmmakers from Transylvania, fully intend to take part in this project – not only by sharing our expertise but also by actively contributing to the creative process.

From an educational perspective, it is difficult to draw definitive conclusions about whether analogue technology fosters a deeper understanding of digital technology, especially for younger generations who have grown up with digital tools. These individuals often grasp abstract concepts, such as shutter angle, without needing a physical visualization. While showing an image of a mechanical shutter can help contextualize the origin of the concept, this illustration is usually sufficient – they do not necessarily need hands-on experience with analogue shooting to understand it. A similar situation arises with light measurement. In digital filmmaking, tools like histograms and false-colour systems are used to achieve correct exposure, making traditional analogue methods, such as incident light measurement, less relevant for digital workflows. The present paper focuses only on the process of shooting on analogue film, and in the future, it would be worth expanding it to the topic of sensitometry, comparing analogue and digital technologies and analysing the possibilities of combining them. However, this subject is too large to be included in this study. But after that, we'll be able to draw deeper conclusions.

From a technical and technological standpoint, it is not essential to emphasize analogue methods in the teaching process of digital filmmaking. However, many participants were captivated by the tactile nature of film material and the enigmatic quality of the latent image on a film negative, which only reveals itself during the development process. This fascination is difficult to articulate logically, as the essence of such experiences lies in their spirituality – something inherently elusive to rational explanation. Much like symbols, which emerge from our subconscious, their power diminishes when we attempt to dissect their meanings.

The master scene shooting method, made more accessible by the affordable storage capabilities of digital technology, offers greater freedom to actors and encourages realistic performances. However, it doesn't necessarily aid the learning process of film language. Importantly, actors don't always require that level of freedom. In contrast, the overlapping shooting method enhances visual continuity and fosters the discovery of original visual solutions. By demanding precise shot planning, it significantly supports the learning of film language and the development of distinctive visual styles. The expensive nature of analogue film material naturally encourages the use of the overlapping method. While it's possible to enforce this method with digital technology, it's harder for students to adhere to it without the constraints imposed by the medium itself. I believe beginning with the overlapping method is essential for learning, as its discipline provides invaluable experience for effectively employing the master scene method later on. Many participants also agreed that the limitation of raw material (film negative) stimulated their creativity – not just during shot planning but also in editing and digital post-production.

During a Q&A session, Boglárka-Angéla Farkas, the director of the episode *The Wedding*, shared that the silent film format was particularly significant for her. Previously, she considered herself a "dialogue girl," heavily relying on dialogue in her films. This project, however, forced her to focus on conveying meaning primarily through visual storytelling. I recall that despite her efforts to minimize dialogue, the initial version of her episode still included too many dialogue inserts. Over time, she gradually realized that at least half of them were unnecessary. This experience demonstrated how the absence of dialogue can effectively encourage more cinematic thinking.

While silent moving pictures are not exclusive to analogue technology, black-and-white analogue film is so deeply associated in our collective memory with silent cinema that I find it challenging to avoid a sense of kitsch when using digital technology for silent films. This stems from our tendency to easily accept what feels familiar while struggling with what is unfamiliar – much like how some artists, attuned to the quality of light, initially resisted electric lighting after being accustomed to oil lamps.

With the rapid expansion of the internet, the demand for visual content has skyrocketed, leading to an explosive growth in media schools branding themselves as film schools. These institutions keep alive the alluring dream for their students – the hope and possibility of becoming true

filmmakers. And that's not a bad thing at all! Many brilliant filmmakers have emerged from less prestigious film schools or have bypassed formal academic training in filmmaking altogether. However, it is clear that reintroducing analogue technology into the teaching process on a large scale is impractical for such a vast number of film students. While some film schools might have the resources and capacity to incorporate analogue methods into their curricula, it cannot realistically be expected as a standard requirement across the educational system.

With the adoption of the Bologna System of Higher Education, which shortened undergraduate programs to three years instead of four, the educational process in filmmaking has accelerated – something made possible by the user-friendliness of digital technology. However, this shift poses a challenge for art universities in determining how to structure meaningful experiences for students at the master's level. I believe that alternative educational projects, like the one we experienced, could be an effective solution for those who wish to deepen their knowledge in specific areas of filmmaking after earning their bachelor's degree. A key advantage of such projects is the opportunity for postgraduate students to collaborate with other emerging professionals who have already completed their formal studies. This makes these initiatives ideal for partnerships between university postgraduate departments and Vocational Educational Training (VET) providers. However, for such an approach to be truly impactful, a university would need to offer a variety of similar projects across multiple fields of filmmaking, ensuring comprehensive educational opportunities for its students.

This is why we encouraged our external partner in this Erasmus+ program, the Argo Audiovisual Association, to build on the work we started in the field of analogue filmmaking by developing a project focused on 8mm and Super 8mm technology. At the same time, we will continue to create similar programs exploring a wide range of other technologies. Our next project, titled *Recycling Visuals*, will delve into the creative possibilities of working with not only found footage but also unprocessed (unused) archival materials and even the re-editing of footage.

A Hybrid Approach to Filmmaking

By Alex Bøjthe

Analogue and Digital in *The Death of Dracula*



Photo by Róbert Lakatos

Abstract

The *Death of Dracula* is a collaborative project that blends the aesthetics of analogue filmmaking with the precision and flexibility of digital techniques. Shot on 16mm black-and-white film stock, the film consciously embraces the grainy texture and visual qualities of this medium. To overcome the inherent limitations of analogue workflows, a digital intermediate (DI) process was integrated into post-production. While this hybrid approach presented unique technical challenges, it ultimately expanded the film's visual vocabulary.

A short introduction to analogue and digital colour grading

While colour grading is often associated with manipulating hues and saturation, it plays a crucial role in black and white filmmaking as well. Even without colour, tonal adjustments can dramatically impact the mood and aesthetic of a black and white film. This process, also referred to as tonal grading, involves manipulating the grayscale to achieve a specific look and feel. Historically, achieving the desired black and white aesthetic relied heavily on the film stock used, the lighting choices on set, and careful manipulation during the development and printing process, which could involve techniques like pushing or pulling film to alter contrast, or using specific filters to control tonal range.

The rise of digital filmmaking revolutionized this practice with the introduction of the digital intermediate (DI) process, which involves scanning and digitizing film footage. This transition liberated filmmakers from the limitations of film stock and chemicals, granting them significantly greater control over their film's contrast, grain, tonal range and colour palette. Moreover, modern colour grading software like DaVinci Resolve, Nuke, and Adobe After Effects provide a powerful toolkit for both colour and black-and-white filmmakers, with advanced tools such as colour wheels, curves, masks and keyframing for nuanced adjustments.

One of the key advantages of digital colour grading is its non-destructive nature. Filmmakers can experiment freely, making and undoing changes without impacting the original footage. Additionally, digital grading software offers real-time feedback, enabling immediate visualization of colour and tonal adjustments.

Digital intermediate (DI) process in *The Death of Dracula*

The production of *The Death of Dracula* provided a unique opportunity to explore the intersection of analogue and digital filmmaking. By choosing to shoot on 16mm black-and-white film stock, we aimed to capture the classic aesthetic associated with this medium. However, the inherent limitations of analogue workflows necessitated the integration of digital techniques for editing and colour grading.

To facilitate these post-production processes, we developed the film stock at the university, which in turn – besides being a cost-effective method – offered us greater control over processing and preservation of the film stock. The challenges of working with analogue film, though, required a



The projector used to film the developed film stock with a digital camera.

digital intermediate (DI) process. Initially, this process consisted of projecting the developed film onto a screen and capturing it with a digital camera. Our hope was that this strategy would preserve the original grain structure and texture of analogue film while transferring the footage to a digital format suitable for editing and manipulation.

This hybrid analogue-digital approach offered both advantages and disadvantages compared to traditional film scanning, and while it proved to be a cost-effective method – which can be particularly important for smaller productions –, it also presented several limitations. One such limitation was the potential for image degradation during projection and digital capture, while the final image quality was highly dependent upon various factors, including projector resolution, camera sensitivity, and overall setup stability.

Initially, we recorded the projected film in Log format, aiming to capture the maximum dynamic range to retain as much flexibility in post-production as possible. However, a primary obstacle we encountered was the introduction of additional noise or grain into the digital footage. While the natural grain of the 16mm film is integral to its aesthetic, the digital camera's sensor added an

undesirable layer of noise to the frames, which not only impacted image quality, but also made effective noise reduction more difficult.

To mitigate the issues, we encountered with Log format, we transitioned to Blackmagic RAW (.braw), hoping that its increased bit depth and uncompressed image data would offer greater flexibility in addressing the noise while preserving the film stock's inherent grain structure. Our goal with this experiment was to isolate and reduce the digital noise introduced by the camera sensor during capture, without impacting the film's original grain. While .braw did offer a noticeable improvement over the Log format – as it provided finer grain control, better highlight and shadow detail, and more flexibility in post-production – the limitations of our projection-based approach persisted, partly because the projection process itself introduced certain unavoidable distortions and artifacts, and differentiating between the film grain and the digital noise remained a complex task.

Generally, the ISO setting on a digital camera determines its sensitivity to light. Higher ISO values allow shooting in low light but increase the likelihood of noise, because the camera's sensor amplifies the electronic signal to compensate for low light. However, the relationship between ISO and noise is not always straight forward, and several factors influence noise characteristics, including sensor design, image processing software, and lens quality. To mitigate these issues, we optimized projection conditions, adjusted camera settings to minimize noise, and employed post-production noise reduction techniques. While our initial goal was to eliminate the distracting digital noise added by the camera's sensor, we quickly realized that our noise reduction tools were indiscriminate in their approach: while they were effective in minimizing the unwanted noise, they also smoothed away the film's natural grain structure, which was an integral part of the film's analogue character. The challenge consisted in finding a solution that could differentiate between noise and grain, targeting only the undesirable artifacts while leaving the film's inherent grain intact. This proved to be a difficult task, as many noise reduction algorithms struggle to distinguish between the two.

This experience highlighted the importance of carefully evaluating noise reduction techniques and understanding their potential impact on film grain. One of the counterintuitive conclusions of this learning process was that in some cases higher ISO values – that match the camera's native ISO

levels –, can actually result in lower noise levels, which can happen when the camera's built in noise reduction algorithms are particularly effective at higher levels. It's important to emphasize, though, that this is not always the case. Optimal ISO values depend on various factors, including desired image quality, lighting conditions, and camera capabilities.

Another issue we encountered, was that even with careful calibration, the process of filming the projection often resulted in a cropped or compromised image, where portions of the original frame were lost or distorted. This cropping effect occurred partly because the digital camera's field of view would not always perfectly match the full frame of the projected image. Without precise framing, some portions of the image could fall outside the digital capture area, effectively cropping



Fig. 1. Crop in the footage captured using a film projector.

the film and altering the original composition.

In our experiments, this issue was partly caused by the physical setup of the projection and capture process. If the projector was not perfectly aligned with the screen or the digital camera was not centred correctly, even small deviations could result in the edges of the image being lost, and any slight shift in the projection geometry, whether from misalignment or optical distortions in the projector lens, could

lead to parts of the image being cut off or warped. Additionally, the inherent diffusion of light from the projector introduced a slight blurriness at the edges of the projected image, which further increased the risk of losing critical details during the digital capture (Fig. 1.).

The issue was further complicated by the fact that traditional 16mm film projections often leave a slight overscan, meaning that portions of the image that extend beyond the viewable area of the projection.

In addition to cropping, the process of filming the projected 16mm film introduced challenges related to the resolution and sharpness of the image. The physical limitations of projecting film onto a surface unavoidably led to some loss of detail, because the sharpness of the original film stock could not be fully retained when projected onto a screen and then re-captured digitally. The

projected image would lose fine details, especially at the edges of the frame, where lens aberrations and light bleed could cause blurring or distortion. Light bleed (the stray light extending beyond the intended projection area), created a halo or glow around the image, particularly impacting the edges where contrast and sharpness were crucial for defining details. This loss of clarity at the edges, compounded by lens imperfections, resulted in a degradation of the overall image fidelity once digitized.

Additionally, the hybrid approach introduced potential inconsistencies between the analogue and digital components of the workflow. Differences in contrast and grain structure could arise between the original film stock and the digitized footage, requiring careful attention to colour grading and other post-production techniques to ensure a cohesive visual appearance. Furthermore, the reliance on repeatedly projecting the film to experiment with different capture methods introduced the risk of film stock degradation and even destruction, which was particularly concerning when working with unique and irreplaceable analogue film stock.

The synchronization of projected frames with digital frames in a hybrid analogue-digital filmmaking process also proved to be a difficult task. Mechanical variations in the film projector, such as slight inconsistencies in the speed of the film transport mechanism, caused frame rates to fluctuate, resulting in subtle but noticeable mismatches between the projected frames and the digital frames. Even small deviations in the projector's timing could create issues like frame skipping, jittering, or uneven playback. In addition to mechanical inconsistencies, the synchronization of the digital camera's shutter with the projector's frame rate also proved to be problematic. The digital camera's sensor and shutter system needed to be perfectly aligned with the projector's cycle to avoid capturing frames at the wrong moment, because any misalignment in timing could result in only partial frames being captured, leading to motion artifacts such as tearing, ghosting, or stuttering in the digitized footage. Environmental factors also added complexity to the synchronization process. Variations in ambient light, temperature, and even the vibration of equipment could affect the stability of the projection and digital capture setup. These influences, though seemingly minor, still introduced shifts in image quality, focus and frame timing, further complicating the task of achieving perfect synchronization. The consequences of these synchronization issues were significant. For example, in moments when the projector's film frames and the digital camera's exposure did not perfectly align, motion blur occurred, leading to

blurred images that smeared movement across frames, which could detract from the desired aesthetic and undermine the fidelity of the original 16mm film footage.

Finally, this projection-based analogue-to-digital transfer process highlighted a fundamental trade-off: while it preserved the organic texture and grain of the 16mm film, it also introduced issues that could detract from the final image quality.

The transition to working with scanned frames

Following the initial digitalization and post-production of *The Death of Dracula*, Kornél Szilágyi (also known as Igor Buharov) proposed a more meticulous approach: scanning each frame individually. Recognizing the limitations of our initial process, he generously offered to scan each frame for us, which proved invaluable to the project. This method offered a significant improvement over the projection-and-filming technique we had initially employed. By scanning each frame directly from the 16mm film stock, we preserved the full detail, texture, and dynamic range of the original footage, capturing nuances lost during the projection-based digitalization.



Fig. 2. Crop factor of the frame from Fig. 1. on the scanned 16mm film stock.

The advantages of this approach were immediately apparent. For example, the problematic image cropping issue that had plagued our previous efforts was completely eliminated, and scanning the entire frame allowed us to retain the full composition of each shot (Fig. 2.). Every aspect of the frame was captured with precision, ensuring that the film's original composition and visual intent were faithfully preserved. Additionally, the frame-by-frame scanning approach offered superior image quality. The high-resolution scans maintained the fine grain structure and intricate details of the 16mm film stock, unlike the projection method, where sharpness and detail were inevitably lost. This was especially important for a black-and-white film like *The Death of Dracula*, where subtle variations in contrast and texture are crucial. With Kornél Szilágyi's method of scanning each frame individually, the film's tonal range was fully retained, allowing for greater flexibility during post-production. Another key advantage of individual frame scanning was the significant reduction in noise and unwanted digital artifacts. The original digitalization process had introduced additional layers of noise due to imperfections in the camera sensor and projection system. In contrast, direct frame scanning produced a remarkably cleaner image, mitigating the need for extensive noise reduction efforts that had previously compromised the footage's visual quality. Additionally, this technique also allowed us

to retain the inherent qualities of the 16mm film stock, since we deliberately chose to preserve the scratches, light leaks and different imperfections, embracing these elements as part of the film's aesthetic and visual texture (Fig. 2.).



Fig. 3. Example of grain, scratches, and other imperfections visible in the scanned frames.

Overall, the frame-by-frame scans provided us with a foundation of precise, high-quality footage, streamlining the subsequent digital post-production workflow. Moreover, the consistency offered by this frame-by-frame approach was extremely helpful, because it eliminated the discrepancies between analogue and digital components that arose from mechanical variations in the projector and misalignments during the initial digital capture process. With each frame individually scanned

in a controlled environment, the resulting digital footage was far more uniform and stable, significantly reducing the need for extensive and intrusive post-production corrections. This method also granted us much higher control over the final image. We could fine-tune individual frames during editing and grading, making subtle adjustments to exposure, contrast, and sharpness on a frame-by-frame basis – a level of precision which seemed impossible with the initial digitalization method.

However, this approach also presented some difficulties. The most obvious was the significant amount of time required to scan each frame individually, as this process was extremely labour-intensive and could take weeks complete. Another challenge was the necessity to re-edit, re-sync, and re-grade the entire film after the frame-by-frame scanning process was finished. This involved carefully aligning the scanned frames with the previously captured and edited digital footage, adjusting the timing and pacing, and reapplying and adjusting post-production effects such as tonal grading and transitions. Despite the obstacles, the benefits of frame-by-frame scanning were significant enough to warrant the additional effort. The increased control, precision, and quality that this approach offered were invaluable in preserving the integrity of the original film footage.

While the process was undeniably time-consuming and resource-intensive, the results ultimately justified the effort.

However, we observed inconsistencies in the duration of shots when comparing the digitized scans to the projection-based footage, which could be attributed to variations in the speed of the film projector used to capture the original analogue footage. Unlike modern digital projectors with precise frame rate control, older analogue film projectors can experience slight fluctuations in speed due to factors such as mechanical wear and tear, power supply variations, and environmental conditions. When the original footage was captured using a film projector, these speed fluctuations resulted in frames being slightly longer or shorter than their intended duration. This discrepancy wouldn't have been noticeable during the initial analogue projection, as the human eye is relatively tolerant of minor variations in frame rate, however, when the footage was digitized on a frame-by-frame basis, these variations became apparent. This posed a significant obstacle, because any changes in the timing of the film could cause syncing issues with the music that Mr. Montanaro had already composed for certain chapters, especially considering he had begun composing based on a version of the film edited with the projection-based digitalization method. Even seemingly minor differences of a few seconds here and there could accumulate over the film's one-hour runtime, leading to noticeable discrepancies between the visuals and the soundtrack.

To address this, we ultimately had to carefully adjust the timing of the scanned footage to match the timing of the original projection-based digital footage. This involved identifying the frames where the timing was inconsistent and manually adjusting their duration to align with the corresponding frames in the previously edited version of the film. Overall, this time-consuming process was essential for ensuring that the digital footage remained in sync with Mr. Montanaro's music.

The Dual-Camera Approach

To ensure the preservation of visual content, the production team strategically employed a dual-camera approach, simultaneously capturing footage using both a 16mm analogue black-and-white film camera and a digital camera as a backup. In hindsight, this dual-camera strategy proved to be a prudent choice, as some of the analogue footage was subsequently lost or destroyed, and the availability of digital backups allowed for the recovery and restoration of crucial scenes. This meant, that in the instances where we had to use the digital backups, we also had to carefully match the digital footage with any remaining analogue sequences, ensuring seamless, and as much as possible, unnoticeable transitions between the two formats. This process was both time-consuming and technically demanding, requiring a keen eye for detail and a good understanding of both analogue and digital workflows.

In our initial attempts to emulate the aesthetic of 16mm black-and-white film on digital footage, we experimented with third-party effects, such as “Red Giant's Magic Bullet Suite” and “CinePacks - 16mm Film FX.” While these effects can be useful for achieving certain visual styles, their application to mimic our specific 16mm black-and-white film stock revealed several limitations. Despite their ability to create a film-like appearance, third-party effects introduced a noticeable degree of artificiality to the film, and the subtle imperfections inherent to analogue film – such as grain, gate weave, scratches, light leaks and variations in density –, proved to be difficult to replicate using digital effects alone. The simulated grain often appeared too uniform and lacked the organic randomness of true film grain. Gate weave effects tended to be overly simplistic and repetitive, failing to capture the subtle irregularities and variations in movement characteristic of real film projection and the overall tonal quality lacked the subtle nuances and depth present in the original film stock. Ultimately, these effects alone weren't able to convincingly recreate the specific characteristics of our source material, resulting in a look that felt artificial and lacked the authenticity we desired.



Fig. 4. Digital footage with overlaid 16mm film stock and additional tonal range adjustments.

To overcome the limitations of purely digital effects, we developed a hybrid approach that combined both analogue and digital footage. Our process began by filming a variety of grey tones on 16mm black-and-white film stock, in order to capture the organic textures, grain, and nuanced light interactions of the analogue format. This footage was then integrated with our digital shots, utilizing blending modes like overlay and multiply to achieve a visually cohesive look rooted in the authenticity of

analogue film. This approach provided a foundation of genuine film grain and organic light interactions, which we then carefully augmented with digital effects. We used these tools sparingly, focusing on enhancing specific aspects of the image, such as fine-tuning contrast, adding subtle vignetting, or deepening shadow detail, all while preserving the inherent qualities of the analogue film stock.

Overall, this strategic blend of analogue and digital techniques allowed us to achieve a more cohesive and organic visual aesthetic when emulating the specific characteristics of our 16mm film stock. More importantly, it provided a consistent visual language throughout the project, even allowing us to seamlessly incorporate digital shots where the original analogue footage was lost or damaged.

Colour Grading *The Death of Dracula*

The production of *The Death of Dracula* involved a collaborative effort between multiple teams and directors, who in turn employed a variety of 16mm black-and-white film cameras and film stocks. While this decentralized approach offered certain advantages, such as increased efficiency and flexibility, it also presented significant challenges related to maintaining consistency and quality across the various segments of the film.



Fig. 5. Night scene from *The Death of Dracula*.

This made it necessary to carefully calibrate the



Fig. 6. *Dracula and Mary*.

The use of multiple creative teams and directors inevitably introduced variations in the aesthetic style and approach to filmmaking, which made it significantly more difficult to achieve a cohesive and unified look for the film. Moreover, the use of multiple cameras and film stocks introduced additional complexities into the black-and-white grading process, partly because different film stocks have their own unique contrast characteristics and light sensitivities, which can have a significant effect on how the images are captured and reproduced. To address these discrepancies, we had to employ a variety of techniques and tools, such as contrast adjustment, tonal range compression, and shadow detail enhancement. Contrast adjustment involved manipulating the ratio between light and dark areas of the image, tonal range compression involved reducing the overall range of grey tones to create a more

dramatic or stylized look, while shadow detail enhancement involved increasing the visibility of details in the darker areas of the image.

When colour grading the scanned footage, one of our declared goals was to preserve the raw, organic qualities of the film—textures, grain, scratches, in short, the natural imperfections that are inherent to the medium. We considered, that these imperfections are not only the artifacts of an



Fig. 7. Severely damaged frame with dust and scratches.

older technology but are crucial to the aesthetic and emotional impact of the footage. The visible grain structure, for instance, can lend the images a tactile quality that connects the viewer to the physicality of the film stock, grounding the story in a sense of authenticity and tangibility. Rather than viewing scratches, dust, or minor errors as flaws to be corrected, we embraced them as part of the visual identity of the film, reinforcing its analogue origins

(Fig. 7.). Preserving these elements required a delicate approach during the grading process. While colour grading software offer a wide range of possibilities and tools to clean and perfect footage, our intention was the opposite: to maintain the character and texture that make 16mm film stock unique. Over-polishing the image or attempting to remove these imperfections would have stripped away the characteristics that made the footage unique, leaving it feeling too modern, sterile, or disconnected from the film's analogue roots.



Fig. 8. Dust, scratches and stains.

Instead, our colour grading workflow focused on enhancing these natural imperfections while balancing the overall image to suit the film's aesthetic goals. This meant fine-tuning contrast, exposure, and colour without compromising the grain or textures that had been captured during the scanning process. We carefully adjusted shadows and highlights to bring out the inherent depth of the film, allowing the grain to remain prominent, while keeping the images consistent

with the broader tonal shifts. This process required restraint; we consciously avoided overusing noise reduction or sharpening tools that could destroy or alter the delicate texture of the original film. What's more, we saw the scratches and dust present in the scanned footage as important visual markers of the film's analogue journey. These imperfections, while often treated as unwanted in modern digital filmmaking, were integral to the authenticity and rawness of the images, and they served as a reminder that the film had a life before its digital transformation, reinforcing the idea that this film was a physical artifact with its own unique, imperfect history (Fig. 8.). In addition, the natural flickering and instability in contrast and exposure across different frames – often caused by the degradation or uneven development of the film –, was something we sought to maintain in the grading process. Rather than imposing a rigid consistency on these fluctuations, we leaned into them, letting the footage breathe and evolve naturally throughout the film.

Ultimately, the decision to preserve the textures, grain, and imperfections of the 16mm footage during colour grading was driven by the desire to maintain the authentic, tactile essence of the medium.

Achieving the Illusion of Night

Day for night (D4N) techniques have their roots in early silent films, allowing filmmakers to create the illusion of night time during daylight hours. This practice generally involves manipulating lighting, tonal grading, and other cinematographic elements to simulate darkness.



Fig. 9. D4N shot from The Death of Dracula, with tonal and contrast adjustments. The sky was hand drawn and overlaid on the footage.

Creating a convincing D4N effect involves a combination of techniques. When filming analogue footage during the day, shooting near sunrise or sunset (a period also known as the golden hour) offers the most natural opportunities for D4N shots, and cloudy days can help diffuse sunlight, which in turn can help achieve the illusion of night. Neutral density filters and colour filters can further enhance the effect. Additional techniques include intentional underexposure for a darker

atmosphere, backlighting subjects to create silhouettes, and adding fog or smoke for a more mysterious look. Overall, D4N allows filmmakers to creatively overcome logistical challenges and achieve their desired visual aesthetic, even when shooting in daylight. *The Death of Dracula* involved several day-for-night shots, but budgetary constraints and time limitations prevented us from filming in optimal lighting conditions, and in the end, we achieved only one true day-for-night shot during the golden hour. Unfortunately, reshoots were not feasible given these restrictions. Because of this, we employed several post-production techniques to transform daytime footage into a nighttime appearance in our black-and-white silent film. For example, we intentionally darkened the image to mimic the lower light levels of nighttime, creating a more subdued and mysterious atmosphere. Adjusting the shadows and highlights created a starker, more dramatic contrast, emphasizing the eerie and gothic nature of the nighttime scenes. To further enhance the dramatic effect, we increased the contrast, creating a more distinct separation between light and dark areas. Noise reduction was applied to minimize unwanted graininess, resulting in a cleaner and more defined image. In certain scenes, we added film grain to enhance the texture and

atmosphere of the footage, creating a more authentic and vintage feel. Additionally, to create a more atmospheric and mysterious look, in some scenes we introduced fog or smoke effects. We also created silhouettes by positioning subjects in front of strong backlighting, adding a dramatic and cinematic element to the footage.



Fig. 10. A D4N shot from The Death of Dracula, with an overlaid hand drawn cloudy sky and full Moon.

To enhance the nighttime illusion, we added a cloudy sky overlay to some of these shots. Significantly, all the sky overlays were hand-drawn to maintain the gothic, analogue feel of these elements and to evoke the haunting presence of an overcast night sky, reinforcing the dark, foreboding tone of the scenes. Furthermore, we used vignettes to darken the edges of the frame, creating a more intimate and focused look. In cases where vignettes alone

were insufficient or impractical, we employed masking techniques to selectively darken or brighten specific areas within each shot, which in turn allowed for precise control over the lighting and atmosphere, enabling us to shape the mood and focus exactly as needed for each scene.

Finally, preserving the analogue feel throughout the film was one of our core principles, and this commitment extended to every storm sequence we created. This decision was central to our overall vision of preserving the tactile, imperfect quality that defines analogue filmmaking, and it brought a distinct visual texture to storm sequences. While modern digital effects can be impressive in their own merit and are able to produce extremely realistic results, they can also produce visuals that feel too clean, too precise, and ultimately too detached from the raw nature of the film medium we sought to reconstruct.

Our hope was, that hand-drawing the lightning bolts will allow us to retain the imperfection and unpredictability that characterize both natural lightning and the handmade quality of analogue film production. This frame-by-frame approach also gave us complete control over the timing,



Fig. 11. Example for a frame with a Hand drawn lightning hitting a lightning rod. A hand drawn, cloudy sky was also added to the scene.

positioning and movement of the lightning, allowing us to synchronize the flashes with the atmosphere and architecture of each scene (Fig. 11.). Because we crafted each bolt individually, we were able to make it interact with the landscape and the characters in ways that digital effects might not have captured as naturally. To enhance the impact of the hand-drawn lightning in *The Death of Dracula*, we complemented each lightning strike with one or two frames of inverted frames, in order to create the illusion of

a sudden, blinding burst of light, mimicking the natural visual effect of lightning illuminating the entire scene for a split second.

The use of negative frames heightened the sense of unpredictability and intensity associated with lightning. In nature, lightning briefly flips the world into contrast, turning night into day for a second. By incorporating these negative frames, we attempted to capture that sensation of disorientation and awe, ensuring the lightning didn't just feel like an effect, but rather a tangible element of the storm. The sudden burst of negative imagery created a flickering effect, simulating the brightness of lightning's flash. This method was particularly effective in black-and-white, as the inversion exaggerated the tonal contrast, making the effect more striking. Our goal with this technique was to reinforce the analogue aesthetic of the film, and the addition of these negative frames was another way we avoided relying on digital manipulation while enhancing the overall impact of the lighting strikes. Moreover, by keeping the effect simple and rooted in analogue traditions, we tried to amplify the impact of the lightning strikes without sacrificing the handmade, tactile quality that was central to the film's visual identity.

During post-production, one question that arose was whether or not to tint the image during the grading process, partially because tinting could have helped achieve D4N shots easier by

introducing a cool, bluish hue to the footage, simulating the colour temperature often associated with nighttime scenes and enhancing the illusion of darkness. Tinting black-and-white films is a post-production technique that involves applying a single colour or colour gradient to the entire image. This process can significantly alter the mood, atmosphere, and overall aesthetic of a film, and it can be used to create specific emotional responses in the viewer, evoke certain time periods or settings, or simply add a unique visual style to the film.

The earliest examples of film tinting date back to the late 19th century, and initially, tinting was a relatively simple process involving dipping the film stock into coloured dyes. For example, in *The Phantom of the Opera* (Rupert Julian, 1925), the Phantom's lair was often tinted in eerie shades of blue or green, while scenes in the Paris Opera House were often coloured shown with warm, golden light. Similarly, in *Nosferatu* (Friedrich Wilhelm Murnau, 1922) – an obvious inspiration for our film –, tinting also played a crucial role in establishing the film's Gothic aesthetic and emphasizing the supernatural elements of the story. The most prominent use of tinting occurred in the scenes featuring Count Orlok, who was often depicted in cool, bluish tones, creating a sense of coldness and otherworldliness, which contrasted with the warmer tones used in scenes featuring the human characters, emphasizing the stark difference between the living and the undead.

In the case of *The Death of Dracula*, we made the deliberate artistic choice not to tint the black-and-white images. This decision was partly to emphasize the film's gothic horror elements, enhance the psychological depth of the characters, and create a sense of stark contrast between light and darkness. Furthermore, by not tinting black-and-white film, we aimed to create a sense of realism and authenticity. Although thanks to the hybrid approach used in this film, tinting the digitalized black-and-white footage would have been a relatively straightforward task, we made the conscious choice to limit the use of digital effects, in order to preserve the authentic analogue nature of the film as much as possible.

Title cards

The title cards of a silent film play an essential role in establishing its overall tone and aesthetic. However, creating visually and thematically consistent title cards *for The Death of Dracula* presented a unique challenge: the film's production spanned over six years, with each chapter being helmed by different teams and directors, each employing their own distinct title card styles. Because of this, initially there was no unified visual approach to these sequences.

To achieve a cohesive aesthetic for the final film, we employed an approach that combined traditional hand-drawn backgrounds with digital text and layered analogue footage. The foundation of our title screens was a series of hand-drawn borders and illustrations, in order to provide a sense of authenticity and tangibility to the cards. By using hand-drawn elements, we aimed to create a more personal and artisanal feel for the title sequence. Digital typography was employed for the film's title and credits, in order to have greater flexibility and control over the appearance of the text. This ensured that the text was both legible and visually appealing, making it easier to adjust throughout the post-production process, and more importantly, it allowed us to unify the different styles of the original title screens into a cohesive whole. This approach also made adapting the film for different languages significantly more cost-efficient.



Fig. 12. Title screen with overlaid 16mm film stock. The edges of the hand drawn, the background and the text are slightly blurred.

Furthermore, we wanted the title cards to blend in seamlessly with the analogue aesthetic of the film. To achieve this, we employed the same post-production techniques we used to integrate the digital footage with analogue film stock. First, we carefully colour-graded the digital elements of the title cards to match the unique look and feel of the analogue footage, after which we layered the analogue textures we previously captured over the hand-drawn backgrounds and digital text.

With this method, the hand-drawn backgrounds provided a sense of authenticity and tangibility, the layered analogue footage added depth and texture, while the digital text ensured that the film's title and credits were easy to edit and remained clear and legible.

A Hybrid Approach to Analogue Cinema

My work on *The Death of Dracula* was an experiment that explored the relationship between analogue and digital filmmaking techniques. By choosing 16mm black-and-white film, we sought to capture the timeless aesthetic of silent films and classic gothic cinema. However, to overcome the limitations of analogue workflows, we integrated digital technology, particularly during post-production. One of our primary achievements was preserving the authentic qualities of analogue film while leveraging the flexibility and precision of digital tools.

Open music

By Miquèu Montanaro

Chronicle of a creation bringing together popular and learned music in a new musical language developed in a learning context.



Photo by Mira Mărincaș

When Robert Lakatos and the Association of Hungarian Filmmakers from Transylvania approached me to lead a workshop to create the music for *The Death of Dracula*, I thought it would be a good opportunity to use my practice of open music, which finds its originality in building bridges between different styles and origins.

Robert Lakatos was in the audience during a performance of *Ősvény*, which was already a soundtrack to a film. He had noticed that if the film itself was monotonous, without words, without a story, just a subjective camera following a path from a little village to the top of a mountain in Provence, a region of France where I come from and whose culture in the Middle Ages influenced the whole of European culture, the music was a real adventure and gave sense to the whole project. This project was supported by the Mediawave Festival as part of its regular workshops, of which I am one of the permanent facilitators. This festival is a major event for film and music in Hungary. He thought that my way of working could lead to a result that was not only musical, which is expected of a composer, but also human. The music would then act as a mirror reflecting the musical image of the cinematographic work, produced under his guidance, carried out by young filmmakers as part of the festival.

The question is: how do you create a contemporary work based on lost elements of the past? Using shooting techniques that, if not forgotten, are rarely used today, how do you create a contemporary work using an aesthetic from a bygone era? How do you bring the eras together in a timeless work?

For me, who has been working for years in the field of what I would call 'Open Music', this was a real opportunity to put this notion into practice in the context of a work that required music with strong sensations, shared emotions and that conveyed all the feelings of the film.

Over and above the film's theme and the musical themes derived from an initial viewing of the film, still in 'Work in Progress' mode, I had to offer all the participants a new framework, something strong, a stable direction, a spontaneous openness in a kind of flexible rigor that I had to master. That's what I tried to do throughout the workshops, drawing on the experience I'd gained over many years in this field, in workshops, master classes and creations.

Finally, I saw it as an opportunity to rethink the whole creative process that I've been following for years. Then as well, a way to try and explain it. Now, I also see it as a possibility to analyse it in retrospect, and to develop clear and bold avenues of work for the coming years.

1. Open Music

I have called ‘Open Music ’a type of composition that behaves like an anti-seismic structure in architecture. It's a flexible structure that adapts to each individual's personality. But it remains solid and rigid enough to prevent the building from collapsing and losing its original form. I thought about working in this way right from the start of my collaboration with the filmmakers on *The Death of Dracula*, even though I first came across the images in the film and it was on this basis that I produced the first elements of the composition.

Then the preparation of the final score was a long series of meetings. Initially these meetings took place on the basis of the interest shown in the approach by the participants. Around these musical themes and these filmed images, we came together to share the music in most of my many workshops. A two-year process made up of trials, abandoned leads, and certainties about the validity of the common approach.



First musical workshop in Cluj Napoca, Romania. Photo by Róbert Lakatos

In the summer of 2022, during my annual workshop held as part of Mediawave's Nyári Berek in Somogyfajsz, we began experimenting with sounds based on themes I had composed. This was done using only a traditional flute called the Low Whistle. The sound of this flute left plenty of room for other instruments and their sounds, towards the end of the piece.

This compositional work started with a spontaneous and solitary improvisation from the first viewing of the film. Once this initial form had been established, I could try out anything with the other musicians. I could always go back to the initial inspiration. This way of proceeding ensured that we didn't lose the strength of the emotion.

Of course, the directions evoked in the improvisation were reworked before being submitted to the orchestra. They were finalized in a simple score that already contained numerous musical forms just waiting to be further diversified. However, they all came from the same breath and retained the unity necessary for this kind of work.



From left to right: Miquèu Montanaro, Attila Kis, Krokovay Nóra. Photo by Zsófia Makkai

The first ensemble to perform these tunes was the traditional music group Figurás, which became Kaptza after the musicians' stay in the USA. It was a formation that was quite usual in this type of dance music, with a violin, an accompanying viola, a double bass and a cymbalom. During this workshop, Kaptza was augmented by two violins, a cello, an electric guitar, percussion and, of

course, my flute. The cello (Nóra Krokovay), the electric guitar (Kis Attila) and the percussion will be part of the definitive orchestra of the cine-concerts with another percussionist (Cserey Csaba) coming from jazz.

They will see the 'Death of Dracula' project through to the end, taking part in the final recording and the Work in Progress concerts with the other musicians who will be joining us.

The traditional Hungarian orchestra option could have served as the nucleus of the film-concert line-up, but Kaptza received a scholarship to spend several months in the USA and take lessons, so the members of the group were no longer available. As the work on the film's music progressed at the same pace as the finalization of the images, it was also necessary to rethink the future orchestra.

Another session was organized in the autumn of 2022, in Ravazd by Mediawave, which led to some promising avenues of work. At this point in the work, we added an electric bass and an accordion, although the former will disappear from the final score, the latter (Móser Ádám) will make its way all the way to the studio recording phase of the music and will remain associated with all the phases of the work in progress presentations of *The Death of Dracula*. Cello and electric guitar were always there, and there were also two traditional violins, which were later replaced. I myself brought the sound of the flute.

This session gave us the opportunity, based on the footage already shot and the editing well advanced, to match the images and sounds, the musical themes with the filmed sequences and it seemed to us that this could work, at least from our point of view as musicians. It also allowed us to get feedback from the filmmakers and their first impressions. By making a few comments, they validated our work. We made several little changes to fit their vision. The electric bass will be abandoned for good after a third session in March 2023. The idea remained.



The first musical workshop in Cluj Napoca, Romania. Photo by Zsófia Makkai

In imagining this third session, I felt it was necessary to add an entirely external element to this orchestra that would challenge us. So, I called on a great master of real-time electro to act on the sounds of the solo instruments. Christian Sebille, who will also take part in the final recording and in the film-concerts in their final form.

Although the sound result was most interesting, and a very powerful revelation for the performers who had never before experimented with this form of music, we had to abandon the real-time track fairly quickly. However, it took us a long way forward and opened the door to another possibility.

Unfortunately, the system isn't flexible enough to match the images. While keeping the idea of using electro music, we decided instead of 'real-time' to use prepared sounds, with various types of synthesizers, called up live and in a more flexible and precise way during the film-concerts.



Christian Sebille with his electronics during a workshop. Photo by Zsófia Makkai

So, by this stage, the initial music had already opened up to the sounds of rock (bass), Klezmer (accordion) and electro (real time) ... From this session came the idea of creating the ‘Mediawave Open Music Chamber Orchestra ’as part of the Mediawave foundation. MNKZ in Hungarian means ‘Mediawave Nyitott Kamara Zenekar’. This ensemble will perpetuate all our attempts, which of course did not begin with *The Death of Dracula*. I’ll come back to the highlights of my collaboration with this cultural organization in the appendix.

The application for and receipt of European funding under the Erasmus+ program enabled me to continue exploring creative avenues with a view to producing the film score, while training musicians in this particular expression and relying on experienced musicians.

At this stage, I also felt the need to involve a classical string quartet in the project to provide a written link between the different types of music. Animato Quartet, an ensemble made up of young musicians, most of whom were still students, agreed to take part in the experiment.



From left to right: Renáta Gyárfás, Lilla Unger, Kamilla Kasabian, Andrea László and Nóra Krokovay. Photo by Zsófia Makkai

At the time, we were basing the work on classical music, jazz, improvised music and electronic music, against a background of traditional music from Central Europe. Each of these styles being represented by one or two performers, the orchestra took shape. Personally, as an Occitan steeped in the music of the south of France, I brought a distanced view of this cultural world.

A further experimental session took place in Cluj Napoca in December 2023 in the University studio, which enabled me to work at times in the presence of the directors of the various parts. Writing film music means putting the filmmaker's wishes and needs into melodies, soundscapes and rhythms. Here, we had the opportunity to confront my intuitions, our realizations and our interpretations with the ear and critical eye of the directors.

This session was the first with Animato Quartet. I brought 4 themes developed for string quartet. After a morning's work with the musicians, I realized that they got into the proposed scores very quickly, that they quickly understood what was at stake in this music, that they accepted the

practices I was proposing and that I had to provide them with other scores to play if the session was to be effective and prolific.



Ending the first musical workshop in Cluj Napoca, Romania. From left to right: Andrea László, Miquèu Montanaro, Sára Domahidi, Lilla Unger, Kamilla Kasabian, Ádám Móser, Csaba Cserey, Nóra Krokovay, Attila Kis. Photo by Zsófia Makkai

The afternoon improvisation session wasn't enough to provide enough material, so I had to take advantage of my evenings at the hotel to arrange all the themes in a classical way.

In these scores I left room for interpretation, which would later be adapted to the proposals of the other members of what was beginning to take shape as the definitive orchestra.

String quartet

An extra violin

An additional cello

An electric guitar

Accordion

Flute (Low Whistle)

Percussion (created by Csaba Cserey)

In this configuration, we were able to record all the themes corresponding to the existing images and produce a first complete model before the arrival of two other long sequences and the adjustments due to the insertion of the dialogue cards, which slightly modified certain durations without changing the character of the music. Only two parts of the first 40 minutes had to be changed. One piece of music was moved, another modified and a new composition replaced the theme that had been moved.

When I received the last images, I was able to fix all the themes and suggest to Christian Sebille that he prepares his synthesizer interventions.

It was in March 2024 at the GMEM in Marseille, where he is director and artistic director, that we were able to work in excellent conditions and with plenty of time to choose the types of sounds. He then worked alone to make these sounds compatible with his personal quest for quality in an area where my skills are extremely limited.

To enable him to cover the whole film, I recorded the missing pieces, I did it in solo. And I joined it at the time with the December 2023 work with the Orchestra. In April, I was able to listen to the collection of sounds and atmospheres he had created for the film based on the demos, some of which had not been played by the orchestra. It was a good base to choose which ones of them will feature at last the film music. All that remained at this stage was to bring all the elements together, each having been able to experiment with new things, new situations and find personal solutions to the problems posed by the cohabitation of styles. As far as I was concerned, it was up to me to give unity to the whole by creating the conditions for a fruitful dialogue between everyone.



*The first test screening of *The Death of Dracula* with the orchestra playing live during the Mediawave Festival. Photo by Mira Mărincaș*

A new work session took place during which all the musicians were present. This session to set up the music for the image took place at Ravazd as part of the Mediawave Festival. On the one hand, everyone found what they were obliged to play and, on the other, the new proposals they had each come up with as a result of listening and individual preparation for this new encounter. Baltazar Montanaro, an improvising musician on the baritone violin, joined us for this session. He joined us to give the ensemble its definitive form.

This is the moment when the open music escapes the composer to become that of all the participants. This is the moment when it is necessary to let things happen, to establish dialogue and create harmonies. It's the moment when you have to move on from 'I'm the one who's right' to 'together, it's beautiful'. This stage also allowed the music and film, still in their 'Work in

Progress 'state, to be put to the test in front of an audience made up almost exclusively of music and film professionals, including the directors of some of the sequences.



*The audience of the first test screening of *The Death of Dracula* at the Mediawave Festival. Photo by Mira Mărincaș*

It was also an opportunity to check that everyone had found their place and that the musical openness of the project functioned more as a unity in diversity than as disparate elements juxtaposed, especially as two elements were integrated for the first time, the baritone violin in total improvisation and the live electronics in concert. Despite the surprise of these two elements, the other musicians quickly adapted and found their place in the new sound.



*Miequèu Montanaro and Csaba Cserey recording drums in the studio in Cluj Napoca, Romania.
Photo by Zsófia Makkai*

Sára Domahidi: I was able to discover what it means to come up with ideas together, to listen to each other, to look and listen not only to the scores but also to each other.

Renáta Gyárfás: It had a very good effect on me, I had already improvised at other musical events, but I feel that I improved a lot in this workshop and that I was able to improvise more freely.

Nóra Krokovay: I was no stranger to 'Open Music', and I work well in such an environment, I like this kind of practice. The more I find myself in these situations, the better I can improve.

Lilla Unger: It's had nothing but a positive effect on me. I've been able to free myself from the strict rules of classical music.

Kamilla Kasabian: *Improvisation and free music can be a liberating experience. It's within set limits, not everything is extravagantly liberated but everyone is. You can contribute to the musical material and the experience according to your own tastes.*

Csaba Cserey: *I feel really good playing free music, because I've been doing it for a long time, and as a jazz drummer it gives me a fantastic feeling.*

Attila Kis: *Playing with other musicians is always a good exercise, especially for a guitarist accustomed to accompaniment who has few opportunities to practice from spontaneous reactions.*

Andréa László: *It was good to practice something new, to play music with new people.*

Ádám Móser: *I really enjoyed practicing Open Music, as it helps to develop musical communication with other musicians. Everyone can participate at a level and style that suits them.*

Christian Sebillé: *The Dracula-project, produced by the Association of Hungarian Filmmakers of Transylvania and the Sapientia University, was an opportunity to create new international links for the GMEM, Centre National de Création Musicale de Marseille. The film project led by Róbert Lakatos was exemplary in its construction with the young filmmakers. As for the musical composition by Miquèu Montanaro, it brought together international professional musicians (from Hungary, Romania and France) and young artists at the beginning of their career. His musical writing, combining remarkable themes, original arrangements and experimental sound design, has created a composition that is both accessible and sophisticated.*

Baltazar Montanaro: *The open music exercise has made me question my own practice and pay attention to what's going on around me.*

2. Listening

To be able to practice Open Music you need to develop a great sense of listening. It's a different kind of listening from that used in total improvisation, where the only guide is the evolution of sound, harmony and a shared, unconstrained breath. Here, although the score provides reference points, it is not as precise as that of a symphony orchestra, even though it implies a symphonic structure. It's also a question of playing together and creating a homogeneous, coherent sound throughout the work.

So, we had to work on this notion of listening, or rather these notions of listening. Listening with your ears, which is the most common way for musicians to listen. Listening with the eyes too, which is stereophonic, so you tune in visually to the other musicians but you also have to stay in touch with the images in the film. There's also listening with the whole body, which allows us to be connected to each other.



The orchestra watching the film during a workshop. Photo by Zsófia Makkai

Little by little we found a common breath, a musical complicity. The Animato Quartet carried the structure of the ensemble without giving it too much rigidity. All the others relied on the

arrangements to find their own sound and let their different styles be heard within the same framework without them clashing violently.

At several points in the film, there were passages that called for total improvisation in order to give the music maximum effect to support the image. To do this we had to establish a common language. We had to experiment together, even though I often suggested ways of working.

We had to give meaning to moments of chaos.

Free jazz teaches us how to do this, it expresses a revolt, it makes sense but only two of us had been trained in this practice. Electro also teaches you to do this using other techniques that have their own rules, and here again there were only two of us who had a long-standing, shared practice. What's more, for the reasons mentioned above, only Christian Sebille had mastery of his expression and knew the appropriate terms, and we had to invent a special language to be able to communicate with him and with each other. We had to translate from French to English, sometimes Baltazar did, and sometimes I did myself, but it wasn't easy to find the right vocabulary. Naturally the music spoke for itself, and all of us speaks this language fluently. In fact, this experience with *The Death of Dracula* led us to accelerate our learning process, while at the same time producing the work. This was part of the initial project, to create something new with old and diverse techniques.

There's an old French saying, *c'est au pied du mur que l'on voit le maçon* we could translate this way: 'it's at the foot of the wall that you see the mason', so could we say: 'What's left of our music when we take away our habits?' After a number of Open Music projects, I'd say that what's left is listening, and that's what produces the music and its harmonious development. Above all, it's music that can only be played by people who really want to play together.

I sometimes say, and often quite jokingly, that music is played with the ears. In the case of *The Death of Dracula* it was really played with the ears and the eyes.

My role was to make sure that everyone played in this spirit, that everyone played for the others, that everyone enjoyed themselves, that everyone contributed to the story, and that everyone felt supported by the others and by this original work.



Miquèu Montanaro, in the background Renáta Gyárfás and Sára Domahidi. Photo by Zsófia Makkai

Sára Domahidi: As a classical musician, I'm used to being given ready-made scores that we perform well. This project was an opportunity to discover what it means to react to each other.

Renáta Gyárfás: It was very interesting for me, I don't think I've ever experienced anything like it before.

Nóra Krokovay: I really enjoy listening to music, melodies and all sorts of answers immediately come to mind, unfortunately not (yet) in a (sufficiently) structured form.

Lilla Unger: I've realised how little attention I paid to detail when listening. Now I listen much better to my peers than I used to.

Kamilla Kasabian: *In certain scenes, the impact is stronger when there are only one or two instruments playing at the same time. I was able to follow those parts of the film better. Maybe it would be a lot to take in if everything sounded at the same time. We can relax a bit too, and so can the audience. At the same time, it's also important to listen to others, so that you can learn from them. If their solo is more important, be careful not to cover it up. That's also a fundamental element of chamber music.*

Csaba Cserey: Listening to music is just as important as playing it.

Attila Kis: *Playing by ear is important to me, I felt good.*

Andrea László: *On the one hand, it's exciting and liberating to improvise and play by ear, but on the other, it's a challenge, as classical musicians we're not very used to this kind of thing.*

Ádám Móser: *Listening helped me in the improvisation process, to recognize the structure and texture of the music, to find possible points of connection, empty spaces.*

Christian Sebille: *The meeting between these musicians from such different backgrounds brought with it a need to listen and to benefit from each other. The different periods of work encouraged everyone involved in the project to pay attention to each other. The concerts cemented this conviviality thanks to the committed and studious work that Miquèu Montanaro was able to impose.*

Baltazar Montanaro: *I was able to put into perspective the different proposals, whether improvised or written, with the place I had to hold as an improvising instrumentalist.*

3. Improvisation in reading

In classical music teaching, instrumentalists are trained to sight-read and then play works composed by someone who has taken care to give as much information as possible. These works are extremely precise and only sound really good when each player plays each note exactly where the composer placed it, at the volume and duration indicated. It's a difficult exercise, requiring years of learning and practice to achieve at the same time great precision - to a hundredth of a millimetre and a thousandth of a second for a violinist - and great emotion. The task is a noble one, but there is a risk that if we consider only this type of music and learning as valid, we will eliminate all those who, although full of music, cannot adapt to this discipline. In today's practice, this kind of training can be very useful, as long as you know how to get out of it so as to be able to perform works that leave room for personal expression within the writing.



Getting ready to record the music in the studio. Photo by Zsófia Makkai

The proposal that the music of *The Death of Dracula* made to the musicians of the Animato Quartet was precisely to play in and around the score. To think of each note not as an obligation but as a proposition. To make the score their own and create their own music, which is rare in classical music because part of this tradition has been lost over time. In music that is now considered to be a sanctuary, there were free cadences and rhythmic interpretations that differed from the score, which was simplified to make it easier to read... Baroque, Bartók, and a large number of contemporary composers. Teachers, conductors and the public sometimes demand a fixed work, which is reassuring and which we must respect.

My writing for Open Music offers the possibility of experiencing the score not as a motorway with safety barriers but as a side road where it holds us by the hand but does not force us to look or listen. Here, the quartet, while having its own arrangements to make sound, finds itself in the same position as the other musicians in the orchestra.

Nóra's cello playing around the notes

Attila's guitar, playing around the chords

Ádám's accordion, which plays on styles and structures.

Baltazar's baritone violin, flying freely over the ensemble

Christian Sebille's synthesizers wrap the whole thing in a score of moods, feelings and sound effects.

Renáta's violin, which draws notes from the written text as a basis for improvising her own song in a baroque style of counterpoint and spontaneous fugues.

And finally, my flute, which punctuates all this music. My score is a digest rather like a skeleton, the flesh being added by the interaction with the image and the orchestra.

The score is completed by the ear, the eye and the memory.



Miquèu Montanaro and Christian Sebille rehearsing for the test screening at Festejada in Correns, France. Photo by Zsófia Makkai

Sára Domahidi: It was a challenge; it was difficult at the beginning but at the same time it was a liberating feeling when I had the courage to improvise.

Renáta Gyárfás: I was happy that we could improvise freely within certain limits and that I could stop playing only from the score, playing only what is written in the score. I'd like to improvise more so that, with time, I'll have more courage to improvise more difficult melodies and not just a few sounds.

Nóra Krokovay: *I really like this freedom, but I still need to improve a lot in terms of improvising and learning structures.*

Lilla Unger: *It's also had a positive effect. I've been able to let go of the convulsive way in which the score is followed and my imagination has been able to take off a bit. I was finally able to introduce spontaneous decisions into my music.*

Kamilla Kasabian: *Everyone was able to embellish and vary the works with their own style. In many places it was very good, but in others it would have been better if we'd strictly followed the models written on the score. As I also play traditional music, I was able to insert more ornaments derived from it, whether in melody or rhythm. It's nice to combine them in these works.*

Csaba Cserey: *Improvisation helps a musician a lot in terms of creativity, whether he's composing music or playing freely.*

Attila Kis: *It's what I train for the most, I felt at home and it was good to try out certain things.*

Andrea László: *Improvisation was a challenge for me but I'm happy because I feel that it improved me. It made me pay more attention to my surroundings, listen more and adapt to my fellow musicians.*

Ádám Móser: *The freedom has given me the opportunity to approach the musical process according to my own knowledge and intentions.*

Christian Sebille: *The place of improvisation in the programme enabled us to discover very different musical practices, depending on the practice, the musical background (traditional, classical, contemporary) and the background of each individual. The improvisations helped to shape the sound design.*

Baltazar Montanaro: *I was able to use the structured elements to go as far as possible with the sound design.*

4. Reading in improvisation



The first musical workshop in Cluj Napoca, Romania. Photo by Róbert Lakatos

Musicians who practice total improvisation rely on the following elements, and without going into the details of each, we can summarize them as follows:

- The search for sound homogeneity.
- Imitation and the question-and-answer game.
- The use of a musical culture that can be called upon in part.
- There's no need to write, just take the initiative, listen and share a moment in life.

Electro music requires the preparation of a new instrument for each project; it's akin to instrument making that you develop as you use it. The technical difficulties involved mean that musicians have to memorize their movements and write down only what is strictly necessary to preserve the structure of the work.

Although traditional music can sometimes be written down, as is the case with music from my region in Provence, it tends to be practiced by heart, no matter how complex it may be. Indian, Iranian, Arabic and Turkish music takes a very long time to develop and needs to be integrated into a long and rigorous oral apprenticeship.

Depending on the musician's position in Europe, tradition leaves more or less room for personal inspiration.

For dance

For funerals

For celebrations

The same theme can take on different forms, always appropriate to the moment in question.

These three practices, which have nothing to do with writing, came together in the music for *The Death of Dracula*. However, in order to ensure that everyone could play their part in a complex work dedicated to the image, we had to resort to a sort of score, which took different forms for each of the musicians. This meant that certain passages of improvised music had to be based on snippets of written music. This is a basic principle of Open Music.

The idea was not to apply a single system but to blend them so that everyone was in the same movement without having to constantly refer to the reading. The difficulty and the richness of the process is to ensure that once the sound, the harmony and the quality of the playing have been established, the balances remain stable. It's about creating an original sound that is recognizable from one theme to the next, despite the diversity, and from one work to the next, despite the participation of different musicians.

It was when I replayed *Ösvény* which was the starting point for my collaboration with the Association of Hungarian Filmmakers from Transylvania, and the commission for the workshop to create the music for *The Death of Dracula*, that I realized how solid the artistic proposal was.

With a group reduced to a third of its original size, with musicians playing this music for the first time, with a mix of amateurs and professionals, we found that the emotion produced by the ensemble was no less than with the usual line-up. Even though there were fewer timbres, the feeling of fullness was rediscovered because everyone was able to fill in the empty spaces by producing sounds in the spirit of the composition, with a minimum score that everyone quickly made their own.

This was also the case for *The Death of Dracula*.



Renáta Gyárfás and the Animato Quartet (Sára Domahidi, Lilla Unger, Kamilla Kasabian, Andrea László) during a workshop in Cluj Napoca, Romania. Photo by Zsófia Makkai

Sára Domahidi: *For me, the score was a good basis for improvisation, a sort of safe point that I could hold on to.*

Renáta Gyárfás: *It helped in so far as it served as a musical base, especially as long as I didn't include the music from the film, I had an inspiration on which to build my improvisation. Sometimes it was easier to play the melody a few notes higher or lower, based on the written notes.*

Nóra Krokovay: *I also like to play from sheet music, but it's better to use both together. It's more flexible and several musicians with different levels of musical knowledge, culture or instrument can be involved. The score is just an aid to communication, a starting point. It's useful for that and doesn't prevent improvisation (I'm not a professional...).*

Lilla Unger: *The score provides stability and structure. This helped beginners (like me). Inside, I started inserting sounds and then improvisational phrases.*

Kamilla Kasabian: *It was useful, because there was a defined framework within which we were freer. Think and play. The starting point was pretty much the simplest idea, and beyond that we were able to adapt to the scene that was unfolding in the film at any given moment and according to the mood of the moment.*

Csaba Cserey: *The improvisation descriptions in the score are always a good basis for a musician to build on.*

Attila Kis: *The score helps you to see the connected parts of the music, to see the framework and how the individual sequences are structured.*

Andrea László: *It was comforting to have a basis that could be followed and varied.*

Ádám Móser: *It was a safe point to guide my playing in the orchestra, it gave me security.*

Baltazar Montanaro: *I played without scores.*

5. Superimpositions of techniques

The aim of the workshop was also to consider how different techniques could be brought together in the same piece of music, from pure technique to the relationship between acoustic and amplified music, in two directions.

The first is the integration of electro elements, which by their very nature are amplified, into the acoustic sound of the ensemble.



József Lénárd (sound engineer) with Miquèu Montanaro and Christian Sebille recording the electronic sound effects in the studio in Cluj Napoca, Romania. Photo by Zsófia Makkai

The second is the assimilation of the jazz brought by an electric guitar with its amp as an extension.

How do you reconcile the classical musician's quest for purity of sound with the traditional musician's quest to alter it?

As the workshop progressed, the notion of accuracy evolved, moving from the accuracy of the note to the accuracy of emotion, colour and expression.

The same applies to electro, which needs a high volume to bring out the details of a sound, these details making all the difference between a botched work and a sound that is original and personal to the creator. For Christian Sebille, of course, there is no question of doing things by halves, and the fact of cohabiting with untreated and unsound acoustic instruments was a challenge for him. Christian had to get out of his comfort zone, a comfort he found again in part during the stage concert at the Ördögkatlan Festival, where the open-air stage, set up in front of a large audience, required a sound system for all the instruments. This meant that the electro musician found himself in a configuration that was more familiar to him, with the possibility of sound feedback and control easier to implement.

And even if the finesse of the playing was there in the various workshops, rehearsals and previous acoustic presentations, this performance with sound showed just how much finesse, modernity, space, sensations, décor and feeling this instrument and its mastery by a virtuoso of this means of expression can bring.

For the electric guitar, the challenge was to strike a balance between the volumes of the accompaniment and those of the solo parts.

Amplification not only affects the volume of the ensemble but also increases the dynamics of the instrument.

The workshop helped us to find the ideal location for the amplifier so that it could play a balanced part in the orchestra, being heard by everyone and sufficiently by the guitarist himself, which led him to find specific nuances in his playing that were refined during the work together.

My role was to ensure a balance between all the players without restricting their expression too much. When I was recording the soundtrack, I asked Attila to add a free voice to one of the pieces he accompanies on stage. I asked him to step out of his role and become a rock soloist, using distortion and letting his imagination run wild. This sequence made an undeniable contribution to the film's music as a whole.

Each musician used his or her technical skills on his or her instrument to create a unity of purpose that was enhanced by the diversity of personalities and expressions.

It's this particular sound that I've been looking for since the first attempts at open music with Vents d'Est in the early 1990s. An orchestra made up of traditional orchestras but playing together a new music, which would later take the name of 'Musique Ouverte' but which at the time was considered to be crossover. Vujicsics, Téka, Ghymes, Ökrös Zenekar were the key players, but so were ensembles from Bulgaria, Indonesia, Russia, Burundi, Turkey and Algeria, and singers from all over the Mediterranean and the rest of the world. They mixed their cultures using themes composed especially for this group, which had a very variable geometry but was made up of human and musical fraternities.

Another experience encouraged me in the idea that musicians of different levels and generations could live together in the same ensemble. I had the opportunity to visit Arabo-Andalusian music orchestras and to compose music for one of them, the Es-Soundoussia association, where amateurs and beginners rub shoulders with the great masters. At first, they only participate by singing, then gradually integrating the instrument with the simple melody, then with time and practice adding ornamentation and variations until, depending on their abilities, they reach virtuosity, which is not compulsory to remain a member of the orchestra and contribute to the sound. The sound is remarkable and inimitable. This is heterophony.

This type of apprenticeship can be found in the music of the gypsies of Andalusia.

I have often drawn inspiration from this type of source. Certain passages in *The Death of Dracula* are impregnated with it from a sonic point of view.



The Animato Quartet (Sára Domahidi, Lilla Unger, Kamilla Kasabian, Andrea László) recording their part in the studio. In the background: Christian Sebille and Csaba Cserei. Photo by Zsófia Makkai

Sára Domahidi: It was a new experience to play with electronic effects, perhaps disconcerting at first, until I understood the role of this special alloy in the film.

Renáta Gyárfás: The electronic effects were good, even if sometimes I found them a little too present or not quite appropriate. There were soft melodies that should have conveyed calmness in themselves.

Nóra Krokovay: I had no problem integrating classical music, I'm used to it. Integrating electro was more difficult, the experience was often too much for me. Maybe it's also because we recorded it separately (in the studio) and it wasn't possible to try out much live. But it definitely has its place in the music. It's just harder to integrate than classical (written) music.

Lilla Unger: *I've never played with electronic music before, but I've come to understand how a good sound from this aesthetic can enrich music with effects.*

Kamilla Kasabian: *In my opinion, the most spectacular technical changes can very well be reflected by the different moods of the scenes and sudden changes in mood. It's a way of evoking the emotions of the audience in each part.*

Csaba Cserey: *Since electronics has appeared in different styles of musical culture, it can make music very versatile, you just have to know how to use it in style and not by exaggeration. I particularly liked it and it always supported the atmosphere of each scene during the concert.*

Attila Kis: *It's a difficult thing to link these different parts together, but we managed to do it because everyone was a professional in their own field.*

Andrea László: *Sometimes we had volume problems because the electronic music was so loud that we could barely hear each other with the classical instruments, but we slowly managed to adapt to it and to each other.*

Ádám Móser: *It was exciting, the fact that there were different styles meant different inspirations for playing and improvising.*

Christian Sebille: *The different layers between acoustic and electronic music meant that we had to listen carefully and pay particular attention, while at the same time imposing a combined aesthetic between the different types of music.*

Baltazar Montanaro: *It allowed me to hear the diversity of the proposals and the natural way in which they coexist.*

6. Sharing between generations

Another feature of the work we did in the workshop was the sharing of experiences between the different generations represented.

20, 40, 50, 60, 70 each of these different age groups brought their own experience of different forms of learning and musical styles.

As the leader of the musical project, I considered each person's experience carefully, making sure that it was taken into account by everyone.

You could say that it was important to see these adults of all ages playing together like children.



The last music workshop in Cluj Napoca, Romania. From left to right: Lilla Unger, Kamilla Kasabian, Andrea László, Nóra Krokovay, Ádám Móser, Attila Kis. Photo by Zsófia Makkai

The strength of the film's images allowed me to concentrate all my energy on their musical transposition, replacing dialogue, sound effects, anecdotal sounds and those of the elements such as the wind or the storm...

To achieve this, I had to encourage the timid, hold back the brave, and bring together personalities forged by life experience and music. Each of the participants already had a long musical experience in his or her field, whatever their age.

I noticed that these exchanges were nourished by the human closeness created by the conditions of the performances and the assemblies.

Shared meals, moments of relaxation together, mutual respect, particularly noticeable in the interest shown in each other during the concerts where each group played its own music.

Animato Quartet in its classical repertoire, Electro-Aimant, KI & BE by the Montanaro duo and Lépcsők by the Móser-Montanaro duo.

What touched me most about this exercise was seeing the sparkling, youthful, curious eyes of the older members rubbing shoulders with the daring, virtuoso enthusiasm of the younger ones in a shared pleasure.

For the recording, I had asked for the presence of a professional conductor who could, without tempering it, guide this enthusiasm towards technical irreproachability in the field of classical music. Zsolt Jankó musical conductor of the Hungarian Opera from Cluj-Napoca in Romania did successfully this task. Thanks to him, it became really easy for the soloists to play on this base.

Then, on this secure base built by the youngest, the more experienced improvisers could lay down their sounds, which was done with no other concern than the beauty of the sound.

The last two elements were the electro part laid down by Christian Sebille and the baritone violin recorded in one take by Baltazar Montanaro.

Christian Sebille brought to the table his vast experience and the quality of his work, well-versed in dialogue with the theatre, cinema, contemporary dance and numerous artistic collaborations. He

also brings his knowledge of everything that is being done in his field, thanks to his stature as a composer and director of the GMEM, one of France's leading centers for musical creation.

In our work together, as a duo and then as a trio, we began by bringing traditional music into the canons of electro music, while at the same time trying to define what would be an electro aesthetic that would be similar to traditional music. We arrived at a series of constants that enabled us to compose coherent pieces in real time.

This will serve us well for *The Death of Dracula*.

Free improvisation on baritone violin by Baltazar Montanaro, a 40-year-old veteran of the genre who has taken part in various open music adventures, first with Vents d'Est (when he was very young) and then with Ösvény, as well as with MAR Simfonia Maritima and numerous albums by other groups in which he features.

Then there are the joint compositions on the albums Montanaro Duo, KI, BE and those in preparation for the forthcoming FEL.

We're talking about a father-son encounter here, but in our minds, each brings different knowledge, experience and artistic practices to the other, in a spirit of equality and humility with regard to the music produced.

We write our music as if it were an epistolary correspondence, and then each of us adds his own touch, his own improvisations, and the music transforms itself to become, whatever its origin, that of the duo. This will also serve us well for *The Death of Dracula*.

As far as I'm concerned, these fruitful and friendly encounters are reflected in my understanding of the relationship between generations and cultures, both as project leader and workshop leader.

Sára Domahidi: *I didn't feel any difference between the age groups, we were all there as musicians who could learn from each other.*

Renáta Gyárfás: *It was a very good experience for me, I'm glad that everyone was free and relaxed, I got on really well with them, because they were quite young. My family isn't like that at all.*

Nóra Krokovay: *Wonderful.*

Lilla Unger: *It's great to work with musicians of different ages. Everyone has different experiences; you can borrow knowledge from everywhere.*

Kamilla Kasabian: *It's always a good opportunity for new and different ideas, experiences and interpretations.*

Csaba Cserey: *It's a very good feeling, for example in my case to play with young musicians but also with older ones, because in music age doesn't matter.*

Attila Kis: *I have no problem with that. It felt good.*

Andrea László: *Very good, I found common ground with everyone. It's good to work with more experienced and older musicians, you can learn a lot from them. The atmosphere was always very good, and the aim of making music and playing together enabled us to forge bonds.*

Ádám Móser: *I like playing with musicians of different ages, because each age group contributes differently to the ensemble.*

Christian Sebille: *Bringing generations together is an essential part of the project. There are very few projects these days where age is a factor in inclusion. This intergenerational element meant that we had to be open to the younger and older generations. The transmission has therefore been multiple, without imposing one.*

Baltazar Montanaro: *No difficulty (I didn't realize there were age differences).*

7. Playing with musicians of other styles

One of the hallmarks of my work, which can be found in almost everything I do, is bringing together musicians of different styles in the same project. I wanted to know what the participants thought about it and how they experienced it.



Ádám Móser. Photo by Zsófia Makkai

Sára Domahidi: I've noticed the freedom with which musicians who are not bound by the score are able to play. I'd also like to apply this freedom to classical music.

Renáta Gyárfás: I'm pleased to have met members of the orchestra who already had experience of this kind of crossover. They also helped me to imagine and implement improvisations. I think they

also got an insight into the musical world in which most of us evolve and we got an insight into theirs.

Nóra Krokovay: At first, I was worried about whether there would be a good atmosphere, a good feeling with the professional classical musicians and it took a while for that to develop but in the end, I feel it has worked. I learn a lot by listening to different styles and musicians, and also by playing together.

Lilla Unger: There are many different styles of music but they all have music as their foundation and support. I think it's very important for classical musicians to try out different styles of music because it only enriches their playing.

Kamilla Kasabian: It was a pleasure for me to bring into classical music traditional motifs that touch me (because it's one of my interests) and combine them with other elements. The electronic instruments produced a unique and interesting experience that reinforces the impact of the film.

Csaba Cserey: It's always good when musicians of different styles play together, you can learn a lot from each other.

Attila Kis: There aren't many opportunities for this. This is a very interesting and good opportunity for me.

Andrea László: Very cool, everyone could add something to the music, some are comfortable with classical music others with tango. We were always able to inspire and guide each other.

Ádám Móser: It's always a pleasure to play with musicians of different styles - they inspire me in a different way.

Christian Sebille: The mix of styles is a key aspect of the project, but the different ways in which different nationalities and musical styles learn about music have also been fundamental in bringing the project together.

Baltazar Montanaro: Very instructive, an opportunity to learn other techniques and draw inspiration from them.

8. European Orchestra

Composed of twelve musicians at the end of all the experiments, but having seen many participants pass through for trials, this ensemble can perhaps be described as a ‘European Open Music Orchestra’.

First of all, the musicians live in three EU countries. Secondly, most of them have backgrounds that have brought them into contact with inspirations from many European countries.



From left to right: Zsófia Makkai (post production supervisor and director of the last chapter of the film), Miquèu Montanaro, Nóra Krokovay, Renáta Gyárfás, Sára Domahidi, Attila Kis, Kamilla Kasabian, Lilla Unger, Andrea László, Christian Seville, Baltazar Montanaro, Ádám Móser, and in the front Róbert Lakatos creative producer. Photo by Mira Mărincaș

The Animato Quartet plays pieces by Dvorak, Ravel, Mendelssohn, Schumann, Beethoven and others. The fact that they play works by many Austrian, German, Russian, Italian and French composers opens them up to these particular cultures, even if they can all be classified in the classical or romantic style and filtered through these inspirations.

Alongside the quartet, Kamilla Kasabian often plays Irish dance tunes or shares with Baltazar some themes from Hungarian folk music.

Renáta Gyárfás, herself a classical musician, lent herself successfully to the exercise of guided improvisation. She found a musical playground in which she felt no stranger.

As for Ádám Móser, you only have to read the presentation of his solo concerts to understand that his music is highly personal and draws on many sources of popular culture... Frenchbalkanklezmertango is already quite a programme. As a composer, he has achieved a highly original symbiosis of all this.

If you trace Baltazar Montanaro's lineage, you'll find origins in several European countries and regions - Italy, Occitania, Slovakia, Hungary, Romania - with some Jewish ancestors, and yet he shows a French passport when crossing borders. He also draws on rock, world traditions and French and international chanson.

Attila Kis is passionate about jazz, so he brings an extra-European touch to the project, but his jazz, in contact with the other performers and under my direction, becomes European jazz, because it has been stripped of the tics of this music, while continuing to use the phrasing that has been adapted to the needs of the film score, giving it a colour close to that of the European jazz greats of the 30s, 40s and 50s, with the emblematic Django Reinhardt as performer, whose music has left its mark on generations of guitarists.

Nóra Krokovay, who plays the cello in total improvisation, also supports this idea that the music produced can only be produced in this part of the world; anywhere else a different sound would be produced. She also comes from a classical background, but very quickly branched out into improvisation and participation in workshops that have been described as jazz with István Grensó and ethno with me as part of the Mediawave festival.

Cserey Csaba is also a musician of improvisation and jazz, but he is very much rooted in central European culture and the sound he produces, while very free, undoubtedly brings back influences from his home in the centre of Transylvania, even if it is sometimes tinged with latin influence.

In the latest version of the project, Christian Seville adds to the synthesizer elements already used live for recording, the 'real time' which is the spontaneous composition 'from sounds collected live'.

He works with the sounds produced by Móser Ádám's accordion, Baltazar's baritone violin and my flutes.

This means that his work is dependent on the proposals of each of them, and is distorted, extended, re-created, composed and re-composed. In this way, he too becomes an element linked to the traditional inspirations of each of the three protagonists. It brings a contemporary element and a European framework to the work produced.

Sára Domahidi: *We come from many backgrounds, we carry many cultures and styles, that's why the team is so colourful.*

Renáta Gyárfás: *Mainly because of the music, you hear that we all play European music in our different groups, the atmosphere of the whole group is European.*

Nóra Krokovay: *The instruments and the relationship to the music are European and we all come from European countries. Eastern Europeans might understand each other even better, but that's not certain.*

Lilla Unger: *The band can be described as European because all its members come from Europe.*

Kamilla Kasabian: *Mainly because the group has members from different European countries, each bringing their own style (especially where the traditional elements and instruments are French/Occitan, Hungarian/Transylvanian...etc.).*

Csaba Cserey: *The European dimension of the orchestra: it is made up of musicians and composers or musical directors of several nationalities.*

Attila Kis: *I like Europe to be diverse, to contain diversity. And here in the group we were diverse.*

Andrea László: *We come from different countries, each of us bringing with us a piece of our culture, our customs, our way of life.*

Ádám Móser: *Musicians from different countries and musical cultures form a musical community, their tastes, styles and customs are present together, complementing each other, while remaining recognizable.*

Christian Sebille: *This type of project could be extended to involve other conservatoires and music schools. The relevance developed brings together musicians from very different musical backgrounds and life paths, with undeniably high artistic standards. The result is surprising and undeniable.*

Baltazar Montanaro: *A European orchestra, because it brings together personalities, each of whom brings diversity and cultural complexity, due to the migrations and border changes that have been commonplace in Europe for centuries, and who contribute to the beauty of the cultures that make it up.*

9. Re-appropriation of a local theme that has become global

Like everyone else, I've seen films about Dracula, vampires, Nosferatu and every possible variation on the theme. After all, they're all inspired by the first world-famous Dracula, Murnau's *Nosferatu* (1923), even though it's not really about Count Dracula. It is known to be an unauthorized adaptation of the novel of the same name.

The list of films based on this theme is long, from Tod Browning in 1931 to Dario Argente in 2012, including Fischer in 1958, Anna Procházkova in 1971, Dan Curtis in 1973, Philip Saville in 1977, John Badham in 1979 and Francis Ford Coppola in 1992. All these films are directly inspired by Bram Stoker's novel and are as faithful to it as possible.

The Death of Dracula (*Drakula halála* in Hungarian) seems to be the first film on this subject. This lost film has now been reconstructed by emerging filmmakers from Transylvania. As this is a current reconstruction of the film based on a novel describing it, it is quite possible that it will take us elsewhere. Which is very interesting in the context of our musical work.



*The test screening at the Transylvania International Film Festival, in Cluj Napoca, Romania.
Photo by András Muhi*

So, the choice for the music was to make it timeless, with no cultural roots other than the search for a contemporary sound in an imagined Central Europe. Even if, as described above, the choice of performers led us to root the music in a second stage.

My first task was to establish the themes that punctuate the film and to arrange them in a modal way, so as to leave plenty of room for the performers. What's more, I had to keep an eye on the overall balance at every stage.

Then, throughout the workshops, I had to allow for dialogue, listening and re-creation, all the while aiming to make this music as grounded as possible and as original as possible, a term that is perhaps more appropriate. To make the music as astonishing as Dracula's theme, firmly planted in Transylvania, while at the same time reading and listening to it.

I wanted to match the music to the project without overpowering it, while bringing in new blood.

It's interesting to read how the various protagonists have responded to this question, depending on their origin, age and interest in this cinematic theme.

The last adaptation of the subject dates back to 2024, so the theme is still very much alive.

The Death of Dracula takes us into a dream world for which I tried to create, with the help of all the participants, a soundtrack somewhere between a dream and a nightmare.

Sára Domahidi: *I think it's great that a Transylvanian remake of a Transylvanian film can be made now and not by chance.*

Renáta Gyárfás: *I'm delighted that this project has been created and above all that it's not amateurish at all. It has completely exceeded my expectations, especially as it is largely the work of young filmmakers, and I hope that this project will reach the widest possible audience in this format.*

Nóra Krokovay: *It's great if a story travels to many places, if many people know it, adapt it, change it and then it's great if it comes back. Then you can see what's been added to it, what its 'original'*

roots were, but it's all part of a fascinating investigation and questioning. It's likely that after the 'homecoming' the story will start travelling the world again, and that's great.

Lilla Unger: *The only thing I have to add to that is that when I tell people I'm from Transylvania, they immediately mention Dracula. So, he's become a world-famous myth and we've relaunched him in Transylvania, in his own country.*

Kamilla Kasabian: *The rough and grotesque plot threads of the silent film are reworked in a completely different way. They showcase a different Dracula to the one played by internationally renowned actors. In this film, viewers can discover him in a different interpretation.*

Csaba Cserey: *Dracula is still a fascinating historical subject in people's minds. I think it was a fantastic idea to restore him to his former glory.*

Attila Kis: *I would never have imagined that this somewhat boring story could be revisited and rethought.*

Andrea László: *I'm happy to see that with the film we've shown the original story and brought people back to their roots a little.*

Ádám Móser: *It's always exciting when a story returns to its starting point.*

Christian Sebillé: *By basing themselves on the myth of Dracula, the protagonists of the project were able to impose a very judicious subject. This myth is based on a story that is known the everywhere in world, that has fuelled everyone's imagination, but which originated in this region of Romania. The story, shared between Stoker's book and the various films, contributes to this internationality. The ingenious nature of the project was further enhanced by the method of re-shooting a film that had already disappeared, based on historical documents. By playing between creation and tradition, the creative processes have made it possible to impose diversity at all levels.*

Baltazar Montanaro: *I think it's a beautiful thing to bring the myth closer to the starting point of its legend, it gives an emotional strength by the place and the energy of the region.*

10. Film score

Film as score and basis for improvisation.



Miquèu Montanaro. Photo by Zsófia Makkai

Sára Domahidi: The music is above all written by the film, and as musicians we have to submit to the emotions and movements that appear in it. That's what film music means to me.

Renáta Gyárfás: I remember what we talked about in the workshops, how long a piece of music lasts, when to stop and when to continue. Such instructions are written in the score: he puts the glass on the table, a door opens, etc. How many times to repeat a particular motif.

Nóra Krokovay: *I've also worked with graphic scores and that's also very interesting. Film is also just a visual system and sometimes it elicits the same reaction from the musicians (in which case it's like the score), sometimes it's completely different (in which case it's something other than a score and the reactions will be more personal and improvised). Film music allows for creative interpretations and that can work well.*

Lilla Unger: *Before the music project, I didn't know there was such a thing as film music. After entering the world of soundtracks, I realized how important it is in film. Not only does music show locations and changes in events, but an evil look, a flash of lightning, can be supported by it. The word film music brings to mind a conductor and a general score where everything is written down and the conductor shows it and conducts it for us. The film is exactly like that.*

Kamilla Kasabian: *The mood of the music also comes from the scenes in the film, these feelings come through in the pieces, they have to be composed for that. It won't have the same effect if it's harder or more, if it's overcrowded and crowded... Or if the musical material corresponds to a softer or calmer scene.*

Csaba Cserey: *For a musician, I think that playing a film or a play as a score, as a thread, can be a good thing.*

Attila Kis: *Unexpected turns and events only improve attention and quick reaction, and are a good driving force for the music.*

Andrea László: *It's a real challenge to follow the film live. It took a lot of practice to get to know the film and synchronize the music with the different sequences. It's interesting that we always watch the film but the music is always a bit different. The film is also a help, because you see the specific event and the feeling that the music has to support, it's a very good guide.*

Ádám Móser: *I love playing for films, it demands a completely different kind of attention, it broadens your musical expression and your sensitivity. It's useful to pay attention to several tracks.*

Christian Sebille: *The musical writing is based on the chronological development of the film and its editing. While this idea has made the musical construction accessible to everyone, it's still fairly traditional in the way cine-concert works are put together. On the other hand, being able to present*

a stage version with all the musicians was fundamental to the project's purpose and to everyone's understanding of their place and contribution to the project led by Miquèu Montanaro.

Baltazar Montanaro: *I find that it allows me to read the piece intuitively, to react to the images and the action, to be in the moment without having to question what comes next (like on a score where you read the bar before playing it).*

The musical exploration that has taken place since the start of the 'Death of Dracula' adventure has enabled me to identify a number of areas of work for the coming years.

In addition to the concept of 'Open Music', which I have been advocating for years and which enabled me to be chosen to direct the music for the film and the preparatory workshops, there is the complementary concept of Film/Partition or filmed score.

When I read the comments made by the participants in this production, I realize that everyone has the impression of having been in control of their own music. What reassures me is that nobody seems to think that this work was directed by the person who composed it, but by the film itself and the exchanges between the different musicians. In these cases, I feel I've achieved my goal.

The preparatory work for all of us was to find and fix reference points in the image that would trigger musical interventions.

As these reference points were not the same for everyone, the changes were interwoven and corresponded to elements of counterpoint and fugue found in learned music, but with the difference that they were and are to some extent improvised each time. This notion, which was in embryo at the beginning of the project, has now become a guiding principle of my work.

Conclusion



Miquèu Montanaro at the first musical workshop in Cluj Napoca, Romania. Photo by Zsófia Makkai

I have taken up this way of working again in my current projects and also in the workshops that I run at various festivals and art centers. On the basis of this strong experience, I'm going to apply myself to delving into these two mixed concepts to give birth to musical and visual works.

I have started calling these drafts, essays and works 'Visual Poems'.

This term, which covers an older idea than the other two, led me to make films. For me, these are anti-clips, in which the protagonists take center stage.

The visual poem is more open and vaguer, more focused on sensations than on concrete elements.

Open Music, Film-Partitions and Visual Poems can be endlessly re-visited by anyone who wishes to do so, including the participants in the music for *The Death of Dracula*, in the hope that this practice will open up new creative perspectives.

My solo augmented MAR features a film, recorded natural sounds, pre-recorded poems recited in Occitan, simultaneous translation into French, and improvisations on traditional instruments from Provence processed by a special sound-alteration and looping software called Logelloop.

A version with symphony orchestra has also just been created. This form is no longer a full, augmented solo, but all the elements remain and blend together to create a dream, a hypnotic sensation, a sea journey towards greater humanity.

That's the aim of my work, to show that through music, if we organize ourselves in the right way, we can share the world's human wealth with everyone without anyone lacking anything.

The conditions are created by laws, and the law of music is one of them, obeying all the vibrations. Accuracy is the physical relationship between the notes, and it's what we're constantly looking for and striving to create.

The *Death of Dracula* project has helped us to explore this further.

Note 1.

300 1. **1. JOUR** **Two Cello-fuitare: apporter dans un trou**
LEVEGO **AIR** **Condémner de justice nul**
 Em Am Em D Em Am Em Em Cello + fuitare
 9 **SYNTHÉ** **Chochette** **VN**
EVANOUISSEMENT - STÉBULES **Accroche solo**
 10 **DRAKULA ATTENTI!** **DRAKULA UTAU** **VN: Téma**
REVEIL APRES 2 DOCTEURS **Bl A Dm**
 Am G Dm Em Am Am Em Dm Dm E7
 C Dm Em Am Em Am Em

CHOR DRAKULA **DRAKULA** **LETER** I
SYNTHÉ **INSTRUMENTAL** **VI**
 → **écrire la structure dans une autre note**
 1 **SYNTHÉ** **VI**
 2 **SYNTHÉ** **VI**
PREMIERE DANSE **610 TANG** **SYNTHÉ** **VN**
3 **SYNTHÉ** **VI**
3 bis **SYNTHÉ** **VI**
SYNTHÉ **VI**
SYNTHÉ **VI**

THE TWO DOCTORS **VN: Téma**
 1. **Accroche (reprise aux guitares)** 2. **viola** 3. **viola**
 fin entrée dans l'hôpital
SYNTHÉ **VI**
13 **SYNTHÉ** **VI**
14 **SYNTHÉ** **VI**
15 **SYNTHÉ** **VI**
16 **SYNTHÉ** **VI**
17 **SYNTHÉ** **VI**
18 **SYNTHÉ** **VI**
19 **SYNTHÉ** **VI**
20 **SYNTHÉ** **VI**
21 **SYNTHÉ** **VI**
22 **SYNTHÉ** **VI**
23 **SYNTHÉ** **VI**
24 **SYNTHÉ** **VI**
25 **SYNTHÉ** **VI**
26 **SYNTHÉ** **VI**
27 **SYNTHÉ** **VI**
28 **SYNTHÉ** **VI**
29 **SYNTHÉ** **VI**
30 **SYNTHÉ** **VI**
31 **SYNTHÉ** **VI**
32 **SYNTHÉ** **VI**
33 **SYNTHÉ** **VI**
34 **SYNTHÉ** **VI**
35 **SYNTHÉ** **VI**
36 **SYNTHÉ** **VI**
37 **SYNTHÉ** **VI**
38 **SYNTHÉ** **VI**
39 **SYNTHÉ** **VI**
40 **SYNTHÉ** **VI**
41 **SYNTHÉ** **VI**
42 **SYNTHÉ** **VI**
43 **SYNTHÉ** **VI**
44 **SYNTHÉ** **VI**
45 **SYNTHÉ** **VI**
46 **SYNTHÉ** **VI**
47 **SYNTHÉ** **VI**
48 **SYNTHÉ** **VI**
49 **SYNTHÉ** **VI**
50 **SYNTHÉ** **VI**
51 **SYNTHÉ** **VI**
52 **SYNTHÉ** **VI**
53 **SYNTHÉ** **VI**
54 **SYNTHÉ** **VI**
55 **SYNTHÉ** **VI**
56 **SYNTHÉ** **VI**
57 **SYNTHÉ** **VI**
58 **SYNTHÉ** **VI**
59 **SYNTHÉ** **VI**
60 **SYNTHÉ** **VI**
61 **SYNTHÉ** **VI**
62 **SYNTHÉ** **VI**
63 **SYNTHÉ** **VI**
64 **SYNTHÉ** **VI**
65 **SYNTHÉ** **VI**
66 **SYNTHÉ** **VI**
67 **SYNTHÉ** **VI**
68 **SYNTHÉ** **VI**
69 **SYNTHÉ** **VI**
70 **SYNTHÉ** **VI**
71 **SYNTHÉ** **VI**
72 **SYNTHÉ** **VI**
73 **SYNTHÉ** **VI**
74 **SYNTHÉ** **VI**
75 **SYNTHÉ** **VI**
76 **SYNTHÉ** **VI**
77 **SYNTHÉ** **VI**
78 **SYNTHÉ** **VI**
79 **SYNTHÉ** **VI**
80 **SYNTHÉ** **VI**
81 **SYNTHÉ** **VI**
82 **SYNTHÉ** **VI**
83 **SYNTHÉ** **VI**
84 **SYNTHÉ** **VI**
85 **SYNTHÉ** **VI**
86 **SYNTHÉ** **VI**
87 **SYNTHÉ** **VI**
88 **SYNTHÉ** **VI**
89 **SYNTHÉ** **VI**
90 **SYNTHÉ** **VI**
91 **SYNTHÉ** **VI**
92 **SYNTHÉ** **VI**
93 **SYNTHÉ** **VI**
94 **SYNTHÉ** **VI**
95 **SYNTHÉ** **VI**
96 **SYNTHÉ** **VI**
97 **SYNTHÉ** **VI**
98 **SYNTHÉ** **VI**
99 **SYNTHÉ** **VI**
100 **SYNTHÉ** **VI**

PREPARATION - STÉBULES **VN: impr. XVII**
12 **SYNTHÉ** **VI**
13 **SYNTHÉ** **VI**
14 **SYNTHÉ** **VI**
15 **SYNTHÉ** **VI**
16 **SYNTHÉ** **VI**
17 **SYNTHÉ** **VI**
18 **SYNTHÉ** **VI**
19 **SYNTHÉ** **VI**
20 **SYNTHÉ** **VI**
21 **SYNTHÉ** **VI**
22 **SYNTHÉ** **VI**
23 **SYNTHÉ** **VI**
24 **SYNTHÉ** **VI**
25 **SYNTHÉ** **VI**
26 **SYNTHÉ** **VI**
27 **SYNTHÉ** **VI**
28 **SYNTHÉ** **VI**
29 **SYNTHÉ** **VI**
30 **SYNTHÉ** **VI**
31 **SYNTHÉ** **VI**
32 **SYNTHÉ** **VI**
33 **SYNTHÉ** **VI**
34 **SYNTHÉ** **VI**
35 **SYNTHÉ** **VI**
36 **SYNTHÉ** **VI**
37 **SYNTHÉ** **VI**
38 **SYNTHÉ** **VI**
39 **SYNTHÉ** **VI**
40 **SYNTHÉ** **VI**
41 **SYNTHÉ** **VI**
42 **SYNTHÉ** **VI**
43 **SYNTHÉ** **VI**
44 **SYNTHÉ** **VI**
45 **SYNTHÉ** **VI**
46 **SYNTHÉ** **VI**
47 **SYNTHÉ** **VI**
48 **SYNTHÉ** **VI**
49 **SYNTHÉ** **VI**
50 **SYNTHÉ** **VI**
51 **SYNTHÉ** **VI**
52 **SYNTHÉ** **VI**
53 **SYNTHÉ** **VI**
54 **SYNTHÉ** **VI**
55 **SYNTHÉ** **VI**
56 **SYNTHÉ** **VI**
57 **SYNTHÉ** **VI**
58 **SYNTHÉ** **VI**
59 **SYNTHÉ** **VI**
60 **SYNTHÉ** **VI**
61 **SYNTHÉ** **VI**
62 **SYNTHÉ** **VI**
63 **SYNTHÉ** **VI**
64 **SYNTHÉ** **VI**
65 **SYNTHÉ** **VI**
66 **SYNTHÉ** **VI**
67 **SYNTHÉ** **VI**
68 **SYNTHÉ** **VI**
69 **SYNTHÉ** **VI**
70 **SYNTHÉ** **VI**
71 **SYNTHÉ** **VI**
72 **SYNTHÉ** **VI**
73 **SYNTHÉ** **VI**
74 **SYNTHÉ** **VI**
75 **SYNTHÉ** **VI**
76 **SYNTHÉ** **VI**
77 **SYNTHÉ** **VI**
78 **SYNTHÉ** **VI**
79 **SYNTHÉ** **VI**
80 **SYNTHÉ** **VI**
81 **SYNTHÉ** **VI**
82 **SYNTHÉ** **VI**
83 **SYNTHÉ** **VI**
84 **SYNTHÉ** **VI**
85 **SYNTHÉ** **VI**
86 **SYNTHÉ** **VI**
87 **SYNTHÉ** **VI**
88 **SYNTHÉ** **VI**
89 **SYNTHÉ** **VI**
90 **SYNTHÉ** **VI**
91 **SYNTHÉ** **VI**
92 **SYNTHÉ** **VI**
93 **SYNTHÉ** **VI**
94 **SYNTHÉ** **VI**
95 **SYNTHÉ** **VI**
96 **SYNTHÉ** **VI**
97 **SYNTHÉ** **VI**
98 **SYNTHÉ** **VI**
99 **SYNTHÉ** **VI**
100 **SYNTHÉ** **VI**

These four pages are taken from my conductor's notebook and show that by listening to the music everything that has been said above is applied.

Móser Ádám, Nóra Krokovay and Attila Kis play from this score and develop their way around these notes.

Oral transmission also plays an important role in the realization of the musical project.

Memory and listening complement this schematic writing, which is also very effective if the performers take the trouble to work in this direction. This works very well in the context of a workshop whose aim is to train musicians in this practice. In the context of truly professional work, with limited time and the demand for impeccable quality, it is advisable to bring together an orchestra of people experienced in this practice.

If this were to happen, I know that I can now count on an orchestra with a proven track record. All I would have to do as a composer would be to provide all the soloists with the same type of score so that the music is ready to sound.

For the quartet, a different type of score would be used, dividing up the orchestral voices while leaving room for the ornamentation and variations of each performer. I am assuming here that we would keep the same musicians. At the invitation of a festival, I suggested this possibility rather than inviting a local quartet with no specific training. The savings on travel from Cluj Napoca would be wiped out by the number of services that would have to be organized to bring the quartet up to scratch.

The music of *The Death of Dracula* is clearly that of a European ensemble formed around these scores but also around a shared practice of music, in a period when industrial workers are interchangeable it is good to have a field in which the personality of each is indispensable.

Note 2.

- FELTELE - XXI

VIRSLI HANGULPÉLÉ
MONTANARI

+ SYNTHÉ
+ LIVE (EFFECT)

Handwritten musical score for 'FELTELE'. It features four staves: Violon 1, Violon 2, Alto, and Cello. The score includes a piano introduction and a main section with various musical notations such as notes, rests, and dynamics.

Nyitány I

DRAKULA (HÉZ DRAKULA)
MONTANARI

65-2 fm

Handwritten musical score for 'Nyitány I'. It features four staves: Violon 1, Violon 2, Alto, and Cello. The score includes a piano introduction and a main section with various musical notations.

THE DEATH OF ZACCUA. XXIX

SYNTHÉ
(SOUNDINES)

REVISED BY MONTANARI

Handwritten musical score for 'THE DEATH OF ZACCUA.'. It features four staves: Violon 1, Violon 2, Alto, and Cello. The score includes a piano introduction and a main section with various musical notations.

Nyitány II

DRAKULA (HÉZ DRAKULA)
MONTANARI

Handwritten musical score for 'Nyitány II'. It features four staves: Violon 1, Violon 2, Alto, and Cello. The score includes a piano introduction and a main section with various musical notations.

These first four pages of the quartet's scores clearly show the absence of the indications of ornamentation and variations usually found on this type of document. However, these indications are sufficient if the quartet has been trained for this type of exercise. For my part, I have had the opportunity to try out this style and use it in concert with the Orchestre de Chambre de Toulon et du Var, a group for which I have written a lot as a string quintet. We've often shared the stage in performances for which I was improvising soloist on traditional Occitan instruments.

We also worked in the same environment with the Talich Quartet in Prague, and the fifth member of the Quintet was the jazz, classical and traditional double-bass player Estelle Amsellem.

Each time, once the surprise of discovering this type of writing had passed, the music was able to spring from a few services of working together, the time to give birth to a common language.

In fact, as these were all new works that had never been performed, it was necessary at the same time to decipher the work and give it a meaning, a question that does not arise in the case of a tried and tested repertoire. There is an oral tradition of the work in classical music to be performed, and many versions have been recorded for over a hundred years under the baton of great conductors, or performed by renowned quartets or quintets.

It's then up to the new interpretation to build on what we consider to be the strong points of past interpretations, leaving aside those that seem weaker.

For the Animato Quartet, it was as much a case of breaking new ground as it was of deciphering it, inventing a new sound and sharing it with instruments from other musical genres: electro, traditional and jazz.

The music of *The Death of Dracula* was for them a kind of beginning of liberation, as can be seen from their comments in the preceding pages.

Festival as a community experience

The Ördögkatlan Festival is not only a cultural event, but also a community experience that attracts tens of thousands of people to the hills of Baranya County every year since 2008. Here, people are not just spectators, but active participants in a medium of art, nature and human interaction. The Ördögkatlan Festival is a place where the experience of being together, along with the programmes, is the charm.

As soon as you arrive in Nagyharsány, Kisharsány, Beremend or Vylyan Manor, you immediately feel the difference compared to other festivals. The courtyards are open, people say hello to each other and conversations develop between strangers while waiting for the programmes. Perhaps the secret of Ördögkatlan is that we all come for the same reason: to connect. People here are open and direct. The villagers themselves are involved in creating the festival atmosphere: the local winemaker smiles as he talks about his wines, the accommodation providers welcome back last year's guests and the organisers are not distant faces but as much a part of the community as anyone else.

*"For us the key word is encounter. So, the encounter is the encounter of locals and guests, and the encounter of genres. So that's why I can say that it's actually a perfect condensation of what we're doing in detail in five days with hundreds of programmes. Here one programme represented all of that."*²

² Source: LOST ANALOGUE project, interview with László Bérczes, 2024, conducted by HÉTFA Research Institute

On the overall artistry of the Ördögkatlan Festival

From the very beginning, the Ördögkatlan Festival has always had an all-arts festival character, so that all artistic disciplines are represented at the festival. In fact, the best of each genre should be represented, and the quality of the festival programme should be the deciding factor, rather than the fluctuating popularity of each genre. We have looked at rock music, which attracts thousands of young people, but we have also looked at dance, visual arts, theatre and classical music. What we found was that people do have a desire for encounters, a desire for personality, a desire to preserve the human scale, a desire for a sophisticated culture.

This aspect was very quickly complemented by the need to create a relationship not only between the performers and the audience, but also between the artists who meet each other on the spot. It has therefore become increasingly important over the years for artists to be with us throughout the festival, to be present. During the summer encounters, the need to create something together on the spot, either through joint productions across artistic disciplines or by involving locals and festival-goers in the work in the way mentioned above, soon emerged.

Even from this brief introduction, it must be clear that Ördögkatlan Festival differs significantly from other art-festivals in the fact that it does not just invite and present individual productions, but generates collaborations and interdisciplinarity which plays a basic and key role in the festival's overall operation and renewal. It is most strictly speaking at the level of individual programs that we generate collaborations between excellent representatives of different artistic disciplines, of which there are countless examples in the 17 years of the festival's history. Afterwards these productions follow a life cycle of their own, often generating further collaborations. The other distinctive set is that the structure of the program pushes performers in this direction. When we invite certain artists, they are usually with us for the whole duration of the festival and are involved into workshops and other programs.

During these sessions and rehearsals, which require intensive presence, they are introduced to the expressive tools of the other art form and give the opportunity to incorporate them into their own work in the long term. This kind of interaction makes artists (and visitors at the same time) more open and contributes to the enrichment of the formal language of the different artistic disciplines.

And to widen the perspective further, the third significant area is no longer at the level of personal collaborations. We realised very early that we need to rely on each other and reinforce each other, so in addition to artistic collaborations, we often cooperate with artistic institutions, festivals and NGOs. The House of Hungarian Music, the House of Traditions, the Faculty of Humanities of Pécs, Szkéné Theatre, Nézőművészeti Kft. Company, Jelenkor literary magazine and all kinds of art education institutions are all important partners. In addition to reaching a wider audience, these collaborations have provided us with experiences that guide us in innovation and sustainable development. Collaboration at program level – examples from Ördögkatlan-history:

1. Cooperation between Alexander Balanescu and Andrea Ladányi

In 2009, Alexander Balanescu conducted a three-day string workshop for young musicians in Kisharsányi. On the closing day of the festival, the occasional team also gave a concert in the village church on Saturday evening, where they premiered his piece "Variations from Kisharsányi".

Andrea Ladányi, a prominent Hungarian contemporary dance artist, also held a workshop for aspiring dancers and interested festival-goers. One of the best moments of the 2009 program was when Andrea Ladányi danced to Alexander Balanescu's violin improvisation on Wednesday evening in the Szoborpark (Statue Park). It was a site-specific, unrepeatable moment, an encounter that has been talked about ever since, and one that anyone who has seen it will never forget.

2. Béla Bartók's Concerto at the Chapel of Reconciliation, choreographed by the Forte Company

In 2016, we upped the ante with a large-scale co-production in a fantastic venue, a collaboration between two wonderful teams. Director-choreographer Csaba Horváth, head of Forte Company, had long cherished the idea of choreographing a piece for a large orchestra by Bartók. Apparently, this was enough for the Concerto to be performed and shown at the 9th Ördögkatlan Festival in Beremend, in front of the Chapel of Reconciliation. The Hungarian Studio Orchestra, conducted

by Dániel Dinyés, with the effective assistance of Balázs Bujtor, concertmaster, put the far from ideal concert conditions (open space, sound system, impending storm, etc.) to one side and presented a sovereign reading that faithfully conveyed Dinyés' ideas. The orchestra did not deny its excitement at the exceptional nature of the production, and played in favour of the Bartók piece. It was a wonderful concert.

Festival productions that go down well tend to live on. Following its summer premiere, the Forte Company's Concerto was presented in October at the Castle Bazaar, courtesy of BFTK. It was subsequently marketed by the National Dance Theatre and has been invited to several prestigious international festivals over the years and has been performed in Hungary with great success in the following years.



Photo by Zsombor Pál

3. Village tourists

The first time they visited the Devil's Atoll was in 2013, in Nagyharsány. The Baranese theatre group, which uses the guided walk genre, is one of the most popular attractions of the festival. The guided tour is more like a farce than an interactive performance. The working method has been a given for many years. Uncle Imre Kanász, the local historian of the area, helped to collect the material for the performances. He showed the crew preparing for the performance around the village. From this, Kinga Várnagy wrote a sketch, the itinerary was worked out, and the permanent team - Kinga Várnagy, Norbi Ács, Lóránt Matta and Ádám Ottlik - brainstormed how to make this an exciting performance for everyone.

Just as the guided tour has fixed and freely variable parts depending on the group, the characters vary according to the village.

4. k2 performances at the Ördögkatlan Festival

The cooperation between the Ördögkatlan Festival and the k2 Company, founded in 2012, has been intense since the existence of k2. It started with k2's independent productions at Ördögkatlan in 2012, Once Upon a Time with Helen, 2013 with God and the Drunks and 2014 with Yorick Returns. At that time, they came with pieces rehearsed in their Budapest rehearsal hall, but in the following years the cooperation developed further and they represented themselves at Ördögkatlan with two jointly created premieres in 2014: the bride from Nagyharsány and 2015: the groom from Kisharsány, 2016: the bride from Villánykövesd, 2017: the wedding from Beremend, 2018: the pearl bush from Baranya.



Photo by Zsombor Pál

It is obvious from the titles alone that the performances are related. The working method is the same: the company arrives in one of the Katlan villages long before the festival starts (but the two directors and the dramaturge, sometimes the whole company, spend a few days in the spring of the year in the chosen village, meet the inhabitants, collect stories, listen to their happy and sad family tales, and explore the most varied versions of local legends. The fragments of stories they picked up were put together, further shaped, written down, improvised and sung to - and from all this collection they created a performance during rehearsals on the spot. Once again, the choice fell on the 1950s, when it was almost commonplace for families and individuals to experience tragic events that would shape their entire lives. The tragedies were, of course, mostly caused by the dictatorship, which trampled on lives and destinies. Thanks to the unique vision and linguistic ingenuity of k2's creators and actors, the story is built around a lot of comic situations and dialogue, but of course, behind the laughter, there is a constant threat. Local linguistic twists and references to the events and mood of the time are incorporated into the text with unparalleled sensitivity and sensitivity.

The results so far have not only proved the validity of this method, but have also set an example of theatre-making in the sense that these young people are not (only) trying to create a production from books and textbooks, but are meeting the so-called local community, finding people and situations that interest them, connecting with the immediate past, and in doing so, it becomes natural for them to create theatre that is directly connected to people.

Collaborations between the arts

The importance of collaboration between artistic disciplines plays a prominent role in the development of the festival's creative program. The workshops and intensive art courses develop participants' openness to interdisciplinary thinking and the resulting productions open the door to social dialogue between local (even minority) communities and festival-goers from the big city. The synergy between different art forms such as music, visual arts, dance, literature or theatre not only creates new aesthetic experiences, but also offers the opportunity to discuss complex social issues and cross-cultural boundaries. Take, for example, the performances of k2. From a social perspective, collaborations contribute to building cultural bridges between communities. Through a theatrical performance, it can foster understanding between individuals from different backgrounds, while offering a common language that goes beyond verbal communication. In this way, it not only creates aesthetic value, but also strengthens social cohesion.

Interdisciplinarity is particularly important in the field of arts education, as the meeting of different fields opens up new perspectives for students. For example, combining an improvised musical composition with a contemporary dance choreography can create a whole new narrative dimension. Improvisational collaboration in artistic creation is a creative approach in which participants spontaneously react to each other's ideas and actions. Improvisation requires collective intelligence and communication, as artists have to adapt to each other's style, rhythm and expression in real time. Such collaboration can foster innovation as participants can experiment more freely without the constraints of expectations. Moreover, the improvisation process often leads to a deepening of artistic expression, as artists are forced to make intuitive and interactive choices. Improvisational collaborations are generally non-hierarchical, allowing participants to contribute equally to the final outcome. Think of Miquéu Montanaro's concept of Open Music (Montanaro, music composer of *Death of Dracula*):

"I have called open music a type of composition that acts as an antiseismic structure in architecture. It is a flexible structure that adapts to the personality of each individual. However, it remains strong and rigid enough to prevent the building from collapsing and losing its original form."

Another significant result of the cooperation could be the development of a new design language. In the dialogue between different artistic/disciplinary disciplines, creators share different ways of thinking and techniques that can lead to new innovative solutions. For example, the integration of theatre and local history allows for the creation of interactive experiences which, because of the consumer-friendly language, can more easily address audiences on difficult topics such as local history.

The two examples above show that we have experimented with different forms of collaboration over the years. Some productions we play an important role in creating, whether it's helping to bring together artists from different artistic disciplines, as in the case of Concerto, or helping them to find the theme of the production. Typically, these programs come to us because of the short duration of the festival, or because the productions that are created require longer preparation, are rehearsed elsewhere and come to us with a finished production.

The other group is characterized by being born here and now during the festival

The end result is usually a product to be presented to an audience, i.e. the artists are not working in a workshop l'art pour l'art, but for a specific purpose, which in our experience is very inspiring.

Cooperation with other organizations

From the above examples it is clear that the Ördögkatlan Festival is based on cooperation with various artistic groups and cultural organizations. Cooperation between organizations in the arts is key to sustainable development, innovation and reaching a wider audience. Implementing interdisciplinary projects and strengthening links between different sectors can create not only economic but also cultural value.

*"...I start from the premise that collaboration is always the hardest. It is always harder than just figuring something out on your own and doing it. You don't have to coordinate with somebody else. But the end result is also much denser and richer. Because a lot of things come in just by understanding and not understanding, because he brings in something different than what I can think of that makes it difficult to collaborate, but that's what brings in colours to it that couldn't have been born otherwise. So, when they meet, they make it difficult, just as rehearsals make it difficult, and cooperation also makes it difficult to organize, because it's obvious to me, and the other party doesn't understand that this is the way it should be, or vice versa, and they experience that I don't understand. So, it is more difficult to cooperate. It's like - now this is going to be a stupid example - we're trying democracy, which we don't know what it is, but we're trying it. So, doing things democratically is much harder."*³

Cooperation allows for a more efficient use of resources, as the parties involved can share knowledge, tools and experience. This is particularly important for smaller organizations, which may find it difficult to implement more ambitious projects on their own.

Partnerships encourage innovation, as the meeting of different perspectives can lead to new ideas. It also helps to broaden audiences by reaching more people through unified communication and coordinated marketing activities. Joint projects help arts organizations to adapt to an ever-changing social and economic environment while maintaining their creative identity.

³ Source: LOST ANALOGUE project, interview with László Bérczes, 2024, conducted by HÉTFA Research Institute

The Ördögkatlan Festival recognized this when it partnered with Mediawave Festival in 2009- it is not by accident that Mediawave has become a collaborator of Ördögkatlan in *Lost Analogue* project.

Mediawave's ethos inspired the development of community and cultural programs at the Ördögkatlan Festival from the very beginning, and from 2009 Mediawave took an active role in organizing the programs of the Kovács Udvarház in Kisharsány, which was one of the central venues of Ördögkatlan until 2015.

Between 2009 and 2015, a number of joint projects, such as documentary screenings, exhibitions, jazz and world music concerts, community workshops, music and film workshops, have enriched the program of the Ördögkatlan Festival.

The end of the joint programs was marked by the demise of the Kovács Udvarház, but since then the two festivals have regularly supported each other, so it was only natural that they proposed for us the *Lost Analogue* project, which would showcase our common values through cooperation.

Art workshops as a tool for intergenerational learning

So, as has been demonstrated in the previous pages, interdisciplinary collaborations at the Ördögkatlan Festival are essential for the development of the festival. Links between different artistic disciplines allow new perspectives and innovative solutions to be explored. The integration of the different artistic disciplines contributes to the renewal of creative processes and to a new approach to specific problems.

However, it is important to keep in mind the age composition of our visitors for the long-term sustainability of the festival. Perhaps the most elemental experience of the last 16 years of the Ördögkatlan is the natural coming together of generations. This encounter in everyday life means that visitors range in age from 0 to 100 years old, and indeed we have many children who were brought to us as babies by their parents and have been with us ever since, but the passage of time has also meant that many are growing older with us - while returning retirees feel at home here.

But the coming together of generations is also symbolic: when we enter the Local History Museum in Nagyharsány, for example, to see the late Roman excavations on the outskirts of the village, or when the House of Traditions brings us the past of our ancestors, be it objects, clothes, crafts or even dances and music, generations of long ago are reaching out to us. And when we cherish these values, that is we preserve, save and redefine, we preserve value and create value.

The two concepts of preservation and creation are linked, you cannot create something out of nothing - at least not by human beings. Only an existing, living, carefully preserved tradition, brought back to life again and again, can give birth. Culture consists of a chain of past-present-future, and it is the recognition of this that spurs us on when we encounter the values of the past and the works in progress. It is a handshake between past and present that forms the basis for the future. This kind of hand-me-down is culture itself.

So, our task is as much to educate the next generation to become a knowledgeable audience as it is to motivate the next generation of artists, to familiarize them with our cultural traditions and to inspire them to explore new paths.

Thematic workshops are the most appropriate tool to achieve these objectives. These are interactive, closed-group learning and development platforms that run throughout the festival and enable participants to acquire new skills in a given artistic field through direct experience and practical activities. Over the years we have tried to invite outstanding artists from all artistic fields. Almost every year we manage to organize a music workshop and a dance workshop, but we also often organize theatre and creative writing courses. Such programs offer significant benefits in terms of both individual and group development. Interactivity and active participation allow participants to engage more deeply with the subject matter, as they have the opportunity to apply theoretical knowledge immediately to practical examples. Our workshops have the undisclosed advantage of promoting intergenerational learning. They allow older, more experienced professionals to share their knowledge and practical experience with the younger generation. This knowledge sharing includes not only theoretical knowledge, but also practical skills and professional know-how that can often only be acquired through years of experience. Learning from the older generation is particularly important for developing a professional identity and practical problem-solving skills. Workshop participants will gain a deeper understanding through practical examples, which will help them to develop not only professionally but also personally, as the values and ethics of their older mentors can be an inspiration.

Thanks to the interactive nature of the workshops, intergenerational interaction takes place organically. Young people are not just passively listening to the older participants, but can actively engage with their questions and ideas. This results in mutual learning: while younger people benefit from the experience of older people, older generations gain insights into young people's modern attitudes, technological knowledge and innovative ideas.

This process can also be used to transfer so-called "hidden knowledge", often not documented but based on everyday work experience. This kind of knowledge transfer is particularly valuable in professions or fields where practical skills are of paramount importance.

Overall, workshops provide an excellent platform for promoting intergenerational dialogue and learning. This kind of cooperation leads to sustainable development and strong community ties in the long term.

Every year, we place a strong emphasis on helping keen learners develop their skills by learning from the best. To give you an idea, we have hosted a workshop at the festival with Tim Carroll, a world-renowned theatre director who has worked with student actors. On the music front, Miklós Both, who held a Roma-Hungarian music workshop, Alexander Balanescu, who held a string workshop, and special guest of the last edition, composer Miquéu Montanaro, the author of the film music of the silent film *The Death of Dracula*. But for years dance has been of particular importance, and the audience could learn from the greats of its most diverse genres. Our instructors have included the greats of the profession, Andrea Ladányi and Péter Gerzson Kovács.

Integrating the Lost Analogue project

The 17th Ördögkatlan Festival hosted a special program: film music workshops, ended by the work in progress cine-concert of an extraordinary film, *The Death of Dracula*, the result of years of painstaking work and creative collaboration. The period leading up to the screening spanned many stages of filmmaking, with filmmakers, musicians and artists working together to bring a unique work to life. As this has already been thoroughly described by the project's professionally competent participants, we will only highlight the important aspects of the Ördögkatlan Festival.

Work on this project began in 2018 as part of the Analogue Filmmaking Workshop initiated by the Association of Hungarian Filmmakers from Transylvania in collaboration with the Media Department of the Sapientia Hungarian University of Transylvania. By 2024, the project was slowly coming to an end, with the most important filming tasks already completed. The foundations of the project had been laid. It was a period full of creative challenges and intensive film post-production, as artistic rigor was combined with pedagogical intent: each chapter was directed by a different participant of the analogue filmmaking workshops, filmed by mainly different directors of photography on 16mm black and white film with old film cameras, and the film raw material was not taken to the lab, but was instead developed by the participants, using chemicals they had prepared, every fifteen meters of the more than 2500 meters of film.

The project entered a new phase in May 2023 at the Mediawave Festival, where Robert Lakatos, leader of the Analogue Filmmaking Workshop, attended a music workshop led by Miquéu Montanaro. This marked the beginning of the formation of the film orchestra. Lakatos and Montanaro discussed the idea of creating an international film orchestra for the silent film in production and presented it to Jenő Hartyándi, founder of the Mediawave Festival. As a long-time collaborator with our festival foundation, Hartyándi proposed the project as a joint initiative. We involved the Hétfá Research Institute, which had prior experience with Erasmus+ projects, and this partnership became the foundation of our collaboration.

The plan was to shoot the final two episodes during filmmaking workshops while simultaneously beginning film music workshops. The first filmmaking workshop took place in November 2023,

followed by a combined filmmaking and film music workshop in December 2023, both held in Romania in collaboration with Sapientia University in Cluj.

The next phase involved further work on film editing and music in Hungary, during workshops organized in April 2024 in collaboration with the Mediawave Film and Music Festival. These workshops culminated in a work-in-progress test screening for a professional audience of filmmakers and musicians to gather expert feedback. A similar workshop with another test screening was planned a month later in partnership with the Transylvania International Film Festival, alongside film music recording workshops held with Sapientia University. In August, the project was set to host film music workshops, filmmaking masterclasses, and a work-in-progress cine-concert at our festival. This marked the culmination of the creative process and the start of final revisions, leading to completion in September in Correns.

The film and culture masterclass, the photo exhibition featuring cyanotype prints of stills and behind-the-scenes photos, the film music workshops, and the work-in-progress test screening of this unique silent film with live musical accompaniment perfectly aligned with the festival's spirit of fostering innovative and creative artistic endeavours. The audience's enthusiastic reception confirmed that the creators had achieved their goal: to deliver a total artistic experience that would leave a lasting impression.

So, the already described film screening on the 3rd of August was preceded by very active workshops and events during the days of the Ördögkatlan.

1. Film and culture masterclass

A film and culture masterclass with film screenings took place in the so-called "Hunchback Cinema" of the Beremendi Blacksmith's Workshop, in a real retro cinema, with project leader Róbert Lakatos and directors Zsófia Makkai and Gyopár Buzási. Important issues such as the use of analogue techniques, the specificities of silent film acting, and the roots of the Dracula story in Transylvanian folklore were discussed. The program aims, among other things, to clarify the misconceptions surrounding the Dracula myth, showing the real ethnographic intellectual values behind them.



László Bérczes, the festival director, hosted a Q&A session with film directors Róbert Lakatos and Zsófia Makkai following the film and culture masterclass. Photo by Vera Éder

The myth of Dracula, originating with Bram Stoker and projected onto Transylvania, is bothersome to many Transylvanians as it creates a false image of their culture abroad.

At the masterclass, Róbert Lakatos screened a 50-minute documentary he directed, titled *The Dracula Dilemma*, which explores this topic. The film is a humorous road movie that visits various tourist spots in Transylvania, where some locals attempt to profit from the Dracula myth without knowing much about it—resulting in a grotesque kitsch parade. Meanwhile, others express anger over their role in contributing to the distorted image of Transylvania. The film also features disappointed tourists, feeling cheated, as they try to make the best of their financial investment in an obviously fake cultural tour.





Film frames from the documentary titled The Dracula Dilemma

Interestingly, the vampire myth does have ethnographic roots in Transylvania, but they differ from the myth popularized by Dracula films. The word "vampire" is not even known in traditional culture. Instead, there are various other mythological creatures, linked to incubus and succubus figures, originating in Greek, Roman, and Slavic mythology. These creatures serve a similar function to vampires but do not suck blood; rather, they torment their victims sexually. Robert Lakatos also screened an 18-minute short fiction film on this topic, titled *Genius Diabolis*. The film is a humorous interpretation of folk tales about supernatural creatures and sexuality, presented in a style reminiscent of P.P. Pasolini's *Decameron* and *Canterbury Tales*.





Film frames from the Transylvanian erotic comedy in the convention of magical realism, based on folk tales, directed by Robert Lakatos, and (on the next page) the audience of the film and culture masterclass watching the film.



2. Film music workshops

The Beremend Library was the venue for a music workshop in the morning, accompanied by a screening, to put the finishing touches to the work in progress cine-concert on Saturday. The focus of his workshops was on spontaneous musical creation, allowing participants to free themselves from the usual technical constraints and discover their own musical voice. According to Montanaro, improvisation is not only a technical exercise, but a means of communication that bridges different musical cultures and musicians.

The aim of the sessions is to enable participants to respond quickly and flexibly to musical situations, whether it's varying a melody or working together on a new musical theme. In Montanaro's methods, musical dialogue is key: participants build on each other's improvisation to create dynamic, live musical processes. This approach not only brings technical development, but also enhances creativity and collaborative skills.



Film music workshop at Beremend Library. Photos by Milán Kovács

The workshops featured a wide range of instruments, from traditional folk instruments like flutes and drums to classical instruments such as violin, viola, cello, and even the rare baryton violin. The lineup also included jazz guitar, accordion, and electronic instruments. Montanaro considers improvisation to be one of the most important elements of community music-making, not only because it deepens the technical knowledge of the participants, but also because it helps to cross cultural boundaries. Through improvisation, participants experienced the power of music on a personal and communal level, while discovering new dimensions of their own creativity and musical expression, which is perfectly reflected in the feedback from participants. Montanaro's aim is to make the experience of musical freedom and collaboration accessible to all participants.

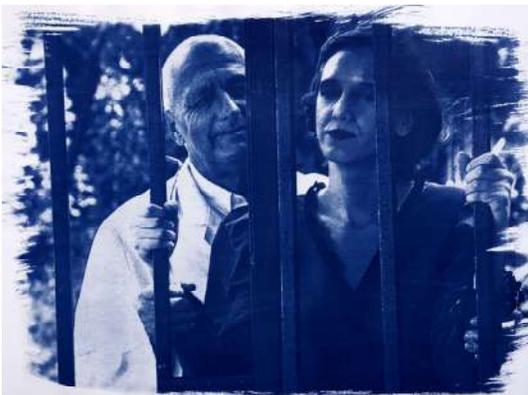
Montanaro's teaching methods are interdisciplinary: through music they are linked to other arts, in this case film. With the sensitivity of a true artist, he did not intrude on the visual work but created a work of art that can stand on its own as well. With the same attentive humility, the aim is for each participant to recognize their own voice and creative power through the universal language of music. His incredibly curious and open personality allows him to connect not only with musicians but also with interested amateurs, so his Ördögkatlan workshops were not confined to the walls of the Beremend library, and he was happy to engage in musical conversation wherever he met people during the festival.



Photo by Vera Éder

3. Photo exhibition

In one of the exhibition halls of the Narancsliget, hundreds (or rather thousands) of visitors were able to see special stills from the shootings. Special, because the photos were taken by several participants, but the cyanotype prints were developed under the guidance of photographer Mira Mărincaș, assistant professor of the Sapientia University.





A sample of cyanotype prints from the exhibition

4. Work in progress test screening with cine-concert

The evening of August 3, 2024 will be unforgettable for everyone who came to the Narancsliget in Nagyharsány, where the work in progress version of the film *The Death of Dracula* was screened, while the Hungarian-Romanian-French Film Orchestra, led by Miquéu Montanaro, played music. At dusk, around 9pm, not a pin could be dropped in this temporary open-air cinema-concert hall, which meant that at least five hundred people watched in anticipation as the Film Orchestra tuned up under the stretched film screen. This was happening at a multi-site all-arts festival, while a number of theatre performances and concerts were taking place. But those who entered the Narancsliget (Nagyharsány, Kossuth utca 30.) knew that they were witnessing and participating in an exceptional, once-in-a-lifetime event.

The overture was played, the projection began and while we were able to jump back in time a hundred years, we were also able to experience being present at the miracle of birth. Euphoric, but without exaggeration: Montanaro's beautiful music was at once in tune with the moments on the screen, while feeding on a thousand roots merging together, it resounded as a significant work of art in its own right. The standing ovation that followed the screening and concert made the evening a joyous celebration.







Photos by Vera Éder

Project impact on the operation of the Ördögkatlan Festival

Many pages ago, I once wrote about Béla Bartók's Concerto that successful festival productions can, in many cases, live on. Well, we now know that the word is spreading about this curious film, and there is interest in further festival screenings and distribution. We are very proud that we were able to put the finishing touches to the film and host the work in progress screening with cine-concert.

But for now, beyond the life of the production, I'd like to write about how those involved in the process of creating it have benefited from it all. Our artists have had the opportunity to learn a different way of thinking about filmmaking, to learn about different musical styles and musical cultures and to incorporate them into their own work. This kind of interaction often leads to a more accepting and open-minded approach and fosters synergies between different art forms. After the project, further collaborations are formed, demonstrating the effectiveness of the joint work.

But the collaborations are not only important for the artists, but also for the audience of the Ördögkatlan Festival. A work of art presented in an international context can help to break down stereotypes, as in the case of the Dracula myth, a sound world of different musical cultures can sensitise and strengthen a sense of global community. And encounters and conversations beyond the production are just as important. However, this required the festival to create the infrastructure necessary to ensure such a creative presence.

Although the Ördögkatlan Festival has always placed great emphasis on presenting top artists from the international scene, despite our limited budgetary margins, these collaborations have been enough to invite and host a circus performance or a top musician. The fact that we were able to participate in this Romanian-French-Hungarian collaboration, which for us was a large-scale project both in terms of funding and time, has taught us that, with all the difficulties of working together, there is a lot of added value beyond what is produced. Perhaps the most important experience we have had is that we have learnt the system of small-scale international cooperation, and we have found that, although we are a festival with a basically Hungarian target group, international cooperation fits well into our profile. We hope to have the opportunity to participate in similar projects in the future!



Photos by Vera Éder