

Slansky_X

From teaching to scientific adventure – 26 years Prof. Dr. Peter C. Slansky at the HFF

English catalog texts

Introduction

On 1 November 1999, Peter C. Slansky started his position as Chair of Department II Technology at the University of Television. Exactly 26 years later to the day, on 1 November 2025, he will retire (as the official title is) and move his first residence back to his home in North Rhine-Westphalia, the Lower Rhine area.

This exhibition presents an overview of the many different aspects of his activities over these 26 years: His teaching in the basic subjects of film and television production technology to all HFF students, his management as Managing Director of Department II Technology with over 20 employees who look after the more than 100 technically equipped rooms in this building, as well as his research in many different scientific fields. This exhibition is organised into 26 thematic stations. There is also an overview of his teaching and a tribute to a special, auratic object that accompanied him throughout most of his career, just opposite this panel...

Contrary to the trend towards ever greater academic specialisation, his activities, presented in the 26 + 2 stations, encompass such diverse areas as Film and Television Technology, Film Design, Media Technology Planning, University Construction Planning (in practice and theory), University, Cultural and Technical History and Astronomy. The stations are deliberately not presented in strict chronological order, but together they form a scientific biography. A recurring, central role in this biography has - and had been from the beginning, even before the HFF - the electronic, now digital, camera. ARRI has provided a special exhibit in the very first studio.

It is no coincidence that this exhibition takes place in the studios of the HFF, as Peter C. Slansky contributed significantly to their structural and media-technical realisation during his 15 years as the HFF's building commissioner. These studios not only provide a wide variety of technical means for media and lighting design, they also function as a kind of wrapping exhibit. At the time of the opening of the HFF building in autumn 2011, two technological world firsts were associated with these studios:

In the second room, the largest of the three, a total of thirteen stations are presented, which are characterised by a particularly wide variety of topics and methods. Two television shows and a number of projections are worth spending some time with. Media installations demonstrate larger projects, such as the book 'Vom Widerstand des Gerätes' (On the Resistance of the Device), which Peter C. Slansky conceived, wrote, edited and photographed in 2017 to mark the 50th anniversary of the HFF. This book also deals with an important guiding principle of Department II Technology at the HFF: "Technology with a human face" in a triad of person - device - result/experience. Another example is the new Virtual Production LED wall, which was acquired as part of the CreatiF project, a

successful third-party funding application in the 'Innovative University' competition organised by the Federal Ministry of Education and Research.

'Between mission and adventure': Peter C. Slansky has often had to react to external influences or requirements and take on responsibility in areas that were previously unfamiliar to him, including the planning of the new HFF building and its media technology equipment, but also in the realisation of certain current fields of research such as the development of cameras or lenses.

On the other hand, Peter C. Slansky was able to transform an initially unrelated assignment into an academic adventure on several occasions. His dissertation at the Faculty of Architecture at the Bauhaus University Weimar on 'The role of the user in university construction' or his debut as a cultural historian with 'Film academies in Germany' are examples of this. One outstanding exhibit is the 'CILECT Teaching Award', which the World Association of Film Schools CILECT presented to Peter C. Slansky in 2023, the first German to receive it.

The five stations in the last studio show astronomical research projects in which Peter C. Slansky combines his profession, media technology, with his passion as an amateur astronomer. The articles for the WGN Journal of the International Meteor Organisation, for example, show that it is possible to contribute to science in this way today - or rather, especially today. The light plays a special role in all five astronomical stations, both as the origin and as the medium of representation of each image. It is therefore not surprising that Peter C. Slansky's astronomical image does not remain static.

Accompanying information material and English texts can be accessed at each station via QR codes. To do this, you must first log in to the HFF WLAN using the QR code below.

Articles by Peter C. Slansky are available for reading in the reading corner at the exit of the last studio. Current books can be purchased. A guest book is also available there.

The design of this exhibition was realised by Frank Abele and his team from Büro für Gestaltung Abele, Munich. Andreas Beckert and Peter Gottschall, studio masters at the HFF, are responsible for the lighting design and lighting technology for the exhibition. Benedikt Geß, Florian Schneeweiß, Henning Hoffmann-Heyden and many other members of the Department II Technology as well as Simon von der Au, Malte Schulz, Sarah Rotter and Elizabeth Bouquet from the CreatiF Centre and Christoph Weber from AI Research were involved in the media technology.

The HFF would like to thank all the supporters of this exhibition, especially ARRI.

Station 1: Before HFF | 1993

In 1991, Detlef Möllering and Peter C. Slansky submitted their joint diploma thesis "Contribution to a technically and scientifically substantiated way of working with the video camera". The first supervisor was Prof. Dr.-Ing. Franz Stollenwerk, a committed advocate of the new HDTV television standard, and the co-supervisor was Jürgen Burghardt, then working for Sony and later Managing Director of Fernseh- und Kinotechnische Gesellschaft. The core of the thesis was a series of test recordings that Möllering and Slansky were able to realise with professional Sony cameras in Sony studios using professional measuring equipment.

However, the intended publication of the work in book form proved to be difficult: on the one hand, the work had to be significantly revised for publication, and on the other, the search for a publisher proved not to be easy. ('You want to write a book? You're still young!') But in 1993, after a further year of working together, the 'Handbuch der professionellen Videoaufnahme' was published by edition filmwerkstatt, Essen, including a 48-page colour supplement.

This specialised book was just one component of a larger overall concept. At the same time, the two authors had also developed the key element for “working in a control loop”: The ‘Personal Waveform Vectorscope’. In the patent specification, it was more soberly called a ‘television operating oscilloscope’. But no interested manufacturer was found. Then a company brought a slightly different device onto the market. Today, its functions are integrated into every digital camera. As a final element, Möllering and Slansky also offered seminars on ‘Electronic Cinematography’ from 1992. At the same time, they continued to shoot industrial videos.

In the years that followed, Peter C. Slansky made several attempts to complete a doctorate on the subject of ‘film look’. After the fifth rejection from a potential doctoral supervisor, he considered this endeavour a failure. Then the advert for a professorship in technology at the HFF Munich appeared. Peter C. Slansky's trial lecture took place on 18 February 1999 in the HFF cinema in Giesing - his topic: ‘Film look versus video look’...

Station 2: The digital Film Camera | Presentation, 2002

It was the 29th presentation at the 20th annual conference of the Fernseh- und Kinotechnische Gesellschaft in Zurich on 12 June 2002 and the auditorium was jam-packed. The speaker was nervous: presenting ‘The digital film camera’ in theory was of course much easier than building such a device. In many previous lectures, new technologies for High Definition Television had been presented, including HD cameras of the latest digital generation. But these were based on the same 3-CCD technology as the cameras with which Peter C. Slansky had shot his first industrial videos and made the recordings for his diploma thesis. This was a dead end in that this technology precluded the realisation of a genuine film look. Even though George Lucas had shot his latest ‘Star Wars’ episode with such a camera.

The key component of the camera concept presented by Peter C. Slansky in Zurich was a single sensor, the size of a 35mm film frame. This was impossible with the CCD principle. But at that time, CMOS sensors, which promised to fulfil this requirement, were becoming technologically feasible.

The speaker went into enthusiasm, praised the creative advantages of shallow depth of field, called for the replacement of television signal recording by a “raw image data stream” in 3K quality, was not sparing with references to the superiority of the film look and speculated about colour separation on the sensor not with a rigid Bayer mask (as is still generally used today), but in a ‘temporally variable sub-pixel shuffling’ in the primary colours white, yellow and cyan with an LC display attached in front of the sensor. In view of this film-technical eccentricity of the presentation, the criticism from the auditorium was prompt, and unanimous - including from the FKTG board.

After the discussion, a gentleman approached the speaker: "Interesting, your concept. My company is currently working on something like that..." Back in Munich, Peter C. Slansky met the Managing Director Franz Kraus. This was the beginning of a long, mutually beneficial consultancy relationship for ARRI.

Station 2X: The hybrid Film-TV-camera | 2011

Seven years after the theoretical concept of a digital film camera was presented, several companies from Japan, the USA and Germany launched digital film cameras on the market. The big milestone came in 2010 with the ARRI Alexa: this camera convinced many former sceptics. The digitalisation of cinema film recording became a reality.

At this time, Peter C. Slansky found himself in a bit of a dilemma at the HFF: due to his large-scale equipment applications for the initial media technology equipment for the new HFF building (see Station 11), he had secured funding for the studios, but not for new mobile recording equipment for the films of HFF students. This was due to the construction of the two television studios, which were fully equipped with television cameras: Only their procurement was directly related to the new HFF building.

However, it was to be expected that the television studio cameras would be much less utilised than mobile digital film cameras. So Peter C. Slansky, together with department head Franz Kraus, came up with the idea of a 'hybrid' camera based on the ARRI Alexa. In February 2011, he wrote a corresponding specification sheet. A budgetary constraint became a technology project: ARRI expanded the Alexa's firmware so that it could be remotely controlled via triax cable, as is common in live television operation. In addition, a third-party television signal transmission system and an optical adapter were added, which allowed the use of a 2/3" television zoom lens with a large focal length range on the large sensor of the ARRI Alexa. The result was a solution that allowed the procurement of three ARRI Alexas as television studio cameras and also enabled their use as mobile film cameras.

The ARRI Alexa Live was officially presented to the Bavarian Minister President Horst Seehofer at the opening of the new HFF building on 25 September 2011. With this hybrid film-television camera and the world's first LED studio, the TV studio 2, the HFF had induced two world firsts in media technology from ARRI. Based on this experience, ARRI later launched modified versions of the Amira and Alexa 35 models for television use.

Station 3: Digital Film - digital Cinema | Book, 2004

At the beginning of the process from shooting the film scene to the image on the cinema screen is, without a doubt, the camera. But the chain is long. At the beginning of the 2000s, the 35mm wide film strip was still firmly established, both as a recording medium and as a screening standard. However, as described in Station 2, the first attempts were made to break the classic photochemical chain and replace it with a digital one. It was clear that this would require new standards, as the existing ones, based on television technology, did not deliver the picture/sound quality required for the big cinema screen.

In spring 2003, Peter C. Slansky sent out 20 letters to potential authors, asking them each to contribute a topical contribution to an edited volume on the digital cinema of the future. Almost all of them complied with his request. One of them, Prof Franz Kraus, had just become head of the Department II Technology and honorary professor at the HFF. Another, Siegfried Föbel, was to take over this position from him 14 years later.

What Slansky did not know at the time was that a specification for digital cinema distribution was being developed in the USA at the same time, driven by the Hollywood majors. This so-called DCI Specification was presented in 2005, one year after 'Digital Film - Digital Cinema'. This made the book partly obsolete - but not entirely: digital cinema remained a moving target.

The first technical blueprints for the new HFF building also had to be submitted in 2005 (Stations 10/11). In 'Zukunft Kino', edited by Daniela Kloock, Slansky wrote a year later: "Let's not forget that cinema, with 35mm film, was and still is the first global medium. Any film, no matter how old it is or which country it comes from, can still be played anywhere in the world. It would be an irony of

technological and cultural history of digitalisation, which is often cited as the basis of globalisation, were to bring about the end of cinema as a global medium."

It didn't come that far. The DCI specification was implemented worldwide - including the cinemas in the new HFF building.

Station 4: Cinec-Award | 2002 - 2014

For film technicians, there is, quite literally, not much to win - in stark contrast to the representatives of directing, production, camera, acting, writing, editing, sound, set design and music, who have learnt to collect prizes of all kinds at countless festivals and express their particular pleasure in doing so.

The Cinec Award is one of the very few prizes worldwide for 'outstanding and innovative achievements in the field of film technology'. It was awarded every two years at the Cinec trade fair for film technology in Munich. Peter C. Slansky chaired the jury from 2002 to 2014.

The tasks of a Cinec Award jury chairman were manifold: formal and technical examination of all applications (you had to apply for the award), timing and moderation of the seven-member jury, formulation of the technical justifications and press releases, signing of the certificates, coordination with the Bavarian State Minister of Economic Affairs and Technology (who presents the prizes to the winners), moderation of the award ceremony (in English).

In contrast to broadcast technology, film technology is a very compact but closely networked industry in which everyone knows everyone else. Receiving a Cinec Award can mean a breakthrough on the market, promote company start-ups, reward years of development work and influence company strategies.

Similar to a hard or soft currency, the value of a technology award is measured by whether or not its self-imposed criteria are met. After seven jury rounds with a total of over 50 Cinec Awards, Peter C. Slansky himself was honoured with a Cinec Award on his departure from this position.

Station 5: Centre for Advanced Studies in Film Technology Academic institution of the HFF | 2008 - 2019

The special prize in the competition 'Exchange Processes' organised by the Stifterverband der Deutschen Wissenschaft and the Federal Ministry of Education and Research was endowed with € 100,000. The fact that there was a special prize at all in addition to the five main prizes was a spontaneous decision by the jury, who apparently particularly liked the concept of founding a study centre for film technology at the HFF Munich.

The study centre, whose founding director was Peter C. Slansky from 2008 to 2019 and whose business was managed by Katrin Richthofer, had four fields of activity:

- Professional Training
- Industry communication
- research
- History of film technology.

'The Centre for Advanced Studies in Film Technology at HFF Munich combines training with further education in a way that is unique in Germany, bringing together representatives of equipment manufacturers with creative users and lecturers at the University of Television and Film, uniting high technology with tradition. With this in mind, Katrin Richthofer and Peter C. Slansky have organised a number of German and English-language training events for external participants over eleven years, including 'Hands On XK', numerous industry forums, a symposium on the development of film lenses in 2015 and the international 'Teaching Cinematography' congress in 2018. Together, they set up an e-learning platform and a database for a 'Virtual Film Technology Museum' and produced three research studies (Stations 6, 7 and 9). Last but not least, they raised third-party funding totalling around €1 million.

However, although this third-party funding was always the sole source of financing, unfortunately no way was found to secure the museum's long-term institutional operation.

Station 6: Teaching Cinematography | Survey and Book, 2018/19

'Teaching Cinematography' was the title of the international conference organised by Katrin Richthofer and Peter C. Slansky together with Tony Costa from the European Federation of Cinematographers IMAGO at the HFF in March 2018. With 120 cinematographers from 30 countries, the level of interest was unexpectedly high, as the main topic was not camera work itself, but cinematography teaching. A certain collective narrative emerged at this conference that seemed worthy of further research.

The starting point of the study conducted by Katrin Richthofer and Peter C. Slansky in 2018 was the observation that the subject of cinematography is predominantly taught by practitioners who are usually called upon to teach because of their own film work. As a result, they develop their teaching methodology mainly autodidactically, in the process. As many cinematography lecturers teach at several institutions at the same time, the role of the respective institutional framework was also analysed.

A total of 125 cameramen and women from 40 countries worldwide took part in the survey, totalling 1840 years of teaching experience. The free text responses in the chapter 'Tell us your story' form a special focus: Despite all individual differences from teacher to teacher, from country to country or from teaching institution to teaching institution, interesting common patterns can be recognised in here.

The study was presented at the IMAGO conference 'Cinematography in Progress' in Brussels in April 2019. This was also where Peter C. Slansky met Harry Mathias, author of the book 'Electronic Cinematography' (see Station 1), for the first time: He had taken part in the 'Teaching Cinematography' survey and presented his own new book in Brussels.

'Teaching Cinematography' is available from Books on Demand.

Station 7: The Cinematographer and the Lens | Survey, 2014

For a long time, the design of lenses for filming cinema and television films was primarily based on technical specifications. The aim was usually to maximise sharpness and contrast, as both parameters were significantly impaired by the photochemical film stock and copying. With the transition to digital film cameras, however, these no longer applied. As a result, cameramen tended to judge the

look of images shot with the same lenses as before, but on digital cameras, as “over-sharp” and “too crisp”.

Katrin Richthofer and Peter C. Slansky carried out their first joint research project on this topic in spring 2014. The participation of over 440 cinematographers worldwide in their survey exceeded their expectations many times over. A majority of 71% confirmed the basic assumption that the importance of the lens had increased with the transition to the digital film camera (Station 2). In the digital era, the look of the image is essentially created by the choice of the lens, in addition to the classic means of image design and digital colour grading. Despite all individual differences, certain overarching preferences are evident here: for example, avoiding focus pumping is rated as even more important than overall sharpness performance.

The study was presented at the “Lens under the sign of XK” symposium held by the Centre for Advanced Studies in Film Technology at the HFF on 16 March 2015. This symposium brought together - for the first time for many participants - lens designers and cinematographers, and an exciting and fruitful dialogue developed. Today, all renowned manufacturers of film lenses consider the questions of look in their designs.

The study is available for free download in German and English via the QR codes.

Station 8: On the resistance of the device | Book, 2017

50 years of HFF Munich was celebrated in a multitude of ways in 2017. As editor, author and photographer, Peter C. Slansky produced a volume of stories and studio photos relating to the HFF's collection of technical-historical equipment for Department II Technology. He wrote: “I only built up this collection to the extent that I gradually removed obsolete equipment from the current equipment pool, but did not dispose of it, and declared these remnants to be the ‘Technical History Collection’.” A small permanent exhibition and a magazine have been set up for this collection in the new building. A small selection is presented here.

The title “On the resistance of the device. 50 years HFF München, 50 alumni, 50 film devices” stands for the recipe of the book: 50 HFF graduates each present a piece of film or television equipment that was used in teaching during the 50-year history of the HFF Munich and tell a story about what they experienced with this equipment. The aim of the book - and this is a guiding principle of the HFF's Dept. II Technology - was to present technology “with a human face”, to link cultural history and the history of technology in a triad of person- device - experience/result.

Some alumni wrote declarations of love for the cool black apparatus made of metal, leather and glass: film as a dangerous mission, the camera as a “beautiful weapon” - you don't always see through its interior, sometimes it seems to do what it wants, but you look damn good next to it. Female graduates did not describe such erotically charged relationships with the appliance. For them, moments of community predominate: The device with its resistance as a catalyst for human interactions of a special kind.

“Vom Widerstand des Gerätes” is available at edition text + kritik.

Station 9: EDC-16 – Educational Digital Camera 16mm | Survey, 2015

Students of film all over the world have been learning how to use professional film cameras in their first semesters for decades, especially in 16mm format. These analog cameras have - in many cases,

it must be said: had - great advantages in film education: They are robust and easy to use. As a result, students concentrate on the basics of image technique - exposure, focus - and image composition - camera position, perspective, framing, movement.

With the transition to digital cameras, this simplicity and the concentration on the essentials that goes with it has been lost. For cost reasons, semi-professional or non-professional cameras are often used. In this segment, many camera manufacturers are particularly pleased with the originality of the camera design, variety of menu functions, variety of automatic functions - and a rapid change of models, which ensures that what has just been learned will soon need to be learned again in a different way. The discontinuity of the secondary takes precedence over concentration on the main.

So, how could - or how should - a digital film camera be designed specifically for the needs of film education?

To answer this question, Katrin Richthofer and Peter C. Slansky conducted a survey among representatives of film schools in 2015 in coordination with ARRI. With 144 participants, the response was great. A technical profile of such an "Educational Digital Camera EDC-16" can be derived from the responses. One of the key points is the camera's ability to be administered, with the option of locking certain functions and options for students.

The study is available for free download in German and English via the QR codes.

Station 10: Planning of the new HFF building | 1999 - 2013

At the end of 1999, just a few weeks after Peter C. Slansky had taken up the professorship at the HFF, the president of the HFF at the time, Albert Scharf, reported that the Bavarian State Ministry of Science, Research and the Arts had sent out "certain signals" that the HFF's current lack of space in the Bedspring Factory in Giesing could soon be remedied. The university has been called upon to assess its needs. To this end, the Senate set up a planning committee.

It was no coincidence that Peter C. Slansky was appointed to chair this committee, as media technology had the most specific spatial requirements. Planning for an extension at the Giesing site began and continued for the next three years. In 2000, Slansky traveled to all German film schools. His report, which included student and space figures, clearly showed how much the HFF had fallen behind the other film schools in terms of space.

In 2002, the Bavarian state government made the extremely fortunate decision for the HFF to build a new university building in the heart of Munich's art quarter, directly opposite the Alte Pinakothek. Peter C. Slansky represented the HFF as user representative and expert judge in the architectural competition held in 2003.

Together with the chancellor of the HFF at the time, Ms. Ulrike Neuneyer, he had already drawn up the 130-page functional floor plan, which was incorporated into the documents for the architectural competition by the State Building Authority. On display here is Slansky's personal working copy, with all handwritten changes and annotations.

Due to the high level of political interest in this building project, the challenge for the user representative of the HFF was to assert the sometimes very specific functional requirements of the university for its future building over aesthetic or urban planning aspects. The fact that he succeeded in doing so, even with the glass façade, which at first appeared to be very problematic, is testament to the excellent working relationship that he and the architect Peter Böhm from Cologne had built up.

An important milestone was the laying of the cornerstone on November 14, 2007, when Bavarian Minister President Günter Beckstein was asked by Peter C. Slansky to film the lowering of the cornerstone by crane into the excavation pit using the latest digital film camera from the Munich-based company ARRI. The photo was taken for the press.

One particular difficulty was the integration of the media technology planning into the general planning. To this end, the media technology was divided by the State Building Authority and Peter C. Slansky into building-related media technology and initial media technology equipment. The former was to be planned and implemented by the building authority, while the university was responsible for the latter. The planning of the media technology is shown separately in Station 11.

Peter C. Slansky conducted numerous guided tours of the building during the construction work, several hundred to date. One of these took place in 2010 with Jörg van Hooven from München TV. Their 45-minute tour of the still unfinished building can be seen on the video.

For the opening of the new building on September 25, 2011, the Bavarian Minister President - now Horst Seehofer - was once again invited to the camera. The demonstration of the new LED light in the world's first LED studio was still using pre-production models of the floodlights. After the university moved into its new building and after the end of the opening ceremony, however, the media technology took another two years to be completed - "interim operation" became a non-word.

All in all, Peter C. Slansky worked for 15 years as a building commissioner and user representative for the new HFF building. In the two years before completion and moving in, he wrote a book on the history of film schools in Germany (Station 13) and his dissertation on user representation in university buildings (Station 12). For both monographs, his experience as a building commissioner formed a decisive basis.

Station 11: Planning of the media technology in the new HFF building 2005 - 2013

As described in Station 10, the particular difficulty in planning the media technology for the new HFF building was that it had to be divided into construction-related media technology and initial media technology equipment. The State Building Authority was responsible for the former and the university for the latter. Peter C. Slansky had to wear two different hats, so to speak, if a solution was to be created from a single piece of work: that of the HFF user representative for the construction-related media technology and that of the managing director of Department II Technology for the initial media technology equipment. The interface between the two parts was quite complicated, as different application procedures and procurement guidelines applied in each case.

In 2005, Peter C. Slansky, together with the HFF administration, formed 11 planning groups for internal university requirements planning, the results of which were included in the construction budget document for the Bavarian state parliament. The minutes are summarised here in a collage. A specialist planning office was then commissioned for both the building-related media technology and the initial equipment. The initial equipment was divided into six functional groups: Studio technology, cinema technology, post-production, sound processing, networks and film scanning. Each functional group consisted of a different number of functional units. For each of the six functional groups, a large-scale equipment application was submitted to the German Research Foundation DFG.

The planning of the media technology can be divided into two periods: Before and after 24 January 2011, when the last presentation by the planning office commissioned by the HFF and the building authority took place. This was preceded by several crisis meetings with the management in the presence of lawyers. But despite all this, the office continued to present inadequate planning documents. Just six months before moving in, the contract had to be cancelled and legal proceedings were inevitable.

This situation had been developing gradually since summer 2010, after the DFG's reviewers had not approved the two most complex large-scale equipment proposals - post-production and networks - due to a lack of detail in the planning documents. And technically, the reviewers were absolutely right. At the same time, however, other media technology sectors such as cinema technology or studio technology were already being built at full speed. In this situation, Peter C. Slansky involved the employees of Department II Technology even more closely in the planning. A key document was created by Christoffer Kempel shortly before Christmas 2010, in the middle of the basic seminar in the first semester: The so-called 'pencil plan', the jointly and iteratively developed block diagram of the entire media technology network. This pencil plan was later the most important prerequisite for the collaboration with the newly commissioned planning consortium of the companies Müller BBM and SDI.

From March 2011, the planning backlog was caught up with the new planners. Peter C. Slansky spoke personally with each of the seven DFG reviewers. The re-evaluation was positive. Nevertheless, the realisation of the post-production suffered delays beyond the move in - "interim operation" became the bad word of the first year in the new building. In the end, however, the HFF was the best-equipped film school in the world at the time in terms of media technology.

After nine years of largely trouble-free operation, a large part of the post-production technology was replaced in 2020 - in the middle of the Corona pandemic; in addition, the new areas of VFX and later AI research were integrated.

Station 12: The role of the user in university construction. User representation and user coordination using the example of film schools | Doctoral thesis, 2013

As described in Station 1, Peter C. Slansky's first attempt at a doctorate on the subject of 'film look' in the mid-1990s failed because no first supervisor could be found, even after five attempts. He made his second attempt in 2005, based on his experience as a user representative on the HFF's new building project and as an expert and consultant on building projects at other universities. At first glance, this second attempt seemed even less promising than the first because, firstly, his topic of 'user representation in university construction' was clearly outside his designated area of expertise, and secondly, the fact that he had already held the Chair of Technology at HFF for over ten years without a doctorate proved to be far from favourable. This time, seven potential doctoral supervisors turned him down.

Things took a turn for the better in 2008, when Lorenz Engell from the Faculty of Media at the Bauhaus University Weimar had already been giving guest lectures in HFF Department I Media Studies for years. He told Peter C. Slansky that his colleague Bernd Nentwig, Chair of Construction Management at the Faculty of Architecture, was the right person to contact. After a very swift examination, Nentwig accepted Slansky as an external student in his doctoral colloquium.

Nentwig and Engell also advised Slansky to turn his 'introductory chapter' on the history of film schools in Germany, which had already grown to 100 pages, into an independent monograph (Station 13). It "worked out well" that the new HFF building was delayed by a year: as its completion had to be incorporated into the dissertation, there was still enough time left for "Filmhochschulen in Deutschland".

Hans Zehetmair, former Bavarian Minister of State for Science, Research and the Arts, wrote in his foreword: 'A user representative must ensure that the building not only fulfils the representative lighthouse character, but also proves itself in everyday practicality'. The core of the dissertation is the 'cinematic model' of the construction process developed by Peter C. Slansky, which is derived from a sequence of constellations over certain phases, corresponding to the dramaturgy of a fictional film.

The disputation took place on 30 January 2013 at the historic Bauhaus building in Weimar.

Station 13: Film schools in Germany. History Typology Architecture | Monograph, 2011

The first attempts to establish academic film education institutions in Berlin and Munich date back to 1920/21. However, for 90 years there was no comprehensive historiographical account of the subject, and a topic that is highly relevant to cultural studies lay dormant. Given the plethora of film studies research and literature, this is quite astonishing.

In 2000, Peter C. Slansky had travelled to all German film schools for the first time as part of the HFF construction project. As part of his dissertation, he began researching archives for the first time in 2008, including Munich, Koblenz, Potsdam and Berlin, and conducted interviews with contemporary witnesses. This research yielded such a wealth of interesting individual results and cross-references that in August 2009 - the 'historical introduction' already comprised 100 pages - a decision had to be made. As a result, the former "introductory chapter" became an independent historiography.

Slansky's debut as a cultural historian comprises 858 pages. It contains 40 photos and 1290 footnotes, 688 sources were processed, including 297 books, 220 magazine articles, 10 press releases, 7 unpublished writings, 7 TV reports, 31 web links, 96 archival documents and 20 interviews. The history of film schools in Germany proves to be anything but a smooth flow: of the 14 institutions analysed, six no longer exist. Some failed right from the start, others after years of initially quite successful activity, some in a single violent eruption of centrifugal energies, others in a seemingly endless agony - film schools are potentially hyper-dynamic systems.

'Filmhochschulen in Deutschland' was published by edition text + kritik. It was presented on 18 July 2011 at the HFF cinema in Giesing. That was the last event in this cinema. One day later, the rows of seats were dismantled and the move to the new building began.

Station 14: The research of the others | Expertises, 2001 - 2025

Wherever science and art are in need of funding, the funding requires expert judgement as a decision-making aid. Preparing expert reports is one of the tasks of a professor. In the usual ways of state funding for research, for example through the German Research Foundation (DFG), this is done free of charge, in a sense on a reciprocal basis. A commission to prepare a review is always personal and non-transferable.

The principles of scientific peer review are

- Formal qualification
- Expertise
- Independence
- Impartiality
- Verifiability
- Unambiguity
- Confidentiality

Peter C. Slansky wrote his first expert evaluation for the DFG in 2001 with a proposal amount of DM 3.7 Million. Since then, he has written a total of 22 expert evaluations for the DFG or for other research funding organisations as well as for universities or their superordinate authorities with a total proposal amount of € 38.5 million. Universities in Germany, Switzerland, Austria, Czech Republic, Serbia, Greece, Israel, the United Kingdom, China and Australia have asked him for advice on their building projects. His expertise and advice have led to the realisation of construction projects worth several hundred million euros.

In addition to his work as an expert, he has submitted his own applications for media technology equipment at the HFF – primarily for the initial equipping of the new building – totaling 14 Million euros.

Station 15: α |Forum | Broadcast, 2013

In the programme α |Forum from 22 April 2013, Hubert von Spreti interviewed Peter C. Slansky for 45 minutes, providing an insight into his wide-ranging teaching and research activities.

Station 16: BBQ.311 – A five-dimensional classification system for the quality of moving images | Monograph, 2022

The scientific manual presented in this station is based on a research project carried out between 2018 and 2021 with the support of the company ARRI.

From the first cinema images at the end of the 19th century to the advent of television and the computer in the 20th century and today's media world in the 21st century with displays and screens of all types and sizes, amateurs and professionals alike are concerned with the quality of moving images. A closer look at moving image quality reveals it to be an extremely complex and multi-layered phenomenon that can be viewed from very different perspectives - physical-technical, psycho-physiological, creative-artistic. The BBQ.311 system provides moving image professionals with a comprehensive classification system for all relevant quality aspects for the first time. BBQ, pronounced 'BBQ Three One One', stands for "Bewegtbiqdqualität" – moving image quality. It is based on a strict, self-contained system that is presented in a five-dimensional matrix. BBQ.311 is conceived entirely from the moving image seen, not from its technical basis. It therefore works with semantic terms, not with technical or physical parameters. It therefore works with semantic terms, not with technical or physical parameters. The BBQ.311 system can be used to describe the entire

workflow chain of moving images, from recording to post-production, distribution and playback in the cinema, on television or streaming or another display, as well as individual phases of the workflow. The system is independent of specific image technologies, whether electronic or photochemical, screened or unscreened, analogue or digital. The BBQ.311 system thus also forms a communicative bridge. It targets researchers, teachers and students of media technology, media science, media design and perceptual psychology in equal measure.

BBQ.311 is available from Westarp (see QR code).

Station 17: Meteor Observation with digital Film Cameras | 2014 - 2025

For a long time, professional astronomers and amateurs alike used analogue black and white video cameras in standard definition resolution for meteor observation. For about ten years, however, digital film cameras in colour and in high-definition resolution or even higher have opened up new scientific possibilities.

Peter C. Slansky took his first meteor image with a digital film camera on 24 May 2014, when the Camelopardalids, named after the constellation Giraffe from which these meteors appear to come, were predicted for that night. As this meteor shower was appearing for the first time, its character was unknown. From his roof top terrace, Slansky aimed an HFF Canon C 300 with a Zeiss Superspeed wide angle lens at the Munich night sky. The camera was switched on shortly after midnight. The video sighting showed a very bright meteor at 03:58 CEST, which blazed up with an orange afterglow lasting several seconds. It was the world's brightest camelopardalid seen in 2014. NASA meteor researcher Peter Jenniskens analysed Slansky's image data (which promptly led to certain meme phenomena on the HFF Facebook page).

Even more extraordinary was Slansky's video recording of a bright Perseid 2018, which was given the code 3414-2018 by the International Meteor Organisation: This meteor showed a very bright terminal flash, a green afterglow with a diameter of up to 8 km that persisted for several seconds, and a large-scale bluish skyglow following the terminal flash, which could be detected for half a second up to a distance of 122 km. These halo effects were only observable with the instrumentation used. Together with co-observer Bernd Gährken, Peter C. Slansky wrote an article for the WGN Journal of the International Meteor Organisation (see QR code). Further presentations at astronomical conferences followed. In this way, Peter C. Slansky was able to position himself scientifically in this field of research at the crossover between his professional work, especially with digital film cameras, and his work as an amateur astronomer.

At the International Meteor Conference 2022 in Poroszló/Hungary, he presented a morphological classification scheme for halo phenomena of meteors in three zones based on his meteor video observations. Nevertheless, the hunt for meteor halos with the video camera continues.

Station 18: Telescope Construction | 2000 - 2025

Out of all the stations in this exhibition, this one has the most playful character - telescope making is not least a handicraft activity. Peter C. Slansky often makes the housings of his devices out of plywood or cardboard, which only seems to contradict the optical and mechanical precision of telescopes. This is because these organic materials also have advantages in telescope construction. All his telescopes - both those he built himself and those he bought - serve specific technical

applications in astrophotography, which is why they are given technical acronyms as names. For many of his designs, Peter C. Slansky works together with Matthias Knülle and Bernd Gährken.

ANT 222/985mm is an astrophotographic Newtonian telescope with 222 mm mirror diameter and 985 mm focal length for use with full-frame cameras. Built between 2004 and 2006, its tube is made of plywood and the mounts for the primary and secondary mirrors and for the focuser are made of aluminium. The ANT was dimensioned in such a way that it still fits into a Porsche 944...

GFA 80/360mm is a large field astrograph for 4x5" sheet film with a Zeiss repro lens and plywood housing; built between 2000 and 2007. Today it has been replaced by digital cameras.

CSFR 71/1.734mm is a chromatic solar folding refractor; built between 2005 and 2010. The optical system consists of a single lens with a diameter of 71 mm and a focal length of 1.734 mm. The beam path is folded via a prism at the end of the plywood tube, so 96 % of the sunlight is reflected to the side. In full format, the solar disc is imaged to fill the entire format.

UVCR 61/840mm is a chromatic refractor that was built in 2022 especially for photographing a lunar eclipse in the ultraviolet. The optical system consists of a single lens with a free diameter of 61 mm and a focal length of 840 mm in UV-A. The tube is made of lacquered cardboard and has a particularly low stray light design on the inside.

ZCR 50/540mm is a compact Zeiss C refractor with helical focuser, which was built in 2019 for the photography of solar prominences during the solar eclipse in Chile.

ALSK is not a telescope, but an all-sky camera. The two-stage imaging takes place via a hemispherical mirror from surveillance. Developed in 2010 for meteor images, the ALSK will soon also be used for polarisation images of the day and night sky.

Each of these telescope constructions is associated with certain astronomical excursions and the image results realised - or not - in the process. Some of these can be seen on the screens - in reduced resolution. The analogue SLR cameras attached here are for illustration only. The QR code leads to technical reports on each of the telescopes.

Station 19: Four spectra | Photo-Light-Installation, 2019

This station is nothing more - and nothing less - than a rather playful installation for visualising the different aspects of light spectra.

1. Astronomical spectrum

An astronomical object emits light into space. Each object has a characteristic brightness curve depending on the wavelength, called a spectrum.

2. Camera spectrum

On earth, this light, focussed through a telescope, falls on the sensor of a camera. A color camera has a characteristic sensitivity curve over the wavelength, separated into the blue, green and red channels.

3. Printer colour spectrum

The image captured in this way is digitally processed and printed out at the end. The printing colours used here each have a characteristic reflectance spectrum in the yellow, magenta, cyan and black channels.

4. Illumination spectrum

The four printed images in this studio are each illuminated with an ARRI L7-C LED spotlight. These spotlights alternate between two different spectra that are indistinguishable to the eye: A continuous white spectrum and a narrow-band white spectrum consisting of three individual spectral ranges: blue, green and red. This light change was programmed by Peter Gottschall and Andreas Beckert, studio masters at the HFF.

In the colourful areas of the images, a clear difference can be seen when switching between the two lighting spectra: the colour saturation is significantly higher in the narrowband spectrum than in the continuous white spectrum because the maxima of the narrowbands are multiplied by the maxima of the printing colours. In this way, the viewer experiences the connection between the four spectra, between the light of a distant astronomical object with telescope and camera technology as well as printing technology through to lighting with spectrally varying LED film spotlights here in TV Studio 2 of the HFF, the first LED studio in the world.

Station 20: Camera photometry of the total lunar eclipse of 21 January 2019

A total lunar eclipse, during which at its maximum the moon glows copper-red, is one of the most visually impressive astronomical events ever. Due to its orbital geometry, the lunar eclipse on 21 January 2019 was the last one that could be observed in Europe for the next ten years. Peter C. Slansky observed it together with Bernd Gährken at an altitude of 2000 metres from the Plose near Brixen in the Eisack Valley. The aim of the observation was the photographic photometry of the entire course of the eclipse in the four spectral ranges of blue, green, red and infrared.

Under almost optimal observation conditions, two series of images of the entire eclipse were taken between 03:43 and 07:42. Two Sony $\alpha 7S$ cameras were mounted on an 80/480mm apo refractor using a flip mirror. The first camera worked in normal, visual light; the IR cut filter had been removed from the second camera and an IR pass filter was used instead.

For the evaluation, seven measuring fields were defined on the lunar surface, which were measured separately. To do this, the opto-electronic transfer function of the camera had to be determined. This was done in this studio using the test chart that Peter C. Slansky had once used together with Detlef Möllering to make the test recordings for their diploma thesis and for the 'Handbook of Professional Video Recording' (Station 1). Thus, after 27 years, a circle was closed.

In addition to the image sequence on the screen, the graph below shows the brightness curve averaged over all seven measuring fields in the spectral ranges blue, green, red and infrared. While the maximum eclipse of the moon reached -16.1 f-stops in blue, it decreased to -15.7 in green and -14.0 in red, and in infrared it was only -10.5 f-stops, 48 times brighter than in the blue.

Station 21: Research Professorship on Artificial Intelligence | 2021

In 2019 the Bavarian state government announced a competition as part of the Bavarian High-Tech Agenda for 50 fully funded, permanent research professorships in artificial intelligence (AI) at Bavarian universities. All eligible Bavarian universities participated, submitting a total of 175 applications, including 150 joint applications and 25 individual applications.

The individual application “AI and Data Science in Media Production” by Siegfried Fössel and Peter C. Slansky was successful.

The job description for the professorship was part of the competition application, which stated: *"The subject area, which must be competently represented in research and teaching, is to be newly established at the HFF Munich. It covers the individual areas of artificial intelligence in media production, new creative possibilities based on AI, automation and optimization of data handling and workflows, generation and use of metadata in large film datasets; advanced enrichment of films with metadata, subtitles, language variants, data transfer and linking of workflows to games and VFX productions, and investigation of deepfake media content."*

In 2022, Sylvia Rothe, who holds a doctorate in mathematics and is a software developer and filmmaker, was appointed to the professorship. Since then, she and her five-member team have been researching and teaching AI in film production at the HFF. Their contributions have attracted national and international interest.

In the Free State of Bavaria's competition, the HFF was by far the smallest participating university – and that with an “immodest” single application...

Station 22: CreatiF Centre | 2023 – 2027

Following their success in the Federal Ministry of Education and Research's ‘Innovative University’ competition, Siegfried Fössel and Peter C. Slansky were able to found the HFF’s ‘CreatiF Centre’ in 2022. The second round of funding for the ‘Innovative University’ competition aimed to support universities in the areas of transfer and innovation and to strengthen their strategic role in their respective regional innovation systems. The funding period is five years. The federal and state governments provided a total of 285 million euros, with the funding being provided in a ratio of 90:10 by the federal government and the respective state in which the university is located. 165 universities took part in this competition, including 110 universities of applied sciences, 42 universities and teacher training colleges, and 13 art and music colleges.

The HFF's individual application ‘CreatiF’, conceived by Siegfried Fössel and Peter C. Slansky, was successful. As in the competition for the AI research professorship (Station 21), the HFF was the smallest university participating – and that with an ‘immodest’ single application.

The CreatiF Centre consists of three sub-projects:

- CIL: Creative Innovation Lab
- IPM: Integrative Production Management
- HFF|F: HFF Film Heritage.

The CreatiF team consists of a total of 16 employees, 13 of whom are based at the HFF, two at the Fraunhofer Institute for Integrated Circuits in Erlangen and one at the University for Music and Performing Arts Munich. The project budget for the five-year project period from 2023 to 2027 is €6.3 million.

The Sony Verona LED wall was purchased for application research by the Creative Innovation Lab in the field of virtual production. In this exhibition, it is used for presentation purposes. Otherwise, it is used in HFF courses to display virtual backgrounds, which are calculated in real time by a 3D workstation with the correct perspective for the respective camera angle. The LED wall thus symbolises the film technology innovations that are being researched and tested at the CreatiF Centre at the

HFF, founded by Siegfried Fössel and Peter C. Slansky. Even after his retirement, Peter C. Slansky will continue to supervise the CreatiF Centre until the end of the project funding period.

Station 23: Extreme Cinematography | 2024

In cinematic image design, a very shallow depth of field is often desirable in order to “dictatorially” direct the viewer's gaze to certain elements of the image.

Inspired by US camera technician Nikolas Moldenhauer, Peter C. Slansky constructed an experimental camera setup in 2024 consisting of an extremely fast projection lens and a digital back for an analog medium-format camera. The lens comes from an old 3-tube video projector, identical in construction to the projector from the former HFF cinema in Munich-Giesing, which can be seen in Station 8, “The Resistance of the Device.” With a focal length of 145 mm, the lens has a speed of $f/1.0$. The digital camera back from the Swiss start-up company “I'm Back” fits the 6 x 4.5 cm medium format. The image through the lens is projected onto the focusing screen of the digital back, where it is filmed internally with a small camera. In this two-stage imaging process, only the free aperture of the first lens is decisive for the depth of field. Compared to a 35 mm camera, the experimental setup produces the same image angle and depth of field as a 46 mm lens with an aperture of 0.33, which is physically impossible!

In this exhibition a mirror was added to better showcase the construction.

Try it out for yourself:

- Turn on the camera using the main switch at the rear left
- Confirm the “6 x 4.5” format on the touchscreen
- Stand on the yellow line on the floor
- Observe the shallow depth of field of your image on the screen!

Peter C. Slansky used this experimental setup in 2024/2025 for several workshops with students and presented it at a film technology trade fair.

Slansky built another experimental setup around a Fresnel lens with a diameter of 1 m. This achieves a focal length equivalent to 35 mm of 49 mm and an aperture of 0.044!

Station 24: International Survey: „Disruptions Ahead? The Impact of AI on Cinema“ | 2024/2025

Like every new innovation in human history, artificial intelligence comes with potential to transform artistry and counter challenges we face every day as film creatives. Is AI a potential threat to classic filmmaking or is it a chance to reach new dimensions of creativity?

This global survey examines expectations, fears and hopes regarding the impact of AI-based tools on cinema and filmmaking, as well as on teaching and learning. It consists of 20 questions on current opinion in the film industry, the potential of AI, and the fears that filmmakers may have about it. The survey is the first comprehensive study to examine the use of AI specifically in the film industry from a global perspective.

In addition to Peter C. Slansky, the team of experts consisted of Prof. Dr. Sylvia Rothe (HFF Munich), Jean-Paul Jarry (France), Petru Maier (Denmark) and Simon von der Au (CreatiF Centre at HFF Munich). The survey was launched at the CILECT 2024 congress of the International Association of Film Schools in Beijing. The HFF's communication partners were CILECT and a number of professional associations of filmmakers around the world. A total of 240 filmmakers, film teachers and film students from 37 countries worldwide took part. More than 100 participants took the opportunity to submit a personal comment. These personal comments reflect the whole range of opinions and assessments on this topic.

One initial outcome can already be reported here: in general, filmmakers around the world feel poorly prepared to deal with AI-supported systems.

Peter C. Slansky will present the further results of the survey at the 6th Munich AI Symposium at the HFF in November 2025.

Station 25: CILECT Teaching Award | 2023

Since 2013, the international association of film schools CILECT has been presenting an award for excellence in film education: the CILECT Teaching Award. Candidates must apply for this award, and each application is assessed according to the following criteria:

- Nomination statement
- Teaching philosophy statement
- Teaching positions
- Publications
- Presentations and workshops
- Awards and grants
- Policy Making
- Teaching Video

At the association's annual congress in Rome in 2023, the CILECT Council presented Peter C. Slansky with the Teaching Award “in recognition of his outstanding merits in film, TV, and media pedagogy.” He is the 17th recipient of the award and the first German to receive it.

The right QR code leads to the application portfolio.

Station 26: The Secret of the X Antennas in North-Rhine Westphalia | Book, Work in Progress

On his 25th anniversary, Peter C. Slansky announced his retirement on November 1, 2025. When he got married in 2023, he knew he would be moving his primary residence from Munich back to the Lower Rhine region. His first scientific project in his new/old home of North Rhine-Westphalia will be a technical-cultural-historical overview of the remarkable concentration of radio astronomy and satellite radio technology facilities in North Rhine-Westphalia. Starting in 1955, several waves of development led to the construction of numerous large-scale radio engineering facilities for the

purposes of astronomy and satellite radio communication—over several decades marked by the division between East and West and the Cold War.

The radio telescope on the Stockert, visible from afar across the Eifel heights, with an antenna diameter of 25 m, was the first large-scale research facility in the then still young Federal Republic of Germany. Building on this experience, the Effelsberg radio telescope was built in 1970, just a few kilometers away. With a diameter of 100 m, it was the largest fully steerable radio telescope in the world for over 50 years. In Bochum, the individual initiative of self-taught astronomer Heinz Kaminski succeeded in establishing one of the world's leading facilities for satellite radio communication in the 1950s and 1960s. More recent developments include submillimeter antenna systems developed by universities, research institutes, and companies in North Rhine-Westphalia, which are used for scientific purposes in observatories in Switzerland, Chile, South Africa, and Tibet.

The planned comprehensive presentation of the technological and cultural history of these research facilities will also shed light on the political dimensions and the countless interconnections between the individual objects. Parallel to his literature research, Peter C. Slansky has already made initial visits to the sites, where he interviewed participants and photographed the facilities. “The Secret of the X Antennas in North Rhine-Westphalia” is scheduled for publication in 2027. The “X” currently stands for the number of facilities depicted, which has not yet been finalized.