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# Director of Sound vs. Sound-Operator

**ABSTRACT.** The article arose from the material of a presentation given during the CILECT-GEECT Conference of the LAMT in 2017 and was inspired by the author's personal experience in work-flows and discussion processes concerning filmmaking and doing the soundtrack for several projects. The article begins with the actual situation of today's work-flow for film sound, particularly in German cinema-film and TV productions. The topical situation is stamped by an understanding that sound people are seen in production and post-production as technical employees and they see themselves partly also in such a way, who deliver a sedate, technically clean sound for the final mix "in nice" layouts made by directors and editors. These sound engineers are not seen as creatives, neither as co-authors on the same level with authors, directors or editors. If there is, however, a position of a Director of Sound, compared to a Director of Photography, producers and directors would have a co-author for sound in the team, who would also be acting as the leader of a whole team in sound crafts. Incidentally, there was already the position of a sound producer in the 1940s in the US film industry, and this position exists in Indian film as the Director of Audiography even today. Topical Teamwork models (Scrum or Design Thinking) – above all, in the development of software or complex game projects – can be models of a modern cooperation for film sound and bundle up the group-intelligence of specialists creatively. It is time to discuss these forms of collaborative working, as to how to lead such teams and on how to be an interlocutor with the screenplay-writer, director and editor. This is important because a majority in the profession of sound operators will become superfluous in the foreseeable future, being replaced by Artificial-Intelligence-Automation.

**KEYWORDS:**  
sound design,  
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composition, author,  
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work-flow, education.

The CILECT-GEECT announced a sound-conference would be held in Vilnius in 2017. The Bachelor program Film & Sound of the University of Applied Sciences and Arts in Dortmund was accepted as full member of the CILECT in spring, 2017 and I thought it might be a good occasion to give a lecture about my ideas for another view on how sound-creatives could participate as authors for film projects. I hoped that within

the scope of the conference in Vilnius, I would be able to appeal as much to scriptwriters as to directors and producers. Unfortunately, these professional groups were hardly present in Vilnius, nevertheless, an illustrious circle of sound-creatives met in Vilnius who engaged in a lively discussion about the ideas from my presentation.

I base my considerations on this subject from experience gained from films, TV productions and student projects in Germany. Indeed, thanks to the numerous international conferences I have visited, I know that my observations are also quite similar to those made in other countries, which can be of international interest here regarding the addressed problems and solutions.

Sound-creatives – except music-composers – are booked in the topical film production process as a rule as operators. One cannot also master all the available audio engineering, so one needs an engineer who will understand exactly what is needed for the movie. It is the scriptwriter, director, perhaps also the producer and editor who decide what should be moved, but not the “sound engineer”. The definition of an engineer as an employee for sound comes from the tradition in radio or television, as in film, the creative core of the team is built up by the producer, the author and the director. In the production process for a film, the Director of Photography is accepted as a creative employee, in the usual process of post-production, this is the editor. For decades, sound was equally cut in a montage together with the picture in the editing process by the editor. Because this process is the most important one after the screenplay and the shooting, it is accepted that the director/producer is present regularly, if not daily. Since editing has become digital, it is not seldom that directors also cut themselves. In this process, the moving pictures are placed sequentially, however, just also in this arena, the sound layout is already present: Dialogues, Off-Screen-Text, important elements of the sound scenery, diegetic and non-diegetic music (Temptracks), maybe already Voice over. Because this sound layout is often produced with qualitatively insufficient, fast found sounds, a sound engineer is needed at the end to finish the layout “nicely”. Whether this engineer is called the sound-engineer, sound designer or sound editor is less important for the principal: the central issue is, he understands the layout, fortifies this around usual shares like Foley, Atmos and effects, and ultimately delivers good basic material for the final re-recording mix, which is determined essentially again by the director.

In German film-sound-studios, the sound designer is mostly also synonymous with the sound editor and the sound editing supervisor and he can supervise and influence the whole expiry of the post-production, mostly in his function as a sound supervisor. However, as a sound editor he has to compile a few of the crafts described above, in the team with other sound editor's colleagues. Besides, the sound designers concentrate

in their sound-assembly activity mostly on Atmos-, effects- and SFX-work. Hence, I use the different job titles in the following system:

- ◆ The **Sound Editor** is a sound cutter who compiles one or a few sound crafts according to the given order and delivers this – without any larger contribution of his own sound draft – by order for the final mix.
- ◆ The **Sound Designer** is the sound creator who works by given order on several sound crafts, though in very limited communication with the director, the producer and often also the editor. For certain tasks (layers), he gives orders and also communicates closely with sound editors and makes certain demands of them. Mostly he takes over the core creation layers in the sound-editing himself, because he compiles a sound draft and moves this strictly after consultation with his principals. Very often, he is also the re-recording assistant, and less often he is also the re-recording sound engineer for the final mix.
- ◆ The **Sound Supervisor** (Supervising Sound Editor) must not work as an editor, however, he is engaged – comparably to a composer for the film music – the concept artist who sketches in addition to the editors work on the one hand, the sound conception and the narrative sound-formative dramaturgy in support of the screenplay and the present cut version. He gives orders to sound editors, and is responsible for the very efficient cooperation within the whole work-flow, the technical standards and the communication between the departments on how to organise the single sound crafts. At the same time, he very often has to present layouts to the director (often also to the producer) and communicate with the music-composer. In an ideal case, he is involved in the mix on an equal decision level beside the director and producer (sometimes also the editor) for making final decisions, and being responsible for the final shape of the Sound editing/ Sound design.
- ◆ The **Film Music Composer** is classically the composer who is responsible for the harmonious, rhythmic and the melodic passages in the film. Whether he allows this music to be played with instruments, generates it electronically or composes a mixture of both is his decision, and merely depends on the agreed choices in communication together with the director.

Unfortunately, the actual situation is, as a rule mostly also in Germany, that sound designers and music composers know that there is also somebody in parallel who works on the soundtrack for the same film, but they mostly do not know what they do or how!

With smaller productions, the sound designer is at the same time a creative and co-ordinator of his sound editors working together with him. This is good for the

"creative downpour", however demands on his time soon pile up if he must also co-ordinate external appointments, supervise technical standards and transfers, and above all soon faces a lack of understanding from the director or producer on what concerns the technical work-flow demands for sound post production.

Unfortunately, cost pressure is decisive in Germany, so that a sound supervisor is not mandatory and nor is a Post-production Supervisor hired, who could organise and co-ordinate, above all logically and technically, the whole process in picture and sound after the trick. The result is, in this case, that the necessary communication has to be done directly with each other and has to be tuned within a team, often without having cleared hierarchy and technical standards, and any emergent problems have to be handed on to the producer. As a consequence, too often this results in situations which cost a lot of time and strength and hardly deal with the creative work, because filmmakers rarely know the system and the professional vocabulary of film sound. It would be extremely advisable for producers to hire a Post-production Supervisor and consequently also a Sound-Supervisor, if they are interested in utmost creativity within a problem free work-flow.

Film sound is such a complicated symbiosis from the most different admissions at the most different times and purposes that this would require an experienced Music Concète Composer or just of a composing sound designer to structure the material, to make a semantic mount for the purposes of the storytelling, or to orchestrate the right degrees of sound timbre mixing to each other. If this person also has to be the technical coordinator, a good communicator and an interesting co-author for the film material, this already requires quite a lot from a single person.

Or: Film sound is such a complicated symbiosis from the most different admissions at the most different times and purposes, that it requires a team of specialists that can communicate very well, in order to structure the material well, to edit semantically for the purposes of the storytelling or to orchestrate the right degrees of sound timbre mixing with each other. However, this kind of team always needs a team leader who has the last word and can possibly mediate – be "modest" in term of their own work – and can defend team decisions in front of the principals.

I think both possibilities are feasible and practice both models in my university teaching. Both possibilities contain the potential to create a soundtrack "from a downpour". This would be a composition in harmony of the heterogeneous materials: language, music and noises in regarding their architectural, melodic and rhythmical values and their effects on the moving picture. At the same time, this composition would vary in its motive, cover broad combinations of the different key words, noises or musical

motives horizontally dependent on each other and assemble accompanying sounds to unfold in a clearly-structured and vertically-connected way, leading to a dissociated or even counter-point arrangement for the whole construction of the sound layers and their development “musically, to sound-linguistic senses”. Following on from the statement by Michel Chions that “there is not a soundtrack” functioning autonomously, independent of the moving picture in the film context, the question arises:

**What do I hear from what I see and what I am not hearing – and what do I see from what I hear and what I do not see! – And what is the meaning of these decisions?**

In the first case it requires a type of sound designer who thinks in terms of compositions, who knows how to use microphones, a field recorder, DAWs, sound synthesis programmes and mixing desks as instruments. He must know as much about filmmaking as his director and editor colleagues. In addition, he must be competent in the possibilities of film sound creation and be at the standard of art relating to international discourse about film sound and the according vocabulary. As he works creatively with hardware and software, he must be technically trained in sound and know the topical technical standards, and understand the sound-technical vocabulary as well. He must know all the sound editing crafts and has to ideally already have work experience in these. He must be a communicative person, know how to put a team together and has to be able to lead.

The second case requires a type of “sound master”, a “Director of Sound” who creates – thanks to his communication skills and mutual respect – the team composition of a soundtrack together with his sound colleagues, being aware of their technical knowledge and specialisations. Part of this team is also the music composer as the specialist for harmonious sounds, like the specialist for the spoken word, atmosphere, noises and special effects. These five layers should exist beside each other with equal rights and should be worked door to door or virtual in an daily exchange with the whole STEMs in a DAW, if possible. This would offer the opportunity of being able to listen to the work of the respective specialists on an ongoing basis, to gain inspiration from this, or to share advice on the sound design, since one works or has worked parallel on the same sequence on another layer. If one has the opportunity to put two, three, four or all five layers as layouts quickly and spontaneously, parallel again and again and therefore to come together to discuss it with each other and to immediately go back into his studio again to work further to this, then there is a chance for a collective composition.

A team always needs a supervisor – even if it still functions well – someone who makes decisions and is accountable for the artistic and formative aspects, comparable to the film-director in the team of set designers, costume designers, camera team,

light-technicians and actors on the set. This Director of Sound should be the most experienced and universal person in the team, who already has worked practically in most if not in all basic five layers. By the way, such an universally experienced sound director is the prototype of the type described in the first case of a sound designer with the extended role of planning, co-ordinating, supervising, leading and communicating by delegating practical work completely to a team of "arrangers" or "interpreters". A Director of Sound (or Supervising Sound Editor) corresponds most to this type, if one does not equate him – as is usually the case – merely to being the administrative and technical organiser and supervisor of the sound post-production. The organisational supervision, calculation and communication with the producer, the supplying studios and special companies for processing should be incumbent upon a post-production manager, the technical care and supervision – on a sound engineer. The formative, respectively, the compositional planning and care of the whole soundtrack process, however, should be incumbent upon the sound designer, or even better to the type of Director of Sound described above! This type of composer is, in my opinion, the creative future of film-sound design. If a music composer is also in co-operation on his team there is a chance to create a "soundtrack" which earns this kind of name and does not lead to a collision of two independent sound layers compiled on top of each other in the final mix...

It is imperative for education institutes to form such "sound teams" as models in project work. It is advisable for bigger film sound studios to create these kinds of working structures and rooms, and to offer such packages to the film sound market. It should be the job of every producer to organise sound post-production in such a way that these forms of temporal and spatial co-operation become possible. If this cannot be realised in one space, nowadays it is no problem to organise this virtually via Cloudsharing of video files and Sound-STEMs and to arrange to meet regularly in video conferences for arranging the worked layers and to discuss creative ideas and reactions with the other partners.

The film producer or quality TV productions hire topical film sound studios or freelancer sound editors in the function of a supervisor, who will know enough sound editors and also original sound teams for a film production. Then this person has to prioritise the task of communication between producer and director on the one hand, his sound teams on the other hand, and finally with the mixing sound engineer, and if necessary also with the music composer. Starting from this communication process, he has to logically co-ordinate the work-flow, as well as to develop a sound draft arising from the talks and possibilities, to communicate and to supervise this. In his position as Supervising Sound Editor, he has to combine ideal communication skills to be able to talk

to very differently trained creatives, he has to have the ability to think conceptually and to be able to formulate these drafts. He has to be strong in structural thinking, in having a good knowledge of the used hardware and software and he has to have the ability to organise the technical and logistic work-flow. Ideally this creative also has something of an understanding of moving picture editing, so that already in the screenplay discussions also the audio visual possibilities can be roofed and co-compiled. If so, this can have an effect in the editing process in the form of a co-edited sound layout. Of course, he must also understand so much from music and the dramaturgical possibilities for the application of film music, that he is the ideal contact person for music composers and if necessary also musicians and music sound engineers. By the way, often a competent sound designer develops into an editor; the best known example is Walter Murch who began with sound editing, then sound design, onto sound montage which he named himself, finally, onto audio-visual editing.

By the way, the circle of the other side closes at this point, which was broken open at the end of the 1970s. Even today, older editors state with pleasure that the occupation of a sound designer/sound editor is actually superfluous, because sound was edited earlier also by the film editor directly at the Steenbeck. After editing a sound-movie, it earlier times it only required a sound engineer to adapt the sounds levels, to pull non-synchronous sounds and to form smoother crossings, before the re-recording mixing sound engineer made the final mix on tape. Ongoing differentiating development of sound-creatives has given us the sound designer, sound editors, original sound recording engineers and editors, Foley studios, ADR studios, plus composers and musician crafts who work separately, distinguishing the audio-visual crafts themselves from each other. It is only relatively recently that DAWs have become the tools of sound editors, as for music composers, and modern editing software allows doing a layout of a number of soundtracks, and the crafts are increasingly growing together again. However, because the sound process has become much more complicated in multi-layer thinking, and working is mostly still on a picture frame referring to sequential picture editing, sound editors devote themselves increasingly also to moving picture montage and become therefore audio-visual editors with a stronger weighting of the picture sound interaction than has been the case in earlier times.

Because the available technology – software in the form of editing software or DAWs – increasingly became more complicated, yet graphic user interfaces have also made it easier to learn and are manageable even intuitively, requiring no extensive technology studies for the use of these programmes. Instead of the usual 4–5 years studying electrical engineering, audio engineering, picture technology and video technology, etc.,

to eventually have a job profile of a sound engineer or media engineer, today other skills are in demand.

In terms of a proper understanding of the job profile of an audio-visual supervisor, ultimately he has to be accepted as a co-director who can pursue material development with the director, the author and also with the Director of Photography on the one hand. On the other hand, he is the expert who can train and co-ordinate a whole team of sound specialists! Of course, this person must have studied film extensively and all the movie crafts, dramaturgical drafts, as well as music and sound creation, editing and the suitable technical skills, as well as have a profound logistic knowledge, no longer being merely the engineer or operator, but a technical, scientific and creative team player for the filmmakers!

Older filmmakers will hardly get involved in this type of creative cooperation, because film sound was understood for too long only as a technical service. Hope rests on young filmmakers who understand that future filmmaking is teamwork among equal creatives!

The normal case of material development (regardless of whether it is for film, video, television or computer or even games) should be that everybody who is responsible for plot, picture and sound creation works together on the material, long before the work goes to the production process. If enough time is given to this process, just as to the realisation and the post-production, there is a chance to create a media-masterwork of art.

Since the digitisation of products, and especially in software development, new models of co-operation have emerged since the 1990s for the advance of software products. The implementation of these developments has led to the set up of agile, interactive drafts with high-achieving accountable teams facing up against the linear “waterfall model” of the analogous production (the production line). Concepts like agile, incremental and iterative – and beyond the draft stage, also SCRUM or Design Thinking – operate entire work-flows. Not only film sound studios, but also film production companies could learn from such models and apply them in creative work if they want to receive a very high creative input from all crafts for their film projects, and thus break away from the old author’s filmmaker/hierarchy principle.

For sound people, the advice would be to develop as fast as possible into Directors of Sound according to the above-described definition, with a suitable competence spectrum to become creatives on the same level as scriptwriter, director and editor. This should be discussed as a basic condition for the development of film projects. The actual galloping development into automation processes will not stop for professional sound editing, and already in the foreseeable future tools will become available that can operate

Foley editing, ADR, Atmo editing and maybe even effects-sound design automatically, according to picture analysis and access to large sound-libraries. Experience tells us that everything that can be automated with a unique investment will be used by financiers – in this case, those responsible for TV production and film producers. Why are sound editors still needed then, one may ask? With the current state of understanding, these crafts would be further significantly degraded only to operators and mistake-controllers of automation processes. However, topically the automation tools are not able to do some things as well as humans:

Inventing, improvising, arguing, bring together unconnected fragments in a semantic manner, having splendid ideas, experimenting with audio-visual interaction or copying from well made models – and more.

A Director of Sound should be distinguished just by these kinds of competences and should then not have any fears of one day being replaced by artificial intelligence...

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## **Garso režisierius vs garso operatorius**

SANTRAUKA. Šį straipsnį inspiravo konferencijoje (CILECT-GEECT 2017, LMFTA) skaitytas pranešimas, diskusijos bei asmeninė autorius patirtis statant filmą ir kuriant garso takelius keliems projektams. Straipsnio pradžioje pristatomas filmų garso kūrimo procesas šiandieninėje Vokietijos kino filmų ir televizijos pramoneje. Garso baro žmonės gamybos ir vėlesniuose etapuose yra traktuojami kaip techniniai darbuotojai (jie ir patys iš dalies save taip traktuojasi), kurie galutiniam montažui pateikia techniškai švarų „gražų“ garsą, atitinkantį režisierių ir montažo režisierių reikalavimus. Šie garso inžinieriai nelaikomi kūrybiniais darbuotojais, ką jau kalbėti apie jų traktavimą bendrautoriais, kurių profesionalus darbas prilygsta autorų, režisierių ar montažo režisierių darbui. Jei vėl atsirastų garso režisieriaus pozicija, panašiai kaip vaizdo operatoriaus, produiseriai ir režisieriai savo komandoje turėtų garso bendrautorių, kuris vadovautų visai garso meistrų grupei. Praeito amžiaus 4-ajame dešimtmetyje JAV kine egzistavo garso produiserio pozicija. Šiandieninėje Indijos kino pramonėje ši pozicija vadinama audiografijos režisieriumi (*Director of audiography*). Komandinio darbo modeliai (*Scrum* arba *Design thinking*), pasiteisinę kompiuterinių programų bei sudėtingų kompiuterinių žaidimų kūrime, gali tapti ir modernaus bendaradarbiavimo pavyzdžiais filmų garso srityje. Šiandien yra aktualios dialogo su scenarijaus autoriais, režisieriais ir montažo režisieriais paieškos ir vadovavimas tokioms komandoms. Tai svarbu, kadangi artimoje ateityje didžiąjį garso operatorių darbo dalį perims dirbtinio intelekto įrengimai ir ši profesija taps neberekalinga.

**REIKŠMINIAI  
ŽODŽIAI:**  
garso dizainas, garso takelis, kompozicija, autorius, režisierius, garso režisierius, vadovas, montuotojas, operatorius, saviorganizacija, lankstusis darbas, kūrybinis mąstymas, komanda, darbo procesas.