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Sound event dramaturgy – a storytelling-based analysis of film sound

Theses

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A sound engineer needs to understand the mechanisms by which sound in film produces its effects both instinctively and consciously. Knowledge of the soundtrack's structure is necessary to achieve a better understanding of said mechanism. Every film aims to tell a story, which is why my research focused on the aspects of sound which impart narrative information. Even though films can affect viewers' emotions differently, the manner in which the narrative information is conveyed appears to be more tangible. Emotional effects and aesthetic judgments are outside the scope of a structural analysis of the soundtrack and the film style. To the contrary, knowledge of a film's structure allows us to identify the elements which produce its aesthetic effect. The aim of the dissertation is to create a method of analyzing the structure of such sound features which can convey narrative information.

Several works mention, rightly, that the literature of sound in film is much less ample than that of its visual aspects. General, systematic works on film theory offer little detail on film sound structure. This is true even of recent books such as that by David Bordwell, Kristin Thompson and Jeff Smith.

Some authors, including Michel Chion, David Sonnenschein and Ferenc Lohr, have written thoroughly considered works discussing the role, emotional effects, and acoustic features of sound. These deal with the following three main aspects of the structure of the soundtrack:

1. How can we analyze film sound, even though there is no definable 'sound unit' equivalent to the visual 'frame'?
2. How can we categorize the various elements of the soundtrack?
3. How can we investigate the relationship between image and sound in a film? Is there a way to perform an analogue to horizontal and vertical musical analysis?

Film theory answers all three of these questions. Intuition can help with the problem of the 'sound unit,' as demonstrated by the fact that there is a categorization of the different kinds of sounds in film. If there were no way to identify their characteristics, it would be impossible to sort them into categories.

The relationship between image and sound has an extensive literature. The most important author in this field is unequivocally Michel Chion, who questions the role of counterpoint in film, and offers a more complex solution.

The dissertation considers these questions and reaches the following conclusions:

> Sound can only be perceived as a change in physical quantities. Thus, contrary to the image, it cannot be examined as a still shot. However, it can be analyzed on an arbitrarily short period. The duration of a "sound moment" can be defined by a function that tends to zero.
>
> It follows that sound can be examined on a shorter period than a frame. The visual elements of a frame are equivalent to "sound moments."

Contrary to the image, which can only be cut at frame borders, the unit of sound does not determine the position of sound cuts. Instead, the timing of these cuts determines the boundaries of the unit of film sound.

The smallest meaningful unit of the soundtrack is not based on duration.

Sight and hearing perceive frequency spectrums in a vastly different way. This enables us to formulate a physical definition of the sound event as the basic unit of film sound.

Sound events are ultimately identified based on their physical characteristics as well as the narrative functions they fulfill.

Some characteristics of film sound do not fit readily into exclusive categories. These can be organized in a structure which retains the clean-cut approach of the categories offered by some works, while also providing the crucial flexibility found in others.

This structure must discriminate between aspects of film sound that are optimally viewed as sets, and gradual and quantitative characteristics. Thus, existing notions of film sound theory get a clearer meaning.

We can examine the known aspects of these – now clearly defined – sound events, describing their inner structure.

Some analyses may benefit from a more complex distinction than the binary interpretation of diegetic and non-diegetic sound events.

We can define the equivalent of the "speech layer" in this modified theoretical frame.

The concepts of musicality and physicality offer an alternative to the trichotomy of speech-noise-music.

The audiovisual parts form the basis of a horizontal analysis of film.

The notion of audiovisual parts is a generalized form of previous approaches to horizontal analysis, forming a connection to the existing results of film sound theory.

The vertical synch points, defined by Michel Chion based on their aesthetic effect, can be redefined based on a stylistic approach.

An analysis based on storytelling and the approach described in this dissertation allows us to identify numerous structural characteristics of films. This is illustrated by examples of relevant film scenes throughout the dissertation, as well as a more detailed analysis of a single film in Chapter 3.

The notions discussed in the dissertation helped to create the work of art attached to the DLA thesis. This will be mentioned in the Appendix.

The main motive for writing this dissertation was to improve the consistency of the system of concepts discussed in the relevant literature. The reconsideration of these concepts aims to allow for a detailed analysis

of film sound style and its corresponding elements in the narrative.

List of publications:

1. Horváth, Andor and Szarka, Judit: *Mit mesél a film hangja? – a hang szerepe a filmes történetmesélésben* [What does film sound recount? – the role of sound in the movie narrative]. in: Golden Dániel (szerk.): *EFOP-3.2.6-16-2016-00001 A tanulók képességkibontakoztatásának elősegítése a köznevelési intézményekben*, Budapest, Színház- és Filmművészeti Egyetem, 2019. (publikáció alatt)
2. Horváth, Andor: *A New Approach to Film Sound Theory. GEECT Conference: Music and Sound Design,* Vilnius, Lithuanian Academy of Music and Theatre, 2017.

List of works of art:

1. Caroline Kamya: *The Peace Between* (2019) – sound design
2. Samuel Auer: *Night Owls* (2018) – sound design
3. Zurbó Dorottya: *A monostor gyermekei* (2017) – dialog editor
4. Herendi Gábor: *Kincsem* (2017) – dialog editor
5. Samuel Auer: *Die Spieler* (2017) – dialog editor
6. Nagy Borbála: *Asphaltblumen* (2017) – sound design
7. Szentpéteri Áron: *Láthatatlanul* (2017) – sound design
8. Kiss Marian: *Ach du* (2017) – sound design
9. Fillencz Ádám: *Inconvenient Comfort* (2016) – dialog editor
10. Horváth Lili: *Szerdai gyerek* (2015) – sound assistant
11. Visky Ábel: *Romanian Sunrise* (2014) – sound design
12. Cantu Mari: *Westend* (2014) – dialog editor
13. Kovács Gábor Attila: *Tünet* (2013) – sound design
14. Kiss Marian: *Fliegerkosmonauten* (2009) – főcímzene