MUSIC AS A COMPONENT OF FILM SOUND: THEORETICAL ASPECTS¹

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The fundamental idea of the dissertation *Music as a Component of Film Sound:* Theoretical Aspects was to »clean up« Croatian terminology concerning film sound and film music. It is a direct consequence of the fact that there is not much literature on either topic (film sound and film music, and, of course, their terminology) written in the Croatian language. Thirdly, the situation in both Croatian theory and practice has been that systematic exploration of film sound has been completely neglected. It was necessary to make a start, beginning with acoustics, continuing with finding different types of film sound and film music, and, finally, explaining the dimensions of film sound.

The initial points of the dissertation were two articles published in *Hrvatski filmski ljetopis* [Croatian Film Chronicle, 2007, No. 50): *Tipologija filmskog zvuka* [Typology of Film Sound] written by Andrija Dimitrijević and Mit o neprimjetnosti filmske glazbe [The Myth of Unperceivable Film Music] written by Hrvoje Turković. The former did not quite solve some terminological issues (especially concerning terms that required expertise in music and film music). Dimitrijević's text was an overture of sorts to Turković's (in truth, Turković had published an ambitious study Zvuk na filmu — sistematizacija pojmovlja [Sound in Film — Systematization of Terms]—much earlier, in *Hrvatski filmski ljetopis*, 1996, No. 5, where he tried to solve the terminological chaos that exists in Croatian film circles, even today). In his Myth of Unperceivable Film Music, Turković seriously attacked a fundamental rule concerning film music — its »inaudibility«, namely the claim that good film music should not be heard.

Logic tells us that there is no music that is "not audible" (film music analysts and theorists explain the "rule" saying that it is not meant literally — it means that film music is not perceived with attention, since all the viewer's attention is largely concentrated on the story). Nevertheless, Turković put forth many arguments to show that inaudible film music does not exist at all. To achieve this,

¹ Summary of the PhD thesis, Faculty of Philosophy, University of Zagreb, February 13, 2010. Thesis supervisor: Nikica Gilić, PhD.

he firstly explained certain phenomena (such as selective listening) and he then elaborated his thesis from an earlier article (*Sound in Film...*) and explained in detail the differences between diegetic and non-diegetic music.

These articles were the foundation stone for Irena Paulus' dissertation on film music. Texts, and especially books about film music in Croatia, are rare, and there was no such work on the theory of film music, let alone the theory of film sound in this country. In order to write her study, Paulus turned to foreign literature beginning with Unheard Melodies by Claudia Gorbman where the »inaudibility« of film music is explicitly mentioned as a »rule«. This also initiated a search for systematic thoughts on the topic of film sound, as in a »schoolbook« on film theory by David Bordwell and Kristin Thompson (Film Art. An Introduction). This book was often mentioned by Andrija Dimitrijević, who found it to be the first authentic systematization of film sound. In Bordwell and Thompson's Film Art. An Introduction, the chapter on film sound seemed well put with its two parts. The first part gave acoustic explanation of film sound and the second part was about the dimensions of sound. This was the framework for the Paulus' dissertation, which was expanded with more recent writings by Michel Chion, Richard Davis, Jeff Rona, David Sonnenshein, Roy Prendergast, Fred Karlin and Rayburn Wright, and others.

The dissertation often draws from other authors who have in some way contributed to theoretical readings of film sound and film music — either when they wrote about film sound in the broader aspects of film theory or the theory of sound/music, or when their topics were narrower and more specific as in sound design (Sonnenschein), or when they wrote about certain film sound specialties, such as was Chion's voice in the cinema. Paulus comments on citations from their books and articles, writes as if she is conducting a conversation with them, and sometimes, when she uses some older texts, she tries to see their material in a different, more contemporary way.

Like some (but not all) books about film sound, the dissertation starts with acoustics. The first chapter, called »Foundations of tone in acoustics and their usage in Film«, explains the biological (through study of the sense of hearing, the ear) and the physical basis of sound (through study of the acoustic foundations of sound waves). Acoustics divides sound into two categories: tone and noise, where specific parameters of sound — intensity, pitch, timbre and duration — already partake in the creation of a film. That chapter explains the usage of each parameter: usage of intensity that marks the viewer's point of view; usage of pitch that partakes in the creation of melody, but is also specific for some film genres (extremes such as very high and very low pitches are used in »abnormal«, horror situations). Timbre opens new chapters about monochrome scores, orchestrators and orchestrations, synthesizers and usage of »exotic« instruments in contemporary film scores. It also mentions some acoustic phenomena such as the »law of similarity«, »masking effect« and »selective listening«, which influence the viewer's perception of film sound.

Duration, which is also one of the parameters of tone, is not explained in this chapter, since it has a big role in the creation of film time and music time. So this parameter is dealt with in chapters that are considering the »normal« time of real life, time in film and time in music. Those are different categories, but they live together simultaneously in film.

While acoustics differentiates two elements of sound — tone and noise — film divides sound into three categories: speech (monologue, dialogue, and even — according to Sarah Kozloff — polilogue), sound effects and music. The definitions of each component are studied and compared in different sources in literature. The goal of finding "he truth", the "right" definition is hard to achieve, especially where music is concerned. The author is also searching for the "turning" point, which connects all three categories. Namely, human voice can be heard as a sound effect, a sound effect can "act" as music, and music can take the function of a sound effect and speech. This very interesting position of film sound enables creative manipulations with sound that have been used by some great film directors such as Charlie Chaplin, Jacques Tati, Stanley Kubrick, Alfred Hitchcock, Sergio Leone, and others.

The chapters about the dimensions of film sound follow. They begin with Bordwell and Thompson, who write about the four dimensions of sound: rhythm, fidelity, time and space. However, since rhythm and fidelity already contain the temporal dimension of sound, the dissertation explores only two: time and space. Time as a dimension of film sound is the subject of two chapters, which explore it in its connection to music and its connection to film. The starting point of music time in film is not only music beats (the chapter: »Time as a dimension of film sound: time as the characteristic of film music«) but also hours, minutes and seconds. This puts the author in a position to explore similarities between timings in film music and in contemporary classical music, which also uses a stopwatch. After a small »excursion« — which starts with silence in contemporary music and in film — the author comes back to the terms of tempo, meter and rhythm, even melody, harmony and form, and explores their relationship in concrete situations (specific meters in the scores for the *Planet of the Apes* films of 1968 and 2001).

Since time in music is different from time in film, the next chapter is about film time and about ways in which the music (and music time) is integrated into it (»The dimension of time: integration of music and other film elements«). Namely, film time has the ability to »narrow« and »expand« real, physical time (and in some ways it has similarity with music time during listening, which also differs from »real« time). Music time is changeable (the duration of a music performance varies from performer to performer), but film time is fixed (film is not »performed« live as music is; a film projection always last the same time, since film is recorded).

Sound and music enter in a film's projection time (the duration of a film's performance«) by following terms such as synchronous and asynchronous sound; synchronous and asynchronous playback. The same terms are used to note procedures that are not directly connected to the synchronicity of music/sound

and visuals. These are: asynchronism as a principle of montage (Eisenstein) and synchronization of music to the picture (the recording process). Film also has its story time that »narrows« and »expands« real time and differentiates simultaneous and non-simultaneous sound.

Space is the subject of the last chapter, "The dimension of space as a criterion of classification of film music and film sound". The term "diegesis", which denotes the space of a film's story, was used by Claudia Gorbman to make the division between diegetic and non-diegetic sound (in Croatia, instead of "diegesis" there is a term "prizor", which was used by Hrvoje Turković who distinguishes "prizorni zvuk" as "diegetic sound" and "neprizorni zvuk" as "non-diegetic sound"). The dissertation also revives some old theories, which tried to create terminology concerning sound outside and sound inside the story space. By putting these theories all together, it seems that there was terminological chaos in the past. But some classifications of film sound from old theories have remained relevant, even today (such as the difference between diegetic sound on screen and diegetic sound off screen, or the difference between objective and subjective diegetic sound/music).

The dimension of film space offers limitless possibilities for interpretations by musicians, sound designers, film-makers, musicologists and filmologists. Although the term "space" looks more usable in the visual rather than the aural parts of a film, it is interesting in both spheres. Various authors think that there are different types of film space. As far as the music is concerned, although it is "invisible", the fact is that it physically exists as a sound wave that spreads in the space (of the cinema, story space etc.). As we have already seen, space becomes an important category when it comes to classification of film sound and film music, especially in works by such theorists as Bordwell and Thompson, Gorbman and Turković.

Through the theoretical aspects of music as part of the film sound, it systematizes existing knowledge in order to create a framework for further exploration of film music/film sound in Croatia and in world terms. The goal was to create a compact study in the Croatian language, which systematically goes through different areas of music (acoustics, dimensions of sound) and searches the modes of their usage in film; systematically encompasses as many theoretical aspects of music as possible (parameters, classification, functionality, influence on film space and film time); and tries to find (and make more perfect) professional terminology.

The dissertation *Music as a Component of Film Sound: Theoretical Aspects* is a contribution to theoretical works on film music, which has been neglected in Croatia — in all of its aspects, theoretical and practical. It is the first comprehensive writing on the theory of film sound and film music in Croatia and its goal is — among other — to contribute to—the seriousness of writing about it and the seriousness of composing it. The author hopes that this dissertation is a small step forward to seeing film music as an art form in Croatia (and in some other parts of the world).