# DIEGETIC AND NON-DIEGETIC SOUND EFFECTS IN FILM

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#### **Declaration of Originality**

This dissertation is submitted by the undersigned to the Institute of Art Design & Technology, Dun Laoghaire in partial fulfillment of the examination for the BA (Honours) in Film. It is entirely the author's own work except where noted and has not been submitted for an award from this or any other educational institution.

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## INTRODUCTION



In this thesis, I will explore how the concept of diegesis applies to sound effects in film. The first chapter will examine the various elements making up a film's soundtrack and address some difficulties in their classification. I will define diegesis and demonstrate how it applies to sound. Introducing helpful terminology, I will examine examples of diegetic audio and its impact on the cinematic experience.

The second chapter will be devoted to non-diegetic elements of the soundtrack. I will explain why diegesis is the standard in modern films, and how, nevertheless, non-diegetic sounds are incorporated for specific narrative or emotional reasons. I will discuss some challenges involved in using such sounds and analyse methods to integrate them seamlessly. I will also highlight several subtle ways in which film soundtracks go into the non-diegetic sphere

In the third chapter, I will build on the previous discussions, drawing on Claudia Gorbman's insights to demonstrate that sound effects cannot always be put into a binary classification. I will explain the crossover between diegetic and non-diegetic sounds, which reveals a grey area where they intersect.

To illustrate how these concepts can be applied in sound design, the final chapter will offer a detailed analysis of a sequence from *Apocalypse Now*, which utilizes both diegetic and non-diegetic sounds to create an immersive and powerful audiovisual experience. I will analyse how this helps tell a memorable story.

This thesis aims to provide a detailed exploration of how sound designers can effectively use diegetic and non-diegetic sounds to craft unique soundtracks which elevate the art of filmmaking.

## **CHAPTER I**

## Diegetic Film Sound



#### Categories of Film Sound

Sound has always been an important part of the cinematic experience. Especially since the incorporation of synchronised sound in motion pictures, it has been an inseparable part of the filmmaking craft. Yet, despite its crucial role, sound often receives less attention in film analysis compared to visuals. This oversight is uniquely pronounced when it comes to certain types of sound, which, although subtle, can profoundly influence a scene's impact.

In film production, sound is typically divided into three groups, or stems: **dialogue** (DX), **music** (MX), and **effects** (FX).<sup>1</sup> Out of these, dialogue has the most obvious impact on storytelling the speech of characters reveals key information about their motivations and actions. For this reason, the clarity of dialogue is usually prioritised. It's worth noting that it's often the only part of the soundtrack recorded on set together with the image. Music also has a clear impact on a film, although it differs from that of dialogue in being more about emotion than information.<sup>2</sup>

Sound effects occupy a space between dialogue and music. Like dialogue, they are usually sounds corresponding directly to the visuals on screen - the sounds we would hear if we were in the room with the characters. However, a sound designer can use them to powerfully influence the emotions of a scene, in a way similar to music.

In this thesis, I will focus on this least obvious type of sound - one that often goes unnoticed yet plays a crucial role in sound design. I will analyse how this seemingly straightforward element of the soundtrack can be leveraged to bring a scene to life, creating depth and emotion that resonate with the audience.

<sup>&</sup>lt;sup>1</sup> Holman 176

<sup>&</sup>lt;sup>2</sup> Ibid. xviii

#### The Ambiguity of Definitions

When discussing sound effects, we immediately encounter an issue of definitions. The FX stem is usually divided by sound editors into three premixes:

- Foley: these are sound effects recorded in a studio, in synchronization with the image. Foley includes elements such as footsteps, cloth movements and prop sounds, all matching the on-screen action.
- Ambience, also called atmospheric sound (atmos), or background sound (BG): as its name suggests, it's the sound of the location. It provides a backdrop to the other effects and generally lasts throughout a scene.
- **Spot effects** (SFX), also referred to as cut-effects: Similar to foley, these sounds usually correspond to visuals on screen, but they are not recorded in sync with a specific shot.<sup>3</sup>

However, these categories are not set in stone, and for some films they are broken down differently. The boundaries between them are also not always clear. Foley and spot effects, though different on a technical level, often perform a similar function. A sound categorised by the mixer as a spot effect may, especially in popular discourse, be described as part of background sound.

For the purposes of this thesis, I will treat sound effects as a whole, except when a distinction is crucial. When referring to ambient sound specifically, I will consider it as sound that "produces a space for the film to exist in".<sup>4</sup>

#### What is Diegesis?

To apply the concept of **diegesis** to sound, it's crucial to first understand what this term refers to. It originates in ancient Greece, but since film combines aspects of different styles of classical storytelling, in film studies diegesis has obtained its own meaning.<sup>5</sup> Claudia Gorbman defines it as the "narratively implied spatiotemporal world of the actions and characters".<sup>6</sup> According to this definition, diegetic parts of a film are all those existing *in the world* of the story (for instance, characters, props, and events shown on screen), and everything separate from that world is non-diegetic (this would include camera setups, since the framing of a shot doesn't exist in the world

<sup>&</sup>lt;sup>3</sup> Ibid. 180-186

<sup>&</sup>lt;sup>4</sup> Ibid. 183

<sup>&</sup>lt;sup>5</sup> The meaning of *diēgēsis* in reference to ancient Greek storytelling is different, and in some ways opposite to the one it obtained in modern film and narrative analysis. In antiquity, it was contrasted with *mimēsis*, and these two terms referred, respectively, to recounting a story in a past tense, and presenting it in direct speech (Castelvecchi 150-151).

<sup>&</sup>lt;sup>6</sup> Gorbman 195

of the story - when there is a cut to a reverse shot, we don't see a camera filming us, nor do the characters know they are being filmed).

When talking about film sound, diegesis is most commonly applied to music. In many ways, here the distinction is the clearest. To illustrate it, we can consider two scenes from "The Good, the Bad, and the Ugly". In a scene in a Union camp, a prisoner orchestra plays the song 'The Story of a Soldier'. We see their instruments, and characters in the scene hear the music playing. Therefore, we're looking at a diegetic use of music. In a later scene, the same theme plays as we see the final moments of a wounded soldier. This time, the music is heard only by us, the audience. There are no instruments in the scene, and the characters do not hear the tune. This music is non-diegetic, and what I will refer to as **score**. This distinction is also quite straightforward when it comes to dialogue. Whenever a character in a scene speaks, the sound of their voice is diegetic. An example of non-diegetic dialogue is narration overlaid onto a scene.



Fig. 1



Fig. 2

#### Secondary World

One issue with analysing whether certain elements of a film are diegetic is that the world of the film is, by its nature, artificial. What we see is a series of two-dimensional, staged shots, and when we cut to the next setup, though no narrative time passes, it was likely filmed hours if not days later (or earlier!). This has implications for sound. If in one shot of character A walking we see his feet hitting the ground, then the sound of his footsteps can be clearly classified as diegetic. If, however, the next shot is a close-up of character B observing character A, we don't see the footsteps anymore. They likely didn't even exist on set at that time. The sound we hear is now separate from the image. But this does not make it non-diegetic.

When performing this sort of analysis, we need to expand our consideration beyond the visuals on screen and to the *world* of the narrative. In his 1947 essay *On Fairy-Stories*, J.R.R. Tolkien puts forward the concept of a **Secondary World**. He claims that a story-maker is a **sub-creator** who "makes a Secondary World which your mind can enter. Inside it, what he relates is 'true': it accords with the laws of that world. You therefore believe it, while you are, as it were, inside". The secondary world is contrasted with the **primary world** - the real world where we live, and on which the secondary world is based, while being distinct from it.

This concept can be applied to film sound: a sound designer acts as a sub-creator forming an auditory secondary world, or rather forming the auditory realm of a secondary world created in the collaboration of writing, acting, visuals, and sound. All sounds native to that world are diegetic. Whether they correspond to visuals or not, are recorded on set or digitally created - the audience immersed in the story *believes* <sup>8</sup> them to be part of the secondary world they have entered.

#### **Diegetic Soundtracks**

This understanding of diegesis is especially helpful when applied to atmospheric sound since it's the part of the soundtrack most often separated from visuals. Background effects, like the rustle of leaves, whistling of wind, or traffic noise coming from outside the window, are all added in post-production. A film should be considered as a sum of all its parts. A skilled sound designer crafts the location with sound, just like an art designer does with decorations and props. And it's all those parts working together that create the secondary world. Therefore, as long as it exists within that world, atmospheric sound, even if it doesn't directly correspond to visuals, is nevertheless diegetic.

<sup>&</sup>lt;sup>7</sup> Tolkien 52

<sup>&</sup>lt;sup>8</sup> Tolkien refers to this as secondary belief (Ibid.).

<sup>&</sup>lt;sup>9</sup> Walter Murch emphasizes this comparison, drawing attention to the amount of information about the setting and characters which can be implied even by simple choices in sound effects (Murch and Paine 16).

Since the secondary worlds of films are based on the primary world, we can apply the analysis of real-world soundscapes to those in film soundtracks. Our world is full of manifold environments, and their auditory realms are equally diverse. R. Murray Schafer talks at length about the varying qualities of soundscapes and their change throughout history, starting with the sounds of nature - water, wind - which are enriched by sounds of animal life. Each place on earth has a distinct sonic identity. Each geological environment leaves its mark on the sound filling it; each species of bird sings its own melody. With the coming of humans, another layer was added to the soundscapes of the world. First, it was the still relatively quiet sound of agrarian societies and urban centres, each with unique timbre and rhythm, interrupted only by the clamour of war, but with the advent of the industrial age, the sound of engines and factories took over.

Schafer provides useful definitions for analysing soundscapes. He contrasts **keynote sounds**, "which are heard ... continuously or frequently enough to form a background against which other sounds are perceived", with **sound signals**, "to which the attention is particularly directed". <sup>14</sup> **Noise** is the unwanted, unmusical sound polluting the soundscape. <sup>15</sup> Depending on the signal-to-noise ratio, he divides soundscapes into **hi-fi** - those in which the noise level is low enough to let other sounds be heard - and **lo-fi**, in which "individual acoustic signals are obscured in an overdense population of sounds". <sup>16</sup>

For a scene which demonstrates the different levels of diegetic sound, we can look at the Plaza Hotel scene in *The Great Gatsby*. On a hot summer day, all the principal characters go to spend an afternoon in a private suite in the middle of New York City. At this point in the story, tensions are very high, and the audience is on the edge of their seats, waiting for the inevitable outburst of conflict.

Discounting dialogue, the first layer of sound we hear is foley and spot effects corresponding to what's happening on screen: the cracking of an ice block, the flicking of a cigarette lighter, footsteps and clothes rustling. Under that, we have the ambient sound. Closest to us is the sound of the room, specifically of a fan. This both helps us feel the heat of the day, and works almost as music, constantly humming in anticipation. The sound of the fan does change throughout the scene, but that variation is diegetic. It follows the shots. When the fan is in shot, it's louder, and the closer it is, the louder it gets. The third layer is ambient sounds from outside the window. The sources of these are not seen, but they are fully diegetic. The sounds of city traffic, construction, trains, all build a realistic background to the scene.

<sup>10</sup> Schafer 15-24, 29-39

<sup>11</sup> Ibid. 26-27

<sup>&</sup>lt;sup>12</sup> Ibid. 31-34

<sup>&</sup>lt;sup>13</sup> Ibid. 44-45, 48-50, 53-67

<sup>14</sup> Ibid. 272, 275

<sup>15</sup> Ibid. 273

<sup>16</sup> Ibid. 43



Fig. 3



Fig. 4

The first of these layers is comprised of sound signals, and the sounds of the third can be classified as keynotes. The fan lives somewhere in between - while it's a constant noise, we do notice it and its variation throughout the scene. The signal-to-noise ratio is also on the border of hi-fi and lo-fi, but leaning towards the latter. Although we are partially isolated from the urban noise by the walls of the building, it's still loud and noticeable. This mirrors the themes of the story, which focuses on intimate stories of people living in a metropolitan society.

Up until the moment Gatsby loses control of his nerves, this diegetic soundscape is the only thing we hear. While score can often be a great way to communicate emotions, in a film already rich with a blend of classic and modern music, the sudden lack of it makes for a startling contrast, and signals to the audience that the story is taking a turn. This scene exemplifies how a diegetic soundtrack can not only amplify the emotions of an already intense scene, but also enhance the story and themes in a subtle way. As Walter Murch put it when talking about the layers of a soundtrack:

"hopefully it will all go together, and it will look like a coherent whole that not only exists on its own, but which connects with certain things in the story, certain things in the character". 17

#### Sound Mix: Sonic Emphasis and Prioritization

While the idea of diegetic sound is to portray what an environment would really sound like, this does not mean there is no creativity at work. On the contrary, it takes skill to mix those diegetic sounds in such a way that they work as a cohesive whole, complimenting the story. In any given scene, some diegetic sounds can be made louder to emphasize them. As with the fan in *The Great Gatsby*, this can simply follow the placing of the camera, but it can also function in a way similar to a close-up shot, whose purpose is to draw attention to whatever is filling the frame. We can see an example of this in the same movie. The scene in which Nick and Gatsby wait for the arrival of Daisy starts with a visual close-up of a clock. We also hear its loud ticking. The scene cuts back to this close-up several times, but when it cuts away, the sound doesn't disappear or even become quieter. In effect, this has the same result as having the close-up last throughout the whole scene, but utilizing sound allows for cutting to different shots, while still keeping the feeling of anticipation constant. In fact, such a sonic close-up can be so subtle that it's not actively noticed by the audience.



Fig. 5

Manipulating the loudness of diegetic sound effects is especially interesting when it is applied to ambient sound. As I mentioned before, in film soundtracks dialogue almost always takes priority. When creating the final mix, the dialogue stem is first brought to a standardised loudness level, and all other sounds are then mixed to keep dialogue audible. However, in reality, the human voice does not

<sup>&</sup>lt;sup>17</sup> Murch and Paine 16

always rise above ambient sounds. Therefore, decreasing the loudness of dialogue in relation to sound effects can be a diegetic decision.

In the film *Silence*, two Jesuit missionaries travel to Japan, where they encounter religious persecution from the authorities. The film's soundtrack is rich with ambient sounds of nature: noisy insects, violent sea waves, whistling wind. Often, these sound effects are not just faintly heard in the background, but overshadow foley and even rival dialogue. This is an interesting example of diegetically highlighting the environments with sound design.



Fig. 6

#### The Ultimate Diegetic Tool

There is one technique worth singling out, which is crucial in creating an immersive, diegetic soundscape: **reverb**. Chion writes that "a sound and its source are two different entities". An isolated, or **dry**, sound effect of a footstep represents the shoe hitting the floor, but it provides no further information about the space where the action takes place. What inhabits the space is the reverberation of the sound. That reverb is distinct for any given location. It varies depending on the size of the space, the materials it's composed of, and even things or people located in it.

As Chion points out, this distinction is particularly important when it comes to atmospheric sound effects, whose point is not necessarily to portray specific sources of sounds, but rather the space they exist in. <sup>19</sup> With spot effects, reverb has a slightly different function. It helps to ground them in the secondary world. For this reason, I think reverb can be considered *the ultimate diegetic tool*. Without it, even if sound effects correspond to things in the secondary world of a film, they don't feel fully

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<sup>18</sup> Chion 79

<sup>19</sup> Ibid.

diegetic. Our ears can tell that they don't match the environment. With it, they are immersive and realistic.

Practically speaking, reverb can be achieved in many ways. If a scene is recorded in a location with characteristics corresponding to those of the location in the secondary world, then its reverb can be recorded together with the effect. On the production of the film *Heat*, the bank robbery scene was filmed on location in downtown Los Angeles with real firearms shooting blanks. When talking about the sound of the shootout, sound mixer Chris Jenkins said that "because of the skyscrapers everywhere, it was just deafening, and it would hang in the sky for ... eight or ten seconds". When these sounds were replaced in post-production, director Michael Mann immediately noticed that they didn't sound right. In the end, production sound was used for all the gunshots. Mann explained that "nothing artificial could come close to delivering the fear of the sound ... and the way the sound ricocheted off the walls of the buildings of an empty downtown".<sup>21</sup>



Fig. 7

However, this approach is not always possible. Firstly, since films are often recorded on specially constructed sets, the reverb will not always match the desired effect. In addition, it's important to remember that the secondary world of the film is not the same as the primary world. Therefore, the desired sound effects of the secondary world will not always be the same as the real sound effects of the primary world. Another, more technical reason, is that on set, sound recording is focused on dialogue, and the quality of live recorded sound effects will often not be ideal.

<sup>20</sup> Nasr 00:49:13

<sup>&</sup>lt;sup>21</sup> Ibid. 00:50:08

For these reasons, in most cases, sound effects for films are either taken from sound libraries or specially recorded in post-production foley sessions. They can either be recorded in a room with a desirable reverb, or the reverb can be added later on to dry sounds. In the past, the only way to do the latter was to re-record the recorded sounds in a reverby location. Walter Murch explained how creative techniques can be used to influence the reverb in such situations. In an interview, he talked about a discovery he made, that if a sound effect is re-recorded at a higher speed, after slowing down the resulting recording, it sounds like it's located in a much larger room than it actually was.<sup>22</sup>

These days, computer software allows sound designers to add a digital reverb to sound effects. There is a large level of customizability in its qualities, but nevertheless, some productions take extra steps to make the reverb as authentic as it can be. It's possible to take a sonic scan of a location and apply its reverb to sounds. For *The Hobbit: An Unexpected Journey*, the filmmakers wanted to make the scenes in the underground Goblin-town feel as if they really exist in a massive underground cavern. To achieve this, a crew was sent to New Zealand's Waitomo Caves, to capture what's called **Impulse Responses**.<sup>23</sup> It requires playing a special rising sound in a given location and recording it back. Sound designer Dave Whitehead described it as "taking ... a sound photograph of echoes and reverbs of a room".<sup>24</sup> This can then be digitally applied to any other effects to make them sound like they are located in the captured space.

The analysis of diegetic soundscapes makes it clear that sound is a powerful tool for filmmakers to make the audience understand the environments they want to portray. Reverb is an example of a technique which aids in this task, and there are many others that sound designers can utilize for this purpose. For instance, by adjusting the equalisation, or **EQ**, of a sound clip, it can be made to sound as if its source is right next to us, or in a different room, separated by a thick wall.



Fig. 8

<sup>&</sup>lt;sup>22</sup> Murch explains this in Worldizing: a sound design concept 00:01:15

<sup>&</sup>lt;sup>23</sup> The Songs of The Hobbit 00:23:04

<sup>&</sup>lt;sup>24</sup> Ibid. 00:23:35

#### Sound as Key to Immersive Realism

The main takeaway of this chapter is that diegetic sound can help make the secondary world of the film feel more real. As mentioned above, film is artificial. When reading a novel, you can more easily enter its secondary world, since all it gives you are words, and your imagination takes over. But when watching a film, you're aware that what you're seeing is artificial.<sup>25</sup> You're not *in the room* with the characters - you're looking at a screen. Cutting between shots *forces you* to look in a certain direction. It is the job of filmmakers to make the secondary world presented on screen believable and consistent. This is why continuity errors in the placement of props, lighting, costumes or framing can distract the audience and pull them away from the story - they break the laws of the secondary world. When someone says that a film *sucked them in*, it means that the filmmakers succeeded in making these laws consistent. The story was strong enough to distract from the artificiality of the medium, and that artificiality itself was mitigated by good continuity, skilled shot composition, and editing.

This ability to disregard the artificiality of film has long been understood. Kuleshov famously showed that we subconsciously connect images we see on screen. As Gorbman pointed out, even on a basic level, seeing a shot of a man followed by a shot of a bowl of soup, we understand them to be in the same location.<sup>26</sup> This occurs even though, for all we know, the shots were filmed in two completely different places. And this effect is only amplified when sound is added to the equation.

Sound is the only part of a film that truly surrounds the audience. It's not just on the screen - it reverberates throughout the room, meeting the viewer from all directions. This becomes even more the case with technological advances in surround sound, which allows sound mixers to place individual sounds in a three-dimensional space surrounding the audience. If we close our eyes, we feel like we're actually in the scene. Chion calls this filling of a theatre with sound a **superfield**.<sup>27</sup> He draws an analogue to cinematography, comparing this auditory superfield to an establishing shot, the purpose of which is to show the audience the location in which a scene takes place. He contends that "the superfield logically had the effect of undermining the narrative importance of the long shot".<sup>28</sup> It's able to constantly keep the audience informed about the surroundings, even when these are not seen on screen. Therefore, if diegetic sound is mixed well, it makes it easier to ignore cuts between shots, even continuity mistakes.<sup>29 30 31</sup> There is one part of a scene that remains consistent throughout - the sound of the secondary world.

<sup>&</sup>lt;sup>25</sup> Tolkien talks about this in regard to drama, pointing out the challenge of telling fairy-stories in the medium of theatre, which makes entering the secondary world more challenging for the audience (Tolkien 61).

<sup>&</sup>lt;sup>26</sup> Gorbman 196

<sup>&</sup>lt;sup>27</sup> Chion 150

<sup>&</sup>lt;sup>28</sup> Ibid.

<sup>&</sup>lt;sup>29</sup> Chion 47

<sup>&</sup>lt;sup>30</sup> Holman xviii

<sup>&</sup>lt;sup>31</sup> Sonnenschein 155

Vivian Sobchack, writing about the capabilities of Dolby Digital sound technologies, says that this development allows sound to take priority over picture. "Whereas it was once a given that vision was the dominant and most nuanced (and hence poetic) element of cinematic experience, of late that dominance has been challenged by shifts of emphasis and attention in both sound technology and our sensorium". In addition, sound is not just heard, it's also *felt*. Vibrations which produce sound physically interact with our entire body, especially the low frequencies generated by powerful modern speakers. 33

All these technological developments are an incredible opportunity for sound mixers to expand the sonic realm of films into something almost indistinguishable from real life. However, there is a danger that goes along with that. Film is an *audio-visual* art form, and these two elements need to work together.<sup>34</sup> If sound distracts us from the picture, the synergy is broken. Murch acknowledged that, saying: "You have to be very careful about what sounds you put behind the audience. They can distract attention away from the screen". <sup>35</sup>

Ultimately, creating a realistic secondary world is not the only task of filmmakers. The main goal is to tell a compelling story, and to fully harness the power of sound in this endeavour, it's worth going beyond the diegetic realm.

<sup>32</sup> Sobchack 2

<sup>&</sup>lt;sup>33</sup> Ibid. 10

<sup>&</sup>lt;sup>34</sup> This relationship is not always one of harmony, but even if there's dissonance, it's only possible because of the existence of this interdependence (Chion 35-39).

<sup>35</sup> Jarrett and Murch 5

## **CHAPTER II**

## Non-Diegetic Film Sound



#### The Dawn of Sound Films

When developments in technology first started making sound films possible, a choice had to be made by filmmakers on how to combine sound and image. The obvious direction was diegetic sound. Sonically representing the things happening on screen made films more immersive, as was done in the first feature with synchronised sound: *The Jazz Singer*.

However, some pioneering filmmakers viewed sound differently. The Soviet director Sergei Eisenstein is known for his montage theory, which describes the result of the collision of independent shots. He focused on the effect that seeing certain images in succession has on the audience, and he believed that sound can be a powerful way to amplify that effect. He wrote that "only the contrapuntal use of sound vis-à-vis the visual fragment of montage will open up new possibilities for the development and perfection of montage". In his view, the use of sound as a way to strengthen the realism of film would be a missed opportunity: "The first experiments in sound must aim at a sharp discord with the visual images". He wrote that "only the contrapuntal" are the properties of the development and perfection of montage "." In his view, the use of sound as a way to strengthen the realism of film would be a missed opportunity: "The first experiments in sound must aim at a sharp discord with the visual images".

In subsequent decades, as synchronised sound became more available to filmmakers, the diegetic view of sound became the norm. Especially in commercial films, such as those produced by American studios, sound was used chiefly to improve the realism of motion pictures. That being said, just like his theories about montage, Eisenstein's ideas about sound were not forgotten. It's their incorporation with the otherwise diegetic world of sound effects that gave rise to the rich field of sound design that exists today.

<sup>&</sup>lt;sup>36</sup> Hariharan 55

<sup>&</sup>lt;sup>37</sup> Rogers and Barham 110

<sup>38</sup> Ibid

#### **Acousmatic Sound**

The baseline for identifying non-diegetic audio is finding sounds which have no visible source on screen. Sounds like these are called **acousmatic**. However, while all non-diegetic sounds are acousmatic, not all acousmatic sounds are non-diegetic. Acousmatic sounds are simply offscreen, but they do not necessitate their source being outside of the secondary world. This distinction is important to underscore. As I argued in the previous chapter, sounds can be diegetic even if we don't see their source. Similarly, we need to distinguish non-diegetic sound from sound that's simply acousmatic.

That being said, looking at the effect of acousmatic sound can help shed light on what similar functions non-diegetic sound can serve. Chion points out two scenarios: "either a sound is visualized first, and subsequently acousmatized, or it is acousmatic to start with, and is visualized only afterward".<sup>39</sup> The first use, he argues, creates an association of a sound with the visual image of its source for the audience. Therefore, by bringing the sound in acousmatically, the filmmaker can conjure up that image in the spectator's mind. The second scenario Chion outlines keeps a sound acousmatic until a reveal further on in the story. This creates a feeling of anticipation and mystery.

Because non-diegetic sounds don't have a direct correspondence to things seen on screen, they allow for interesting uses of both techniques presented by Chion. In the movie *The Great Gatsby*, the first image we see is a green light at the end of the Buchanans' dock. As the light blinks, we hear a mesmerising jingle. It is not sound made by the lamp, so it's not diegetic. It is, however, linked by association to the light, therefore immediately connecting these two things in our minds. The same sound is played many times throughout the film. Each time we hear it, we are reminded of the mysterious light from the opening shot.



Fig. 9

<sup>&</sup>lt;sup>39</sup> Chion 72

However, because this sound is not a direct visualisation of the image, it also fulfils a role similar to Chion's second scenario. It represents the mystery of Gatsby. In the first part of the film, we hear it every time the yet unrevealed man is mentioned. Later, the sound plays whenever more about Gatsby's past is explored. Towards the end, it begins to represent his uncertain and doomed future.

Combining these two techniques, this non-diegetic sound becomes a kind of **leitmotif**. This term is usually applied to a recurring musical phrase representing a certain character, theme, object or storyline. *The Great Gatsby* itself uses many such leitmotifs. For instance, Lana Del Rey's song *Young and Beautiful* is used as a leitmotif of Gatsby's relationship with Daisy, its various arrangements fitting the emotions of each scene. With the sound of the lantern, the same sound changes its meaning based on the context of the surrounding scene.

#### Sound Effects as Music

This is not the only way in which sound effects can function similarly to music. To underscore important moments in a film or create an interesting transition between scenes, short musical phrases called **stings** are often used.

Just like in the cases discussed before, sound effects allow this purpose to be fulfilled more subtly. A sound played at a specific moment can create a feeling of impact or underscore a dramatic turn of events. Because such sounds do not directly correspond to events in the secondary world, but are put in strategically for pacing reasons, they are non-diegetic. But, as opposed to music, they can be more easily blended together with the rest of the soundtrack.

In the movie *Gladiator*, this technique is used several times. When Maximus is apprehended to be executed, as he is hit in the head, we hear an impact sound, but it's not the sound of the actual hit seen on screen. It's a deep thud which turns into a wheezing hiss as we cut to a brief vision of Maximus' future. It brings to mind the sound of an explosion or a flying projectile. It sounds partly natural and partly artificial. It makes the audience feel the agitation and disorientation experienced by the protagonist. At a later point in the film, when Maximus puts on his gladiatorial mask, preparing for his first fight in the Roman Colosseum, the moment of his turning towards the camera is underscored by a clash. Again, it's difficult to pinpoint the sound. On the one hand, it could be part of the orchestral score, but it also blends in with the metallic clangs of weapons.

A similar thing happens in the movie *Once Upon a Time in... Hollywood*. When Clif Booth visits Spahn Ranch, as he walks through the secluded field, noticing hippies staring at him, the sound design takes a turn from what it was up until this point. We hear eerie sounds: a metallic rustle, creaking and fluttering. It's hard to identify these as any specific things - what sounds like crickets, could also be gears of an old rusty machine. This ambiguity is not coincidental. It's a mark of the non-diegetic nature of these sound effects. They're not meant to inform us about the specifics of the

surroundings, but rather to conjure up a feeling of unease. They also seamlessly blend in with diegetic sounds - the distant barking of dogs, the creak of a beat-up couch or the ghastly hissing of the wind. Even if a first-time viewer is not aware of the real-world story of Spahn Ranch, they can hear that something ominous is about to happen.



Fig. 10

#### Non-Diegetic Sound Effects and the Secondary World

An interesting question to consider is how to classify certain sound effects which, although seeming diegetic, do not technically have an in-world explanation. A perfect example seen often in science-fiction films is sound in space. Sound waves cannot travel in a vacuum, so in reality, the engines of spaceships and galactic battles like those seen in *Star Wars* would be completely silent. If we assume the secondary worlds of these films operate under the same rules of physics as ours, all sound effects in space are non-diegetic.<sup>40</sup>

This is both an extreme and subtle example of non-diegesis. On the one hand, we're talking about a massive difference between loud sound effects in the cinema and the complete silence which would diegetically be there. On the other hand, the non-diegetic quality of these sounds is not noticeable unless the audience considers the science of the transmission of sound waves. Because of this, it becomes a perfect presentation of principles which can be applied to other non-diegetic sound effects.

<sup>&</sup>lt;sup>40</sup> It's worth noting that in science-fiction, the secondary world of which already differs from the primary world in major ways, it can be asserted that the laws of physics work differently too. When talking about *Star Wars*, sound designer Ben Burtt recounted his conversation with the director, George Lucas: "I initially thought: Well, there's no sound in space, and I told George that. He was kind of puzzled but he said. "Well, we're going to have sound and music in space." He wasn't shy about creating a world where you hear everything in space" (Roxborough).

The reason why most audiences don't question sound in space is that it seems to fit the scene. The origins of the sound are there and make sense. We see the engines of spaceships or the firing of laser guns. In other words, the effects are *grounded in the secondary world*. Unless a sound designer aims for a non-diegetic sound effect to be noted by the audience as non-diegetic, this grounding is necessary. Murch emphasizes that he tries to "employ sounds that have a plausible origin in the film's world", because "if you stretch it too far, it just becomes absurd. You haven't given the audience enough of the circle to know whether it's a circle or not". Besides plausible origin, other techniques, like reverb discussed in the previous chapter, can be utilised to successfully bring non-diegetic sounds closer to the secondary world.

This can be applied to the non-diegetic stings discussed earlier. In *Gladiator*, they all fit in the secondary world perfectly - whether it's the clinking of metal or the whooshes of air, they connect to the diegetic sounds surrounding them. The creepy sounds in *Once Upon a Time in... Hollywood* are mostly just exaggerated versions of the soundscape of a dingy hippie commune. Even when the sounds are more abstract, like the jingle in *The Great Gatsby*, they do fit into the soundtrack of these films, and thus, they are not jarring enough to draw audiences out of secondary belief. But the fact that they are more imaginative only strengthens their effect, since that helps the audience to embrace the deeper, more mystical themes of the stories. Schafer emphasizes such experiences: "The demystification of the elements, to which many modern sciences have contributed, has turned much poetry into prose. Before the birth of the earth sciences, man lived on an enchanted earth". Film is a form of art and non-diegetic effects are one of many methods which allow filmmakers to combine depicting reality with providing an escapist experience. It's a fine line to walk, but by choosing how non-diegetic sound relates to the secondary world, sound designers can play an important part in this process.

#### Non-Diegetic Silence

There is another way in which we can find non-diegetic audio in film. However, it's not in sound effects, but in their absence. In the real world, complete silence doesn't exist. 43 44 What we call silence is just the absence of what in film would be spot effects or louder ambiences. There always exists some atmospheric noise, even if just a faint hum, and the presence of a listener itself creates sounds, such as breathing, heartbeat, the movement of clothes. In spite of these sounds, we still perceive it as silence. It can have a calming effect, like a sort of sanctuary which helps us clear our minds. Schafer writes that: "Just as man requires time for sleep to refresh and renew his life energies, so too he requires quiet periods to regain mental and spiritual composure". 45

<sup>&</sup>lt;sup>41</sup> Jarrett and Murch 11

<sup>42</sup> Schafer 24

<sup>&</sup>lt;sup>43</sup> Other than in very specific conditions, like in space, as noted earlier in this chapter.

<sup>44</sup> Sonnenschein 124

<sup>45</sup> Schafer 253-254

However, in a film sound mix, *complete silence* is indeed possible, when the audio track is left empty for a given period. This silence is, therefore, non-diegetic.<sup>46</sup> Robert Bresson wrote that "the soundtrack invented silence".<sup>47</sup> The absence of sound can only be noticed when sound surrounds it. That's why the effects that silence has on the narrative of a film cannot be applied to silent films. But when this contrast is present, complete silence can be very startling, since it's an interruption of otherwise constant sound.<sup>48</sup> On a psychological level, "Man fears the absence of sound as he fears the absence of life … the ultimate silence is death".<sup>49</sup>

The film *Silence* focuses on man's relationship with God and His perceived silence towards us. As I mentioned before, the soundtrack of the film is actually rich in atmospheric sound. But at the climax of the story, when Father Rodrigues has to decide whether to apostatize from his faith, all sounds disappear. This change is impossible to miss. The silence can almost be heard. In the words of Schafer: "When [silence] interrupts or follows sound, it reverberates with the tissue of that which sounded, and this state continues as long as the memory holds it. Ergo, however dimly, silence sounds". <sup>50</sup> But the silence not only interrupts sound, it also creates an anticipation of what will come next: "nervous anticipation makes it more vibrant". <sup>51</sup> In this case, the silence is broken not by any diegetic sound effect, but by what Rodrigues believes to be the, until now silent, voice of God.



Fig. 11

The silence in this scene works on multiple levels. It startles the viewer, inducing discomfort and anticipation; it focuses the scene entirely on the divine dialogue, and it ties into the themes of the entire film.

<sup>&</sup>lt;sup>46</sup> Assuming that the secondary world functions by the same laws as the primary world.

<sup>&</sup>lt;sup>47</sup> Bresson 21

<sup>&</sup>lt;sup>48</sup> Chion 57

<sup>&</sup>lt;sup>49</sup> Ibid. 256

<sup>50</sup> Schafer 257

<sup>51</sup> Ibid.

Because of how noticeable complete silence is, it's used very sparingly in films. But even if some sounds are present, the absence of others may be non-diegetic. A good sound mix will be very selective in what it includes. The goal is to feed the audience certain sounds to achieve a particular effect, and adding too many of them can end up being distracting. If a scene shows a character walking in a crowd of people, including the footsteps of each person will have an effect of drowning out our character. If this is not the desired effect, a sound designer can bring down the volume of all footsteps other than the main character's, and even then put in a smaller amount of them than the number of extras on screen. This choice is non-diegetic, and it's something done to some extent in almost every film.

Besides avoiding distractions, this technique can have other, creative influences on storytelling. One of the most common uses of it is in getting into a character's mind. When someone is focused on a specific detail so much that they don't pay attention to what's happening around them, those irrelevant sounds can be pulled down or completely muted. Diegetically, they still exist, but they're not audible on the soundtrack - these are called **off-track**, contrasted with audible **on-track** sounds. We can see this in the Council of Elrond scene in *The Lord of the Rings: The Fellowship of the Ring*. When the conversation gets intense, and people get up from their seats arguing about the right course to take, Frodo sits still, knowing what needs to happen and that he's the one to do it. As he stares at the One Ring, the voices around him fade into an echoey blur and give way to non-diegetic sounds: roaring of flames from the Ring and the voice of Sauron. The result of this is that the audience relates to Frodo's feelings - just as he, we don't focus on the chaos around us and are singularly thinking about the Ring and Frodo's inevitable quest.



Fig. 12

<sup>52</sup> Sonnenschein 154



Fig. 13

#### Non-Diegetic Reverb

In the previous chapter, I talked about reverb as the ultimate diegetic tool which grounds sounds in the secondary world. However, reverb can just as successfully be utilised in a non-diegetic way. This is a common and very subtle technique which can elevate otherwise diegetic sounds into the non-diegetic sphere. It is often combined with what I described above. In the scene from *The Fellowship of the Ring*, the voices around Frodo are not just muted, the reverb on them also increases. In this case, the echo is used to convey metaphorical distance. Because what's happening is distant from the protagonist's thoughts, we hear it as if it were physically far away.

Another way reverb can be used non-diegetically is the opposite of that. Instead of making things seem far away, the reverb can add gravitas and importance to a sound. Bigger, heavier things make deeper sounds which reverberate more strongly. Such reverb is also associated with solemn spaces, like cathedrals or concert halls. These associations are subconsciously recognised by the audience even when the sound designer adds them in non-diegetically.

In the same film, this technique is used when Bilbo, leaving Bag End, reluctantly leaves the One Ring behind, dropping it onto the floor. This is a momentous event, being the first time in history that the Ring was willingly handed over by its keeper. As it hits the ground, we hear a deep, echoey thud, far more amplified than we would expect it to be.<sup>53</sup> The moment is underscored by the audience's subconscious reaction to this non-diegetic sound manipulation.

<sup>&</sup>lt;sup>53</sup> This is also an example of different cinematic departments working together, as the Ring prop was stopped from bouncing off by a magnet in the floor, thus showing its weight both visually and audibly (Altebarmakian).



Fig. 14

#### Finding a Purpose

What we discover through this analysis is that non-diegetic sound effects are a complex subject. The vast majority of sound effects in films are diegetic. This is their default use. For this reason, including non-diegetic sounds can have a profound impact on a film, but they can also be distracting. This may be the desired effect, such as in experimental cinema, but in mainstream movies, they are used rather more subtly, and have to be grounded in the world of the film to be well integrated into it.

Departing from diegesis is most evident in the way diegetic sounds are mixed. Techniques such as manipulating audio levels or reverb, can make a soundtrack distinctive, creating a subtle yet significant impact on the audience.

However, this conclusion makes another thing clear: sound effects do not all fit neatly into the categories of diegetic and non-diegetic. Adjusting the volume of a chosen sound can serve as a diegetic close-up, but that same technique can be used to achieve non-diegetic emphasis. Reverb can ground sound effects in the secondary world, but it can also pull them out of it for a desired effect. There is significant overlap and a grey area in which sounds have aspects of both categories.

## **CHAPTER III**

## The Grey Area



#### Reconsiderations

Let us consider again the example I gave in Chapter 1. The Man with No Name meets a wounded soldier towards the end of *The Good, The Bad and The Ugly*, and we hear the music previously played by a prison orchestra. There's no orchestra in this scene, so the music is non-diegetic. It's not part of the secondary world. But is it really not? After all, the secondary world of the film centres around characters, and diegesis is what *they* are experiencing. Can we not suppose that the dying soldier is at this moment remembering the times he was listening to 'The Story of a Soldier' with his companions? It's a deeply personal moment, and it definitely can be argued that the music we hear *does* exist within the secondary world: it exists in the mind of the character.

Claudia Gorbman makes this argument in her article on diegetic and non-diegetic film music: "critics often make the error of classifying film music as *either* nondiegetic and therefore, they contend, capable of expression, *or* diegetic, "realistic", divorced from the tasks of articulating moods and dramatic tensions". <sup>54</sup> She contends that this binary classification of music doesn't fully capture how it can be used to tell a story, and now I want to apply her argumentation to film sound effects.

#### Non-Diegetic Sound Used in a Diegetic Way

In a famous scene from *The Godfather*, as Micheal Corleone is sitting in a restaurant, mentally preparing to murder Sollozzo and McCluskey, we hear the gradually growing sound of a

<sup>&</sup>lt;sup>54</sup> Gorbman 198

passing train. At first, it's only a faint noise in the background, but as the moment progresses, it becomes so loud it drowns out all other sounds in the scene. Is this sound effect diegetic?

Admittedly, it's not impossible that there might be train tracks located in the vicinity of the restaurant, and a train may actually be passing by at this moment. But this is not in any way suggested by the rest of the scene. Walter Murch, the sound mixer for *The Godfather*, made that point: "It doesn't make any sense from what you're looking at. You haven't been shown a train anywhere in the neighborhood. The loudness with which you hear it is too loud. Even if you were in a restaurant right under an elevated train, it wouldn't be quite that loud. So the audience is presented with a discontinuity".<sup>55</sup>

So what is this sound? And how should it be classified? Murch states his intentions clearly: "emotionally you absolutely understand what that sound is there for ... the emotion that comes along with that sound, which is a screeching effect as a train turns a difficult comer, gets immediately applied to Michael's state of mind. Here is a person who is also screeching as he turns a difficult corner. This is the first time he is going to kill somebody face to face. He's doing what he said he would never do". This sound effect is a representation of Michael's feelings. Therefore, like the score in *The Good, The Bad and The Ugly*, it is not fully non-diegetic. The emotions it represents *do* exist within the film's secondary world.



Fig. 15

The fact that the sound could have a possible diegetic explanation does not diminish that. Murch himself stated, as mentioned in the previous chapter, that sound effects should be grounded in

<sup>55</sup> Jarrett and Murch 8

<sup>&</sup>lt;sup>56</sup> Ibid. 7-8

the setting of a film. If, instead of a train, we heard a futuristic drone of an alien spaceship, or the buzz of insects in a jungle, it would not achieve the same desired effect, since the audience's first thought would be to question where this sound is coming from. It would be completely alien to the setting of the film and, therefore, pull the audience away from the story. But by gradually building up this believable sound effect, Murch manages to subconsciously inform the audience about the inner feelings of the main character.

#### Diegetic Sound Blended with Non-Diegetic Music

Another way the distinction between diegesis and non-diegesis can be blurred in a film soundtrack is when the border between non-diegetic score and mostly diegetic sound effects becomes obscured. An example of that can be heard in *The Hobbit: The Desolation of Smaug*. For the scene when Bilbo enters the dragon-hoard filled with an ocean of gold and jewels, the composer, Howard Shore, decided to take the score in an unconventional direction. Instead of harmonised, orchestral music, the soundtrack is comprised mostly of traditional Eastern metallophonic instruments.<sup>57</sup> The various gongs, bells and cymbals, though part of a non-diegetic score, sound almost like gems and coins diegetically jingling in the distance<sup>58</sup>, again, making the binary classification too narrow to express it.



Fig. 16

This example illustrates on how many levels the film soundtrack can work. The gamelan melodies do function as a score - they provide a rhythm for the scene, influence the tone, and are

<sup>&</sup>lt;sup>57</sup> The Music of The Hobbit. 2nd Movement: In the Halls of Erebor 00:08:29

<sup>58</sup> Ibid. 00:10:58

masterfully integrated to build into the leitmotif of the dragon Smaug heard later in full orchestration.<sup>59</sup> They also underscore a sense of the location, mimicking treasures echoing in the vast mountain halls. In addition, the cultural background of these instruments conjures up an oriental atmosphere, fitting for the culmination of a journey to the east.<sup>60</sup> And they can also be viewed as a lens into the protagonist's perception, as for Bilbo the hoard is alien like these instruments are for a Western audience, and each small noise feels to him like a strike of a cymbal reverberating through the cavern, revealing his presence. All these layers function for many reasons, but one of them is the fact that they live in the grey area between diegesis and non-diegesis.

The relationship between music and sound effects can also work in the opposite direction. Diegetic sound effects can be manipulated to interact with non-diegetic score, thus moving them into a grey area in between. To see this, it's worth looking at the characteristics of music.

Jason Martineau describes musical sound as "a combination of tones that vary overtone content with a noise component". When a note is played on a musical instrument, we hear vibrations at the frequency of the note, and additional harmonic frequencies called **overtones**. **Noise** is the non-pitched element of the sound. Overtones and noise create the **timbre** of the sound - it's what allows us to distinguish different instruments playing the same note. Notes played in sequence constitute **melodies**, and when they're sounded at the same time, they can create **harmonies**. Rhythm is the temporal arrangement of notes. Intensity is their loudness.

All these qualities are not exclusive to music, but apply to all sounds. Even ones like rhythm, which may seem non-diegetic, are actually plentiful both in the natural and manmade world. 66 67 For an interesting example of how this musicality of sound effects can be used, we can look at the film *Baby Driver*. Throughout the story, the music listened to by the main character plays an important role, itself blending diegesis with non-diegesis. But it also influences sound effects. In the opening car chase scene, all sounds are strategically put in to fit with that score. Screeches of tyres are pitched to the key of the song. The timing of sound effects is also based on it - supervising sound editor Julian Slater said: "People in the sound community normally work in timecode, but for this we had to switch over and work in bars and beats". 68

<sup>&</sup>lt;sup>59</sup> Ibid. 00:11:29

<sup>60</sup> Ibid. 00:09:19

<sup>&</sup>lt;sup>61</sup> Martineau 6

<sup>62</sup> Ibid.

<sup>63</sup> Ibid. 18

<sup>64</sup> Ibid. 50

<sup>65</sup> Ibid. 51

<sup>66</sup> Schafer 226-236

<sup>&</sup>lt;sup>67</sup> The *musique concrète* movement takes advantage of this by creating music with ordinary and experimental sounds (Sonnenschein 58).

<sup>68</sup> Marshall



Fig. 17

Yes, these sounds all diegetically exist in the secondary world, but that world is manipulated from outside of it, from the non-diegetic perspective. Were this a chase taking place in the primary world, all sounds present would be chaotic, clashing with one another and not harmonised with any song. A delicate balance has been struck to make them work both with the music and cinematically. Slater said: "I think the most challenging aspect of the movie was to keep all of the musical syncopation going without it feeling like a gimmick or that it was being overused".<sup>69</sup>

In this case, sound effects don't by themselves fulfill the role of the score, but they do take on musical qualities: pitch, timbre, rhythm. This balance between realism and stylisation demonstrates how sound design allows filmmakers to stretch the boundaries of diegesis.

#### Focusing the Scene

In the previous two chapters, I described diegetic and non-diegetic uses of sound which, on closer inspection, actually fulfill a very similar purpose. I talked about diegetic sound effects having a function equivalent to a close-up, thus focusing the viewer's attention on a specific object or action. Later, analysing the non-diegetic use of silence, I gave examples of fading out most sound effects to draw attention to a character's internal state of mind.

These techniques are very closely linked. We can see how they are both utilised in the opening battle sequence in *Gladiator*. In the beginning, the battle sounds are very realistic. We hear a cacophony of clashes and screams, and while individual sound effects are louder when they correspond to things seen on screen, they still clearly exist as part of the chaos of the whole battle.

<sup>&</sup>lt;sup>69</sup> Andersen

However, when Maximus falls off his horse and a disorganised hand-to-hand melee starts, the soundtrack slowly becomes more and more focused. Background sounds get quieter. We're not hearing the entire battle now, but only the action directly surrounding the protagonist. This, on the one hand, is a great use of diegetic sound effects to help the audience know what's going on in the chaotic sequence: when Maximus' dog runs in to help him, we clearly hear his bark and the sound of his jaw clenching on enemy soldiers; the sword strokes of Maximus are much clearer than all the other ones around him, so that we can tell how his blade is moving. But these diegetic sound effects only work because of the non-diegetic quieting down of irrelevant sounds. By the end of the sequence, the sounds of battle change into an almost complete silence. Only individually selected sound effects are heard, and the rest of the soundtrack is filled with a rising score.

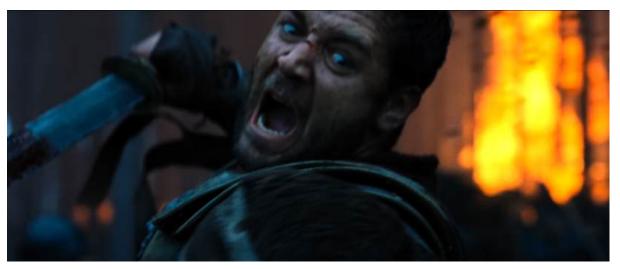


Fig. 18



Fig. 19

#### **How to Combine Them?**

This brings us to the main conclusion of this analysis. Sound effects in film exist on a wide spectrum of diegesis. It is not simply a binary classification, 70 and almost every sound will have both diegetic and non-diegetic aspects to it. However, no sound effect should be considered on its own - the soundtrack of a film is made up of multiple elements, and all of them working together is what creates an immersive and impactful auditory experience. Therefore, while a scene's sound may be described as mostly diegetic or non-diegetic, the real art of sound design is in being able to combine these different types of sound effects into a cohesive whole that brings about the desired effect.

There are diegetic sound effects that help improve realism and immersion. There are non-diegetic sounds that build up mood and pacing. And there are some which exist somewhere in between. Often, a sound effect itself will be diegetic, but its manipulation - be that loudness, reverb, pitch or rhythm - will have non-diegetic characteristics. Or the opposite may be true, and a non-diegetic sound will be so grounded in the diegetic world that it also appears diegetic. A sound designer's job is to decide how much of each of these ingredients to add to a soundtrack to help the audience understand both the secondary world of the story and the emotions that underline it.

In the final chapter, I will take a close look at a scene which shows that task done masterfully, so that we can see how this knowledge can be applied in a real filmmaking scenario.

Although, as Chion points out in regard to a much less murky division between on-screen and off-screen sound, such binary classifications are not without merit in film analysis: "These exceptions, though distressing, do not by any means cancel out the validity or interest of a basic distinction between onscreen, offscreen, and nondiegetic sound, or of the basic division between acousmatic and visualized" (Chion 74-75).

## **CHAPTER IV**

## Case Study



#### Chaos at the Du Lung Bridge

Deep, ominous music plays as the screen slowly fades from black to show a setting sun. A slow, faint beeping signals the nervous anticipation of Captain Willard. We're at the midpoint of the story of *Apocalypse Now*, approaching the crossing of a threshold as Willard's narration informs the audience that they're coming to the Du Lung Bridge, a place that encapsulates the insanity and futility of the Vietnam War. Destroyed daily, the bridge is then rebuilt overnight, only to be blown up again the next day.



Fig. 20

As night falls, the sounds of battle slowly fade in, gradually overshadowing the sound of crickets - the noise of violence drowns out the peaceful nature of the jungle. The soundtrack is diegetic so far. Explosions and screams are heard distantly, as the characters on the boat hear them.

The sound is then brought closer as soldiers jump into the water, begging to be taken onboard. The chaos is at hand. Then, lieutenant Carlson shouts to Willard. As the boat reaches the riverbank and the two have a conversation, the sounds of battle are slightly muted. This is a subtle non-diegetic quieting down of background sounds to give clarity to the dialogue. Then, a curious sound effect can be heard a slow ticking, as if of a clock. It's almost lost in the growing sounds of explosions and quickly disappears.

The moment Willard steps on land, the battle gets loud. He's now in the chaos of war, and we can hear it overwhelming us just as it does him. But he's not going alone. Lance goes with him. We just learned that he dropped acid. His experience of the battlefield is different, and the sound reflects that. When the focus is on him, sounds become echoey, abstract, and unclear. As the two make their way through the fire and chaos, strange music plays. It's non-diegetic score which sounds almost like circus music, but it has a mechanical quality to it, blending itself with the diegetic sounds of fighting. The ticking is briefly heard again - the anticipation of something still unknown is being built up.



Fig. 21

When Willard and Lance jump into the trench, we're back to a diegetic soundtrack. The terror of soldiers sounds real and close. The only surprising sound is a guitar solo heard distantly. Is it part of the abstract score, or does it exist diegetically in the secondary world? There are two soldiers there, one of them shooting manically. When questioned by Willard, they say:

"There are Gooks out there by the wire, but I think I killed them all!"

"You ain't shot shit man. Listen!"

And we all listen. The sounds start fading away again, and as Lance steps out, they become an echo. The score is now hard to tell apart from sound effects, sounding like flying missiles. The guitar

is heard again, and the soldiers go to get Roach. He slowly rises and walks towards a beat-up radio, turning off the music - its diegetic source is now revealed.

By now, the soundtrack is eerily quiet. Battle sounds are almost all off-track, and the screams are coming from just one soldier, "Charlie", shouting crazily. It's so quiet that we can hear the crickets again. Explosions are EQ'd to deep metallic thuds. Gradually, these thuds transition into a sound we heard before - the ticking of a clock. But whereas before it was lost among the chaos, now it's clear. There's no question about its purpose. It's a non-diegetic sound effect building up the tension of the scene up to the inevitable release.

As Roach loads his gun, we hear every little noise. Diegetic foley is here emphasised by the muting of the rest of the soundtrack. But this is not entirely non-diegetic. As with the restaurant scene in *The Godfather*, it puts us into the head of Roach. Walter Murch said that "in that particular scene we're going into the aural consciousness of a character called Roach, who is a human bat. The way he hears the war, when he sets out to kill "Charlie" -- and he echo-locates Charlie -- he doesn't hear anything except Charlie. The goal was to get audiences into the place where they hear only what Roach hears". <sup>71</sup>



Fig. 22

Right before the weapon is fired, even the foley fades away. We're entirely focused on the anticipation. And then the shot is discharged. Charlie is dead, his shouts stop. And sound effects come back in the reverse order of their disappearance: first foley, then the echoes of battle, and when a tower suddenly explodes, the full diegetic soundscape returns.

At this moment, we cut back to the boat. The soundtrack is diegetic until Chief speaks to Willard:

"You're on your own, captain. Do you wanna go on?"

**37** 

<sup>71</sup> Sragow

As Willard hesitates for a moment, the battle behind him fades away slightly, the ticking comes back.

"Just get us up river!"

Willard has made up his mind, and as the boat accelerates, they leave the chaos of Du Lung Bridge behind. Its sound also stays behind, and the score takes over as the image fades to black.

#### Blending Diegesis and Non-Diegesis with a Purpose

This sequence is a masterful example of combining the techniques I outlined in this thesis and motivating their use to achieve a powerful and memorable effect.<sup>72</sup> Firstly, the baseline of the soundtrack is a realistic and impactful soundscape of a chaotic battle. When Willard walks through the trench, we feel the mayhem he's experiencing, and when we cut to the boat, we understand the uneasiness of the characters. Those diegetic sounds are grounded in their environment, echoing through the jungle and down the riverbed. All layers of sound effects can be heard. Well-executed foley helps us make sense of the characters' actions.

The soundtrack moves away from diegesis when sound effects are selectively muted or emphasised. Often, this is done subtly, like when background sounds are pulled down to give clarity to dialogue exchanges, but on several occasions, this technique is more obviously non-diegetic, most notably when barely any sound remains as Roach is introduced. The lo-fi soundscape of war is thus reduced to a hi-fi environment. The selected on-track sounds get full attention. Additionally, strategic inclusions of reverb and echo add to the overwhelming havoc around. The sound effects also work in tandem with the score. Sometimes, it's difficult to tell whether a sound is a musical or spot effect.

The ticking of a clock is a textbook example of the use of a completely non-diegetic sound effect. It's subtly established two times before its main use, and afterwards briefly appears again. This illustrates both scenarios of the use of acousmatic sound Chion described. The ticking, while non-diegetic, blends in with the broadly abstract soundscape of the scenes, and it serves to evoke a feeling of anticipation, like the ticking of a bomb before it explodes.

However, most importantly, these techniques work with other aspects of cinematic storytelling. The changes in how sounds are manipulated reflect the characters we're following. Willard sees the world around him most clearly, so when he's the focus of the scene, diegesis is most pronounced. When we turn to Lance, high on acid, the soundtrack is abstract and trippy. And as we meet Roach, singularily focused on killing his enemy, all irrelevant sounds disappear. Furthermore, the constant fading in and out of battle sounds mirrors the visual fading in and out of light on the

<sup>&</sup>lt;sup>72</sup> In this analysis I focus on sound effects, but it's worth noting that this sequence also blends diegetic and non-diegetic sound when it comes to music (eg. Roach's radio) and dialogue (dialogue vs. narration).

characters' faces, the occasional use of slow motion, and, in a larger way, the entire theme of the sequence. Du Lung Bridge is in the same loop, being destroyed and rebuilt over and over.

Ultimately, this scene is quite an extreme example of such techniques. It is one of the most abstract sequences in a film already full of bold filmmaking choices. But analysing how it successfully walks the border between diegetic and non-diegetic sound, doing it with a purpose and intent, we can see how powerful of a tool the knowledge of this dichotomy can be, and how understanding the overlap between diegesis and non-diegesis in film sound effects can help sound designers create one-of-a-kind soundtracks which grip the audience, suck them into the film and aid in the art of storytelling.

## **CONCLUSION**



Having looked at the varied uses of diegetic and non-diegetic sound in films, I conclude that the understanding of these categories is an invaluable tool for sound designers and other filmmakers. After considering the examples from Chapter 1, I see how immersive a carefully crafted diegetic soundtrack can be. Broadening the concept of diegesis beyond the visuals on screen and into the secondary world of the film, separating the different layers of diegetic sound, grounding techniques and modern technological advances all contribute to this immersion and can be utilised to great effect.

As discussed in Chapter 2, sound effects can be used non-diegetically to achieve many effects, both powerful and subtle. Comparing the use of such sounds to that of music can help in applying them with a clear purpose, to avoid needlessly distracting the audience. Furthermore, non-diegetic manipulation of diegetic sounds can significantly increase the impact of a soundtrack.

The main takeaway of this thesis, as seen in Chapter 3, is the realisation that the grey area between diegetic and non-diegetic sound is greater than can be assumed. Applying Gorbman's ideas to sound effects makes it clear that many elements of the soundtrack have both diegetic and non-diegetic features. This also helps tie the first two chapters together, as very similar audio techniques can be used to achieve a diegetic or non-diegetic result.

The analysis of the Du Lung Bridge sequence from *Apocalypse Now*, along with all other film examples in this thesis, shows how the outlined techniques can be practically used and allows us to experience for ourselves the powerful effect that smart usage of diegesis has on a film soundtrack.

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