

TON & TRAUM: A CRITICAL ANALYSIS OF THE USE OF SOUND EFFECTS  
AND MUSIC IN CONTEMPORARY NARRATIVE FILM

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TON & TRAUM: A CRITICAL ANALYSIS OF THE USE OF SOUND EFFECTS  
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We often talk about the mysterious *Magic of the Movies*, the unique ability of the filmic medium to take the audience into another world, another era, even another galaxy. We also talk about film's unique ability to record life as it happens and to document what is going on in our world, be it right where we live or at the most remote place on Earth. But whenever we look at film as an art form, most of us tend to exclusively credit the visual component of the film, i.e. cinematography, topped off with the occasional thought on editing. The sonic component of film, however, is unjustly ignored most of the time. Sure, we know the name Hans Zimmer from *Gladiator* or Danny Elfman from *Batman* and most recently *Spider-Man 2*, but how many of us know who recorded the location sound on *Master and Commander*?

The goal of *Ton & Traum* is to give the film-soundtrack the credit it deserves. I will start out with an analysis on how music, dialogue, and sound effects work together and show what powerful a tool for storytelling and creation of drama and suspense the soundtrack is in the right hands. The second section will look at the soundtrack following different theoretical approaches such as semiotics and psychoanalysis. The third and final section will take it from there and look at the use of Sound Effects in the Sci-Fi TV series *Stargate SG-1*.

I hope to demonstrate the importance of the film-soundtrack in order to create that certain *Magic of the Movies*. I hope to show that film (and Television) is a carefully balanced compound of certain elements that come together - one of them being the soundtrack - to bring the filmic work of art to life.

Approved:

Ruth Bradley

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I would like to thank John L. Butler, C.A.S., for letting me study with him and introduce me to the world of sound engineering, recording, editing, and mixing. Without the insight I gained from John Butler I would never have been able to just open my ears and sit back and listen. In a world that is dominated by MTV, CGI, and a rapid-fire editing pace, in a time when the average attention span is shrinking by the minute and all people want to see in a film is explosions, mass-battle sequences, and heart-warming Hobbits, I came to learn that the ability to let all this slide and just listen is as rare as it is valuable.

I want to thank all the people on whose films I worked on over the last two years, particularly Guiliana Zapata, Thomas Britt, Josh Hyde, and Emerson Deo Cardoso. The field experience I gained from being involved in the process of making films of various genres was a major influence on how I came to think about the use of sound in film. If it wasn't for all those aspiring filmmakers who trusted me enough to do sound on their films I would never have experienced and understood the difference between creating a work of art, seeing it come to life piece by piece as it gets shot, edited, scored and mixed, and merely analyzing and criticizing a finished product following the thoughts and ideas of other scholars.

I would like to thank the Mixing Techniques class of 2003-2004, particularly Ross Gallup, John Sember, and Bob Wiebusch. Thanks to Desiree Sampson, Terrie Bruscino and Rick Dodgson for helping me put this essay into the proper format and overcome technical difficulties. And last but not least a big thank you to Bob Miklitsch, Tom Hayes, and Marc Kligerman for letting me study with you – my opinion on and understanding of film as an art form would not be the same without you.

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### **Prologue:**

When mankind gave birth to film more than a century ago, little would they imagine what a huge myriad of theories would swirl around film after its first century. As a matter of fact, it is very fascinating to just take a look at how film theory (and thus also criticism) has evolved. In the beginning there was (what we nowadays call) classic film theory, which basically consisted of the work of two camps, the formalists such as Rudolf Arnheim and Sergei Eisenstein, and the realists such as André Bazin and Siegfried Kracauer. Then Christian Metz wrote his monumental *Grande Syntagmatique* and *Film Language: A Semiotics of the Cinema*, thereby taking large sections of the Anglo-Saxon world by storm. Now a unified theory could be developed in order to eliminate the charge that all media studies are mere interpretation and rhetoric.

Basically, one could say that the writing of Christian Metz was a reaction to the tendency of earlier Soviet film theorists to equate film language with verbal grammar. Metz's work was studied intensely by European cognitivists like Francesco Casetti and Dominique Chateau. All of them critically responded to Christian Metz's film semiotics and attempted to overcome the translanguistics of Metz's insistence that film semiotics be based exclusively on the methods of structural linguistics. However, semiotics is just one of the doctrines of modern/contemporary film theory, just like the cognitivists are one group of many and even Metz is only one theoretician among many. There is Jean-Louis Baudry, who refers to Plato's Cave and in how far the situation of the prisoners in the cave is comparable to that of the audience in a movie theatre in the beginning of "The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema".

Another person that should not remain unmentioned at this point is Slavoj Žižek, who's monumental "Looking Awry: An Introduction to Jacques Lacan through Popular Culture" makes strong use of the filmic medium when discussing the work of Jacques Lacan.

Apart from semiotics and cognitive science, contemporary film theory also includes the principles of structural linguistics, philosophy and psychoanalysis. And yet all these different theoretical approaches have one thing in common: they all tend to elude the issue of sound in film and either relegate sound to a minor status or even ignoring the issue completely. In all those years of analyzing, categorizing and interpreting film it seems sadly ironic how little attention was paid to film-sound by any theoretical approach to film. The semiotic approach towards the filmic medium can reveal crucial information not only on how a film is structured and conceptualized, but also how this structure works in terms of influencing the audience, however hardly if ever does a semiotician like Warren Buckland mention the issue of sound. The early film theoreticians of both, the formalist and the realist camp, such as Arnheim or Bazin did not take sound into their considerations when coming up with their theories of film. When Bazin stated that film was born out of the need for representation he only thought of visual representation and set the issue of sonic representation aside. Depth-of-Field appears to be more important in terms of a realistic cinema to him than the coming of sound. Baudry's philosophical approach also fails to include sound into consideration when comparing the prisoners of Plato's cave to the audience in a movie theatre. Even

those who research and analyze the phenomenon of filmic reality such as Etienne Souriau exclude sound from their thoughts.

It is only logical to ask “why”? Why have all these great minds ignored the issue of sound? Especially in the field of semiotics which can be so helpful when trying to analyze how a particular filmmaker’s concept of producing filmic meaning functions, it seems no one suspected to find fruits on the sound tree.

But eventually things began to change; slowly, but gradually. Joseph D. Anderson’s “Sound and Image Together: Cross-Modal Confirmation” states and explains that when a visual image is perceived simultaneously to a sound, the two will be perceived and remembered as a unit. And when this concept is applied to film, it opens up a whole new realm of unexplored territory. Claudia Gorbman, author of “Unheard Melodies: Narrative Film Music” introduced the fascinating, pioneer-like work of composer-filmmaker-critic Michel Chion to the non French speaking world when she translated his “Audio-Vision”, the fourth book he wrote on sound in cinema. Hence Chion’s ideas and theories can be regarded as the scholarly backbone of my essay, allow me to briefly sum up crucial points of Chion’s *Audio-Vision* in order to provide a better introduction to the subject matter of film-sound analysis.

*Audio-Vision* deals with the functions of film-sound in all its variations, from voice-over to diegetic- & non-diegetic music and sound effects. Chion aspires to provide basic insights on all those levels and reveal how the soundtrack influences not only the audience’s perception of the image but the entire movie-going experience. In order to do so the author draws on concepts which he developed in his three earlier books on film-

sound, *La Voix au cinema* (1982), *Le Son au cinema* (1985), and *La Toile trouee* (1988).

Those who might suspect that *Audio-Vision* is merely an updated summary of these books are only partially correct, and a close read will reveal that more than once did the author's opinion on certain elements change over the course of time. It might therefore appear that at times the author contradicts himself in his own writing, however it is especially those contradictions that not only make *Audio-Vision* such an interesting read, but also fuel the general discourse on film and the use of sound and music within the medium.

In terms of its structure *Audio-Vision* is divided into two sections, namely (a) “the audio-visual contract” which serves as the foundation for a theory of film sound, and (b) “beyond sounds and images”, in which Chion provides an analytical method for scholarly analysis of sound in film and Television.

Personally speaking, I believe the first section of *Audio-Vision* to be much more useful and valuable to the reader, for Chion's analytical method of the film-soundtrack is so detailed that it is easy to forget what element of the soundtrack one was originally analyzing. This and the fact that I do not always agree with the way Chion analyzes and approaches the soundtrack made me put my main emphasis on “the audio-visual contract”. In this section the author is concerned with how sound and image blend with one another in the perception of the audience. According to Chion every element of the soundtrack strengthens the image and literally adds value to it. In other words, if we were to look at a given image first without sound and later with sound, the second impression will bare more meaning and convey a higher level of information, i.e. more value to the

spectator. Chion continues to explore this phenomenon which he adequately dubbed *added value* and differentiates between four categories, namely temporalization, sleight-of-hand, unification and punctuation. Noteworthy here is that all these phenomena are analyzed in regards to sound / sound effects rather than in regards to music.

Apart from *added value* the most fascinating concept Chion develops over the course of *Audio-Vision* is the concept of *synchresis* which he describes as “the spontaneous and irresistible weld produced between a particular auditory phenomenon and visual phenomenon when they occur at the same time.” (63) It can furthermore be stated that due to the principle of *added value* and *synchresis* any element of the soundtrack will enhance the meaning and value of the accompanying image.

It is especially here that the author reveals his own philosophical roots as he states that these phenomena are a function of meaning, i.e. they follow laws and concepts of *Gestalt Psychology*. The formalist film theoreticians have also drawn on the rules of *Gestalt Psychology*, stating that a film, when meant/conceptualized to imitate/mimic/resemble life should be structured like a living creature. This idea can be traced back to Plato’s *Phaedrus* in which he claims that a speech (and thus every work of art) has to follow a basic structure and thus must have a beginning, a middle part, extremities, and an end. When approaching the film-soundtrack from that specific angle one can unravel crucial information on how the soundtrack contributes to the image, how two become one, how a film is brought to life through the soundtrack – and Chion succeeds masterfully in that respect.

The two most noticeable aspects of *Audio-Vision* are that (a) Chion presents his theories in a way that will satisfy both the layman/interested reader and the film scholar, and (b) that Chion creates and develops a terminology to approach and analyze the film-soundtrack rather than complaining about a lack of specific vocabulary regarding the issue. Those without a certain sense of humor and those who expect clear-cut cognitive-psychological insight from Chion will most certainly not enjoy *Audio-Vision*. On the other hand, one should be aware that Chion is almost a pioneer in terms of analyzing the sonic aspect of film, and as it is with every pioneer, some might not fully approve his methods and theories. That being said I believe Chion's *Audio-Vision* to be the most concise work on film-sound to date.

It would not be exaggerated to call Chion the prime authority on sound-theory in film and Television. Chion focuses on the aesthetics and functions of sound in film and Television, and he does so in a very fresh way. "Audio-Vision" demonstrates "[...] the reality of audiovisual combination – that one perception influences the other and transforms it." (Chion xxvi) Maybe it is the absence of a strictly academic backbone that makes Chion's work appear so fresh. Here is a person who talks about multi-track sound, Dolby stereo and how sound can be utilized to influence the film audience's perception of space and time when watching a movie, and he does so without drawing on aspects of philosophy or semiotics.

Without the work of Joseph Anderson and especially Michel Chion there would be no basis for what I want to explore in my work. In the first part of this essay I will try

my best to analyze and illustrate the importance of sound not just in terms of creating the cinematic illusion of reality but also how to maintain this illusion on a number of different levels. An in-depth analysis of the role of sound in filmic representations of dreams, illusions and hallucinations is another aspect of this essay. In this part I will also apply a basic semiotic approach (which would not be possible without *synchresis*) as well as certain elementary elements of psychoanalysis to the effect the soundtrack has in combination with the visual image. With this I hope to show that in the case of analyzing film-sound these two opposing doctrines of film theory can work together quite fruitfully without excluding each other. A third part will be devoted to the role of sound design in film and Television with a strong focus on the Sci-Fi genre. The three main films that I have chosen to analyze and discuss are Tim Burton's *Batman* (1989), David Fincher's *Fight Club* (1999) and Cameron Crowe's *Vanilla Sky* (2001). Among the other films that will be mentioned here are George Lucas's *Star Wars: Episode V - The Empire Strikes Back* (1980), James Cameron's *Terminator 2 – Judgment Day* (1991) and Brian Singer's two *X-Men* films (2000, 2003). In terms of Television I will discuss the use of sound in certain episodes from the TV series *Stargate SGI* (1997 – present).

The goal of this work is to demonstrate that sound has been unjustly ignored for too long of a time from film studies. It is time to realize and to acknowledge that film and Television do not just tackle their audience on the visual but on the sonic level as well. It is time to realize the extent to which the legendary *movie-magic* is created through the soundtrack. It is time for contemporary film theory and criticism to evolve, to become conscious of what one previously has been unaware of.     [Back](#)    [T.O.C.](#)



### **1. Film Sound & The Cinematic Illusion of Reality**

Unlike any other art form, film has the unique ability to drag its audience into the individual world it offers. Film can confront its audience with another version or representation of reality. Also, film can be seen as a partial time machine due to its ability to present the audience with another era, be it the past or the future. A film like Robert Flaherty's *Nanook of the North* (1922) transports its audience to the icy cold Ungava Peninsula of Hudson Bay just as Todd Philips' recent remake of *Starsky & Hutch* (2004) takes its audience back to 1970s Bay City.

Many different elements come together in order to give the filmic medium these unique abilities, and many of these elements have already been analyzed by a number of film scholars around the world. Yet one should also consider at least some of the basic conditions that film requires in order to let the audience enter its world. Analyzing these conditions might seem trivial on the surface, but let me assure you that it is far more important than one might think. For example, how is a film like Brett Ratner's brilliant *Red Dragon* (2002) supposed to let the audience in on the vicious mind games of Hannibal Lecter when you hear an explosion through the walls of the theater every five minutes? What if you happen to sit right under one of the emergency exit signs which is constantly humming? Or what about the noises of AC's or the operating film projector itself?

These are just three basic examples that affect the sound in a movie theater. But they are enough to justify a closer look into the necessary conditions under which an audience can enjoy a film to the extent that they enter the world of the movie. One cannot

just put a hundred seats into a big room, install a projector, sell popcorn, and call it a movie theater. Especially not when the quality of the film's soundtrack becomes an issue. Every work of art requires certain conditions for a proper presentation. Just like an Opera house, a proper movie theater is carefully designed with the sound issue in mind. The materials used in the construction of the movie theater play an important role in terms of the room's individual sound, just like the fabric the seats are made out of and the wallpaper in the theater. All these factors play together in controlling the room's reverberation and ensure that sound does not literally bounce off of the walls. The height and placement of the loudspeakers is another important issue, especially when it comes to surround sound or Dolby 5.1. Only when these basic elements are fulfilled can a movie work its "magic". Most movie goers take all these conditions for granted and thus pay no attention to them unless these working conditions fail and one hears the already mentioned explosions or tortured screams from the latest Schwarzenegger movie that plays in the next theater.

Let me come back to the various elements that enable film to create an individual impression of reality. One of the most important, yet least studied elements is the film's soundtrack. In order to perform a proper analysis of a film soundtrack we have to approach the soundtrack from at least three different questions, namely (a) what do we call a soundtrack, (b) how do the several elements in a soundtrack work together and (c) how can the soundtrack create, manipulate, and sustain the filmic illusion of reality.

First of all it should be stated that the term *soundtrack* combines a cornucopia of different elements, or to put it another way, the term *soundtrack* sums up a number of aspects regarding sound, just as the term cinematography sums up all the elements regarding the capturing of the visual image. A finished film soundtrack is the combined work of many people. Whether we are looking at the effects, the dialogue, or the musical department, we will always find the same basic structure, which consists of five different elements, namely the creator, the performer, the recordist, the editor, and the mixer.

Let us take a look at the musical department in a film soundtrack to analyze these elements. In most cases the music in a film is not the work of one single composer but rather a combination of the work of several creators/composers. There are some directors who work closely with the music composer for their films. Francis Ford Coppola for example wrote the musical score for his epic *Apocalypse Now* (1979) together with his father, the renowned composer Carmine Coppola. Woody Allen works with composer Dick Hyman since his 1980's *Stardust Memories*. He also played the clarinet on the soundtrack for his 1973 film *Sleeper* and produced the soundtrack album for his critically acclaimed *Sweet & Lowdown* in 1999. John Carpenter, Jim Jarmusch, and Anthony Minghella are also very concerned with music in their movies and work together closely with their composers.

Another possibility would be a team of composers such as "The Dust Brothers" who scored *Fight Club*. However, the most common approach to identify the creators of a film soundtrack is to distinguish between the composer(s) of the classical score and one or more artists who contribute songs to a movie soundtrack. But then one would also

have to distinguish between songs that were written particularly for the movie and songs that were created independently for the movie soundtrack. Tim Burton's fabulous *Batman* (1989), for example, combines the classic score written by Danny Elfman with several songs Prince wrote for certain key scenes in the movie such as the Museum raid and the Joker's Parade. The soundtrack for *Vanilla Sky* is the combination of Nancy Wilson's classical score, Paul McCartney's Academy Award nominated theme song, and pre-existing songs from various musical groups such as "Radiohead" and "R.E.M."

Let us exclude the pre-existing songs in a film soundtrack for the moment in order to avoid confusion and rather focus on the aspect of the classical score. After the score is written by the composer and green-lighted by the director, it has to be arranged, orchestrated, rehearsed and performed. For this the composer will hire an orchestra (including a conductor) and/or a group of hired musicians to perform the music.

As soon as the musical score is arranged and rehearsed it has to be recorded. And it would be foolish to assume that the recording process is the work of a single person. Apart from the recordists there are the recording engineer(s) as well as a number of assistants, all of them almost crucial to the recording process. This recording will then be mastered, mixed, re-mixed and edited, four separate processes which bring even more people to the table, especially when there are several mixers and editors.

There would be even more parties to mention, such as the recording director or the soundtrack coordinator, but I think this analysis has gone deep enough for now. The point should be clear. Danny Elfman might be the only one who gets credit for the musical score in the opening credits of *Batman*, but giving life to his compositions and

recording them for the movie is the work of fourteen other people, namely three executive producers, one engineer and two second engineers, two orchestrators, two editors, a designer, a re-mixer, one person for digital editing and mastering, and a conductor (and of course The Sinfonia of London Orchestra).<sup>1</sup>

The second element of the film-soundtrack is what I summed up as “dialogue”. As with music, it is not easy to clearly identify the creator of the dialogue. Who should we credit for the brilliant opening monologue in *American Beauty* (1999)? Is it screenwriter Alan Ball, director Sam Mendes, or Kevin Spacey who plays the leading role and whose voice we hear in the opening?

Strictly speaking, the original creator would be the screenwriter in case the director did not write his own script. However, the words in the script are merely the basis for the director’s interpretation of the dialogue, i.e. how he/she wants the actors to deliver their lines. Then there are the actors, who are much more than merely the performers of the dialogue. An actor might have his/her own suggestions about how a certain dialogue line should be delivered. The actor might also change the emphasis on certain words and syllables throughout the performance. And of course one should not forget improvisation. It would thus only make sense to credit all three parties, the writer, the director and the actor as the creator of dialogue.

The next step is recording the dialogue. If this happens during the production of the film we have to think about the location sound recordist/production sound mixer and the boom operator. In case the results are not satisfactory, the actors will have to come to a recording studio where their voice will be recorded. This process is known as

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<sup>1</sup> Information taken from [www.allmusic.com](http://www.allmusic.com)

Automatic Dialogue Replacement (A.D.R.) and involves engineers (for the recording session as such and for the playback control of the scene for which the dialogue gets replaced), recordists, and producers, to name just three. Once recorded, the dialogue will then be mastered, mixed, re-mixed, and edited, similar to the music score.

The third element in the soundtrack is the sound effects department, which consists of one or more foley artists (who we should name as the creators), whose work has to be engineered (recording and playback), recorded, mastered, mixed (and re-mixed) and edited as well.

In order to put the sheer number of people involved in a film's soundtrack into perspective, let us take a look at the sound crew involved in the making of *Batman*. No fewer than twenty-six people are credited in the sound department of this movie, and this number does not include those involved in recording Elfman's music. Twenty-eight people make up the sound department of *Vanilla Sky*, and an impressive forty six people worked on the soundtrack for *Fight Club*.<sup>2</sup>

Not only does this fact clearly indicate the significance of sound in film but also *what* an enormous amount of work had to be coordinated, completed and overseen in order to bring a film like *Fight Club* to life.

Before I move on to complete my analysis of what we refer to as a film-soundtrack I would like to point out that even though those who work in film-sound might not be very well-known to the average audience, they are highly sought-after professionals nonetheless. Tony Lamberti, for example, the sound designer for *Vanilla*

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<sup>2</sup> Information taken from [www.imdb.com](http://www.imdb.com). The same source was consulted for Tony Lamberti, Don Coufal and Hilda Hodges.

*Sky*, worked on fifty-five films since his debut in the world of film-sound as a sound effects editor on Jackie Chan's *Armor of God 2* in 1991. Don Coufal, the boom operator on *Vanilla Sky* and *Fight Club*, has worked on fifty films up to this day, and his filmography includes *The Last Samurai*, *As Good As It Gets* and *The War of the Roses*. Foley Artist Hilda Hodges's résumé might be even more impressive. Hodges's first foley work was for *Brewster's Millions* in 1985 and since then she has worked on 77 films, including *Arachnophobia*, *Braveheart*, *The Matrix*, and *Fight Club*.

After having looked into the production of the three key ingredients for a film-soundtrack, dialogue, effects, and music, let us now look at how these elements are mixed together into what is called the soundtrack. Once the dialogue, the effects, and the music are mixed and edited everything will be re-recorded, which is the initial stage of the final mix. Now the different dialogue and effects tracks are combined and mixed together with the music. The final stage of such a mix however depends on the overall budget as well as on the release pattern of the particular movie. The final mix has to be done with the medium on which the audience will perceive a film in mind. Whether the final mix is in mono, stereo, or even Dolby 5.1 is a question that greatly affects the mixing process on various levels. Whether a movie is made for Television and home-marked release or for theatrical release is another important aspect to keep in mind when completing the final mix of a film's soundtrack. A 5.1 mix for theatrical release is different from a 5.1 mix of the same film for DVD release.

The key difference between the two basic mixing patterns is also one the key factors for film's ability to create an impression of reality. By attenuating or emphasizing

certain frequencies during the final mix the mixer can eliminate the earlier mentioned noises caused by the movie-projector and the air conditioner. In other words, while the soundtrack plays a key role in creating the filmic impression of reality, it also ensures the maintenance of the very same illusion. Only when every noise that is not related to the film's impression of reality is eliminated can the film begin to lure the audience into its unique world.

The overall goal of a film's soundtrack is to complement and enhance the visual image and the performance of the actors. The soundtrack is never meant to be the most outstanding element in a film, not even in an Elvis Presley film or the Beatles' *A Hard Days Night*. The elements that make up the soundtrack will never rival each other and always work together to create the best result possible. Just like cinematography and editing, film-sound is a key aspect in giving a film its unique style and atmosphere. Film-sound is every bit as important as editing and cinematography in terms of creating and controlling drama and suspense. And with their efforts combined, the effects, the dialogue, and the music can not only take on that task easily but also create such powerful results that the audience might believe to have seen things they actually only heard in the soundtrack. An example for this phenomenon can be found in *The Empire Strikes Back* (1980) following the work of Marc Mancini: "The Millennium Falcon's door, for instance, first clunks, then hisses, and finally squeaks – all in less than a second. (Director) Irvin Kershner so trusted this effect in *The Empire Strikes Back* (that) he sometimes photographed the opening of a spaceship door by stopping the camera, taking



the door out completely, and resuming the action. Burt's whoosing sounds convinced audiences that the doors rapidly slid aside, when they had, in fact, suddenly disappeared from the screen" (Mancini 367).

For the following analysis, however, it will be wiser to keep the musical part of a film's soundtrack separate from the effects and the dialogue. Hence the latter are always directly connected to the image we see in a film. We see people talking in films. We also see the causes for the sounds we hear when we are watching a film. Even when absolutely no location sound is used in the finished film, i.e. every line of dialogue has been added through A.D.R. in post-production and every sound effect has been created by a foley artist, the audience will still regard them as an integral part of the film because they see the source of what they hear on the screen.

But unless we are talking about true diegetic music, which originates on the screen not through a radio but from the actors themselves (e.g. Gene Hackman playing the saxophone in *The Conversation*, Michael J. Fox playing guitar in *Back to the Future*), the musical part of the soundtrack has no (physical) on-screen source. Thus the music track has the ability and the freedom to perform multiple tasks in a film. It is due to this "immateriality", to borrow Jane Gaines's term, that the musical part of the film-soundtrack will receive a special place and a special treatment in this analysis.

First of all, let me point out that the use of music in film as well as its timing and placement is never random, and that even the shortest sting has a clear and distinct purpose to fulfill. For example think of *The talented Mr. Ripley* (1999), the scene when Philip Seymour Hoffman finds Matt Damon posing as Jude Law in Rome. While

Hoffman is bombarding Damon with insults and intimidating questions he constantly hits a high piano key which Damon asks him twice to stop. Of course Hoffman realizes that his act is upsetting Damon which is all the more reason for him to keep going. With every second this scene progresses the tension rises considerably. Hoffman knows that he has Matt Damon on the edge but unlike the audience which knows about Jude Law's fate he is not aware of the danger he is in.

All this tension is caused through the repetitive annoying-sounding high note from the piano.

There are a number of films in which music is used as a kind of leitmotif in order to express the intention of the film as well as set the basic tone for what the audience is about to see. Cole Porter's song "What is this thing called love?" plays over the opening and ending credits of Woody Allen's *Husbands & Wives* (1992) and thus functions as a kind of overall frame for the film. Velvet Revolver's "Set me free", the theme song of Ang Lee's *Hulk* (2003), is another fine example for how music can be used as a framework for a film as well as sum up its basic intention.

Music can also be used to establish one or more characters independently from the visual image. Often the film's protagonist has a musical theme which establishes his/her appearance and action in the film. Once a certain musical theme is established and the audience made the connection that this piece of music stands for a certain character, the musical theme can then be used to foreshadow that character's appearance, thus establishing his/her presence even before the character can be seen on the screen. Danny Elfman wrote musical themes for both, [Batman](#) and the Joker in his musical score for

*Batman*. Once these themes are established, they are constantly used throughout the film. More than once are both themes used to almost substitute the characters' physical presence. The [factory-scene](#) in the beginning of *Batman* is a good example here.

The scene starts out with a piece of a dark, almost threatening music in order to establish not only the overall tone the film takes on in that scene, but also to establish the presence of the villains in the factory. As the Gotham City Police enters the scene, the music becomes a little more dramatic but without changing the tone of the scene. The musical accompaniment remains threatening and dark in its character, with the purpose of expressing that the police lack the power to stop the villains and the crime in progress. This changes with the dramatic appearance of Batman. Now the music changes its character and becomes more dramatic. The overall tone remains dark, but now suspense overrides the threatening element. The music also expresses the apparent change of power-relations at this point of the movie. The Police's appearance did not change the musical accompaniment of the scene, but the appearance of Batman did so without a doubt. Even though our protagonist does not exactly have a lot of screen-time in this scene, the music makes the audience aware of his presence, even when Batman is not to be seen.

The very end of this scene should not be unmentioned at this point hence it marks the death of Jack Napier and the [birth of the Joker](#). Suddenly a hand comes out of the water, accompanied by a brief musical sting that literally seems to say "Witness the birth of the biggest threat Gotham City ever had to deal with"! It is only through the combined effort of cinematography and music that the audience understands the scene. Jack Napier

has somehow survived the drop into the tank full of acid, and the hand that comes out of the water is his.

Music can also be used to establish a certain location in a film such as the “Bat Cave”, the F.B.I. headquarters in *The X-Files* or - and this is doubtlessly the most prominent example imaginable - the “Death Star” and “Star-Destroyers” in *Star Wars*. In this case, the musical accompaniment does more than merely establishing certain characters/locations and articulating the overall tone of the film in this particular scene – it also provides the audience with a certain degree of sonic orientation in order to avoid confusion.<sup>3</sup> There are many films which are disorienting because the particular set might either be too big or not visually distinctive enough from other sets. It is quite hard to make a distinction between the interior of a “Star Destroyer” and the interior of a Rebel battle ship on a visual level. But through the proper use of music (or room tone, see Footnote No.3) this potential confusion can easily be eliminated, which the *Star Wars* films prove admirably.

A third way music is used in film is in a transitional way, i.e., the music track is used to smooth over a transition from one location to another. Often the music that accompanies these transitions also foreshadows what awaits the audience at this new location. Several examples of this method can be found in *The X-Files*. Just by listening to the music that plays over a transition one can foresee whether or not the show cuts to a murder site or to a place where the agents will find answers regarding their case. And as soon as the realm of *The X-Files* gets explored a little deeper, one will find that there is

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<sup>3</sup> Room tone can also be utilized very well for orientation on the sonic level. In *Star Trek: The Next Generation* for example one can find distinctive room tones for crucial parts of the Enterprise such as the bridge, main engineering or the Captain’s quarters.

even a brief musical sting that is used whenever the show cuts to the apartment of its protagonist, Agent Fox Mulder.

This clearly indicates the use of music in order to provide a subtle, yet crucial direction for the audience. Without musical accompaniment it would often be very hard not to lose the overall orientation within a film or a Television show.

As we have seen, the music part of a film-soundtrack is an enormously powerful tool that has a strong effect on what the audience sees on the screen as well as how they perceive the overall film. As a matter of fact, the music part of the film-soundtrack is one of the director's most effective instruments in terms of creating and controlling drama and suspense in their work.

However, this power does not come without a price. Out of the three elements that make up a film's soundtrack, music might be the most dominant one as far as a film's tone is concerned, but when it comes to analyzing how the soundtrack can create, manipulate, and sustain the filmic illusion of reality, it is mainly the sound effects department and not the music that should receive credit.

Sound effects are another very powerful tool in the filmmaker's arsenal, arguably even more powerful than musical accompaniment hence they originate on screen, i.e., the audience can identify the source of the sound in question on the screen. If we hear breaking glass while an ashtray falls down or a window is smashed in the film we watch, we automatically assume that what we have seen was the cause of what we heard. If we see Tom Selleck starting his Ferrari in *Magnum, P.I.* and simultaneously hear the sound

of an apparently powerful engine, we assume that this is what a Ferrari engine sounds like.

But is what we hear really what we think we hear? Does a Ferrari really sound the way we know from *Magnum, P.I.*? Who can say whether or not authentic sounds have been matched with the images we see on the screen? It is from right here in the gray zone between authenticity and the creation of a filmic impression where sound effects draw their power. Sound effects have a unique position in a film's soundtrack. Hypothetically speaking, the sound effects originate on-screen, but there is no absolute way to determine whether or not the action we see on-screen would really produce the sound we hear simultaneously; i.e. we are unable to execute a "reality check", to use the psychoanalytical term. As a matter of fact, it is particularly due to the simultaneous perception of picture and sound that sound effects can be very effectively used/manipulated in order to create not only certain emotions in the audience and drama/suspense in the film as such, but also to create the filmic impression/illusion of reality. Hence we perceive both picture and sound at the same time, we subconsciously (or should I say involuntarily?) connect them to each other and eventually register/perceive them as a unit. This process enables the sound designer to use sound effects in virtually any way imaginable without obviously breaking away too far from authenticity.

With that being said, let us go back to the engine sounds, which are a good example of the many ways sound can be used to add detail and character to the moving picture.

Similar to a certain musical piece, sound effects can be used to express dynamics and power-relations in films. If we look at the work of a car-chase movie veteran such as Hal Needham, the man who gave us *Smokey & The Bandit 1 & 2* (1977, 1980), *Cannonball Run 2* (1984) and the hilarious NASCAR spoof *Stroker Ace* (1983) and pay close attention to the engine sounds we hear, we will observe a notable difference between the engine sound of the hunter (Jackie Gleason's Sheriff's vehicle) and that of the hunted (Burt Reynolds' Trans Am). The protagonist's vehicle will always sound more powerful and dominant than that of the antagonist (unless, of course, the protagonist's being caught is part of the story). Manipulating the sounds of squeaking breaks, screeching tires, and shifting gears is another way to control the pace and dynamics in car-chase scenes. When these sounds are used appropriately, they can trigger the impression that the movement we see on-screen is faster than it actually is. In other words, sound effects are the best way to make a car coming around a corner at a speed of about 10 mph look like 30 mph, if not more.<sup>4</sup>

The chase-scene that follows the first confrontation between the two Terminators, Arnold Schwarzenegger and Robert Patrick is another prime example of creative sound design.

The T-1000 pursues young John Conner (Edward Furlong) in a high jacked truck, while the latter tries to escape on his Cross-Bike. The mere sounds of the two engines could not speak more to the characters they are applied to. We have the all-powerful, life-threatening sound of the truck's engine on the one hand and the rather weak sound of the

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<sup>4</sup> *Smokey & The Bandit* – Sound Designer Ray West won the Academy Award for “Best Sound” for his work on *Star Wars: A New Hope* in 1977.

motorbike on the other. It is almost as if the sound of Furlong's motocross-bike expresses the character's lack of protection from the evil forces that hunt him, whereas the sound of the truck-engine leaves not doubt that the T-1000 will do whatever it takes to terminate John Conner. These power-relations are upheld on the sonic level even after the T-1000's truck has sustained heavy damage, and when judging by its outer appearance is no longer operational. The fact that the truck's engine still sounds all-powerful and deadly not only adds to the drama in that particular scene but also expresses the terminator's unquestionable devotion to his mission.

Ultimately, Arnold appears on his Harley Davidson and rescues Conner from a safe death, which opens up a new power-relation that should probably be compared to that of David and Goliath. The sound of Arnold's Harley Davidson is undoubtedly more powerful than that of the motocross-bike, yet not quite up to the task of competing with a truck, no matter how badly damaged that truck might be. On the other hand the Harley sound hints to a degree of dynamics and flexibility, i.e. the ability to move fast. It does not seem like the Terminator pushed the engine of his Harley Davidson to the extreme and that there is still some power left in order to out-maneuver his evil opponent's monolithic truck.

The intensity of the sound we perceive simultaneously with the image as well as the sound's volume are two key factors that should not be forgotten when thinking about how good sound-design creates and controls emotions.

The sound of gunfire is another good example for this phenomenon. The way a character's gun sounds when it is fired can reveal crucial information about whom we as



the audience are dealing with. Even a brief analysis of the gunfire-sounds we hear in a certain movie can tell us about the general power-relations as well as who are the good guys and who are the villains. Classic Westerns such as Sergio Leone's *A Fistful of Dollars* (1964) is a good example of this. Clint Eastwood's revolver has a somewhat distinct sound that becomes distinguishable among the countless gunfire-sounds we hear. That does not necessarily mean that the protagonist's gun sounds are obviously more powerful than any other gun, but when we listen carefully, it is distinctive. A skillfully operated EQ, a little reverb, and a few adjustments on the attack and release ratio in compression, and every gun can sound different. And in order to keep the movie-going experience as entertaining and interesting as possible, every gun must have its distinctive, individual sound. James Bond is virtually defined by the sound of his Walter PPK, as is the case with Clint Eastwood's 'The Man with no Name' and his Colt Peacemaker. Also, there are a number of movies in which a wide range of different guns is used, and all these guns have to have an individual sound. In *Terminator 2 – Judgment Day* (1991) we get to hear and see almost every handgun ever made, and they all sound special and characteristic. The sound of Linda Hamilton's Sniper Rifle is no less powerful than that of the Terminator's shotgun – which is only accurate – yet it still reflects the character of the gun. The Sniper Rifle's sound, when compared to a shotgun is less confrontational and threatening, yet it has a strong lethal and effective tone to it. And the fact that the volume of the rifle-sound is less loud than that of the shotgun reflects only its nature, which is to remain a certain distance from the target. The rifle sounds more precise, and thus less powerful/confrontational. The Terminator's shotgun is the exact opposite. The

shotgun's sound is almost as confrontational and threatening as is the Terminator's outer appearance. If we listen to this sound carefully we will find even more details that define the character of the Terminator. The short-range-explosion/impact sound of the fired shotgun mimics the Terminator's rather direct approach to complete its mission. As a machine made for combat, an infiltration unit, the Terminator will always minimize the distance to the acquired target before it strikes, an aspect that echoes throughout every shotgun-blast Arnold Schwarzenegger will ever fire – Hasta la vista, Baby! The following [audio-clip](#) is from the first confrontation of the two Terminators; note the distinct sounds of their guns and how these distinct sounds perfectly describe their users.

Sound effects can add a lot to the way certain characters and locations appeal to the audience. Sound effects can control and trigger emotional reactions, and sometimes even convince us to see things that aren't really there. Sound effects can even make an image 'look more interesting', for the lack of a better term. Whenever the [T-1000 shape-shifts](#) into another person or repairs itself by taking a semi-liquid form, it is the sound effects that literally sell the scene. Another example would be Paul Verhoeven's science-fiction vigilante fantasy *Robocop* (1987). We are at the Detroit Police Department and suddenly we hear an electric humming that is getting louder. We hear some sort of hydraulics at work, which in combination with the humming leads the audience to suspect some form of machine to appear. But then we hear those heavy, metallic footsteps, and as soon as the background music comes in and the camera starts to move, we know that our hero has just arrived. One could almost speak of sonic foreshadowing<sup>5</sup>

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<sup>5</sup> One of the most prominent examples of sonic foreshadowing might be the artificial breathing of Darth Vader in the *Star Wars* films. [Darth Vader](#) gets introduced through the sound of his characteristic breathing

in this special case hence this is how the audience gets first introduced to [Robocop](#). The camera does not reveal Robocop until later in the scene. But when we finally get to see Robocop, he is every bit as impressive and powerful as we expected from the sounds we heard. And the sound of Robocop's special [handgun](#) characterizes the character as brilliant as the shotgun blast describes the Terminator.

What is also interesting about this particular scene is that the characters on-screen and the film audience share this moment of confusion and expectation, hence Robocop, who walks behind a wall that separates the precinct, cannot yet be seen by either party. In other words, we as the audience are as much confused as the actors we see on-screen, a fact that only fuels the dramatic moment of Robocop's revelation. The following audio-clip is taken from a scene in which Robocop undergoes a basic [system-check](#) after having arrived at the Detroit PD.

Paul Verhoeven's *Robocop* is another prime example for innovative sound design<sup>6</sup> but also for the thin line between credibility and drama that the Sound Designer walks on. Sound effects are often exaggerated for dramatic (or in some cases comic) purpose, but they still have to be credible. Let us go back to the sound of Robocop's footsteps. This sound is clearly one of the most memorable elements in the entire movie, and when one thinks of the character Robocop later, the sound of his footsteps will most likely be the most dominant memory. Nevertheless, if one judges strictly by the sound effects the audience hears prior to seeing the metallic protagonist, some of them might

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prior to his physical appearance on the screen on numerous occasions throughout the entire original movie-trilogy.

<sup>6</sup> The sound team for *Robocop*, Michael J. Kohut, Aaron Rochin, Carlos DeLarios and Robert Wald was nominated for the Academy Award for "Best Sound" in 1987.

actually have expected something bigger than a six foot cyborg. Thus the sound effects clearly work in the way of characterization of the protagonist, but nearly fail in terms of credibility, especially when comparing Robocop to his metallic opponent, the ED-209 robot.

When we think about this thin line the Sound Designer walks on, we should undoubtedly take the aspect of different genres into consideration. The audience expects certain sounds from certain genres, a fact that can serve as a basic guideline in terms of how far the Sound Designer can push the border between credibility and drama. Fulfilling the audience's expectations is thus another crucial aspect of sound design.<sup>7</sup> We have already seen how sound can enhance the quality of the image, which vice-versa means that bad sound can diminish the quality of the image. Certain genres call for certain sounds, and depending on the genre there is either room for creative exaggerations on a sonic level or not. Let's take Blanche DuBois' final, brutal confrontation with Stanley Kowalski in Elia Kazan's outstanding screen-adaptation of *A Streetcar Named Desire* (1951) for example. The sound effects effectively enhance the graphic violence in the images we see and hint at those we don't see, but that would not be the case if they were less or even more brutal and violent.<sup>8</sup> Not only would that distort the relationship the audience establishes with the characters (especially Stanley) but it would also be somewhat unfaithful to the original source of the movie, i.e. the play.

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<sup>7</sup> It should also be mentioned here that the audience's expectation can often differ quite considerably from the director's vision/intention.

<sup>8</sup> Sound Director Colonel Nathan Levinson received an Academy Award nomination for "Best Sound" for his work on *A Streetcar Named Desire*.

Generally speaking it is the Sci-Fi and Action genres that offer the most creative freedom for sound design for the simple reason that it is mainly in those categories that we can see things that are either completely fictitious (e.g. a lightsaber) or things that the regular person does not know much about. Let us take a quick look at some sound effects in John McTiernan's fabulous *The Hunt for Red October* (1990)<sup>9</sup>. How many people have ever been in a sub-marine? How many people know the sound of a torpedo being launched from the shaft? These two questions become serious issues in terms of sound design. The sound effects have to be credible to the extent that the audience believes that this is what a sub-marine (and a torpedo) sounds like. Also, the sounds must have the potential to create drama on a sonic level without taking away from the credibility / authenticity element.

In order to create a dramatic, yet credible torpedo sound for *The Hunt for Red October*, the following sounds were combined: a speedboat coming and going, a Ferrari, animal screeches and growls, bubbles, a motor scooter, a screeching screen-door spring, and the sound of water rushing through a garden hose into a pool. These sounds were mixed together and processed and used as an explosive element for the initial compressed-air release.<sup>10</sup> This is just one example of what creative sound design holds in store – combining pre-existing sounds in order to create something new/imitate something that is unknown to the average movie audience.

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<sup>9</sup> *The Hunt for Red October* was among the top grossing films of 1990, further establishing McTiernan as a serious action director with a great interest in sound (as proven with his earlier films *The Predator* & *Die Hard*). *The Hunt for Red October* also earned supervising sound editors Cecelia Hall and George waters II the Academy Award for “Best Sound Effects” in 1990.

<sup>10</sup> Information taken from [www.filmsound.org/articles/redoctober/htm](http://www.filmsound.org/articles/redoctober/htm)

That does not mean that sound is any less important in any other genre. However, it is these two special genres that rely more on sound effects than e.g. a serious drama.

*The Empire Strikes Back* and *American Beauty* are both masterpieces of cinema, but the latter does not rely as much on innovative, progressive sound design than the former.<sup>11</sup>

The aspect of credibility can thus be seen as a kind of safety-line for the Sound Designer when approaching a project. The soundtrack's intention is to enhance the graphic image, not to overplay or ridicule it. If the sounds do not fit the picture it will diminish the movie-going experience. The film is unable to pull the audience into its own world if the sounds give it away as just an illusion because they do not fit the picture right. Credible sound effects are thus a key aspect in terms of creating and maintaining the filmic illusion/depiction of reality.

Another aspect that the Sound Designer has to keep in mind is to always leave enough room for the music track and, above all, the dialogue. The dialogue track will always be the most important element in the film-soundtrack; no matter how innovative and dominant music and effects are, the film audience will always focus primarily on the spoken word and treat music and effects as secondary. Even in the Sci-Fi and Action genre, where one can find a truckload of true pearls of trivialized dialogue (the *Terminator* & *Rambo* movies immediately come to mind), the average audience will still pay primary attention to the dialogue track.

The very nature of the music- and the sound effects-track is to accompany and enhance the visual image, as well as creating atmosphere and characterize certain

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<sup>11</sup> *American Beauty*' sound designer Richard Van Dyke was nominated for "Best Sound" by the British Academy Awards in 1999.

elements in the film. But these two tracks were never meant to be playing in the foreground because that would misdirect the audience's attention away from the dialogue track and that would only lead to confusion, and ultimately frustration.

Not only is the dialogue the most important aspect of the film-soundtrack, but also the key characteristic of the sound-film per se. Films were shown with musical accompaniment (what Chion calls *pit music*) for decades before the coming of sound. Also, the music that accompanied the film was often composed and arranged particularly for the film in question. The Criterion DVD release of Dziga Vertov's classic *The Man with the Movie Camera* (1929) for example features a soundtrack that was composed under explicit instructions by Vertov himself. One can even find a very early version of sound effects long preceding dialogue when looking at soundtracks that mimic the action on the screen from that angle. If we take the musical accompaniment to Walter Ruttmann's *Berlin: Die Sinfonie der Großstadt* (1927) into consideration we will find that almost every movement we see on-screen is resembled by the musical accompaniment (the staccato fiddles mimicking the speeding locomotive are just one case of many). And when music and image are perceived simultaneously, Chion's concept of *synchresis* applies and the audience accepts (and appreciates) the musical accompaniment (the staccato fiddles) as a worthy substitute to the original (yet absent) sound of a locomotive running at high speed.<sup>12</sup>

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<sup>12</sup> Unfortunately the original score to this great film has been lost; it would be fascinating to know what it is like. What I am referring to is the musical score written by Timothy Brock for the Kino edition of *Berlin: Die Sinfonie der Großstadt*. Brock also wrote a musical score for F.W. Murnau's *Faust* (1926) and for Robert Wiene's monumental *Das Kabinett des Doktor Caligari* (1920).

John Ford's *The Informer* (1935) is another interesting film in this regard.

Although this film was made after the movies learned to talk, it still makes use of music where one would normally expect foley sounds. Early into the movie there is a scene in which Gypo Nolan lights a match on a lantern post, but instead of putting the appropriate match ignition sound to the image, a brief musical sting was used in order to mimic the ignition process.

However, it was not until the movies learned to talk that people spoke of sound-film and soundtrack. And ever since its birth, the dialogue track has become the alpha-element of the film-soundtrack. During production, the primary focus of the sound department is to record the dialogue in the best quality possible. Sound effects are treated as secondary and will always be neglected for the sake of the dialogue track (especially when shooting on location). Even when principal production is over, the dialogue remains the key element around which everything else in the sound-department revolves. No film will ever sacrifice the quality of the dialogue track for the sake of an effect or a piece of music unless this is the specific intention of the director and the sound designer. The sounds of a train or a car driving by can be used to lay over the dialogue track in order to create suspense in the audience (for example character A just told character B a secret, but the audience couldn't hear it because a car was driving by and the engine was too loud to understand what was being said). Films that deal with issues of surveillance and sounds, such as Francis Ford Coppola's *The Conversation* (1974), Brian DePalma's *Blow Out* (1981) and Tony Scott's *Enemy of the State* (1998) are prime examples of these techniques.



The last aspect I want to mention before concluding this chapter is the quest for authenticity/suspension of disbelief regarding the dialogue track. Not only does the dialogue have to fit the characters that perform the dialogue, but also the situation the characters are in. The voices we hear have to match the characters appearance in order to be credible as well. For example, how much of a threat would Darth Vader be if he had the voice of Jim Carrey?<sup>13</sup> Or let us take a look at HBO's critically acclaimed series *The Sopranos*. In order to portray his role as Tony Soprano as credibly as possible, actor James Gandolfini works with dialogue coach Susan Aston ever since the series started.

But it is not just the way the dialogue is delivered but also how well the dialogue track fits into the overall scene in terms of volume and quality. For this case, let us look at two similar scenes from Woody Allen's *Annie Hall* (1977) and *Anything Else* (2003).

About ten minutes into *Annie Hall* there is an extremely long shot in which Woody Allen and Tony Roberts walk down the street heading for the movie theater where Woody Allen is supposed to meet Diane Keaton. (The "Big Sale on Wagner" scene) This scene is essentially dialogue-motivated hence the camera remains completely steady on the street corner, almost like a surveillance camera. And even at the closest distance, the camera is not close enough to reveal the actors' lips when they talk. It is thus safe to assume that the dialogue for this scene was either taken from another take at closer range, the actors wore wireless microphones, or the dialogue was later added through A.D.R. But regardless of the method of capture used, it is the result that counts,

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<sup>13</sup> For *Star Wars: Episode I – The Phantom Menace* (1999) George Lucas actually replaced the voice of Ray Park, who plays Darth Maul, with the voice of Peter Serafinowicz in order to make the character of Darth Maul even more threatening. Actually, the character of Darth Vader is a similar construct combining the voice of James Earl Jones and the body of David Prowse in order to create arguably the most sinister threat the Sci-Fi genre has ever seen and heard.

and in the case of *Annie Hall* the result is admirable. Naturally, the dialogue is the most dominant element, but the background noises, such as passing cars and other ambient city sounds are at a louder level than one might initially expect. Also, the ambient sounds remain at a constant volume level whereas the dialogue track volume increases very subtle as the actors get closer to the camera.<sup>14</sup>

The ambient sounds clearly establish not just the basic scene as being set in the crowded and loud environment of Manhattan (on-screen and off-screen), but also the position of the camera at this time, and even of the audience that sees what the camera sees. The camera and the audience are located at a specific place and remain static; and all this is suggested by the ambient sounds which remain at a constant level and do not show any noticeable variations that might suggest a switch to another location/position.

And into this ambient sound blends the dialogue track, which sounds dynamic and natural, and thereby hinting either to good location sound recording or a very talented individual behind the mixing console. But whichever method was used, the result sounds so convincingly real that the average audience would never start questioning the movie's portrayal and presentation of reality.

Unfortunately the same cannot be said about the scene in *Anything Else*.<sup>15</sup> The ambient sounds are too far turned down to suggest that this scene is set on the streets of Manhattan on a sunny day. It is far too low to blend successfully with the dialogue track

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<sup>14</sup> In order to further simulate the distance between the actors and the camera a slight reverberation effect might be added to the dialogue track that diminishes as the actors get closer to the camera. This method would also allow keeping the dialogue track at a constant level, which would be an equally effective, yet even more subtle method to sonically suggest the diminishing distance between the camera and the actors than the up-fading volume on the dialogue track.

<sup>15</sup> I will spare you the summary of what happens in this scene for it is basically just a slight variation of the theme established in *Annie Hall*.

to be taken for a conversation on the streets of Manhattan. Also, the dialogue track sounds too clean and controlled to make one believe that what you hear and what you see was recorded simultaneously. This dialogue was clearly recorded in the controlled environment of a sound-studio or a sound-stage, even the crème de la crème of wireless microphones would have captured more ambient sounds than one hears in that scene. It is just too obviously a construct of different elements recorded at different times and in different environments to be taken for a unit.

If *Annie Hall* is the example how to do things right, *Anything Else* is its complete opposite. Due to its superior volume and recording quality of the dialogue track, the witty, philosophical conversation between Woody Allen and Jason Biggs fails to lure the audience into the movies' world.

When it comes to judging how close to reality the reality presented in a film has come, the soundtrack's quality (or lack thereof) can be a very important factor. Let us take a film like *The Blair Witch Project* (1999), a low-budget, High 8/B&W 16mm film presented as a straightforward documentary that turned out to be among the top-grossing films of 1999. This is a carefully structured film in which the shaky, hand-held camera takes the audience right in the middle of the action and reflects the characters' state of mind, fear and confusion through its rapid movement and (purposefully) unprofessional handling.<sup>16</sup> This method works quite effectively and thus the boundaries between fiction and reality, movie and audience dissolve almost completely in *The Blair Witch Project*.

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<sup>16</sup> A similar, yet far less radical approach towards the camera's quest to reveal the characters emotional state can be found in Woody Allen's *Husbands & Wives* (1992) and *Deconstructing Harry* (1997).

Nevertheless, the film's soundtrack is a different story. When looking at the sonic level, it becomes far more obvious that what the audience initially perceives as an unexpected event that no one could foresee is actually a carefully designed concept that takes its power primarily from the unsteady graphic image and employs the soundtrack to basically hold the string of shaky shots together and add some consistency to the movie. But then again there is such a strong use of sounds in *The Blair Witch Project* in terms of creating suspense and suggesting the presence of something unseen, yet highly dangerous creature. Even before the characters in the movie find strange artifacts hinting to the "Blair Witch" the presence of a hostile entity is clearly established on the sonic level through horrific sounds that the characters hear outside their tents in the pitch-black night.

*The Blair Witch Project* owes a lot of its success to the sound department, maybe even more than to the cinematography. One should also note that whereas the sound department for this film consisted of a total of ten people<sup>17</sup>, Neal Frederickson is the only person credited for cinematography.

One might argue that the soundtrack for *The Blair Witch Project* is of far too good quality to be taken as fully authentic when compared to the image, but then one should also assume that if that film had been any more extreme it would not have been such a big success.

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<sup>17</sup> Five of those ten people are uncredited in the film's end credits, among them the sound effects editor, the foley mixer and the dialogue editor. It can be assumed that these people were not mentioned in the credits in order to further sustain the impression that this film is an actual document of what happened on this one tragic night...

The right mixture of the elements that make up the soundtrack is crucial for the creation of an artificial (filmic) reality, and as we have just seen this principle applies equally to all three key elements, dialogue, music, and sound effects. It would be unwise to favor one over the other. Also one should not separate these three elements from each other unless for the purpose of analysis.

In conclusion to this chapter I would like to point out that there is a noticeable difference between film's ability to record life and the ability to create an individual version of reality. Film might have been able to *record* life from the moment it was invented, but only through the coming of sound has film gained the ability to *create* a life of its own: an individual, filmic reality that does not primarily attempt to represent the actual reality as accurate as possible, but rather create a world of its own that happens to bear a more or less close resemblance to what the audience calls reality.

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## **2. Dreams, Sounds, Hallucinations**

The depiction of dreams and hallucinations/delusions can be found throughout almost the entire history of film, from *Das Kabinett des Doktor Caligari* (1920) to *Psycho* (1960) and *Deconstructing Harry* (1997), however it is the late 1990s that stand out as the period in which the ongoing wave of what can be called “What is Reality” films emerged quite fruitfully in both the drama and the Sci-Fi genre and produced riveting results. Spike Jonze’s *Being John Malkovich* (1999), for example, won “Best Film” at the National Society of Film Critics. In the same year, the Wachowski brothers’ *The Matrix* was among the top grossing films, making an impressive \$171.38 million at the Box Office. A third crucial movie of the same year is David Fincher’s *Fight Club* for which Sound Designers Richard Hymns and Ren Klyce received an Academy Award Nomination.<sup>18</sup>

Contemporary film theory has not overlooked these films and this emerging genre for the material proves to be highly interesting on a number of different approaches, from an analysis of the individual editing pattern up to pure theoretical concepts such as philosophy, psychoanalysis and semiotics. And it is especially the latter group that has so far overlooked the importance of the film-soundtrack in their perception of film. Film theory has been too vision centric and failed in acknowledging that ever since the coming of sound film is a unit, a compound of picture and sound, and every analysis should emphasize that for the soundtrack is of equal importance as the visual image. Slavoj Žižek is one of the few who realized this and meditates on sound following the work of

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<sup>18</sup>Three other films that should not remain unmentioned are Cameron Crowe’s *Vanilla Sky* (2001), Christopher Nolan’s *Memento* (2000) and Michel Gondry’s *Eternal Sunshine of the Spotless Mind* (2004).

Michel Chion in Looking Awry: An Introduction to Jacques Lacan through Popular Culture. But instead of treating the soundtrack as a whole and thereby treating all of its elements equally, Žižek puts his main emphasis on the dialogue track and excludes sound effects and music from his thoughts as he talks about *la voix acousmatique* and the concept of *desacousmatisation* in the films of Alfred Hitchcock and George Miller's *Mad Max 2 (The Road Warrior)* (1981).

Even though Žižek's analysis of the soundtrack may not be complete, it still demonstrates that, just like the visual image, the soundtrack of a film can be analyzed following a semiotic or psychoanalytic approach, an examination that will prove most fruitful.      [Back](#)    [T.O.C.](#)

## **2.1 Dreams & Movies**

In regards to the inclusion of sound, both film theory and dream interpretation are apparently hindered by a common lack of vocabulary. One cannot express an impression, a feeling, or a sound if the proper vocabulary is not available. Sigmund Freud applied this problem to the interpretation of dreams and realized that there is a clear distinction between (1) what we dream and (2) what we are able to put into words in order to describe our dream. Michel Chion - much in the fashion of his fellow countryman Christian Metz - went one step further and created a wide range of terms in order to define various elements and aspects of sound and the film-soundtrack, thereby enabling other scholars to follow in his footsteps into the analysis of film-sound.

It is my belief that most films that fall under the 'what is reality' genre can fruitfully be analyzed if we perform our very own little *traumdeutung* in light of the strong dream/hallucination-element these films hold in common. For example, more than two thirds of *Eternal Sunshine of the Spotless Mind* are a depiction of the protagonist's dream, and Cameron Crowe's *Vanilla Sky* is the depiction of the protagonist's lucid dream from the first to the last frame. But first of all, how does film depict and illustrate dreams, illusions, and other products of imagination in the first place? How does the film indicate where one level of (filmic) reality ends and another begins? How blurry can the line between reality and dream become, i.e. how easily should the audience be able to recognize the transition between dream and reality? And finally, how does one describe the difference between a dream and a nightmare?



It is exactly here where film's twofold nature becomes important. The transition between two levels of filmic reality will always happen on both the sonic and visual level, but that does not mean that the transition is always happening simultaneously. Starting the transition with the soundtrack first and delaying the visual transition for a few seconds actually appears to be the most common method that can be found in both, film and Television.

Let us take the opening of *Apocalypse Now* (1979) for example. The audience is confronted with two levels of reality here, namely (a) the Saigon Hotel where Martin Sheen's character has taken quarters (established mainly on the visual level) and (b) the Cambodian jungle where Sheen's mind still appears to be and dreams of returning (established through sound effects like gunfire and the helicopter rotor sounds). The disparity between what we hear and what see in this scene can thus be seen as a metaphor for the protagonist's current state of mind. Captain Willard is disconnected from the world around him. He probably had a traumatic experience in the jungle, an experience his mind cannot let go of. Through the concept of *synchresis*, the sounds Willard seems to hear in his imagination can be regarded as expressions for his mental state and thus enable the audience to further understand and identify with the character of Captain Willard.

*Fight Club* is also quite interesting regarding reality-transitions in film. In one of the earlier fight scenes we see Tyler Durden - who is in fact the unnamed protagonist's hallucination/alter ego - in battle with another man while the voice-over narrator informs us that after a fight he feels safe and enlightened. The film then cuts to a close-up of

Edward Norton's character watching the fight and all of a sudden we hear Buddhist Monks [chanting](#). At this point in the film, this sound would be called *non-diegetic sound* hence there is no visible on-screen source and it seems the chanting was added into the scene for dramatic effect. Not only was this chanting used to illustrate the protagonist's state of mind but also to play over the transition to a new scene displaying the life of Norton's character outside the Fight Club and when he does not hallucinate about Tyler Durden. Given that the way we/the camera saw things the way Norton's character imagined them to be, i.e. him watching Tyler Durden fight from a distance whereas in reality he was fighting himself and merely hallucinating to be Tyler Durden, we shall consider the fight scene a different level of filmic reality than the following scene. And if the fight scene does in a way qualify as a dream-sequence, then the chanting could be an integral part of this dream. If so we would have to reconsider our initial definition of the chanting as *non-diegetic sound* because now - from a certain point of view - there is an on-screen source for the sound effect. It would also allow us to articulate that this dream has ultimately been a good dream for the protagonist hence it gave him the power to better deal with regular life (as becomes obvious in the latter scene).

Michael Mann's *Manhunter* (1986) is another great example for the use of sounds and music to switch between the (filmic) reality of the characters and the world of the protagonist's dreams and visions. The scene when Graham falls asleep on the plane while studying the case file and photos of the Tooth Fairy stands out in particular. As Graham falls asleep he escapes the dark and brutal world of his investigation and slips into a romantic dream about his wife and idyllic Florida Keys home. The scene on the plane is

rather dark and thus stylistically goes well together with the cruel photos whereas the dream sequence is very bright and inviting. The dream sequence gains even more poetic character (Bill Nichols' use of the term) through the use of slow motion however the most effective element here is the use of sound/music. It is the music that enables the audience to clearly identify Graham's dream not only as a dream per se, but also as an expression of his desire to return to his life away from the F.B.I. and the Tooth Fairy. It is the music that makes the contrast between Graham's dream and reality complete. Sound Effects also play an important role here due to the clever way the effects are used in the two levels of filmic reality. The plane scene is filled to the rim with a cornucopia of sounds whereas the dream sequence has no sound effects at all and relies completely on the music track. On the first look one might just argue that all these sounds only add to the realism of the airplane scene for the sounds give the audience a fair idea of what is going on around Graham. In other words, the sounds create off-screen space and hint to the presence of other people on the plane which the audience does not see. But when put against the dream sequence that immediately follows, the sound effects in the plane scene have yet another purpose. It is through the sound effects that the film portrays the protagonist's feelings and state of mind. The scene is loud. We hear the engines humming quite loudly, we hear other passengers chatting and hear clothes rattling. It is obvious that Graham would rather not be on that plane right now. He does not want other people around him, especially children. He is trying to get into the mind of the Tooth Fairy killer to put an end to his reign of terror. But then again he would rather not be involved in the investigation in the first place, which only fuels his desolate, frustrated state of mind.

Graham's mental state, his fear and his haunting ability to make himself think like the killer he is after, all these elements find expression through the soundtrack. And when the dream sequence begins and Graham is at peace with himself for the time being, the soundtrack reacts to that and suddenly, all those annoying sounds from the airplane are gone as his dream reunites him with his wife. The contrast between the situation Graham desires and the situation he is in right now finds much stronger expression on the sonic level than on the visual level. Whether or not the camera would have been able to describe and present Graham's state of mind as accurately as the soundtrack is of no real importance for we are looking at a compound of two elements here, the image and the sound. In the case of the airplane/dream sequence in *Manhunter* the visual and the sonic element contribute to one another in order to give the most accurate description of the film's main character. One could furthermore state that in the first half of the discussed sequence the soundtrack plays a more important role in terms of expressing the way Graham feels, whereas in the second half, the actual dream sequence, the visual component steps into the foreground in order to show Graham's craving for peace of mind.

Much like music and sound effects, voices/dialogue can be used to prelude a transition between two levels of filmic reality with equal effectiveness. When looking at this method one will find that with almost no exception the voice/dialogue track that prepares the transition always originates off-screen, or to put it in Chion's terms, the voice(s) the audience hears does not reveal its bearer and is thus *acousmatized*. The disembodied voice does not only confuse the audience because we do not know where it

is originating from, but also because one can never tell whether or not the voice a character in a film (and thus the audience as well) is a product of that particular character's imagination or a real existing person who is just not seen in the frame. And if the first scenario is the case, then one would have to take the specific character's mental state into consideration for the voice he or she hears could be part of a hallucination caused by mental problems.

Sam Raimi's *Spider-Man* (2002) employs this technique as Willem Dafoe first hears the voice of the Green Goblin. Note that at this point the audience has not yet seen the Green Goblin. They can only assume that Willem Dafoe's lab accident, his amnesia, and the elimination of his business competition are somehow connected. And then suddenly Dafoe starts hearing the scary, disembodied voice of the Green Goblin, and neither he nor the audience knows whether or not this voice really exists in the reality of the film or in the mind of Willem Dafoe's character. Later in the scene it becomes clear that the Green Goblin is an unexpected by-product of the lab accident and has since become Dafoe's alter ego, controlling him at will and without any restrictions.

Another possibility would be that the voice/dialogue in question originates in the character's dream and leaps over to another level of filmic reality in order to signal an upcoming transition between filmic realities. The *Star Trek: The Next Generation* episode *The Battle* is a good example for seeing this method at work. There are several dream sequences in this episode which all follow the same basic scheme of seeing Patrick Stewart asleep in his bed and then suddenly the audience hears voices that seem to be part of Captain Picard's dream. It is not hard to recognize that the Captain is having a rather

intense nightmare, but what is really interesting is that the visual transition to the depiction of his dream is delayed by several seconds. This apparent contrast between the terrified screaming from the dream and the calm, peaceful image of sleeping Captain Picard is quite powerful as it emphasizes the Captain's current state of mind in a manner similar to the already discussed *Apocalypse Now*.

What also calls for attention in our analysis of these two examples is that neither the voice of the Green Goblin nor the voices from Captain Picard's dream have been altered or modified. Taking the most common clichés and stereotypes regarding film sound into consideration, it would be reasonable to assume that the Sound Designer added a lot of reverberation or pitch shifting to the voicetrack in order to make it more obvious that these voices are not real. Not only is the departure from those stereotypes admirable, it also suggests how thin the border between dream, nightmare and reality in film and Television can sometimes be. In this respect Michel Gondry's magnificent *Eternal Sunshine of the Spotless Mind* is quite remarkable for there is literally no way to distinguish between Jim Carrey's real life and his dreams on neither the sonic nor the visual level. What the audience sees on the screen is mostly the perspective of Jim Carrey's character as he is in his mind, which makes the film's reality the product of Carrey's memory. In other words, the audience perceives the film in the way Carrey's character saw and heard what we see now, which explains the film's particular look and sound. *Eternal Sunshine of the Spotless Mind* might thus be the truest form of depicting a character's life hence it depicts the world of its protagonist in the way he himself perceives it. The film also reacts to the protagonist's mood swings in a very subtle way,

however never taking it over the top and always putting the brilliant performances of Jim Carrey and Kate Winslet in the foreground. Their confusion, their fear, all their emotions get reflected through both cinematography and sound. Unlike the films discussed earlier, one cannot clearly identify certain sounds representing certain emotions and impressions in Gondry's film. All the elements that make up the soundtrack for *Eternal Sunshine of the Spotless Mind* blend together so well that one cannot name one aspect that stands out. Neither is it possible at this point to accurately describe the mechanism how music, dialogue and effects are brought together to produce such a riveting result. Maybe in time when contemporary film theory will become more open to the sonic component of film this task will be completed, but for now let us turn our attention to another aspect of the film-soundtrack in the attempt to explain how the soundtrack works.

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## **2.2. Philosophy & Sound**

At the beginning of “Plato’s Pharmacy” Jacques Derrida states that “A text is not a text unless it hides from the first corner, from the first glance, the law of its composition and the rules of its game. A text remains, moreover, forever imperceptible” (63).

It is my opinion that one could easily substitute “text” with “soundtrack” without changing the accuracy of Derrida’s statement. One could even go so far as to say the soundtrack does an even better job at hiding the law of its composition than the text. Why? Because unlike the words that make up a text, the individual components that make up a sound cannot yet be written down and graphically illustrated. We have an alphabet through which we can capture words by writing them down. Words like “water” or “music” exist in every language. However, we cannot graphically display a certain sound such as footsteps in the snow accurately enough so it would be possible for a random person to identify that sound by looking at its graphic display. We cannot look at a waveform displayed in an audio-editing program such as Pro Tools and recognize it as footsteps in the snow. We can recognize the rhythmic pattern of the steps, we can see where and when the levels of the sound peak which gives us an idea about the sound’s dynamics and intensity, but we still cannot identify any characteristics that could be used to define the sound in question.<sup>19</sup>

If we now think back to the beginning of this chapter we will see that the communication-problem sound suffers from is going even deeper than we initially

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<sup>19</sup> This problem has its strongest effect on the ‘sound effects’- element of the soundtrack. A musical piece can be graphically represented in notes and its basic characteristics can be defined through its rhythm (e.g. Tango), its key (e.g. A major) and through brief explanatory instructions like “moderato” or “fortissimo”. The sound effect lacks even that small comfort. It would be of no help to us if we knew the rhythm and pitch of our footsteps in the snow.



thought. Not only are we facing a lack of vocabulary for analyzing the film-soundtrack, but we also lack the ability to properly display the sounds we analyze. If, however, those conditions existed, if one could graphically display sounds and still maintain a high enough transmission of information (as it is the case with words representing objects), it would be safe to assume that people would remember everything they perceive with much greater detail. And they would probably remember their dreams in greater detail as well, which could push the interpretation of dreams to a whole new level.

Back to the game we call soundtrack. It is a tricky game as we have learned. But that should not stop us in our analysis – we should rather be challenged by the game's difficulty.

Let us take a closer look at the rules of the game. What are those rules that the soundtrack must follow in order to trigger a specific emotional reaction in the film-audience? How and why does a given sound prompt an emotional reaction? These are both questions that can only be answered by looking at the way we perceive a certain sound. I also think that the best course to find the answers we seek is to investigate the rich realm of sound design and sound effects in the Sci-Fi genre. If we look at a film like *X2* (2003), we will find a lot of strange things going on onscreen, things that sound even stranger than they look. There is a blue woman with the ability to shape-shift into any person she wants at will. There is a blue guy who can teleport from one place to another. And there is a third guy with the ability to control metal. Three people with three very unique mutant abilities, abilities that once shown onscreen have to have credible sounds

to go along with the image. But what does something that doesn't exist sound like, especially when what the film shows us does not exist in real life like mutant powers?

This question does not concern the accuracy but rather the sound's characteristics that make it sound alien to us. What we don't know is alien to us just as what we have not heard sounds alien to us. That means when Sound Designer David Lee created the sounds for the X-Men's mutant powers, he had to put together something that literally sounds mutant and alien.<sup>20</sup> For a task like that there are two basic solutions, namely (1) creating new sounds from scratch and (2) altering pre-existing sounds to the extent that nobody will recognize them for what they were.<sup>21</sup> In each case Chion's concepts of *added value* and *synchresis* will apply and the audience perceives Lee's low-pitched, metallic sound effect as the shape-shifting of Mystique. This sound effect also bears a very close resemblance to the sound we hear as the T-1000 changes its appearance or repairs itself in *Terminator 2*. This similarity can be justified hence (1) both films belong to the same genre and deal with similar characters and situations, and (2) both characters undergo the same basic process as they change their appearance. One could, of course, argue that even though the process of shape-shifting is the same, there should still be a sonic difference for one character is a robot and the other a living creature, but then one should also consider that the sounds we are talking have probably never been theorized or conceptualized. The sound effect reacts to the action/motion on-screen, which in both cases is a fluent movement without any tempo-changes. One should not apply a reality-

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<sup>20</sup> David Lee also did the Sound Design for the Wachowski's *The Matrix* trilogy. His Sound Design for the first *The Matrix* won him the Academy Award for Best Sound in 1999.

<sup>21</sup> A good example here is the sound effect Ben Burtt created for the Tie-Fighters in *Star Wars*. What the audience perceives as the engines of a combat spaceship as actually a radically altered elephant blow.

check to sounds that do not exist in the real world for it would provide no valuable information. Maybe these sounds should rather be regarded as texts in Derrida's sense. The shape-shifting sound works in perfect harmony with the image in both films and thanks to the concept of *added value* the T-1000 and Mystique are two of the most impressive characters the Sci-Fi genre has given us in the past two decades.

Even though a text might be forever imperceptible, we still succeeded in gathering valuable information regarding the rules of the game we call the soundtrack.

The first rule is that the sound effect's prime directive in film is to enhance the image. Unless done intentionally<sup>22</sup>, the soundtrack will never contradict the image. Nor will the soundtrack ever try to overplay the image. The second rule is that a sound effect will always mimic and follow any motion of the image it accompanies. Furthermore, the sound effect will reflect the dynamics of the image as well as its intensity. Thus a number of sound effects in the Sci-Fi genre have a somewhat fluent, moving bouquet.

The third rule is that in case a sound effect is supposed to create the impression that something is alien or futuristic it has to sound unlike anything the layman associates with reality. Characteristics of those sounds are low pitch and a somewhat metallic quality.

Although these rules were uncovered by examining the Sci-Fi genre in particular, they still apply to other genres as well. For example, let us take a look at Terry Gilliam's *Fear & Loathing in Las Vegas* (1998), a film filled to the rim with all sorts of strange sound effects in order to depict the drug-inflicted hallucinations and altered state of mind

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<sup>22</sup> George Kuchar's *Kettle Mutilations* and its off-beat, contradictory use of musical stings springs to mind.

of its two main characters. Similar to *Eternal Sunshine of the Spotless Mind*, the sound effects in *Fear & Loathing in Las Vegas* do not reveal their modus operandi to us, which makes an in-depth analysis a difficult task. On the other hand, the nature and topic of this film is probably as alien to a wide range of people as is a blue-skinned, shape-shifting woman. In other words, how many people can tell whether or not LSD or other hallucinogenic drugs alter the way we hear as is shown in Gilliam's film? How many people do remember sounds from their dreams at all? It is through this (assumed) unfamiliarity with the subject that Sound Designer Jay Meagher and his staff had the freedom to create a wide range of peculiar sound effects for the protagonists' acid trips.

Again, one should not be concerned about realism and accuracy at this point. One should rather note how well Meagher's sound effects go together with Nicola Pecorini's camera work, how sound and image are successfully combined to show the audience something most of them will never experience.

Guy Ritchie's directorial sophomore effort *Snatch* (2000) with its incredible boxing scenes is another great example for the perfect blending of sound and image. The following audio clip is the sound we hear as Brad Pitt's character knocks out his opponent with a single [punch](#). If one would just hear this sound-montage most people would not think of a rapidly speeded up knock-out punch followed by a series of quick zoom-in reaction shots of the film's key characters. Even if we just examine the very moment of [impact](#) it remains doubtful whether or not one would connect this sound to a bare-knuckle boxing match. If we divorce this sound effect from the image it accompanies, or i.e. practice Chion's method of *reduced listening*, both sound effects

could be paired with an infinite number of images and would thus gain an infinite number of (potential) meanings. If we would pair up the impact sound effect with the image of a spaceship jumping into hyper-space as in *Star Wars* or *Stargate SG1*, I myself wouldn't have any trouble believing that this is the sound of spaceship-engines accelerating to hyper-speed.

Let us wrap up our (semi-) psychoanalytical approach to the film-soundtrack by taking a look at the sound effects in Cameron Crowe's *Vanilla Sky* (2001). The film's very opening already proves to be very interesting in terms of sound effects. The film opens with a long, bird's-eye shot over Manhattan's Central Park, which eventually zooms in on the protagonist's home before the film cuts to a medium close-up of Tom Cruise getting out of bed. Through the soundtrack it is suggested that this scene takes place in the early morning due to the noticeable absence of traffic noise. All we hear at the beginning is a little wind noise, but then all of a sudden we hear a strange sound that turns out to be the whisper of a woman. Later in the film we will learn that this was the voice of Penelope Cruz, Tom Cruise's love interest, telling him to open his eyes.<sup>23</sup> However the first two times we hear the whisper, the track is played backwards, thus causing both, confusion and interest in the audience.<sup>24</sup> What was that? Was the backwards part a part of Tom Cruise's dream whereas the regular "open your eyes" line is actually recorded on Cruise's alarm clock?

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<sup>23</sup> The first time we hear the "open your eyes" line forward is also the cue for the music track, which is the Radiohead song "Everything in its right Place". Noteworthy, this song also opens with the vocal track put in reverse.

<sup>24</sup> Putting a vocal track into reverse appears to be a common method, especially in the Sci-Fi genre. In the *Stargate SG1* TV series for example there is an alien race called the Asgard whose native language consists of a compound of syllables all put into reverse.

The film does not provide an answer to the questions the opening raises however after it becomes clear that the initial five minutes of *Vanilla Sky* have been the depiction of one of Cruise's dreams this answer is no longer required, given that the analysis remains on the surface. This is not the case here, however, given the director's passion for recent pop culture and rock music (as is evident in his previous film *Almost Famous*). The intention behind the opening sequence might not be graspable following a psychoanalytical or a semiotic approach, but rather through *sonic aesthetics*. The backwards-forwards element in the dialogue track gets repeated through the Radiohead song playing over the scene, a concept too subtle to be unintentional. One could furthermore argue that the sound effects and the music track work together in order to create a certain atmosphere for the film's opening that contrasts everything we will see and hear in the remainder of the film. Also one can note a nice contradiction between sound and image in this scene. Tom Cruise is having a nightmare about being the only person left in NYC while a song called "Everything in its right Place" plays in the background.

Other interesting sound effects can be found at various points in the film when Cruise's character experiences a glitch in his lucid dream caused by problems of his subconscious. Cruise's confusion and frustration when things no longer seem to make sense in his life and when Cameron Diaz and Penelope Cruz play each other's parts and Cruise is no longer able to tell the difference between them, all these emotions reflect in the soundtrack. What is also interesting here is that right up to the end of the film neither the audience nor the protagonist have figured out that the entire film is the depiction of

Tom Cruise's lucid dream. Thus the level of confusion is almost the same for both, the protagonist and the audience.

I hope to have shown with this analysis that the film-soundtrack is well worth exploring following a psychoanalytical approach. I hope to have proven that this topic is well worth further, more in-depth study. We should all aspire to gain a greater, more complete understanding of the filmic medium through the study of the world of sound in cinema. And I hope that my first step here will encourage others to follow – to boldly go where few have gone before.

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### **2.3 The Semiotic Approach**

There are numerous scholars who have looked at film from a semiotic perspective. As a matter of fact, the semiotic approach towards film has proven to be most fruitful, which is all the more reason for us to pursue this direction further in our ongoing analysis of the film-soundtrack.

First of all, it should be stated that the following analysis will focus exclusively on only one element of the film-soundtrack, namely sound effects/foley sounds. This limitation is necessary not only due to the restrictions of this essay but also because I would specifically like to demonstrate that sounds can very well be used as signs in a semiotic sense – unlike the currently held opinion in semiotics. I would furthermore like to draw closer attention to the sound effects element of the film-soundtrack for the simple reason that sound effects usually get the least bit of attention from both, the layman movie audience and the film theoretician/critic. Whenever the sonic side of a film is studied, the general focus is almost always on the dialogue track, followed by music. I am not saying that this focus does not produce more than satisfactory results. A study on the use of music in the films of Quentin Tarantino, for example, would be highly interesting. An analysis on the use of music in Martin Scorsese's *Goodfellas* (1990) or the already mentioned *Apocalypse Now* would doubtlessly be equally fascinating. But let us go back to sound effects for now. The fact that dialogue and music are usually favored over sound effects/foley sounds does not mean that there is no interest in the possibilities of this crucial element of the soundtrack. Siegfried Kracauer meditated on sound effects and their ability to be a carrier of symbolic meaning in *Dialogue & Sound*. In the section



entitled “About the Nature of Sounds” he refers to Cavalcanti’s saying that “noises seems to by-pass the intelligence and speak to something very deep and inborn” (Kracauer 138).<sup>25</sup> He puts further emphasis on the matter quoting Eisenstein in the same section: “I think the 100% all-talking film is silly...But the sound film is something more interesting. The future belongs to it” (Eisenstein, quoted in Kracauer 138).

Clearly Kracauer had realized the soundtrack’s potential role in communicating information to the audience: “Indeed, localizable noises often carry familiar symbolic meanings. And if the filmmaker capitalizes on these meanings in the interest of his narrative, the noises yielding them turn from material phenomena into units which, much like verbal statements, serve as components of mental processes.” (Kracauer 138)

This analysis will follow Kracauer’s position that sounds can carry information and should thus be regarded as (at least potential) signs. For example the presence of a character or creature which at that point is off-screen can easily be established through sound effects such as breathing, sneezing, or some monsterish/alien sound as in John McTiernan’s *Predator* (1987). *The Matrix* provides a good example in the scene when Neo and his companions try to escape Agent Smith by climbing down the plumbing pipes behind the wall. Neo’s party is thus off-screen as Smith and the other Agents enter the bathroom where an accidental sneeze gives Neo and his party away.

As this analysis has already shown, sounds can furthermore be used to signal a transition between levels of filmic reality or even as an indicator of time in the way the

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<sup>25</sup> Our earlier problem with analyzing and determining how the sound design in *Eternal Sunshine of the Spotless Mind* works so well springs back to mind.

film-characters experience/perceive it at this point<sup>26</sup>, and in both cases we are dealing with a highly important sign which purpose is to communicate crucial information to the audience.

That said, let us now turn our attention to the study of semiotics and how it can be applied to the film-soundtrack. As one of the most important figures in the field of semiotics, Umberto Eco put it: “Semiotics is concerned with everything that can be taken as a sign. A sign is everything which can be taken as significantly substituting for something else. This something else does not necessarily have to exist or to actually be somewhere at the moment in which a sign stands for it” (Eco 7).

Before this analysis continues I think that there are a few aspects that should be pointed out beforehand. Despite the successes of various film scholars who applied semiotics to film, the field of semiotics is nevertheless more dominantly connected to the fields of linguistics and communication. One can, of course, argue that all three fields of study - film studies, linguistics, and communication – share at least one common factor, namely the study of how meaning/information is transmitted. However the common opinion appeared to be primarily concerned with the spoken word/dialogue track and thus excluded sound effects from their search for meaning. The reason I emphasize the dominance of linguistics and communication studies in the semiotic bowl is because this analysis might not find all of those scholars’ approval. The dominant focus on language in semiotic studies aside, I want to point out that it is not my primary goal to present

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<sup>26</sup> For example, a man looks at a pretty woman as she passes him and suddenly the woman moves in slow-motion. Not only do the slow-motion image and the appropriate sound effects indicate the man’s fascination for the woman but also that, while he watches her, time seems to move more slowly due to that very fascination.

sound effects as a form of language equal to English or German. However, it is my claim that at least (or should I rather say especially) in the realm of film, sound effects can be used to carry information equally successful (if not even better) as words could.

Maybe the best starting point for this analysis can be found in the work of noted German linguist Rudi Keller. In “A Theory of Linguistic Signs” Keller takes a close look at Plato’s *Cratylus*, which is widely believed to be the first text to consider the phenomenon of language and transmission/exchange of information.<sup>27</sup> Here - and borrowing from Aristotle’s *De Interpretatione* - Keller distinguishes between three levels of observation, namely the level of words, thoughts and things. “However, this distinction is made in a less than obvious manner. Convention, Socrates states, serves the purpose of letting you know what I have in mind. Therefore, words serve the speaker in getting across his thoughts to the addressee. [...] However, a word is not a representation of a thought, but a representation of the thing that the speaker has in mind. Simply put, the model of similarity is as follows: the word I use resembles the essence of the thing I have in mind, and this enables you to pick up what I am thinking.” (Keller 25)

I think that few people would disagree when I say that in the Platonic sense, sound effects/foley sounds can take on the same role as words in regards to communicating information. But before we continue, let me emphasize again that in the special case we are dealing with a compound of two elements, image and sound. In a film information can be transmitted on either both levels simultaneously, or just on one level. It should also be made clear that information will always be transmitted, i.e. even a blank

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<sup>27</sup> According to Keller the *Cratylus* is believed to have been conceived in approximately 388 BC.

screen or the absence of sounds means something. It has been put there by the filmmaker with the distinct purpose of conveying information to the film audience. Let us reflect on

Bergman's sparse use of sound in his work and how films like *Wild Strawberries* (1957) or *The Virgin Spring* (1960) are two prime examples that sometimes less is really more.<sup>28</sup>

Both cases - simultaneous and delayed transmission of information to the audience - have already been discussed earlier in this essay however we have not yet looked at these phenomena from a semiotic point of view. If we go back to Chion's example of creating off-screen space through sound effects, we will see that the crucial information, i.e. where we are and what surrounds us is delivered entirely on the sonic level whereas the visual image remains stationary. Our previous example from *The Matrix* can also be used here. The sneeze that gives Neo and his party away reveals the crucial information of their whereabouts to their pursuers. Furthermore, this sign can be seen as an indicator of humanity, i.e. despite the character's defiance of the rules of gravity, they are, after all, still human.

Another case in which the soundtrack becomes crucially important is when the filmmaker decides to create drama or suspense by introducing a character or an event on the sonic level only, i.e. establish the character's presence through sound while keeping the character off-screen. For example, let us take Fritz Lang's marvelous *M* (1931), which Lucia Bozzola calls "one of the most distinguished and technically accomplished

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<sup>28</sup> Woody Allen is another director with a rather minimalist approach to the use of sound in his films. For example, there is absolutely no music in *Annie Hall* with the exception of the scenes in which Diane Keaton's character sings and the L.A. Christmas party scene.

early sound films (which) revealed the expressive possibilities for combining sound and visuals [...].” (Bozzola 1) Early into the film Lang combines shots of an attic and an empty stairwell with the grief-stricken cries of a mother calling for her missing daughter; and the result is riveting. The shock and horror the child murderer is causing in the town are perfectly expressed through the anguished calls over the image of deserted places that just a few scenes earlier were crowded with children. The fact that Lang keeps the mother off-screen as she desperately calls for her daughter further establishes her outcries as the voice of the entire town, i.e. that the child’s disappearance was not an isolated incident. By disembodiment of the mother’s voice and thus enabling it to speak for the entire town Lang created a much more powerful impression of the town’s situation. The fate of one family is shared by the entire town.

And then of course there is Peter Lorre’s character Franz Becker, Lang’s sad, pessimistic metaphor for German society. His character does not appear on screen for a good portion of the film his presence - as well as his importance to the story – however is established sonically from the very beginning. For example Lorre is the murderer the kids sing about in the opening scene. And of course there is his obsessive whistling of Grieg’s *Peer Gynt* which is used almost like a leitmotiv throughout the film to establish the child murderer’s threatening presence.

The complete absence of non-diegetic music is another important aspect in terms of creating the uniquely dark atmosphere that every single frame in *M* breathes. This does not mean that Lang put his focus primarily on cinematography - I think we established that in the previous paragraph – but rather that silence can be a more powerful sign than

anything else. Tom Matic used the following in his review of *M*: “Lack of an incidental score often makes early talkies seem incomplete. But in *M* the shortage of music is no disadvantage. On the contrary, it makes the city streets seem unnaturally quiet and deserted, as if under curfew. This oppressive silence only emphasizes the murderer's eerily hesitant whistling in a macabre parody of the *Pied Piper*.” (Matic 1)

Clearly the use of sound in *M* not only demonstrates that in the realm of film sounds have the ability to be used as signs but also gives an impression of sound's huge potential to help telling a story. Now the next step is to try and analyze the sonic phenomenon that sound design is. And it is exactly at this point where we will hit a snag. Can we really state that silence equals threat? Is whistling *Peer Gynt* to be regarded as a sign for the inability to control the urge to kill?

When formulated like this, the answer to both questions will undoubtedly be a clear “no”. Thus we have to be more specific in regards to our semiotic analysis of sounds. First of all it has to be emphasized (again) that we are looking at sound effects in film. And hence film is an equal compound of the sonic and the visual element, we have to realize the importance of Chion's concept of *synchresis* to a semiotic approach to film sound. In other words, every sound effect we are analyzing always goes together with a distinct visual image. Thus the meaning of the sound effect is not only connected to the image it accompanies; it also strongly depends on the visual image in order to gain a specific meaning. The Buddhist Monk chanting in *Fight Club*, for example, has earlier been identified as a sign for relief, but that holds true only for this specific case. With another image the chanting could mean something completely different. However,

through the concept of *synchresis* we are able to look at sounds in films as specific examples for how they can be utilized to stand for a wide array of different meanings. Each film is a unique example for in every case there will likely be a different image to the sound effect subject to analysis. For example, the same sound effect that was used for the Rebel gliders looking for Han Solo and Luke Skywalker on the Ice Planet in *The Empire Strikes Back* can be found in Rob Bowman's *Reign of Fire* (2002), only here the image is not a spaceship but a huge fire-breathing dragon.<sup>29</sup> The sound effect works perfectly well with the image in both cases, courtesy of Chion's concept of *added value*; however in the case of *Reign of Fire* the amount of information transmitted through sound is more complex. Whereas the gliders do not sound very menacing, the dragons somehow do. Even though the very same sound effect is used, the concept of *added value* adds a threatening note to the flying dragon whereas in *The Empire Strikes Back* the sound effect merely suggests high velocity.

But still, simply giving the concept of *added value* all the credit for this phenomenon might not be enough, given the attempt to look at the use of sound effects from a semiotic angle. Despite all, the concept of *added value* is still a concept, and every concept is built around a core. If the core of our argument is that a sound can be used as a sign, and that the sign gets its meaning/value from its place within the overall sign system (the film in question), then I think we should see every film as a different sign system. The backbone of Chion's concept thereby is the fact that every film sets up a slightly different sign system. The sound effect in question might remain the same, but through

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<sup>29</sup> One could also take a look at John McTiernan's *Die Hard* and Paul Verhoeven's *Robocop* for both films use the very same gunfire and explosion sound effects.

the pairing with a different image and a different story it gains a different meaning. The attacking dragon in *Reign of Fire* has a totally different function and meaning than the Rebel Glider in *The Empire Strikes Back* searching for the film's protagonists; one is a threat, the other a savior. The dragon/glider sound effect gets its threatening note through the different sign system.<sup>30</sup>

Once all that is taken into consideration, the answer to the questions above would be: "In the special case of Fritz Lang's *M* silence is symbolically used as a sign for threat and paranoia. And a very powerful sign this silence is."

So where does that leave us in our semiotic approach? We have seen that sound effects can very well be utilized as signs in the universe of film. Furthermore, we have seen that every sound effect can take on several different meanings, and that it is the image which goes together with the sound effect that gives the sound effect its specific meaning. It is of crucial importance to keep in mind that when looking at the use of sound effects in film, the image also has to be taken into consideration because otherwise we would take the sound effect out of its context. This would only lead to generalization, and this would be a fatal mistake to make.<sup>31</sup> In other words, the sound effect is defined through the accompanying image. Thus every analysis is a specific example for how sound effects - combined with an image - can be utilized to communicate information to the audience. One may now ask what that standpoint does to Chion's concept

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<sup>30</sup> The individual sign system operates on several different levels such as story and cinematography; all those different levels should be treated equally.

<sup>31</sup> For example if we state that silence always resembles threat, what would that do to our perception of Ingmar Bergman's films?



distinguishing three different kinds of listening, especially *reduced listening* when one regards sounds / sound effects as separated from their physical source - be it on-screen or off-screen – as well as isolated from any information/meaning the sounds in question carry. It is my opinion that *reduced listening* is merely a method to uncover how much information in a film is really transmitted on the sonic level, i.e. how influential sound is in regards to the perception of a film. Furthermore *reduced listening* reveals how poorly developed our vocabulary for describing sounds currently is. But whether or not the method of *reduced listening* can prove helpful in determining how sounds convey meaning is another question.

The question whether or not sound effects should be treated as a language also still remains, but maybe we do not have to look any further. If we agree that sound effects can very well be carriers of information in the film world, why don't we just include the use of sound effects into what is referred to as *filmic language*? Just like high and low camera angles can be used to display power relations<sup>32</sup> (e.g. the office scene in *American Beauty*) or jump-cuts and freeze-frames can be used to express a disruption in the regular flow of a film (e.g. Steven Soderbergh's *Out of Sight*) sound effects can be used to fulfill a similar task. Thereby one should acknowledge sound effects as an integral element of *filmic language*.

Let me wrap up my semiotic approach towards sound effects in film with a quote from Julia Kristeva: "However great the diversity, the irregularity, the disparity even of current research in semiotics, it is possible to speak of a specifically semiotic *discovery*."

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<sup>32</sup> Jurij Lotman for example states that the camera angle is a carrier of meaning and that a single shot only gains attention when seen in context with other shots, and thereby comparing the shot in a scene to a word in language.

What semiotics has discovered in studying 'ideologies' [...] as sign-systems is that the law governing, or, if one, prefers, the *major constraint* affecting any social practice lies in the fact that it signifies; i.e. that it is articulated like a language. [...] One may say, then, that what semiotics had discovered is the fact that there is a general social law, that this law is the symbolic dimension which is given in language and that every social practice offers a specific expression of that law." (Kristeva 25)

I hope to have demonstrated that the film-soundtrack and especially the sound effects department are well worth further study, especially for the field of semiotics. Semiotics has proven very useful in terms of analyzing the visual component of film, so why shouldn't one take advantage of semiotics to better understand the sonic component of film as well? Fritz Lang realized the potential of sound in film more than seventy years ago. How long will it take contemporary film theory and semiotics to realize that potential and treat it accordingly?

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### **3. Sound Effects in the Sci-Fi Genre**

In the final chapter of this essay I would like to demonstrate the tasks and the possibilities of Sound Design. In other words, after all the theoretical analysis and speculations on how sounds/sound effects work within the context of film and Television let us now take a close look at what sounds are able to achieve. For this I have chosen the Sci-Fi genre for I believe that it is here where creative, innovative Sound Design can fully achieve its potential. It is the Sci-Fi genre in which people travel through space through artificially created wormholes, defend themselves with energy-weapons and make contact with alien life forms. Only in the Sci-Fi genre does the audience get to see (and hear) lightsabers, artificial life forms, and spaceships that can travel faster than the speed of light. In short, when looking for impressive Sound Design, one should examine the Sci-Fi genre.

The main emphasis here will be on the critically acclaimed Sci-Fi Channel original series *Stargate SG1*. Based on Roland Emmerich's 1994 sleeper box-office hit *Stargate* in which an ancient alien ring with 39 cryptic hieroglyphs that can create artificial wormholes to travel throughout the entire galaxy is found in Egypt and utilized by the USAF, the *Stargate SG1* series starts out a year after the movie and takes the original story into a whole new dimension. Whereas in the movie it was assumed that the Stargate connects Earth with just one other planet, in the series we learn that the Stargate system was developed by a highly advanced alien race millennia ago and connects almost every planet in the galaxy. However, this alien race has died out long ago and since then the Stargate system is used to travel the galaxy by various races, some of them hostile

and some of them friendly. One of these hostile species that figured out how to operate the Stargate is the parasitic Goa'uld who forcefully inhabit human bodies as hosts and slaves. The Goa'uld started coming to Earth thousands of years ago, taking on the role of ancient Egyptian Gods such as Ra, Hathor or Apophis and enslaving the human race as hosts and workers.<sup>33</sup> Countless numbers of humans have been brought to other worlds through the Stargate by the Goa'uld to ensure not just their spreading through the galaxy but also their flow of hosts, miners and slave workers.

Furthermore, the Goa'uld have incredible healing capabilities, an almost infinite lifespan, a quenching thirst for power and worship, as well as far advanced technology that makes them one of the galaxy's dominant species. The Goa'uld have also created a powerful slave/soldier race called the Jaffa who not only worship the Goa'uld as Gods, but also function as incubators for the young Goa'uld larvae form until they reach maturity and take a human host. Each Goa'uld has several thousands of Jaffa in his/her loyal service.

To make a long story short, the Goa'uld are the human race's most vicious enemy and in the seven years *Stargate SGI* has been on the air the Goa'uld have made several attempts to invade and conquer Earth.

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<sup>33</sup> The series actually states that the Egyptian Pyramids are not tombs but rather landing platforms for the gigantic Goa'uld spaceships.

I believe this to be enough back-story for now for this essay is not concerned with the storyline of *Stargate SG1* but rather the unique arsenal of sound effects that bring the show to life.<sup>34</sup>

First and foremost there is the Stargate itself. Made out of an alien mineral that is literally indestructible, the Stargate uses seven points in space (referred to as chevrons and displayed as ancient hieroglyphs on the gate itself) to create an artificial wormhole connecting two active Stargates. Below are pictures 1 & 2, showing the activated and deactivated Stargate:

Picture 1



Picture 2



The following audio file is the Stargate powering up and creating an [outgoing wormhole](#). The next audio file is the seventh chevron locking, followed by the [Stargate activation](#).

There is also a sonic difference between an outgoing wormhole that originates through Earth's Stargate and an incoming wormhole from another planet. The following

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<sup>34</sup> More detailed information about *Stargate SG1* can be found on [www.gateworld.net](http://www.gateworld.net) or [www.stargatesg1.com](http://www.stargatesg1.com)

audio clip is the sound of an [incoming wormhole](#). An even more noticeable difference can be found between the Stargate activation sound and the [shut-down](#) sound.

Another sound effect that should be presented here is the sound we hear when people [walk through the Stargate](#).

These clearly identifiable sound effects function as a framework for the entire show. It is especially the highly dynamic activation and shut-down sound effects that literally seem to state that stepping through the Stargate is the wildest, most intense thrill-ride one can get on. Therefore, these sounds not only clearly set the pace for the show but also hint at what is awaiting the Stargate team on the other side: things so incredibly fascinating that no-one can even begin to imagine.

Apart from their framework-function, there are two more aspects the Stargate sound effects take on, namely (a) geographical orientation and (b) the display of power relations. Noteworthy here is also that in the special case of *Stargate SG1* these two aspects have to be analyzed in combination. The sound effects of the Stargate activation and shutdown are not unique for every Stargate, and the series makes it clear that different races on different planets use alternate power sources to operate the Stargate. However, if we examine the level of technological advancement of several races shown in the series, we can distinguish between several levels of power/technological advancement. Even though the Goa'uld are far more advanced than humans, when it comes to operating the Stargate we are confronted with the same sound effects as on Earth's Stargate. In other words, even though the Goa'uld use a different power source to power the Stargate, the sound effects remain the same. Most of the other alien

races/human descendants the SG1 team encounters are roughly on the same technological level, which means that the Stargate activation and shutdown sound effects remain the same. However over the course of the series the SG1 team encounters a number of alien races that are far more advanced than the Goa'uld, such as the Nox, the Tollan or the earlier mentioned Asgard. All these races appear to have advanced to a level that is far beyond human understanding. The Nox for example merely stretch out their arms and form a circle in the air and suddenly the Stargate is activated without any chevrons locked or the heavy discharge sound the Stargate makes when activated. The Asgard carry small devices that [activate](#) the Stargate in a similar way.

Interesting here is that the Sound Department of *Stargate SG1* votes for minimalism when it comes to display power relations: the fewer sound effects, the more powerful the alien race.

This modus operandi applies not only to the Stargate but also to the wide range of weapons we see and hear in *Stargate SG1*.<sup>35</sup> Let us begin with the weapons used by the Jaffa. The primary weapon of the Jaffa is the so-called [Staff Weapon](#) (picture 3).

Picture 3




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<sup>35</sup> The more advanced races like the Asgard or the Nox do not carry any weapons at all. The Nox for example not only have the ability to render anything and anyone invisible but also possess the power to dematerialize anything and anyone, including themselves at will. Thus the Nox, when threatened, will either turn invisible or simply dematerialize either themselves or the threat. Note that all these actions go almost without any sound effect accompaniment.

This weapon of Goa'uld design measures several feet in length and fires powerful blasts of plasma energy. The Staff Weapon is powered by a small power cell containing a liquid form of the same material the Stargate is made of.

Apart from the Staff Weapon there is the [zat-gun](#), also a weapon of Goa'uld design. The zat-gun (picture 4) is a handheld weapon in the form of a coiled serpent and uses a different power source than the Staff Weapon.

Picture 4

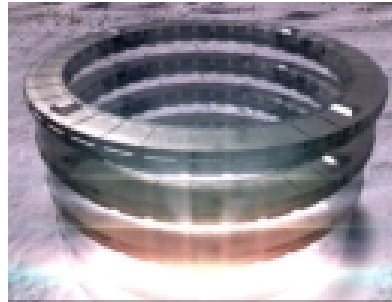


This weapon is not just used by the Goa'uld and Jaffa for the SG1 team managed to steal a considerable amount of zat-guns and uses them along with their regular projectile firing guns ever since. Also noteworthy about this weapon is that unlike its big brother one shot does not kill the victim. One shot stuns the victim, two shots kill, and three shots disintegrate the victim. This fact along with its pocket size makes the zat-gun the weapon of choice of the SG teams. The Staff Weapon and the zat-gun are the most prominent weapons used in *Stargate SG1* and the series wouldn't be the same without the characteristic sound effects of these weapons. Nevertheless there is one more element



that is crucial to the unique universe of both the *Stargate* movie and the *Stargate SG1* series: the [transport rings](#) (picture 5).

Picture 5



The Transport Rings are of a smaller size than the Stargate. Like the Stargate the rings were developed by the Ancients. This means that not only do the rings function on the same principles as the Stargate but are also as widespread through the galaxy as the Stargate system. When activated, the (sending) Transport Rings transmit everything within their formation to another set of (receiving) rings at a different location. Transport Rings are usually used to enter and exit remote locations such as underground laboratories or hide-outs from either a planet's surface or from a spaceship in orbit equipped with a ring platform.

These are the basic framework elements that make up the unique universe of *Stargate SG1*. This series is a prime example for creative, innovative sound design for almost everything the audience sees in the series does not exist in real life, yet the

construction design, cinematography and sound effects produce such a powerful and credible result that one starts to wonder what the US Military hides in its bunkers and underground facilities. The illusion of reality and suspension of disbelief in *Stargate SG1* is nearly flawless for the series always keeps one foot on the ground, no matter how much CGI the audience gets bombarded with. We believe what we hear and see, thanks to the concepts of *synchresis* and *added value*. The show furthermore benefits from the fact that it is a piece of pioneer work and thus has no references to keep in mind. For example, the original *Star Trek* series produced three spin-offs, namely *Star Trek: The Next Generation*, *Star Trek: Deep Space Nine*, and *Star Trek: Voyager*. If one pays attention to the Sound Design in these three spin-offs, one will notice striking similarities in terms of engine-sounds, [phaser](#)-weapon-sounds, and even the sounds of sliding doors or the ever-popular [transporter-beam](#)-sound. Even though the four series are set at different times and different parts of the galaxy, they are still all part of the original *Star Trek* universe and therefore a number of elements from the original show such as the interior and exterior design of the spaceships or the use of specific sound effects for specific situations have to be carried on in the spin-off series. Interestingly enough, the first *Stargate SG1* spin-off, *Stargate Atlantis* will start airing on the Sci-Fi channel in July 2004. It will be very interesting to see/hear how far the spin-off differs from the original series in terms of Sound Design.

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**Epilogue:**

The soundtrack's contribution to a film has unjustly been ignored for too long, and I hope that after reading this essay you will concur. For those who shared my opinion already I hope to have provided you with an interesting and insightful read on the subject of Sound Design in film and Television. Furthermore I hope to have chosen the right mixture between the technical and theoretical aspect of the many facets of Sound Design so that the scholar, the filmmaker and the interested reader will not consider reading this essay as a waste of time. The least I can hope is that my essay was entertaining and thought-provoking.

Hopefully this essay helped in portraying how deep the rabbit hole we call Sound Design really goes, what surprises it holds in stores for us and what powerful a tool it can be in the right hands. Maybe the sonic aspect of film has been ignored for so long for it is part of its nature to never claim the spotlight in a film like a complicated shot (e.g. the five-minutes-and-more opening shot in Kathryn Bigelow's *Strange Days*) or a series of quick cuts (as in *Moulin Rouge* or *Fight Club*). Contemporary film theory's statement that "the soundtrack enhances what we see and compliments what we see" is about as good as it gets in regards to give credit to the sonic aspect of film; I hope that with my essay I have made my contribution to breathe some fresh air in how we think about the soundtrack. The soundtrack is an integral part of film ever since the coming of sound and it does much more than merely complementing the image on screen. What the soundtrack really does is blend together with the image we see to produce what we perceive (rather than just hear or see) when going to the movies or turning on the TV. Time has come to

acknowledge the soundtrack's contribution to the compound we call film. It was films like *Star Wars* or *Back to the Future* that took the use of sound to a new level. Films like *Fight Club* or *The Matrix* took it from there, and I am certain that not too long from now people will acknowledge the brilliant, subtle Sound Design in films like *Cold Mountain* or *Eternal Sunshine of the Spotless Mind*. However only when the community of filmmakers and scholars becomes fully aware of the sheer endless potential of sound can we expect a change in how we think about sound and the use of sound in film and Television to help tell a story and make the film-experience for the audience more complete. Only when the potential of sound is fully understood and acknowledged in both, the practical and the theoretical camp can we hope for a change for the better. Sound is a multi-functional tool which, in the right hands, can be utilized to create a wide range of emotions in the audience. Sound can be used to create drama and suspense and also plays a crucial role in the suspension of disbelief. Last but not least sound is a key element in creating the cinematic illusion of reality on almost every level, from mimicking what the majority of people would call real life up to breathing life into a completely fictitious world such as *Stargate SG1*. Only when we include the use of sound into our thoughts and ideas on film can our understanding and acknowledgment of film as an art form be complete.

The first steps in this direction have been made, and even though we lack a sufficient vocabulary and an adequate system to properly display sounds graphically, we still made some amazing discoveries as proven by Michel Chion. Nevertheless the current study of film sound has merely penetrated the first layer, and there still is a lot

more discover, which is why I suggest we quit arguing whether or not sound should receive as much credit as cinematography or editing and focus on exploring how all these elements combine their efforts to bring a film to life. [Back](#) [T.O.C.](#)

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