

**ACOUSMÊTRE:
THE DISEMBODIED VOICE IN CINEMA**

A THESIS
SUBMITTED TO THE DEPARTMENT OF
COMMUNICATION AND DESIGN
AND THE INSTITUTE OF ECONOMICS
AND SOCIAL SCIENCES
OF BİLKENT UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF ARTS

By

Ufuk Önen

May 2008

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

UFUK ÖNEN

I certify that I have read this thesis and that in my opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts.

Assist. Prof. Andreas Treske (Advisor)

I certify that I have read this thesis and that in my opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts.

Assist. Prof. Dr. Hazım Murat Karamüftüoğlu

I certify that I have read this thesis and that in my opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts.

Assist. Prof. Dr. Dilek Kaya Mutlu

Approved by the Institute of Fine Arts

Prof. Dr. Bülent Özgüç,
Director of the Institute of Fine Arts

ABSTRACT

**ACOUSMÊTRE:
THE DISEMBODIED VOICE IN CINEMA**

Ufuk Önen

M.A. in Media and Visual Studies
Supervisor: Assistant Professor Andreas Treske

May 2008

This study is an attempt to explore the offscreen cinematic space in terms of sound with a special focus on voice, and to analyze the disembodied voices in cinema, in light of the theoretical framework of Michel Chion and his concepts of offscreen space and *acousmêtre*.

Keywords: *acousmêtre*, disembodied voice, offscreen sound, acousmatic sound, cinema

ÖZET

"ACOUSMÊTRE": SİNEMADAKİ VÜCUTSUZ SESLER

Ufuk Önen

Medya ve Görsel Çalışmalar
Yüksek Lisans

Tez Yöneticisi: Yrd. Doç. Andreas Treske

Mayıs 2008

Bu çalışma, Michel Chion'un kuramsal çerçevesi ile onun kadraj dışı alan ve *acousmêtre* kavramlarının ışığı altında, kadraj dışı sinematik alandaki insan seslerini ve sinemadaki vücutsuz sesleri incelemeyi amaçlamaktadır.

Anahtar Sözcükler: *acousmêtre*, vücutsuz sesler, kadraj dışı sesler, akusmatik ses, sinema

ACKNOWLEDGEMENTS

Foremost, I would like to express my gratitude to four persons who have supported me from the very beginning of my graduate studies in Bilkent University: My advisor Assist. Prof. Andreas Treske, Assist. Prof. Geneviève Appleton, Assist. Prof. Dr. Mahmut Mutman, and Assist. Prof. Dr. Hazım Murat Karamüftüoğlu. Their guidance, vision, and criticism not only enabled me to pursue my efforts and finish this work, but also made the experience I had in the master's degree program a terrific and fruitful one.

I would also like to thank Assist. Prof. Dr. Dilek Kaya Mutlu, Assist. Prof. Dr. Ahmet Gürata, and Dr. Orhan Anafarta, for their continual support, encouraging advices, and invaluable comments and criticisms.

Finally, I would like to thank to my mother and my late father. Without their love and support I could not be who and where I am now.

TABLE OF CONTENTS

ABSTRACT	iv
ÖZET	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	ix

INTRODUCTION	1
---------------------------	----------

1. ACOUSMATIC SOUND	5
----------------------------------	----------

1.1. Acousmatic Sound and De-acousmatization	5
--	---

1.2. Acousmatization and Visualization	12
--	----

1.3. The Localization of Sound	17
--------------------------------------	----

1.4. Spatialization and Spatial Magnetization	22
---	----

1.5. Onscreen and Offscreen Space	25
---	----

2. ACOUSMÊTRE: THE DISEMBODIED VOICE IN CINEMA	32
---	-----------

2.1. The Embodiment of the Disembodied Voice	36
--	----

2.2. The Powers of the Acousmêtre	38
---	----

2.3. Phones and Other Communication Devices	39
---	----

2.4. <i>Phone Booth</i> as an Example of Phone Acousmêtre	43
--	----

2.5. HAL-9000 in <i>2001: A Space Odyssey</i> as Acousmètre, or "Acousmachine"	47
2.6. The Voice of Another	50
2.7. Criticism of Chion's Disembodied Voice	54
3. <i>PSYCHO</i>: THE IMPOSSIBLE EMBODIMENT	57
3.1. Hitchcock's Aural Style	58
3.2. Mrs. Bates	63
3.3. The Argument	66
3.4. The Shower Scene	69
3.5. The Bates House	71
3.6. Discovering the Mother	76
3.7. The Court House	77
3.8. The Impossible Embodiment	79
4. CRITICISM AND CONCLUSION	84
FILMS CITED	94
REFERENCES	98

LIST OF FIGURES

Figure 1: The Bridge

INTRODUCTION

In cinema, most of the time, the relationship between image and sound can be summarized with a simple phrase "see a dog, hear a dog". Yet, sometimes, in cinema, sound, or more accurately the sound's source, is in places where the camera cannot or does not go. At these times, the location of the sound's source is beyond the borders of the frame, off the screen, extending the diegesis by suggesting that there is more to the fictitious world than what is seen on the screen.

This thesis is an attempt to explore the offscreen cinematic space in terms of sound, with a special focus on voice, in light of the theoretical framework of Michel Chion. To be more specific, this study concentrates on offscreen voices—particularly, never-before visualized disembodied voices—in cinema, and uses Chion's concept of *acousmètre* as the foundation.

Why voice? Because voice is the most familiar sound to all people. People use their voices and listen to others' voices each and every day; "all of our social life is mediated by the voice" (Dolar, 2006, p. 13).

Whenever people are in environments that are full of sounds, usually human voices are the first ones that capture their attention; all the other sounds are secondary. In audio recording mixing sessions human voices are given the priority; all the other sonic elements are distributed or placed accordingly. If it is a song, it is the lead vocal, if it is a film, generally it is the dialogs that is the primary concern; the structure of the mix is shaped according to human voices.

As Chion (1999) suggests, "the presence of a human voice structures the sonic space that contains it" (p. 5).

In the first chapter, titled "Acousmatic Sound", the theoretical framework of Chion that is used in this thesis is sketched out: Acousmatic sound and de-acousmatization, acousmatization and visualization, localization of sound, spatialization and spatial magnetization, and onscreen and offscreen space. Scenes from films *The Wizard of Oz* and *The Birds* have been

analyzed for the discussions of acousmatic sound, de-acousmatization, and how acousmatic circumstances develop in films, e.g. whether a sound is acousmatic to start with, and visualized afterwards, or a sound is visualized first, and eventually acousmatized.

In the second chapter, "Acousmètre: The Disembodied Voice in Cinema", Chion's concept of acousmètre—a voice that "has not yet been visualized" and that cannot be connected to a face; "a special being, a kind of talking and acting shadow" (Chion, 1999, p. 21)—is examined. According to Chion the acousmètre has some powers—ubiquity, panopticism, omniscience, and omnipotence—powers that are usually attributed to God in monotheist religions. Taking Chion's concept as a foundation, the films *Phone Booth* and *2001: A Space Odyssey* are analyzed in terms of disembodied voices. A perfect yet simple example of acousmètre can be found in *Phone Booth*; it would not be a bold statement to say that the whole film is built on the idea of a disembodied voice. Hal, in *2001: A Space Odyssey*, on the other hand, is a much more complex case of acousmètre, or acousmachine.

Also in the second chapter, special attention is paid to phones and other similar communication devices as they

are favorite tools of suspense narrative because they separate the voice from the body. This is exemplified by the analyses of the acousmètres in *When a Stranger Calls*, *Joy Ride*, and *Scream*. In addition to that, how Lynch extends the ubiquitous possibilities of the telephone in *Lost Highway*, and how he, in the Club Silencio scene in *Mulholland Dr.*, reverses or inverts the way synchresis—"forging of an immediate and necessary relation between something one sees and something one hears at the same time" (Chion, 1994, p. 224)—works are discussed in this chapter as well.

The third and the final chapter of the thesis, "*Psycho: The Impossible Embodiment*", is the analysis of the mother's voice in *Psycho*, which is more than a simple acousmètre. It is a truly disembodied entity because the voice itself is the character, a nonexistent one, and this makes it impossible for this voice to be embodied; hence the chapter's title, "*Psycho: The Impossible Embodiment*".

1. ACOUSMATIC SOUND

1.1. Acousmatic Sound and De-acousmatization

Michel Chion coined the term 'acousmatic' for the sounds coming from unseen sources, the sounds that one hears without seeing their cause (Chion, 1994, p. 221; Chion, 1999, p. 18). The word acousmatic was unearthed in the 1950s by Pierre Schaeffer, a French composer who is generally referred to as the inventor of *musique concrète* (Gobin, 1999, p. 318), a style of music in which natural and non-musical sounds are used as a form of musical expression. Schaeffer and Chion's 'acousmatic' does not appear in English language dictionaries. The word's source is the Greek 'akousma', which means "a thing heard" (Chion, 1999, p. 18). The original meaning of the word dates back to the Greek philosopher Pythagoras, who is believed to have tutored his students from behind a curtain "so that the sight of the speaker wouldn't distract them from the message" (Chion, 1999, p. 19).

When we look into sight and hearing, excluding the faculties of smell, touch, and taste, perception in the absence of sight depends on hearing, and perception in the absence of sound depends solely on seeing. But when both sight and sound are present, one perception influences the other and transforms it. As Chion (1994) states: "We never see the same thing when we also hear; we don't hear the same thing when we see as well" (p. xxvi).

Chion distinguishes between three types of listening modes. He calls semantic listening "that which refers to a code or a language to interpret a message: spoken language, of course, as well as Morse and other such codes" (Chion, 1994, p. 28). By talking from behind a curtain, Pythagoras' intention was to put his students in the semantic listening mode, in which the listener concentrates only on the content of the message. With no visual perception to get in the way and to influence the audial perception, Pythagoras' students were able to focus on their master's voice and better interpret his messages.

Causal listening, which is the most common listening mode, consists of listening to sounds to gather

information about their causes or sources. Chion (1994) explains:

When the cause is visible, sound can provide supplementary information about it; for example, the sound produced by an enclosed container when you tap it indicates how full it is. When we cannot see the sound's cause, sound can constitute our principal source of information about it. An unseen cause might be identified by some knowledge or logical prognostication; causal listening (which rarely departs from zero) can elaborate on this knowledge. (p. 25-26)

Reduced listening is the mode that focuses on the sound itself, without concern for its cause or meaning, and indeed ignoring them. Chion (1994) suggests that the "emotional, physical, and aesthetic value of a sound is linked not only to the causal explanation" or its meaning and contents, but also "to its own qualities of timbre and texture, to its own personal vibration" as well; therefore, reduced listening "has the enormous advantage of opening up our ears and sharpening our power of listening" (p. 31).

Chion's proposed listening modes are based on analyses of sound objects in Pierre Schaeffer's book *Trait des objets musicaux* (Friberg and Gardenfors; 2004; p. 151). Schaeffer's reduced listening, influenced by Husserl's phenomenological reduction (*epokhê*), is an "intentional perceptual activity that seeks to apprehend sound as an object of our perception" (Poissant, 2001, p. 263)

All objects perceived through sound only exist because of our intention to listen. Nothing can prevent a listener from vacillating, passing unconsciously from one system to another or from a reduced listening to a listening which is not reduced. We can even congratulate ourselves; it is just such a whirlpool of intentions that the links of information exchange execute themselves. (As cited in Gobin; 1999, p. 318)

Besides reduced listening, Schaeffer's analyses of sound objects yield to pairs of listening modes such as:

ordinary listening (the most common, which is spontaneously related to cause and meaning), as opposed to practitioner listening (that of the specialist—mechanic, doctor, music lover—who attends to sound for a precise reason); natural listening (a primitive approach to using sound to gather information about an event), as opposed to cultural (which complements the previous form); and, finally, direct listening (which links sound to its visible source), as opposed to acousmatic listening (which does not seek the causes of the sound). (Poissant, 2001, p. 263)

Although Pierre Schaeffer suggested 'direct' sound as a term for the opposite of acousmatic sound, Chion finds this term to be ambiguous and prefers 'visualized' sound instead (Chion, 1994, p. 72; Chion, 1999, p. 18). Visualized sound, as the name suggests, is a sound that is coming from a seen source, a sound which is "accompanied by the sight of its source or cause" (Chion, 1994, p. 72).

The visualization of an acousmatic sound is called 'de-acousmatization' which is the effect "where the source

of the unseen sound is revealed" (Sonnenschein, 2001, p. 153). Chion (1999) suggests that de-acousmatization is "like a deflowering"; at the point of de-acousmatization "the voice loses its virginal acousmatic powers, and re-enters the realm of human beings" (p. 23).

The followers of Pythagoras were obliged to spend five years in silence and to listen to their master speak behind the curtain. Only after completing their training and accepted as full members of the sect, were they allowed to see the face of their master. This *modus operandi* not only prevents the followers from getting distracted from the message by the sight of the speaker, but it also transforms the speaker, the master, into an acousmatic voice just as in some religions and cultural traditions God or spirits are transformed into acousmatic voices. As Chion (1999) states, the "interdiction against looking" is spread through "a great number of religious traditions" (p. 19). By speaking behind the curtain, the master ceases to be a corporeal existence; he turns into an acousmatic voice, and, ultimately, into a God-like being. At the moment of de-acousmatization, i.e., the moment his followers see his face at the end of their training, he loses his God-like powers. He becomes tangible again.

Masters who speak behind the curtains as acousmatic voices are found in cinema as well. A well known example is *The Wizard of Oz* (1939). In the film, the Wizard, whom the author L. Frank Baum named "The Great Oz", hides behind a curtain in his temple and speaks with a roaring voice accompanied by a set of special visual effects such as projections, flames and smoke. Dorothy, played by Judy Garland, who is swept away to the land of Oz by a tornado and tries to return home, and her newly found friends, The Scarecrow, The Tin Man, and The Cowardly Lion, who are respectively in need of a brain, a heart, and courage, go on a journey to Emerald City to find the Wizard of Oz and ask his help. After many trials, they finally arrive in Emerald City and find the Wizard's temple. Just before they enter into the throne hall to encounter The Great Oz for the first time, they are merely anxious, but once they are in the hall and see the flames, the smoke, and the projected green figure on the wall, and especially hear the wizard's roaring voice, they start trembling in fear. The Wizard's voice dominates the hall: "I am Oz, the great and powerful." The special visual effects reinforce the statement. "Who are you?" asks the voice. Dorothy and her friends are too scared to answer. "Who are you?", the voice echoes in the hall. Her friends push Dorothy forward. She, as there is no sight of the wizard,

glances at the projected figure on the wall and answers the question of this "free-floating voice that is not assigned to any bearer" (Zizek, 1991, p. 93): "If you please, I am Dorothy, the small and meek." Then she continues, "We have come to ask you...", but the voice interrupts her: "Silence!" The voice tells Dorothy and her friends that "the great and powerful Oz knows why [they] have come". The fact that the voice knows why Dorothy and her friends are there and what they need before they say anything makes this acousmatic voice which dominates the hall even more powerful.

The Great Oz sends Dorothy and her friends on a mission to bring him the broomstick of The Wicked Witch of the West, and in return he promises Dorothy to help her to go back home, and to grant a brain, a heart and courage to her friends The Scarecrow, The Tin Man, and The Cowardly Lion. Once Dorothy and her friends have accomplished their mission and return to the wizard, instead of keeping his promise he tries to buy time. He tells Dorothy and her friends to come back tomorrow, but Dorothy, impatient to get back home, objects. While this happens, Toto, Dorothy's dog, opens the curtain, and The Great Oz, who speaks with a thunderous voice behind the curtain, is revealed to be an ordinary man, speaking into a microphone and amplifying his voice. The moment

the curtain is opened is the moment of de-acousmatization. The voice loses its acousmatic quality; it is, as Chion (1999) suggests, "embodied" (p. 29). Once the voice is embodied, the bearer of the voice becomes a corporeal being. In the case of *The Wizard of Oz*, de-acousmatization turns the powerful wizard who is beyond reach, the God-like being, into an ordinary man, weak and tangible. As Žižek (1992) puts it, as soon as the acousmatic being is "reduced to its ordinary corporeity", just "like an octopus" out of water, it "loses its terrifying fascination and changes into a powerless slime" (p. 121).

1.2. Acousmatization and Visualization

Chion (1994) proposes that in cinema acousmatic circumstances develop along two different lines: either a sound is acousmatic to start with, and is visualized ("de-acousmatized") afterwards, or a sound is visualized first, and eventually "acousmatized" (p. 72). In the latter case, the sound is associated with a specific image from the outset, which can then "reappear with greater or lesser distinctness in the spectator's mind" every time the sound is introduced acousmatically

(Chion, 1994, p. 72). The sound will be associated, identified or embodied with a specific image.

Hitchcock, for the attack scenes in *The Birds* (1963), uses two sets of variables in relation to sound effects: First, whether the birds are introduced initially visually or aurally, and second, whether the birds are forebodingly noisy or ominously silent. The choice depends on whether he wants suspense or surprise for the attack.

The Birds is heavily dependent on sound effects. There is no conventional musical score in the film; instead a montage of natural and electronically produced bird sounds was used. Even music under the opening titles was eliminated in favor of bird sounds. Avian noises in *The Birds* function like musical score; instead of orchestrated musical instruments, there are orchestrated sound effects.

In Hitchcock's *Psycho* (1960), screeching violins, "played at extraordinarily high pitch, [which] even many musicians could not recognize" (Bordwell & Thompson, 1986, p. 235), imitate birds at various points whereas, in *The Birds*, the bird sounds imitate the function of music by creating atmospheres, building continuity and

serving as background fillers. *The Birds*, which deals abstractly with fear, "is especially dependent on sound because of non-specific quality of sound effects" (Weis, 1982, p. 24).

The sound effects in *The Birds* are of non-specific quality since they are mostly computer generated. In the 1960s, computer-generated audio was a leading-edge technology. The challenge of mastering a new technology was the characteristic of Hitchcock (Weis, 1985, p. 304; Weis, 1978, pp. 42-48). In an interview Hitchcock told Truffaut: "Until now we've worked with natural sounds, but now, thanks to electronic sound, I'm not only going to indicate the sound we want but also the style and the nature of each" (quoted in Truffaut, 1985, p. 297).

There are seven attack scenes in *The Birds*. In the first one, Melanie Daniels (Tippi Hedren), a wealthy young woman from San Francisco, is attacked by a single gull while driving a motor boat in Bodega Bay. In this scene the bird is initially introduced visually; Hitchcock shows the bird first, its screech and the sounds of the wings flapping follow. This surprise attack is Hitchcock's way of telling the audience that the birds can strike anytime, anywhere, without warning.

Before the fourth attack scene, Melanie Daniels goes to Bodega Bay School to pick up Cathy, the sister of the leading male character Mitch Brenner (Rod Taylor). At the school, Annie Hayworth, the schoolteacher, is leading the children in a song. Melanie does not want to disturb them, so she goes out of the school building and waits outside. While she sits on a bench and smokes a cigarette, a flock of crows gathers on the playground. Melanie does not notice them at first. The birds build up silently and a little later the place is swarmed with menacing black birds. The birds make no sound; they are ominously silent. In counterpoint to the birds' threatening silence and presence, the voices of the children are heard at a distance, innocently and peacefully singing. The birds' silence is just like the calm before the storm; they are ready to attack and destroy the peace, they just wait for the right moment. With the ominous silence of the birds, Hitchcock builds up the tension and makes the preparation of the attack scene more terrifying than the realization of it.

Hitchcock also changes the mood by using the variables mentioned above. William Pechter (1964) describes the shift in the mood:

In one of the most amazing images of the film, we suddenly see the town, now burning in destruction, in a view from great aerial elevation; from this perspective, one sees everything as part of a vast

design, and the scene of chaos appears almost peaceful, even beautiful; then, gradually, the silence gives way to flapping of wings and the birds' awful shrieking, and the image, without losing its beauty, is filled with terror as well. (p. 48)

In the scene Pechter describes, the fifth attack scene in the film, bird sounds are introduced later than the visuals. In the overhead shot described by Pechter, first there is a sense of relief, and then by introducing the visuals of the birds, without shrieks or sounds of wings flapping, Hitchcock starts building up the tension. The sense of relief is replaced by suspense; anticipation of the attack begins. When he finally adds the terrifying sounds of the birds, the assault starts.

Weis (1985) suggests that the film's most frightening attack scene is possibly the sixth one (p. 306), the assault on Mitch's house. In this scene, only a bird or two are seen; apart from that, the attack is realized almost entirely through sound. As Weis (1985) indicates, in many thrillers and horror films, "the enemy is most threatening when invisible", so the bird sounds, the shrieks, the screeches, and the sounds of wings flapping, "are all the more abstract and terrifying when they come from unseen sources" (p. 306). In this scene, Hitchcock introduces the birds aurally and conducts the

scene by means of sound. Though the bird sounds are acousmatic to start with in the sixth attack scene, they are not free-floating sounds that are not assigned to any bearer, as Zizek (1991) expresses (p. 93). Despite the fact that the avian sounds are of non-specific quality, as they were mostly produced electronically, since they have already been visualized beforehand they are associated and identified with the image of the violent and life-threatening birds. The image reappears with distinctness in the spectator's mind each time these embodied, demythologized and classified sounds are heard acousmatically (Chion, 1994, p. 72).

1.3. The Localization of Sound

Cinema is constructed by a series of units called "shots", which are "a strip of film containing one or more sequential frames" created by an "uninterrupted inscription of an image on the film by the camera" (Bordwell & Thompson, 1986, p. 11). Chion (1994) designates the shot as "a unit of greater or lesser pertinence for film analysis" but he suggests that it is "nevertheless quite convenient for doing breakdowns of films" and it "has the enormous advantage of being a neutral unit, objectively defined, that everyone who has

made the film as well as those who watch it can agree on" (p. 41). Thousands of images and hundreds of shots come together in a film, yet in cinema "the image", in singular, is spoken of, and, according to Chion (1994), "the image" designates not the content but the container, which is the "frame" (p. 66). The "frame" in cinema is the container for all the images and the shots in a film.

What is the specific unit for sound then, which corresponds to the "shot"? What is the container for sounds, which corresponds to the "frame"? There is no specific unit for sound and there is no auditory container, like a frame, for sounds. According to Chion (1994), this is the reason why sounds, when put together with film images, "dispose themselves in relation to the frame and its content": they are positioned and grouped in relation to what is seen in the image, and this positioning and grouping are constantly revised depending on the changes in what is seen (p. 68). Images are positioned in the frame, but sounds always seek their places.

Sound can either be defined as a wave generated by a vibrating body which propagates in air or other media such as water, steel etc. (stimulus), or as the

excitation of the hearing mechanism and the brain's interpretation of the physical stimulus arriving at the ears that results in the perception of sound (sensation); which definition applies is dependent on whether the approach is physical or psychophysical / psychoacoustical (Everest, 2001, pp. 1-5; Huber & Runstein, 1995, pp. 23-24). To put it simply, sound is either in the air or in the hearer's brain; that is why when a question is asked about sound and space, the question is not "where is the sound?", but rather it is "where does the sound come from?" As Chion (1994) discusses, the problem of localizing a sound is usually the problem of locating its source:

What does a sound typically lead us to ask about space? Not "Where is it?"—for the sound "is" in the air we breathe or, if you will, as a perception it's in our head—but rather, "Where does it come from?" The problem of localizing a sound therefore most often translates as the problem of locating its source. (p. 69)

With one ear, it is not possible to perceive the direction from which the sound originates, but with two ears one can accurately locate a sound's source in the horizontal plane. This is called 'binaural localization' and it results from using two mechanisms that give cues to the ears: 'sound shadow' or 'interaural intensity difference', and 'temporal delay' or 'interaural arrival-time difference' (Everest, 2001, pp. 64-70;

Huber & Runstein, 1995, pp. 52-54; Sonnenschein, 2001, pp. 85-86).

Middle and higher frequencies coming from one side of the head reach the ear nearest the source at a greater intensity because the head blocks the sound waves, it acts as a sound shadow, allowing only reflected sound waves from surrounding surfaces to reach the far ear. As the sound waves travel in the air and bounce off the surfaces, they lose energy so the intensity of the sound perceived by the far ear is reduced. If, as an example, the sound source is located near the left ear, as a result of interaural intensity difference, the sound is perceived as originating from the left.

Lower frequencies have greater wavelengths than the middle and higher frequencies so they easily bend around the head, the sound shadow. However the sound waves reach the ear nearest the source earlier than the far ear since the acoustic path length from the sound source to the near ear is shorter than the path to the far ear. Due to this interaural arrival-time difference and the resulting phase-shift (time or angular difference between two waveforms or signals), sounds with the lower frequencies, or the lower frequency portion of sounds, are localized.

In the horizontal plane, with interaural intensity difference and interaural arrival-time difference mechanisms, it is possible to accurately locate a sound's source. However, for localization in the vertical median plane and for the forward - backward discrimination, these mechanisms do not work. For the up-down and front-back vectors, the pinna, the external part of the ear, is made use of. The pinna has ridges that reflect the sound waves. At the entrance to the auditory canal, the reflected sound waves are combined with the direct sound, the waves coming directly from the sound source, and this combination introduces time delays which result in phase shifting. The pinna, "encodes all arriving sound enabling the brain to yield different perceptions of direction" (Everest, 2001, p. 65).

If the sound arrives at the both ears at the same time and with the same intensity, then the brain perceives as the sound's source is located right in the center, between the right and the left ear. In stereo sound reproduction systems, in which there are two loudspeakers, one for the left channel and the other one for the right channel, when the same signal is sent to both left and right loudspeakers, and the listener is

located at a point which is equally distant from the both speakers, the sound is perceived to be coming from an imaginary third loudspeaker placed between the left and right loudspeakers. This imaginary third speaker is called the 'phantom center'.

If there are no differences between what the left and the right ears hear, the brain assumes that the source is the same distance from each ear. It is this phenomenon that enables the audio engineer to position the sound not only in the left and right loudspeakers, but also monophonically between the loudspeakers. By feeding the same signal to both loudspeakers, the brain perceives the sound identically in both ears and deduces that the source must originate from directly in front of the listener. By changing the proportional level to each speaker, the engineer changes the interaural intensity differences and thus creates the illusion that the sound source is positioned at any desirable point between these two loudspeakers. The source positioning may even be caused to move from point to point between these loudspeakers. This placement technique is known as *panning*. Although it is the most widely used method, it isn't the most effective positioning technique because only those listeners who are equidistant from left and right loudspeakers will perceive the desired effect. (Huber & Runstein, 1995, p. 54)

1.4. Spatialization and Spatial Magnetization

In cinema, stereo and multichannel sound reproduction systems allow real spatialization to be made, that is distributing the sounds with respect to their visible sources in the frame. For example, it is technically possible to pan the voice of the character, who is

standing in the left hand side of the frame, to the left in the stereo panorama. However, the dialogs in most films come from the center loudspeaker in a multichannel sound reproduction system, or from the phantom center in a stereo sound reproduction system. Even though the point in which the sound physically originates is different than the point from which it is supposed to be coming with regard to its visible source in the frame, the spectator nevertheless perceives this sound as coming from its source on the screen. This mental spatialization has been functioning well in sound film since the days of traditional monaural cinema. Chion (1994) suggests that in cinema, sound is spatially magnetized by the image (p. 70).

[Spatial magnetization is] the psychological process ... of locating a sound's source in the space of the image, no matter what the real point of origin of the sound in the viewing space is, e.g., one will mentally place a voice as coming from offscreen left, in tandem with visual indications about the person speaking, even though the sound really emanates from a speaker behind the center of the screen. (Chion, 1994, p. 223)

As another example, when a character walks across the screen, from left to right, it is technically possible to pan the sound of the footsteps in the stereo panorama accordingly from the left channel to the right channel following the image, but even if the sound of the footsteps came from the center loudspeaker, or both

speakers at the same time with the same intensity, creating a phantom center, it is perceived by the spectator as if the sound is following the character's image on the screen. If the character walks off the screen, that is if she goes out of the frame, the spectator perceives the sound of the footsteps as if they were outside the field of vision. "Outside" here, as Chion (1994) suggests, is more mental than physical (p. 69).

At these times we have the feeling, which is disconcerting to our normal sense of spectatorship, that we're being encouraged to believe that the audiovisual space is literally being extended into the theater and beyond the borders of the screen, and that, over the exit sign or above the door to the restrooms, the characters or cars are *there*, preparing their entrance or completing their exit. (Chion, 1994, p. 84)

In addition, there is another state of spatial magnetization. Under particular conditions, the loudspeakers are not located behind or by the sides of the screen but placed somewhere else. For example, at a drive-in movie theater, the broadcasted sound comes from the loudspeakers that are connected to the car's radio, or while watching a movie on an iPod, the sound comes from the headphones. Even the screen and the sound reproduction system are remotely located, the image magnetizes the sound; the sound is perceived as if it were coming from the screen. As Doanne (1985) puts it,

"the screen is posited as the site of the spectacle's unfolding and all sounds must emanate from it" (p. 165).

1.5. Onscreen and Offscreen Space

Onscreen sound in cinema is sound that is emitted from a visible source within the frame, on the screen, whereas offscreen sound is acousmatic, i.e., emitted from an invisible source outside the frame. Metz (1980) suggests that even if a sound is considered offscreen, it is the sound's source that is off the screen; therefore when discussing onscreen and offscreen sounds, what is discussed is actually the position of the visual image of the sound's source, whether it is inside or outside of the frame (pp. 28-29). As Chion (1994) proposes, the state of sound being 'on' and 'off' is a product of the combination of the visual and the aural; it is the relation of what is seen and what is heard, and it exists only in this relationship, so it needs the simultaneous presence of both elements (p. 83). If the image is taken away, both the sounds that are off and on relative to the image will be perceived as the same. For example, a machine noise emitted from a source which is not in the frame and a hammering sound originating from a source which is in the frame are regarded as offscreen

and onscreen sounds, respectively, even if they emanate from a single loudspeaker in the sound reproduction system. If the image is taken away, both of these sounds will be perceived as if they were in the same space, and, in fact, they are in the same space emanating from the same loudspeaker. It is the image, and the relationship between the image and the sound that place the sounds 'on' and 'off' the screen.

As Metz (1980) suggests the sound is never really off (p. 29), and, as discussed earlier, since there is no auditory container that corresponds to the 'frame', which is the container for all the images and shots in a film, sound propagates and diffuses into the entire space.

We tend to forget that a sound in itself is never "off": either it is audible or it doesn't exist. When it exists, it could not possibly be situated within the interior of the rectangle or outside of it, since the nature of sounds is to diffuse themselves more or less into the entire surrounding space: sound is simultaneously "in" the screen, in front, behind, around, and throughout the entire movie theater.

On the contrary, when a visual element is said to be "off", it really is: it can be reconstructed by interference in relation to what is visible within the rectangle, but it is not seen. (Metz, 1980, p. 29)

As Metz suggests above, it is the nature of sound to diffuse into the entire surrounding space. In cinema,

just like in real life, sound is never absent: what is perceived as silence in films is the room tone (Doanne, 1985, p. 166), which is itself a sound. There are exceptions to this though, such as Robert Zemeckis' *Contact* (1997), and Jacques Audiard's *Sur mes lèvres* (*Read My Lips*) (2001), which have sequences with no sound and no room tone at all. Sound in cinema is an element which reinforces the impression of reality (Percheron, 1980, p. 17). In cinema, with a few exceptions, as well as in real life, there is no real silence. A visit to an anechoic chamber, a soundproof room designed to suppress reflections (Everest, 2001, p. 589), at Harvard University, certified for John Cage the impossibility of silence (Kahn, 1999, p. 191). Cage entered the chamber expecting total silence, but he heard two sounds.

[I]n that silent room, I heard two sounds, one high and one low. Afterward I asked the engineer in charge why, if the room was so silent, I had heard two sounds. He said, "Describe them." I did. He said, "The high one was your nervous system in operation. The low one was your blood in circulation." (Cage, 1967, p. 134)

Chion (1994) distinguishes between two types of offscreen sounds: active and passive (p. 85). Active offscreen sound is acousmatic sound that creates curiosity and engages the spectator's anticipation by raising questions such as "What is it?" or "What is

happening?" whereas, passive offscreen sound is sound that creates atmosphere and environment without inspiring the anticipation of seeing its source. Films like Alfred Hitchcock's *Psycho* (1960) and Joel Schumacher's *Phone Booth* (2002) are based entirely on the curiosity aroused by active offscreen sound which "incite the look to go there and find out" (Chion, 1994, p. 85): What does the mother in *Psycho* or the sniper in *Phone Booth* the spectators keep hearing look like? On the other hand, passive offscreen sound does not create curiosity and incite the look to go there and find its source, rather, it provides the spectator a stable place and envelopes the image to make the editing seamless (Sonnenschein, 2001, p. 153). Ambient sounds, such as traffic or city sounds coming from an open window in a room, are a typical example of passive offscreen sound.

Ambient sounds are of an particular importance because in cinema they bring the scene to life, i.e. they reinforce the impression of reality, they give the spectator clues about the setting, and they extend the diegesis beyond the borders of the frame by suggesting the existence of a space which the camera does not register. For acoustic and sonic environments R. Murray Schafer has coined the term 'soundscape', which refers to both actual environments and abstract constructions.

Schafer (1994) identifies three main themes of a soundscape: keynote sounds, signals, and soundmarks (p. 9). Keynote sounds "are those which are heard by a particular society continuously or frequently to form a background against which other sounds are perceived" (Schafer, 1994, p. 272). Schafer suggests that the keynote sounds of a landscape are created by its geography and climate, such as rivers, forests, wind etc., and these sounds become listening habits, therefore, they do not have to be listened to consciously. Contrary to keynote sounds, signals are alarming sounds such as horns, whistles, sirens and the like. Soundmark, a term Schafer derived from "landmark", refers to "a community sound which is unique or possesses qualities which make it specially regarded or noticed by the people" (Schafer, 1994, p. 10). As an example, the carillon of the clock tower of the Houses of Parliament in London, England, which is often referred to as Big Ben, is a soundmark.



Figure 1: The Bridge.

Photo by eqqman. Used under Creative Commons License.
<http://flickr.com/photos/eqqman/17854302/>
Retrieved, November 18, 2007

Sound adds value to the images; it influences or changes how the spectator perceive them. The bridge in Figure 1 will probably be perceived by most of the observers as if it were in a countryside. If a soundscape, which consists of bird chatters, was added to this image, it would reinforce this perception, but if more sound elements were added to the soundscape along with bird chatters, such as distant car horns and fire truck sirens, then the setting would probably be perceived as a park in a city. If a soundmark were inserted into this soundscape, for example the carillon of Big Ben, the

setting would probably be perceived as a park in London, near the Houses of Parliament. As Walter Murch (1994) suggests, "reassociation of image and sound is the fundamental stone upon which rest of the edifice of film sound is built, and without which it would collapse" (p. xix).

2. ACOUSMÊTRE: THE DISEMBODIED VOICE IN CINEMA

Acousmètre is Michel Chion's concept of the disembodied voice in cinema. The term, derived from the combination of the words 'acousmatic' and 'être' (which means "to be" in French), refers to an acousmatic being or acousmatic presence in the form of a human voice that has not yet been visualized or embodied.

When the acousmatic presence is a voice, and especially when this voice has not yet been visualized—that is, when we cannot yet connect it to a face—we get a special being, a kind of talking and acting shadow to which we attach the name *acousmètre*. (Chion, 1999, p. 21)

The word 'acousmètre' has entered Anglo-American film theory terminology directly, without translation (Abbate, 1998, p. 75).

Chion (1999) suggests that it is possible to propose different kinds of acousmètres, such as the 'already visualized acousmètre', in which the spectators continue to hear it after it leaves the visual field, but he

concentrates primarily on what he calls 'complete acousmètre', the one "who is not yet seen, but remains liable to appear in the visual field at any moment" (p. 21). The already visualized acousmètre is temporarily absent from the picture, but it is familiar and reassuring; however, the complete acousmètre, or simply the acousmètre, as Chion (1994) suggests, has a relationship to the screen which "involves a specific kind of ambiguity and oscillation" (p. 129).

Chion (1994) describes "many of the mysterious and talkative characters hidden behind curtains, in rooms or hideouts, which the sound film has given us" and also characters who speak on the phone or radio as acousmètres (p. 129) and these characters derive "mysterious powers from being heard and not seen" (p. 221). Those kind of characters can be found in films such as *The Wizard of Oz* (Victor Fleming, 1939), *Psycho* (Alfred Hitchcock, 1960), *The Testament of Dr. Mabuse* (Fritz Lang, 1933), *2001: A Space Odyssey* (Stanley Kubrick, 1968), *When a Stranger Calls* (Fred Walton, 1979), *Phone Booth* (Joel Schumacher, 2002), *Scream* (Wes Craven, 1996), and *Joy Ride* (John Dahl, 2001).

Chion distinguishes between cinematic acousmètre and theatrical offstage voice. He argues that in theater,

the offscreen voice emerges from a space other than the visible scene; whereas in film, offscreen voice originates from the same space as the onscreen voice because the loudspeaker that reproduces both the onscreen and offscreen sounds are the same. Based on this, he suggests that acousmètre is neither inside nor outside, and that this is its fate in the cinema:

[W]e are a long way from the theatrical offstage voice, which we concretely perceive at a remote from the stage. Unlike the film frame the theater's stage doesn't make you jump from one angle of vision to another, from closeup to long shot. For the spectator, then, the filmic acousmètre is "offscreen," outside the image, and at the same time in the image: the loudspeaker that's actually its source is located behind the image in the movie theater. It's as if the voice were wandering along the surface, *at once inside and outside*, seeking a place to settle. Especially when a film hasn't yet shown what body this voice normally inhabits ... Neither inside nor outside: such is the acousmètre's fate in the cinema. (Chion, 1999, p. 22-23)

While Chion's argument holds true for monophonic and stereophonic sound reproduction systems, it falls short for surround sound systems. Monophonic sound systems use only one audio channel for reproduction; that is, in monophonic sound reproduction systems in cinema there is a single loudspeaker, or a set of loudspeakers which reproduce the same signal, located behind the screen. Stereophonic sound systems use two audio channels for reproduction, usually labeled as the left and right channels. In stereophonic sound reproduction systems in

cinema there are two loudspeakers, or two sets of loudspeakers, usually located on both sides of the screen. It is possible to position any sound anywhere in the stereo panorama, the perceived horizontal space between the right and left loudspeakers. This is simply done by reducing the level of a signal in one channel; that way it the signal is reproduced louder in the opposite channel. As discussed in the previous chapter, in a stereophonic sound reproduction system, when the signal is sent to both the left and right channels, that is to both the left and right loudspeakers, the sound is perceived to be coming from an imaginary third loudspeaker, placed between the left and right loudspeaker, which is called the 'phantom center'.

Chion's argument of offscreen voice being neither inside nor outside holds true only for monophonic and stereophonic sound reproduction systems in which the loudspeakers are located right behind the screen. Surround sound reproduction systems, on the other hand, employ different loudspeaker placement techniques which make physically separating the sound source and the screen possible. Standard modern systems use six audio channels for reproduction: Left, right, center, left surround, right surround, and low frequency. Left and right channel loudspeakers are located on both sides of

the screen, center and low frequency channel loudspeakers are located right behind the screen, and left and right surround channel loudspeakers are located at the back of the theater, behind the spectator. By using the surround channels, in other words, by placing certain sounds in these surround channels to be reproduced by the loudspeakers that are located behind the spectator, it is possible to physically separate the screen and the source of the sound. Therefore Chion's argument, in which he claims offscreen sound in cinema is neither inside nor outside, falls short for multichannel audio or surround sound reproduction systems.

2.1. The Embodiment of the Disembodied Voice

As mentioned earlier, the visualization of an acousmatic sound is called 'de-acousmatization'. It is the effect "where the source of the unseen sound is revealed" (Sonnenschein, 2001, p. 153). For the de-acousmatization of the acousmètre, or, in other words, for the voice to be truly visualized and embodied, it is necessary for the voice to be connected not only to a body but also to a face as well: The voice and the face should be presented to the spectator simultaneously. Chion (1994)

explains why the sight of the face is necessary for de-acousmatization:

[T]he face represents the individual in her singularity ... [T]he sight of the speaking face attests through the synchrony of audition/vision that the voice really belongs to that character, and thus is able to capture, domesticate, and "embody" her (and humanize her as well). (p. 30)

De-acousmatization is a progressive process and, according to Chion (1999), the end point is the mouth, from which the voice emanates: If the face and the mouth have not yet been completely revealed, if the spectator has not verified the "co-occurrence of the voice with the mouth", the process of de-acousmatization remains incomplete, and "the voice retains an aura of invulnerability and magical power" (p. 28).

De-acousmatization is also referred to as embodiment: The voice is enclosed in the circumscribed limits of the body, it is tamed and drained of its power (Chion, 1994, 131).

2.2. The Powers of the Acousmètre

According to Chion (1999), acousmètre has four powers: ubiquity, panopticism, omniscience, and omnipotence (p. 24).

Ubiquity is the ability to be everywhere. The acousmètre seems to be able to be anywhere it wants to be; the voice comes from a non-localized body. Wired or wireless signal transmitting systems such as the telephone or radio usually serve as vehicles of this ubiquity.

The acousmètre has the power of seeing all. It is not in the visual field herself, that gives it the chance to be in the best position to see everything happening, to have an panoptic view. At least this is the power that is often attributed to somebody who is out of sight.

Omniscience, the power of knowing all, derives from the power of seeing all. The acousmètre sees everything, therefore it has the capacity to know everything that can be known about a character. This may include the where the character currently is in, facts about the character's life, the character's thoughts, etc.

Acousmètre's omnipotence, or having unlimited power, is the result of its other powers, i.e., being everywhere, seeing and knowing all. With these powers in possession, the acousmètre has complete power and control on the situation.

Being everywhere, seeing all, knowing all, and having unlimited power are usually attributed to God in monotheist religions such as Judaism, Islam, and Christianity. Chion (1999) accepts these powers as the powers of the acousmètre; he does not question them: he proposes that the word of the acousmètre is like the word of God (p. 24), and that the "greatest Acousmètre is God" (p. 27).

2.3. Phones and Other Communication Devices

Phones and other communication devices such as Citizens' Band (CB) radio—a system of short-distance radio communications used by radio hobbyists, truck and taxi drivers, and small trade businesses—are favorite tools of suspense narrative because they separate the voice and body. This separation, Chion (1999) suggests, has "the effect of "suspending" a character we see from the

voice of someone we don't see, who thereby gains all the powers of an acousmètre" (p. 63).

One of the films that uses this type of acousmètre is *When a Stranger Calls* (Fred Walton, 1979). In this film, a babysitter named Jill Johnson (Carol Kane), after she puts the children to sleep, receives numerous phone calls from a mysterious caller. The caller sometimes remain silent, and at other times asks questions such as "Have you checked the children?" Jill eventually becomes frightened and reports this to the police. While the police are trying to trace the calls, the caller continues harassing Jill. She locks all the doors, closes the curtains and turns out all the lights. She thinks that the bearer of the voice could be anywhere outside the house, watching her. She receives a call from the police, informing her that the calls are coming from inside the house. She realizes that the unseen bearer of the voice, which she thinks could be anywhere except in the house, is actually in the same space as she is, behind the same locked doors, in the same house which she had been considering her refuge.

Another example of acousmètre can be found in *Joy Ride* (John Dahl, 2001). Three young people, Lewis Thomas (Paul Walker), his brother Fuller Thomas (Steve Zahn),

and his friend Venna (Leelee Sobieski), go on a road trip from Colorado to New Jersey. On the road, through their CB radio, they play a practical joke on a truck driver known as "Rusty Nail". The joke takes a turn and the three young people find themselves being stalked by an unseen trucker. Rusty Nail pursues them with merciless and murderous aggression. All through the film, Rusty Nail is just a disembodied voice, heard only on the CB radio; he is never shown to the spectators.

Phone terror is a theme used in many films, especially in the horror genre. *Scream* (1996), and also its sequels *Scream 2* (1997) and *Scream 3* (2000)—all three directed by Wes Craven—heavily use the theme of phone terror. The opening scene of *Scream* begins with Casey Becker (Drew Barrymore) receiving a series of phone calls from an unidentified caller. The voice, in each call, gets more threatening. Casey becomes frightened as she realizes that the voice knows a lot about her and, though she cannot see him, watches her. The caller kills Casey's boyfriend who is tied up on the back patio. Then the killer, i.e., the mysterious caller, breaks into the house and chases her, finally revealing himself both to Casey and the spectators. The voice in the opening scene of *Scream* is a typical example acousmètre: It has the power of being anywhere and everywhere, ready to appear

suddenly and unexpectedly. It also has the powers of knowing and seeing things, and being in control of the situation. The opening scene of *Scream* ends with the killer violently stabbing Casey to death. Though the killer reveals himself, he does so as only a figure because he is dressed in a black costume with a white ghost mask over his face. The mask prevents de-acousmatization from happening because, as mentioned earlier, for the visualization of the acousmatic voice, for the disembodied voice to be truly embodied, it is necessary for the acousmatic voice to be connected to a face and specifically a mouth.

Phones, as suggested earlier, help or cause the voice to be ubiquitous by separating it from the body. However, in *Lost Highway* (David Lynch, 1997) a different possibility of ubiquity is presented. At a party, Fred Madison (Bill Pulman), one of the main characters in the film, meets a stranger who is referred to as the Mystery Man (Robert Blake). The Mystery Man claims that they have met before and that he is at Fred's house at that moment despite standing right in front of Fred at the party in another house. He hands his mobile phone to Fred and asks him to call home, to prove that he is there. Fred does not believe him at first but he eventually complies. He calls home and the phone is

answered by the Mystery Man, who is both talking through the phone from Fred's house and standing in front of Fred at the party at the same time. Lynch, with this scene in *Lost Highway*, extends the ubiquitous possibilities of the phone.

2.4. Phone Booth as an Example of Phone-Acoustmètre

In *Phone Booth* (Joel Schumacher, 2002), Stuart Shepard (Colin Farrell), a publicist who cheats on his wife, goes to a phone booth in New York, the same phone booth every day at the same time to call his lover, Pamela McFadden (Katie Holmes). While Stuart is still in the booth after making his routine call, the phone rings. Stuart answers. The voice on the phone tells Stuart not to even think about leaving the booth and says that Stuart is going to learn to obey him. Stuart at first thinks that this is a simple joke, but as the conversation continues, it is revealed that the man on the phone, the voice, knows Stuart's name, his wife Kelly Shepard (Radha Mitchell), his lover Pamela, where he lives, his job, i.e., all the personal details of his life.

This voice not only knows all the intimate details of Stuart's life but also watches him while he is in the phone booth, sees his every move, even the numbers he dials. Stuart, from inside the phone booth, looks around at the tall buildings that surround him, trying to figure out where the bearer of this voice could be, but there are thousands of windows, so it is impossible to even guess. The location of the source of this disembodied voice could be anywhere. The voice, then, threatens to shoot and kill him if he attempts to get out of the booth or hangs up the phone.

THE VOICE:

Stu, if you hang up I will kill you.

STUART:

What are you going to do about it, up in your high window with your goddamn binoculars?

THE VOICE:

I never said I had binoculars. I have a highly magnified telescopic image of you. Now, what kind of device has a telescopic sight mounted on it?

STUART:

What? You mean... like a rifle?

THE VOICE:

A .30 calibre bolt action 700 with a carbon one modification and a state of the art Henzholdt tactical scope and it is staring straight at you.

Stuart tells the voice, the sniper, that if he shoots a gun in the city, in the middle of the day, "there will be a pandemonium" and cops will be all over the place. The sniper shoots at and hits a small toy beside the

phone booth. The toy, on the highly busy street, gets shattered with the impact of the bullet, but not even a single person seems to notice that a gun was fired.

THE VOICE:

(with a mocking tone, to terrified Stuart)

Oh, Stu... Look at everybody. Look at all the people that are screaming, Stu. Here come the cops. Sniper on the roof. Gunfire hit the deck. Stu, you still with me?

The voice in *Phone Booth* is a simple and a solid example of Chion's concept of acousmètre. He is ubiquitous; his voice comes from a non-localized source, he seems to be everywhere and there is no escape from him. He sees all; he has a panoptic view. He is not in the visual field himself but in the best position to see every move Stuart makes. He knows all; he has all the information about Stuart's life. He has all the power; he is in control of the situation.

Being everywhere, seeing all, and knowing all: these put the acousmètre in a superior position; he obviously has the upper hand over Stuart. However, the real power in this case ultimately comes from the possession of a deadly weapon, one which is capable of taking lives from a long distance, without the need of the shooter getting close to the victim and revealing himself.

At the end of the film, the acousmètre in *Phone Booth* is connected to a face and a mouth; it is de-acousmatized and thus embodied. When the voice is embodied, according to Chion (1999), like any other acousmètre or acousmatic sound, it re-enters "the realm of the human beings" (p. 23).

The question here is however, whether or not this acousmatic voice has been in a realm other than that of human beings to start with. It has all the essential powers of the acousmètre as proposed by Chion—ubiquity, panopticism, omniscience, and omnipotence—but, it can be argued that, right from the start, he has always been in the realm of human beings; even as a disembodied voice. He is a sharpshooter, skilled in using a sniper-type rifle, who gathered information about Stuart, monitored his phone calls he made in the booth by making use of a microphone, and watched him with a telescopic sight. That this disembodied voice is in the realm of human beings does not stop it being in control, powerful, mysterious, terrifying, and threatening.

2.5. HAL-9000 in *2001: A Space Odyssey* as Acousmètre, or "Acousmachine"

In *2001: A Space Odyssey* (Stanley Kubrick, 1968), a group of astronauts are on a mission, traveling on the spaceship *Discovery*. The crew consists of five astronauts plus a super computer, HAL-9000, who maintains the ship's systems. Hal sees with glowing red lantern "eyes" which are supposedly installed in all compartments all over the ship, but Kubrick shows only a few of them and he does not necessarily make a connection between Hal's eyes and his speech every time Hal speaks because Hal, in essence, is a voice. It is a man's voice, and, although it is soft and gentle, it permeates and dominates the entire ship. It is an all-seeing, all-knowing and ubiquitous voice with great powers to reign over the ship and the astronauts.

Even though Hal is a super-computer he has human traits. HAL-9000 is deemed as the sixth member of the crew by the astronauts. Instead of HAL-9000, they call him Hal, and have conversations with him, humanizing him. As Wheat (2000) suggests, Hal's human traits include consciousness, cognition, confidence, enjoyment, enthusiasm, pride, secretiveness, puzzlement, blaming, treachery, fear, panic, lying, and senility (p. 69-70).

Hal is a human-sounding and human-acting super-computer; Hal symbolizes man. Discovery, the spaceship, on the other hand, symbolizes machines. Wheat (2000) proposes that Hal and Discovery "constitute an essentially living organism" which symbolizes humanoid machines and that "Hal-Discovery is a single entity", an individual (p. 6). So, not Hal by himself, but Hal and Discovery together are an acousmètre, or an acousmachine.

How can a humanoid machine be the bearer of a God-like voice? Wheat (2000) argues that the combination of Hal and Discovery symbolizes God:

Hal is just the computer, Discovery's (the spaceship's) brain and central nervous system. But God is symbolized by the *combination* of Hal and Discovery. When Nietzsche suggested that man created God in his own image, the philosopher wasn't speaking only of the mental image of man. He also—indeed, primarily—had the physical image of man in mind. The Bible, which Nietzsche was deliberately turning upside down, says that "God created man in his own image." This was traditionally understood to mean that man was the *physical* image of God; Michelangelo so understood it when he painted God as a husky old man with a white beard. To be turning the biblical verse upside down, Nietzsche had to be implying that God was at least as much the physical image of man as the mental image. And that is why Kubrick has made Discovery the physical image of man while making Hal the mental image of man. Both Hal *and* Discovery symbolize God. They are one being. (p. 100)

Through the course of the mission, Hal endangers the life of the astronauts and starts eliminating them for the sake of the mission. In order to stop him, Dave

Bowman (Keir Dullea), the last remaining astronaut, makes his way toward Hal's red-lit main room, the "Logic Memory Center", the brain or the heart of the acousmètre, or the acousmachine, to disconnect Hal's circuits. The moment Dave is opening door to the "brain room" can be considered as the start of the process of de-acousmatization, or *de-acousmachinization*. Though Hal's voice is never connected to a face, mouth or even to a figure—except for the glowing red lantern "eyes" that are installed all over the ship, but, as mentioned earlier, Kubrick does not necessarily make a connection between these eyes and Hal's speech every time he speaks—his "inside" of his mind is revealed to the spectators.

Even right before the moment Dave opens the door to Hal's "brain room" and the process of de-acousmatization starts, Hal begins to lose his powers and his control over the situation. He figures out that Dave will disconnect his circuits and stop him, in other words he will kill him, so he desperately pleads for his life.

HAL:

I know everything hasn't been quite right with me but I can assure you now very confidently that it's going to be all right again.

I feel much better now.

I really do.

Look, Dave...

I can see you're really upset about this.

I honestly think you ought to sit down calmly take a stress pill and think things over.

I know I've made some very poor decisions recently but I can give you my complete assurance that my work will be back to normal.

Dave begins pulling out the circuit boards and Hal begs him to stop. As Dave disconnects the boards, Hal's voice changes as he slowly dies, it slows down and its pitch drops.

HAL:
Stop Dave!
Will you stop, Dave?
I'm afraid, Dave.
My mind is going.
I can feel it.
My mind is going.
There's no question about it.
I can feel it.
I'm... afraid.

A clichéd way of killing Hal would be blowing him up with a big explosion, but instead Kubrick chooses an original way: As Chion (1999) suggests, "Hal exists as a voice, and it's by his voice, in his voice, that he dies" (p. 45).

2.6. The Voice of Another

The term 'dubbing' refers to the process of recording dialogs—in addition to or as a substitution for the dialogs recorded on location—in the studio, in

synchronization with the picture. Dubbing "in the sense of voice replacement was originally called vocal doubling [later on] "doubling" became conjoined with "dubbing," a term already in use in the record industry for copying discs, to mean sound added after filming" (Handzo, 1985, pp. 405-406).

Today, with the help of modern audio and video equipment and synchronization techniques, technically speaking, dubbing is easy to achieve. However, even without this technology, the idea of dubbing was present in the first years of the sound film. In *Blackmail* (Alfred Hitchcock, 1929), Hitchcock dubbed Anny Ondra, the main actress of the film, while shooting on the set. Hitchcock, in an interview with Truffaut, explains:

The star was Anny Ondra, the German actress, who, naturally, hardly spoke any English. We couldn't dub the voices then as we do today. So I got around the difficulty by calling on an English actress, Joan Barry, who did the dialogue standing outside the frame, with her own microphone, while Miss Ondra pantomimed the words. (Truffaut, 1985, p. 64)

As mentioned earlier, for the voice to be truly visualized and embodied, it is necessary that the voice should be connected to a face and a mouth. With dubbing at filmmakers' disposal, it is always possible that the connection between the voice and the mouth which are presented to the spectator could be far from being

authentic. The voice, which is supposed to be embodied by the actor on the screen, could be the voice of another. How does this affect the film or the story itself? For the diegesis, dubbing has no effect at all. Chion (1999) suggests that the "process of "embodying" a voice is not a mechanistic operation, but a symbolic one. We play along in recognizing a voice that comes from an actor's body as *his*, even if we know the film is dubbed" (p. 129).

Dubbing is usually associated with the spoken script text, whereas 'playback' is the term used for the common practice of performance in which people, generally singers or actors in musicals, match their lip movements with the pre-recorded audio, pretending to be singing. As Chion (1999) notes, in dubbing, "someone is hiding in order to stick his voice onto a body that has already acted for camera", whereas in playback "there is someone before us whose entire effort is to attach his face and body to the voice we hear" (p. 156). Chion draws a distinction between dubbing and playback by suggesting that the work of dubbing is unseen, therefore, it produces only indirect effects, but playback "is a source of a direct, even *physical* emotion" (p. 156) in which "the body tends to incorporate the voice, in aspiring to achieve an impossible unity" (p. 154). Chion

also adds that dubbing and playback are trick effects and that they inspire suspicion in cinema (p. 155).

'Synchresis'—from the combination of 'synchronism' and 'synthesis'—is a term coined by Chion (1994) which means the "forging of an immediate and necessary relation between something one sees and something one hears at the same time (p. 224). As discussed before—in the chapter titled "Acousmatic Sound"—sounds add value to the images; they do that with the help of synchresis. Also, causal listening is manipulated through synchresis because, as Chion states, most of the time "we are dealing not with the real initial causes of the sounds, but causes that the film makes us believe" (p. 28). Chion claims that synchresis is "what makes dubbing, postsynchronization, and sound-effects mixing possible" (p. 63). Considering these, it would not be a bold statement to suggest that, through the phenomenon of synchresis, films create illusions.

In the Club Silencio scene in *Mulholland Dr.* (David Lynch, 2001), as Betty (Naomi Watts) and Rita (Laura Elena Harring) walk into the theater, presenter on stage, Bondar (Richard Green), announces in three different languages, English, Spanish and French, that

there is no band, all they hear is a tape recording and it is an illusion.

BONDAR:
No hay banda!
There is no band!
Il n'ya a pas d'orchestre.
This is all... a tape recording.
No hay banda and yet... we hear a band.
Il n'ya a pas d'orchestre
It is an illusion.

Later on in the scene, Rebekah del Rio (herself) walks on stage, taps on the microphone making sure that it is on, and starts singing the Spanish version of Roy Orbison's "Crying". Before the song ends she collapses but her voice continues, revealing that what she was doing was pretending to be singing but, in fact, she was only doing playback (lip-synching), matching her lips with the pre-recorded audio. As Bondar announces, it is all "a tape recording", "there is no band". What Lynch does here is reverse or inverted synchresis; he smashes the immediate and necessary relation between what is seen and what is heard and reveals, or even proves, that what is presented in cinema is only a illusion.

2.7. Criticism of Chion's Disembodied Voice

Many academics, writers and filmmakers—such as Abbate (1998, pp. 10-15); Dolar (2006, pp. 60-68); Murch (1994,

pp. xxii-xxiii); Sonnenschein (2001, pp. 77, 153, 156, 171); Wollen (2003, p. 230); Zizek (1991, pp. 93, 125-128 & 1992, p. 121 & 1999, pp. 15-16)—refer to Chion's concept of disembodied voice in cinema and accept it "as is". Kaja Silverman, on the other hand, criticizes Chion for comparing the process of de-acousmatization to striptease.

De-acousmatization, the unveiling of an image and at the same time a *place*, the human and mortal body where the voice will henceforth be lodged, in certain ways resembles striptease. The process doesn't necessarily happen all at once; it can be progressive. In much the same way that the female genitals are the end point revealed by undressing (the point after which the denial of absence of the penis is no longer possible), there is an end point of de-acousmatization—the *mouth* from which the voice issues. (Chion, 1999, p. 28. Original work published in French in 1982).

Silverman (1988) quotes Chion and suggests that this is a "symptom of male paranoia and castration" (p. 73), and she objects to him:

A striptease, after all, turns upon removal, whereas the localization of the voice involves the addition or supplementation of the body. However, the equation comes into focus with the reference to yet another scene within which loss is anchored to female anatomy—with the reference to that mythical moment when gender is first displayed and apprehended. Chion is in effect comparing the close-up which discloses the moving lips of an invisible speaker with two situations in which a woman's genitals are exposed to a male gaze: the climactic moment in a stripper's performance, when she removes her G-string, and the moment within the Freudian scenario when the young boy is obliged, if only momentarily, to acknowledge the genital difference of his sexual other. (p. 50)

Silverman (1988) argues that embodying a voice is feminizing it, as embodiment situates "the female subject firmly on the side of the spectacle, castration, and synchronization, while aligning her male counterpart with the gaze, the phallus, and what exceeds synchronization" (p. 50).

Silverman (1988) also criticizes Chion's proposal that the mother's voice is the child's primal experience with the acousmètre and claims that Chion "opposes the maternal voice to the paternal world" so he identifies the mother with sound but the father with meaning (p. 75). According to Silverman (1988), Chion "also situates the maternal voice in an anterior position to the paternal word, conferring upon it an original (if not originating) status" and associates the mother's voice with the darkness rather than with "the form-giving illumination of the *logos*", therefore this anteriority, she claims, implies primitiveness, not privilege or primeness (p. 75).

3. *PSYCHO*: THE IMPOSSIBLE EMBODIMENT

Psycho (1960), based on the novel of the same name by Robert Bloch and directed by Alfred Hitchcock, depicts the encounter between Marion Crane (Janet Leigh), who is on the run after stealing money from her employer's client, and Norman Bates (Anthony Perkins), the owner of Bates Motel, which Marion, tired after a long drive and caught in a storm, pulls into when she gets off the main highway. *Psycho* is, arguably, one of the best and most well-known films of Hitchcock. It is also widely considered as the mother of 'slasher' films, a new genre of horror (Anafarta, 2001; Corliss, 1998; "Alfred Hitchcock", 1999). Anafarta (2001) suggests that the term 'slasher' "seems to be based on the infamous 'shower scene' of *Psycho*" (p. 53). Highlights of the slasher genre includes films such as *Halloween* (John Carpenter, 1978), *Friday the 13th* (Sean S. Cunningham, 1980), *A Nightmare on Elm Street* (Wes Craven, 1984), and later on in the 1990s, *Scream* (Wes Craven, 1996), and *I Know What You Did Last Summer* (Jim Gillespie, 1997). All

of these films spawned numerous sequels and many imitators.

The shower scene of *Psycho*, in which the shadowy mother figure stabs Marion to death, has been studied and discussed countless times by academics, film critics and the like, asking questions such as "Why is this scene so scary?" "Why is it shocking?" "How was the scene shot, directed, or produced?" Yet, very little attention has been paid to the mother character herself.

In *Psycho* the mother, Mrs. Bates, is a voice, a sound. As Belton (1985) suggests, *Psycho* employs off-screen sound to create a nonexistent character (p. 65). It is obvious that Hitchcock, who treated sounds as a new aspect of cinematic expression from the time of his very first sound films, and maintained great control over the soundtracks them, is enthusiastic about the idea of having a character that is actually a voice, a sound.

3.1. Hitchcock's Aural Style

Hitchcock was emphatic about the dramatic functions of sound. While most directors left all but a few crucial decisions about sound to their editors, sound mixers and

sound editors, no matter how much Hitchcock trusted them, he always maintained great control over the soundtracks of his films. Hitchcock told Truffaut (1985): "After a picture is cut, I dictate what amounts to a real sound script to a secretary. We run every reel off and I indicate all the places where sounds should be heard" (p. 297).

In *Psycho*, when Marion, after she took the money and was driving through the Phoenix afternoon traffic, came to a halt at the intersection and saw Lowery (Marion's employer) and Cassidy (Lowery's client), from whom she stole the money, crossing the street in front of her, Hitchcock, in his notes, wrote:

[When] Marion's car comes to a stop at the intersection, we should hear her engine die down to an imperceptible tick over. It is very important to hear her engine sound diminish sharply, because the shot on the screen itself does not clearly show her coming to stop. (Rebello, 1998, p. 136)

In *Psycho*, again, for the sequence of Marion's drive that ends at the Bates Motel, Hitchcock, in his notes about sound effects, wrote in detail:

When we reach the night sequence, exaggerate passing car noises when headlights show in her eyes. Make sure that the passing car noise is fairly loud, so that we get the contrast of silence when she is found by the roadside in the morning... Just before the rain starts there should be rumble thunder, not too violent, but enough to herald the coming rain. Once the rain starts, there should be a progression of falling rain sound and slow range

of the sound of passing trucks... Naturally, windshield wipers should be heard all through the moments she turns them on... The rain sounds must be very strong, so that when the rain stops, we should be strongly aware of silence and odd dripping noises that follow. (Rebello, 1998, p. 137)

Not only in Hitchcock's notes for editors, sound effects were also described in detail in the screenplays of Hitchcock's films as well. Following is the description of the scene in which Detective Arbogast sneaks into Bates house; from Joseph Stefano's script of *Psycho*:

Arbogast listens, holds his breath, hears what could be human sounds coming from upstairs but realizes these could also be the sounds of the old house after sunset... [He] starts up, slowly, guardedly, placing a foot squarely on the each step to test it for squeaks or groans.

These examples account for the great importance that Hitchcock gave to sound. He used sound creatively and as a cinematic expression. As suggested by Weis (1982), analysis of Hitchcock's work "reveals an aural style, one that is inseparable from his visual style and ultimately inseparable from his meaning" (p. 14).

One distinctive point about Hitchcock's aural style is the way he used and handled sound; in other words, his attitude toward sound. Traditionally, a film's soundtrack consists of three basic categories: The human voice (dialogs, monologues, voice-overs), sound effects

(including ambient sounds and soundscapes, as discussed earlier), and music. Each category is generally handled independently from each other on separate recording systems or in different studios, by different people on separate tracks until the final mix. The final sound mix of the film is the stage where all the three categories of sounds are brought together and combined. Contrary to traditional way of handling and working with sound for film, Hitchcock did not conceive these three categories of sound as separate entities:

One distinctive element of [Hitchcock's] aural style is continuity in his use of language, music, and sound effects that reflects his ability of their combined impact before he actually hears them together. Hitchcock does not take for granted the conventional functions of a given track; there is an intermingling of their functions in many instances ... [Hitchcock] showed less creative interest in the dialogue per se than in such non-cognitive forms of human expression as screaming and laughter. Their value as sound effects is usually as important as their significance as human utterances. Similarly, Hitchcock pays less attention to what a character says than to how he or she says it. A person's actual words are less significant than his definition as glib or taciturn, voluble or silent. If human utterances sometimes function more like sound effects, conversely, Hitchcock's sound effects may function more like language. (Weis, 1982, pp. 16-17)

In *Psycho*, Hitchcock integrates music into the soundtrack just like another sound element. The music was composed by long-time collaborator Bernard Herrmann, whom Hitchcock worked with in *The Trouble with Henry* (1955), *The Man Who Knew Too Much* (1956), *The Wrong Man*

(1956), *Vertigo* (1958), *North by Northwest* (1959), and later on, after *Psycho*, *Marnie* (1964). Herrmann was also the sound consultant to the scoreless *The Birds* (1963). Hitchcock maintained very good relationships with his composers, especially with Herrmann (Rebello, 1998, p. 138).

Herrmann's musical score for *Psycho*, which is, arguably, one of the most famous moments from all film scores, especially the shower scene, was composed entirely for strings, a group of orchestral instruments comprised of violins, violas, cellos, and double basses. That was rather unusual considering the fact that Hollywood films' scores were usually composed for and performed by large orchestras. It was Herrmann's idea to use only the string section of the orchestra, to make music sound "black and white" (Rebello, 1998, pp. 138-139). The screeching violins in the shower sequence associate Norman with his stuffed birds of prey—during the attack, violins, "played at extraordinarily high pitch", sound as "birdlike shrieking" (Bordwell & Thompson, 1986, p. 235)—but they also associate the spectators with the onscreen victim: the screeches of the violins, the screams and cries of Marion, and the screams of the spectators merge indistinguishably, breaking down the distinctions between the sound effects, the music, the

screams, and also between the onscreen victim Marion, and the spectators (Weis, 1985, pp. 304-305 ; Weis, 1978, pp. 42-48).

Another important point in Hitchcock's aural style is that, rather than duplicating each other, the sounds and images often contrast with one another. Weis (1982) proposes that in a "Hitchcock film we are typically looking at one thing or person while listening to another", thus Hitchcock, by separating sound and image, achieves "variety, denseness, tension, and, on occasion, irony" (p. 19).

Regarding his aural style and his approach to language, music and sound, and their combinations, *Psycho*, a film in which one of the key characters is only a voice, a sound, is the perfect playground for Hitchcock.

3.2. Mrs. Bates

Chion (1999) proposes that most analyses neglect to consider the role of Mrs. Bates voice as an acousmètre:

The mother in *Psycho* is first and foremost a voice. We catch occasional glimpses of some mute, bestial monster waving a knife, or a shadowy figure behind the window curtains of her room ... And fleetingly also on the landing of Norman's and his mother's house, we glimpse a body carried by Norman. But the

voice—cruel, insistent, and certainly not fleeting—is always heard at length offscreen. (p. 140)

The Great Oz in *The Wizard of Oz*, is a simple and a good example of acousmètre: The synchronism of the voice and the source, or identification of the voice with a body, is delayed to create curiosity, suspense etc., then the curtain rises, the source of the voice is revealed, and de-acousmatization occurs. On the other hand, the mother's voice in *Psycho*, as also stated by Chion, is an acousmètre as well, however not a simple one.

[In] the more complex case of *Psycho* (1960), in which off-screen sound is employed to create a nonexistent character (Mrs. Bates), the particular revelation of the sound's source carefully avoids synchronism: we never see Bates speak in his mother's voice ... Image and sound here produce a tenuous, almost schizophrenic "synchronization" of character and voice, which precisely articulates the fragmented nature of the enigma's "resolution" and completes a "incompletable" narrative. (Belton, 1985, p. 65)

The mother's voice in *Psycho* is problematic. It possesses some of the generic qualities of simple acousmatic voices but it is more than a simple acousmètre. It is a truly 'disembodied entity'. What makes this voice problematic is not that it is never de-acousmatized, but that it is impossible for this voice to be embodied, to be attached to a certain body,

because the voice itself is the character, a dead or even nonexistent character.

There is also a symbolic attribute of this disembodied voice, the mother's voice, in *Psycho*. For all the people, the mother's voice is the primary acousmètre, and, also, the mother is first and foremost a voice.

In the beginning, in the uterine darkness, was the voice, the Mother's voice. For the child once born, the mother is more an olfactory and vocal continuum than an image. Her voice originates in all points of space, while her form enters and leaves the visual field ... In the infant's experience, the mother ceaselessly plays hide-and-seek with his visual field, whether she goes behind him, or is hidden from him by something, or if he's right up against her body and cannot see her. But the olfactory and vocal continuum, and frequently tactile contact as well, maintain the mother's presence when she can no longer be seen. (Chion, 1999, pp. 17-61)

At the three major turning points in *Psycho*'s plot, three speeches delivered by 'the mother' are heard. The first one is after Marion arrives at the motel and Norman proposes that she comes up and have some dinner in the old house that he shares with his mother next to the motel; Marion overhears the argument between Norman and his mother. The second speech is delivered when Norman goes upstairs to his mother's bedroom to take her to a hiding place down to the basement, as people will be looking for her. The third and the final speech is

delivered when Norman is shown in his holding cell in the court house, completely possessed by his mother.

3.3. The Argument

After she checks into Bates Motel, Norman shows Marion to her room and invites her to dinner. She accepts his invitation. Norman leaves the room to prepare dinner and Marion starts unpacking, then she hears a woman's voice coming from a distance:

OLD WOMAN:

No! I tell you no!

I won't have you bringing strange young girls in for supper!

By candlelight, I suppose, in the cheap erotic fashion of young men with cheap, erotic minds!

NORMAN:

Mother, please.

The angry and cruel female voice arouses Marion's curiosity. She looks outside the window, and tries to see the woman. From Norman's response, she understands that the woman is Norman's mother.

MOTHER:

And then what, after supper?

Music? Whispers?

NORMAN:

Mother, she's just a stranger. She's hungry and it's raining out.

MOTHER:
(Mimicking Norman)
Mother, she's just a stranger.

MOTHER:
As if men don't desire strangers.
As if...
Oh! I refuse to speak of disgusting things, because
they disgust me!
Do you understand, boy?
Go on.
Go tell her she'll not be appeasing her ugly
appetite with my food or my son!
Or do I have to tell her 'cause you don't have the
guts?
Huh, boy? You have the guts, boy?

NORMAN:
Shut up! Shut up!

In this scene, in which we hear the mother's voice for the very first time, Mrs. Bates' voice functions as a typical active offscreen sound: It arouses curiosity, engages the spectator's anticipation and raises questions. Usually, the first question about an acousmatic sound is "Where does this sound come from?" or "Where is this sound's source?" As discussed earlier, the problem of localizing a sound is usually the problem of locating its source.

Marion looks out of the window and sees the old house that Norman lives in. The woman's voice comes from the house but the woman herself is not visible. This ignites even more questions, such as "What does she look like?"

"What kind of a person is she?" "Why is she so angry about her son having girlfriends?"

The introduction of the acousmètre creates the desire to go into the house and see the mother. Seeing the mother is seeing the bearer of the voice; attaching the voice to a body, embodying and de-acousmatizing the voice.

At this point in the film, the mother's voice is a simple acousmètre. It is an acousmatic voice which has not yet been visualized, but expected to be de-acousmatized at a further point in the film. It arouses curiosity, it is uncanny, and it possesses some of the four powers of acousmètre—ubiquity, panopticism, omniscience, and omnipotence—that Chion proposes: it seems like the voice is in control of the house, the motel, and Norman, and it 'sees' and 'knows' who comes to the motel, what Norman thinks and wants and so forth.

Of special note, it should be stated that acousmètres, and acousmatic voices in general, have an uncanny quality to them. Doanne (1985) suggests that "There is always something uncanny about a voice which emanates from a source outside the frame" (p. 167). Dolar (2006) writes "the voice without a body is inherently uncanny, and that the body to which it is assigned does not

dissipate its haunting effect" (p. 61). According to Freud's concept, the uncanny refers to or is related to something familiar or known, yet foreign or strange at the same time, which results in a feeling of it being unsettling and uncomfortable. As Amtower (n.d.) puts it, "the uncanny is that class of the frightening which leads back to what is known of old and long familiar". The acousmètre in cinema, due to its uncanny quality, not only arouses curiosity and creates mystery or suspense, but it helps with audience identification, albeit in a remote way. Also, offscreen sounds, including the acousmètre, "deepens the diegesis, gives it an extent which exceeds that of the image" (Doanne, 1985, p. 167). According to Abbate (1998), "the voice of Norman Bates' mother in *Psycho*, has become a *locus classicus* for interrogations of the uncanny in cinema" (p. 76).

3.4. The Shower Scene

While Marion is taking a shower, a shadow on the shower curtain appears, suggesting someone has entered the bathroom unannounced. When the intruder opens the shower curtain, a tall figure holding a knife is revealed. This mute figure, whom the spectators are led to believe is

the mother, savagely stabs Marion to death. This moment in the film can easily be misinterpreted as the moment of de-acousmatization of the mother: The voice of the mother was heard before, and now the mother herself is revealed.

This is not the right way to de-acousmatize or visualize a voice. The figure who stabs Marion to death is mute; he or she never speaks. The discussion of whether this figure is without the power of speech or refrains from speech is irrelevant at this point. What matters is that, in the shower scene, the figure, whose face is not clearly shown, does not talk at all, so there is no way of telling whether the voice that Marion and the spectators heard before belongs to this figure or not. For the true de-acousmatization the voice and the body, which the voice belongs to, should be presented simultaneously, and, it should be clearly shown that the words are coming out of the embodying person's mouth. This is not the case in this scene. The voice and the body are not present at the same time. Before, in the scene which Marion was unpacking in her room, there was a voice without a body; here, in the shower scene, there is a body without a voice.

An acousmatic voice, a voice without a body, as discussed earlier, can be powerful, uncanny, frightening and such. The same could be said of its counterpart, the body without a voice. In the shower scene in *Psycho* the mute character, the body without a voice, is a powerful, savage, terrifying figure. Some films, such as *Halloween*, build their plots on terrifying mute figures. Michael Myers (the primary antagonist in all *Halloween* films, except *Halloween III: Season of the Witch* (1982), which is not connected to the rest of the *Halloween* films), who is referred to and credited as "The Shape", is a tall, powerful and savage figure who never speaks, wears a mask, and kills his victims with a kitchen knife.

3.5. The Bates House

After Marion's disappearance with the money, a private detective, Milton Arbogast (Martin Balsam), is hired. Arbogast tracks Marion to the Bates Motel, talks to Norman and asks questions about Marion. As he is about to leave the motel, he stares up at the house, he sees the figure of Norman's mother in a window.

ARBOGAST:
Is anyone at home?

NORMAN:

No.

ARBOGAST:

Oh? There's somebody sitting up in the window.

NORMAN:

N-N-No, there isn't.

ARBOGAST:

Sure. Take a look.

NORMAN:

Oh, th-that must be my mother.

She's an, uh, "inavlid--" an invalid.

Uh, it's practically like living alone.

His suspicions clearly aroused, Arbogast asks Norman's permission to talk to her, but Norman declines. He leaves but comes back later, and while Norman is doing his evening round of the rooms, he sneaks into the Bates house. Arbogast wants to find the mother, to talk to her. At this point, the scene is expected to end with a de-acousmatization: the spectators witnessing the synchronous representation of the voice and the body.

In the house, Arbogast looks around and makes his way up to the steps, expecting to find Mrs. Bates upstairs since he has already seen her figure in an upper window. When Arbogast nearly reaches the top of the stairs, the camera disengages from him and assumes a bird's eye perspective, showing the landing from a vertical point of view. Suddenly the tall, mute figure in women's clothes and with a knife in her hand, the same figure

who killed Marion in the shower, reappears and stabs Arbogast to death.

Norman understands that people will start looking for Marion and Arbogast and decides to take his mother some place safe, and chooses the fruit cellar down in the basement of the house, where people cannot find her. He comes into the house and goes upstairs. The camera shows him from behind, climbing up the stairs. As Norman enters his mother's bedroom the camera disengages from him, it starts to ascend to a high-angle position over the landing and slowly, with a spiral movement, assumes a bird's eye perspective, showing the landing from a vertical point of view, exactly from the same angle when Arbogast was attacked.

Right after Norman enters his mother's bedroom, the conversation with his mother is heard, which is the second time the mother's voice occurs in the film:

NORMAN:

Now, mother, um, I'm going to bring something up...

MOTHER:

(laughs) I am sorry, my boy, but you do manage to look ludicrous when you give me orders.

NORMAN:

Please, mother.

MOTHER:

No! I will not hide in the fruit cellar. Ha!
You think I'm fruity, huh?
I'm staying right here.

This is my room and no one will grab me out of it, least of all my big, bold son.

NORMAN:

They'll come now, mother.

He came after the girl, and now someone will come after him.

Mother, please, it's just for a few days, just for a few days, so they won't find you.

MOTHER:

Just for a few days? In that dark, dank fruit cellar? No!

You hid me there once, boy, and you won't do it again, not ever again!

Now get out!

I told you to get out, boy.

NORMAN:

I'll carry you, mother.

MOTHER:

Norman, what do you think you're doing?

Don't you touch me! Don't! Norman!

Norman comes out of the bedroom, carrying his mother. The camera is still in the bird's eye perspective, looking over the landing, showing Norman and his 'mother' from above. Mrs. Bates is still complaining; "Put me down! Put me down! I can walk on my own." This is the first time in the film that Norman and his 'mother' are seen together, and it is also the first time that the mother's voice and the mother's figure are represented at the same time. This moment could be interpreted as the beginning of the moment of de-acousmatization: The voice is there, the body is there; both are simultaneously present.

To achieve full de-acousmatization though, as discussed earlier, it should be clearly shown and perfectly proved that the words are coming out of the embodying person's mouth. Because of the extreme high angle of the camera, it is not possible to clearly see the body that Norman carries, let alone her face. At this point what is expected to happen next is full de-acousmatization; with the camera following Norman, showing the mother and her face, presenting the face (and the lips) of the mother and her voice simultaneously to the spectators, truly embodying the voice.

However, this is not what happens. As soon as Norman reaches the stairs, with his 'mother' in his arms, and starts climbing down the steps, Hitchcock fades the picture to black. The spectators are left with an unfinished process of de-acousmatization. While awaiting resolution, to finally connect the voice to its bearer, what they have now is a more complex situation: The sheriff's remark in the previous scene, "If the woman upstairs is Mrs. Bates, who is the woman buried in Greenlawn Cemetery?", makes things confusing enough—either Mrs. Bates is dead and the woman in the house is somebody else or Mrs. Bates is still alive and somebody else is in her grave—then, in addition to that, they see Norman carrying a body, a figure, which

looks like the one who attacked and stabbed both Marion and Arbogast to death, and also they hear the mother's voice, yet they cannot really figure out whose body it is that Norman carries, and whether or not it is the bearer of the voice.

3.6. Discovering the Mother

Lila Crane (Vera Miles) and Sam Loomis (John Gavin), Marion's sister and Marion's lover, respectively, in search of Marion, check into the Bates Motel. Lila, just as Arbogast did before, sneaks into the Bates House. She goes downstairs to the basement and there she discovers 'the mother', the 'real mother', a corpse preserved with Norman's taxidermy skills. Then, at the cellar door, the figure who killed Marion and Arbogast appears, but this time its face is clearly visible. It is Norman in a long dress, wearing a wig and holding a knife.

Norman suffers from split personality disorder; he dresses and acts like his mother, in other words he creates the persona of his mother. This scene, in a way, solves the mystery. The real mother is a preserved corpse and Norman, wearing a wig and dressed up in his mother's clothes, is the figure who killed both Marion

and Arbogast with a knife. All the elements are there together in this scene but one: The mother's voice. When Norman runs towards Lila in the cellar, to stab and kill her, he yells, in his own voice, "I am Norman Bates". Norman is in his mother's clothes but he yells in his own voice. The mother's voice, which was heard previously in two occasions, is absent. This scene, just as the previous ones, ends without de-acousmatization. The mother's voice stays disembodied.

3.7. The Court House

Inside the court house, a psychiatrist, Dr. Richmond, after talking to Norman, who is being held in a cell, explains Norman's condition to Lila, Sam, the Sheriff, and the district attorneys:

I got the whole story, but not from Norman.
I got it from his "mother."
Norman Bates no longer exists.
He only half existed to begin with.
And now the other half has taken over, probably for
all time.

After Dr. Richmond's lengthy and much detailed explanation of Norman's condition, a police guard enters the room and asks permission to give a blanket to Norman. The camera follows the guard to the outside of Norman's holding cell, the guard goes into the cell,

camera stays in the corridor. From the corridor, the inside of the cell is not visible. A little later offscreen voice of the mother is heard: "Thank you", she says to the guard, then the guard leaves the room.

Inside the cell, Norman is sitting with a blanket wrapped around him. The camera slowly approaches him. His mouth is closed but the mother's voice is heard, delivering the third and her final speech in the film:

It's sad when a mother has to speak the words that condemn her own son, but I couldn't allow them to believe that I would commit murder.

They'll put him away now, as I should have years ago.

He was always bad, and in the end he intended to tell them I killed those girls and that man, as if I could do anything except just sit and stare like one of his stuffed birds.

They know I can't even move a finger, and I won't. I'll just sit here and be quiet, just in case they do suspect me.

(A fly lands on Norman's hand)
They are probably watching me. Well, let them. Let them see what kind of a person I am. I'm not even gonna swat that fly. I hope they are watching. They'll see.
(Norman is directly gazing into the camera, he is smiling. His mother's corpse face is superimposed onto Norman's).
They'll see and they'll know, and they'll say, "Why, she wouldn't even harm a fly."

This "final encounter with Norman", as Morfoot (1986) suggests, "is one of the most moving and disturbing of

the film" (p. 95). The mother's monologue is heard over Norman's face but his mouth is closed, "as if to suggest possession by spirits, or ventriloquism" (Chion, 1999, p. 149). The voice cannot find a place to be embodied in so it pastes itself, artificially, on Norman's face.

3.8. The Impossible Embodiment

The mother's voice in *Psycho* is problematic because it is never had the possibility to be truly visualized or embodied. In the first two occurrences, it is not clear whether Norman is actually 'talking' in 'his mother's voice' or if it is an act of ventriloquism. The spectators never get an answer to this question. In the third occurrence, in the holding cell, things become more complicated. Through Dr. Richmond's explanation the spectators know that Norman is suffering from split personality disorder and finally 'the mother's half' has taken over. In the final encounter with Norman in the holding cell, the mother's voice is heard over his face but his mouth is closed, his lips are not moving. Is the mother's monologue in Norman's mind—is it an internal voice? Or, is it an I-voice, as Chion calls it? Or is it an act of ventriloquism?

Callenbach (1960) suggests that Norman, in the cell, "hears his "mother's" voice in internal monologue" and claims this "is probably the most apt use of internal monologue" (p. 48).

Contrary to Callenbach, Chion (1999) proposes that the mother's voice heard in the cell is not an internal voice but an I-voice (p.51). According to Chion (1999), I-voice "is really a subject-voice" however, it is "not just the use of the first person singular, but its placement—a certain sound quality, a way of occupying space, a sense of proximity to the spectator's ear, and a particular manner of engaging the spectator's identification" that should also be taken into consideration (pp. 49-51).

Chion (1999) lists two technical criteria that are essential for the I-voice: First, close miking—a recording technique achieved by placing the microphone close to sound source, in this case the speaker's mouth—which "creates a feeling of intimacy with the voice" and, second, the "absence of reverb in the voice" (p. 51).

Reverberation is the persistence of sound or signal, "in the form of reflected waves in an acoustic space, after

the original sound has ceased"; these reflected waves are random echoes that are closely spaced which "result in perceptible cues as to size and surface materials of a space" and they add to the perceived "depth of recorded sound" (Huber & Runstein, 1995, p. 479).

Reverberation places the sound source in a space and distances it from the listener's ear. Hitchcock uses this for the internal voices in *Psycho* during Marion's runaway drive from Arizona to California. Marion, at the steering wheel, internally hears what the various characters, such as her boss, the car salesman, the highway patrol etc., must be saying about her. These internal voices resonate in Marion's head. Hitchcock uses reverberation for these voices, to place them somewhere imaginary, such as inside Marion's head.

According to Chion, the mother's voice heard over Norman's voice in the cell is not an internal voice but an I-voice because it is "dry", in other words it is without reverberation, it is intimate, and it is a subject-voice as the mother half of Norman has taken over him: "The voice is close up, precise, immediate, without echo, it's an I-voice that vampirizes both Norman's body and the entire image, as well as the spectator herself" (Chion, 1999, p. 52).

This, however, does not rule out the possibility that Norman might have skills of ventriloquism. About ventriloquism Dolar (2006) writes:

Ventriloquism pertains to voice as such, to its inherently acousmatic character: the voice comes from inside the body, the belly, the stomach—from something incompatible with and irreducible to the activity of mouth. The fact that we see the aperture does not demystify the voice; on the contrary, it enhances the enigma ... Ventriloquists usually display their art by holding a puppet, a doll, a dummy, which is supposed to be the origin of the voice ... They offer a dummy location for the voice which cannot be located, a hold for disacousmatization. But suppose that we are ourselves the dummy ... while the voice is the dwarf, the hunchback hidden in our entrails. (p. 70)

Norman might have used his mother's preserved corpse as a dummy, and, in the holding cell at the end of the film, after his "mother" has been taken away from him, he may be using his own body as a dummy.

The acousmatic voice "is always "submitted to the destiny of the body" because it *belongs* to a character who is confined to the space of the diegesis, if not the visible space of the screen" and its "efficacy rests on the knowledge that the character can easily be made visible by a slightly reframing which would reunite the voice and its source" (Doanne, 1985, pp. 167) but in *Psycho*, the mother's voice never gets connected or

attached to a certain body in a true sense, it does not even have that possibility; it floats around and stays disembodied all through the film.

4. CRITICISM AND CONCLUSION

The aim of this thesis was to explore the offscreen cinematic space with a focus on human voices, in light of the theories of Michel Chion. More specifically, this thesis has been an attempt to study the offscreen voices, i.e., disembodied voices, which are outside the frame but within the diegesis, by using Chion's theoretical framework and his concepts of the acousmatic sound and the acousmêtre.

Special attention was paid to the localization of sound. When a question about sound and space is asked, the question is not "where is the sound?", but, rather, it is "where does it come from?" Sound is everywhere: it is in the air, in the hearer's head or in her brain, and so forth. As discussed, there is no auditory container for sounds. So, it really does not matter where the sound is but, on the other hand, it matters where the source of the sound is. As Chion (1994) suggests, the problem of localizing a sound is usually the problem of locating

its source (p. 69). This is one of the reasons, or perhaps the foremost reason, that makes acousmatic sounds, the sounds whose sources are not seen, special: When the source of the sound cannot be localized, the sound cannot be localized, and when the sound cannot be localized, it becomes ominous, it arouses curiosity, and it gains some powers.

Before going into the subject of powers of the acousmètre, of special note about the localization of sound; Chion suggests that in cinema, the acousmètre is outside the image, yet at the same time in the image. What he suggests here is not that the acousmètre is outside of the frame while within the diegesis; what he suggests is that the voice is outside of the frame—outside of the image—but it, or more correctly its source, is physically located inside the image. He compares cinematic acousmètre to theatrical offscreen voice and argues that in theater, the offscreen voice emerges from a space other than the visible scene; whereas in film, the offscreen voice originates from the same space as the onscreen voice because the loudspeaker, which reproduces both the onscreen and offscreen sounds, is located behind or beside the screen, i.e., it is in the same space with the image. While Chion's argument holds true for monophonic sound

systems (which utilize a single loudspeaker, or a set of loudspeakers which reproduce the same signal), and stereophonic sound systems (which make use of two loudspeakers, or two sets of loudspeakers, usually located on both sides of the screen, to reproduce two channels of audio), it falls short for modern surround sound systems because surround systems employ different loudspeaker placement techniques which make physical separation of the sound's source and the screen, i.e., the image, possible.

According to Chion, the acousmètre has four powers: ubiquity, panopticism, omniscience, and omnipotence. In monotheist religions, such as Judaism, Islam, and Christianity, these powers are usually attributed to God. Chion, without questioning them, accepts these powers as the powers of the acousmètre, and proposes that the word of the acousmètre is like the word of God. With these powers, the acousmatic being, in other words the acousmètre, becomes a God-like being and stays like that until the point of de-acousmatization. Whenever the voice is connected to a face, it gets embodied, loses its powers and returns to the realm of human beings.

A perfect yet simple example of acousmètre can be found in *Phone Booth*. It has all the essential powers,

ubiquity, panopticism, omniscience, and omnipotence, but, contrary to what Chion proposes, it is not a God-like being, it has always been in the realm of human beings right from the start, it—the caller's voice—belongs simply to a sniper with a twisted state of mind. At the end of the film the voice is de-acousmatized—the voice and the face are synchronously presented to the spectators—however, it can be argued that this embodiment of the voice in *Phone Booth* neither strips him of his powers nor stops him being a threat for the future.

Voice-over narrators in films have similar powers. For example, the narrator (Mark Hellinger) in *The Naked City* (Jules Dassin, 1948) is like a voice of God: He is omniscient. He has a panoptic aerial view—of special note, he is not only a disembodied voice, but a disembodied gaze as well. He is ubiquitous; he has the freedom to be everywhere in the city. As a result of these powers, he becomes omnipotent. In that respect, the narrator in *The Naked City* is as powerful as an acousmètre but he has even more powers, or privileges, that takes him one step further of the acousmètre. For example, the voice in *The Naked City* is prophetic, he knows what is going to happen next. As an other example, the voice sometimes summarizes the characters' dialogs,

or even speaks their dialogs himself. All these powers puts the narrator in *The Naked City* in a position of voice of God.

As a further study, voice-over narrators in films can be analyzed as a special kind of acousmètre, or as disembodied voices which are even more powerful, or more God-like, than the acousmètre.

Chion reduces the embodiment of the disembodied voice to the synchronous presentation of the voice and the face that the voice supposedly belongs to. Phones and other similar communication devices separate the voice from the body and the face; the detached voice—the disembodied voice—creates suspense, mystery and so forth. When the voice connects back to the body and the face it belongs to, i.e., when it is de-acousmatized, the mystery resolves. However, there are occasions in which, instead of completely detaching the voice from the face, the face is partially presented, or an object or an apparatus that either symbolizes or represents the face is presented, simultaneously with the voice, and in these occasions the mysterious or suspenseful mood is still maintained and even an uncanny or an eerie feeling is created.

As an example, despite being a comic entertainer, the clown has the uncanny ability to be scary and sinister. Many thrillers and horror films make use of clowns in their plots—"Pennywise the Clown" in *It* (Tommy Lee Wallace, 1990) and "Jigsaw" in *Saw* (James Wan, 2004), just to name a few. Ventriloquism is another example. Ventriloquists display their art by holding a dummy, puppet etc., which is supposed to be the origin of the voice. Although the voice and the face are simultaneously presented, this does not demystify the voice; on the contrary, as Dolar (2006) suggests, "it enhances the enigma" (p. 70).

Also, in cinema, there are mismatches of the voice and the face, which—unlike simple discrepancies that make the spectators laugh, such as a muscular man talking in a high-pitched tone—produce horrific effects. A very well-known example is *The Exorcist* (William Friedkin), in which a teenager girl, Regan MacNeil (Linda Blair), is possessed by an mysterious entity. This entity uses Regan's body as a mean of communication; it "talks" through Regan's mouth. The disembodied monstrous voice of the entity is connected to the little girl's face but it is not demystified.

Another unsettling example is Hal in *2001: A Space Odyssey*. Hal has glowing red lantern eyes. Although Kubrick does not necessarily make a connection between Hal's eye and his speech every time Hal speaks, still, from time to time, there is a hint of face—red lantern eyes symbolizing the partial representation of the face—presented simultaneously with the voice. These "eyes" are installed in all compartments all over the ship and this makes Hal an all-seeing entity. The connection of Hal's voice to the partial representation of the face, or, in computer terminology, the interface, does not demystifies or de-acousmatizes the voice; on the contrary, it makes the voice, and Hal in general, even much more unsettling and sinister.

An even uncannier example is the mother's voice in *Psycho*, which tries to find a body and a face to attach to all through the film, but fails to do so because the voice itself is the character, a nonexistent one, and this makes it impossible for this voice to be truly or properly embodied; hence the title of the third chapter of this thesis, "*Psycho*: The Impossible Embodiment".

As discussed in the second chapter, under the heading "Criticism of Chion's Disembodied Voice", many academics, writers, and filmmakers, such as Abbate,

Dolar, Murch, Sonnenschein, Wollen, Zizek and the like, make references to Chion's concept of the disembodied voice in cinema and accept it as it is, without criticizing it. Kaja Silverman makes a harsh feminist criticism of Chion's notion of de-acousmatization and embodiment of the acousmètre—Chion compares the de-acousmatization of the voice to striptease—however, she does not criticize the basic idea of the concept.

As criticism of Chion's concepts of offscreen space and disembodied voice, two points can be put forward. First, Chion (1994) argues that the state of sound being 'on' and 'off' is a product of the combination of the visual and the aural; it is the relation of what is seen and what is heard (p. 83). If the image is taken away, both the onscreen and offscreen sounds will be perceived as if they were in the same space. It is the position of the source of the sound—whether it is in the frame or outside the frame—that makes the sounds onscreen or offscreen. Metz (1980) suggests that a sound in itself is never off, it is either audible or it does not exist (p. 29). The relationship that Chion proposes, between what is seen and what is heard, i.e., the image and the sound, prioritize the image and puts the sound in a auxiliary position.

Second, the separation of the voice and the body in Chion's concept of acousmètre is temporary. The voice and the body is linked to start with, then they are detached from each other, and later on unite again. Taking these two points into consideration, it can be argued that Chion's concepts of offscreen space and the acousmètre are limited in the sense that the sound—including the voice—cannot be an autonomous unit; it is always dependent on the image.

Acousmètre is a very powerful tool in cinematic narrative yet simple acousmètre work only for a single time. Once they are de-acousmatized, the magic is gone. On the other hand, complex cases of acousmètres, such as the mother's voice in *Psycho*, and Hal in *2001: A Space Odyssey*, have continuous power and they remain to be the point of attraction.

Future research points about acousmètre and offscreen space in terms of sound could be as follows: voice-over narrators as a special kind of acousmètre, or as disembodied voices which are even more powerful, or more God-like, than the acousmètre; the implementation of the concept of acousmètre in silent films; connections between computer interfaces as representations or symbols of faces and "voices" of the machines;

acousmatic sound and the acousmètre in new media; the concepts of face and body, both in cinema and new media, and their relationship to the voice; live and pre-recorded offscreen sounds and voices in television shows; study of gender in voice-over narration in cinema and in the concept of acousmètre.

FILMS CITED

Primary List:

Birds, The (1963). Alfred Hitchcock (director). Daphne Du Maurier (writer, story) & Evan Hunter (writer, screenplay).

Blackmail (1929). Alfred Hitchcock (director). Charles Bennett (writer, play) & Benn W. Levy (writer, dialog).

Exorcist, The (1973). William Friedkin (director). William Peter Blatty (writer).

Halloween (1978). John Carpenter (director). John Carpenter & Debra Hill (writers, screenplay).

Joy Ride (2001). John Dahl (director). Clay Tarver & J. J. Abrams (writers).

Lost Highway (1997). David Lynch (director). David Lynch & Barry Gifford (writers).

Mulholland Dr. (2001). David Lynch (director). David Lynch (writer).

Naked City, The (1948). Jules Dassin (director). Albert Maltz & Malvin Wald (writers, screenplay); Malvin Wald (writer, story).

Phone Booth (2002). Joel Schumacher (director). Larry Cohen (writer).

Psycho (1960). Alfred Hitchcock (director). Robert Bloch (writer, novel) & Joseph Stefano (writer, screenplay).

Scream (1996). Wes Craven (director). Kevin Williamson (writer).

2001: A Space Odyssey (1968). Stanley Kubrick (director). Arthur C. Clark & Stanley Kubrick (writers, screenplay).

When a Stranger Calls (1979). Fred Walton (director). Steve Feke & Fred Walton (writers).

Wizard of Oz, The (1939). Victor Fleming (director). L. Frank Baum (writer, novel); Noel Langley, Florence Ryerson & Edgar Allan Woolf (writers, screenplay).

Secondary List:

A Nightmare on Elm Street (1984). Wes Craven (director). Wes Craven (writer).

Contact (1997). Robert Zemeckis (director). Carl Sagan (writer, novel); Carl Sagan & Ann Druyan (writer, story); James V. Hart & Michael Goldenberg (writer, screenplay).

Friday the 13th (1980). Sean S. Cunningham (director). Victor Miller (writer).

Halloween III: Season of the Witch (1982). Tommy Lee Wallace (director). Tommy Lee Wallace (writer).

I Know What You Did Last Summer (1997). Jim Gillespie (director). Lois Duncan (writer, novel) & Kevin Williamson (writer, screenplay).

It (1990). Tommy Lee Wallace (director). Stephen King (writer, novel); Lawrence D. Cohen & Tommy Lee Wallace (writers, teleplay).

Man Who Knew Too Much, The (1956). Alfred Hitchcock (director). John Michael Hayes (writer, screenplay); Charles Bennett & D. B. Wyndham-Lewis (writers, story).

Marnie (1964). Alfred Hitchcock (director). Winston Graham (writer, novel) & Jay Presson Allen (writer, screenplay).

North by Northwest (1959). Alfred Hitchcock (director). Ernest Lehman (writer).

Saw (2004). James Wan (director). James Wan & Leigh Whannell (writers, story); Leigh Whannell (writer, screenplay).

Scream 2 (1997). Wes Craven (director). Kevin Williamson (writer).

Scream 3 (2000). Wes Craven (director). Kevin Williamson (writer, characters) & Ehren Kruger (writer).

Sur mes lèvres (Read My Lips) (2001). Jacques Audiard (director). Jacques Audiard & Tonino Benacquista (writers).

Testament of Dr. Mabuse, The (1933). Original title: *Testament der Dr. Mabuse, Das*. Fritz Lang (director). Norbert Jacques (writer, characters); Fritz Lang & Thea von Harbou (writers).

Trouble with Henry, The (1955). Alfred Hitchcock (director). Jack Trevor Story (writer, novel) & John Michael Hayes (writer, screenplay).

Vertigo (1958). Alfred Hitchcock (director). Pierre Boileau & Thomas Narcejac (writers, novel) & Alec Coppel & Samuel Taylor (writers, screenplay).

Wrong Man, The (1956). Alfred Hitchcock (director). Maxwell Anderson (writer, novel); Angus MacPhail & Maxwell Anderson (writers, screenplay).

REFERENCES

- Abbate, C. (1998). Debussy's phantom sounds. *Cambridge Opera Journal*, 10(1), 67-96.
- Alfred Hitchcock: Our top 10. (1999, August 13). Retrieved January 27, 2008, from <http://edition.cnn.com/showbiz/specials/1999/hitchcock/best.html>
- Amtower, L. (n.d.). The uncanny. Retrieved January 31, 2008, from <http://www-rohan.sdsu.edu/~amtower/uncanny.html>
- Anafarta, O. (2001). *Visual literacy, metafiction, and horror movies: An account of self-reflexivity in the new stalker film* (Doctoral dissertation, Bilkent University, 2001).
- Belton, J. (1985). Technology and aestheticism of film sound. In E. Weis & J. Belton (Eds.), *Film sound: Theory and practice* (pp. 63-72). New York: Columbia University Press.
- Bordwell, D. & Thompson, K. (1986). *Film art: An introduction*. New York: Alfred A. Knopf.
- Cage, J. (1967). *A year from Monday*. Middletown: Wesleyan University Press.
- Callenbach, E. (1960). Psycho. *Film Quarterly*, 14(1), 47-49.

- Chion, M. (1994). *Audio-vision: Sound on screen*. (C. Gorbman, Trans.). New York: Columbia University Press. (Original work published 1990).
- Chion, M. (1999). *The voice in cinema*. (C. Gorbman, Trans.). New York: Columbia University Press. (Original work published 1982).
- Corliss, R. (1998, December 14). Psycho Therapy. *Time*. Retrieved January 27, 2008, from <http://www.time.com/time/magazine/article/0,9171,989844,00.html>
- Doanne, M. A. (1985). The voice in cinema: The articulation of body and space. In E. Weis & J. Belton (Eds.), *Film sound: Theory and practice* (pp. 162-176). New York: Columbia University Press.
- Dolar, M. (2006). *A voice and nothing more*. Cambridge, Massachusetts: MIT Press.
- Everest, F. A. (2001). *The master handbook of acoustics* (4th ed.). New York: McGraw-Hill.
- Friberg J. & Gardenfors D. (2004). Audio games: New perspectives on game audio. Proceedings from 2004 ACM SIGCHI: *International Conference on Advances in Computer Entertainment Technology*. New York: ACM Press.
- Gobin, P. (1999). Sound material: A new reception. *Leonardo*, 32(4), 317-323.
- Handzo, S. (1985). A narrative glossary of film sound technology. In E. Weis & J. Belton (Eds.), *Film sound: Theory and practice* (pp. 383-426). New York: Columbia University Press.
- Huber, D. M. & Runstein, R. E. (1995). *Modern recording techniques* (4th ed.). Indianapolis: Sams Publishing.
- Kahn, D. (1999). *Noise, water, meat: A history of sound in the arts*. Cambridge, Massachusetts: MIT Press.

- Metz, C. (1980). Aural objects. *Yale French Studies*, (60), 24-32.
- Morfoot, P. (1986). *Three films of Alfred Hitchcock* (Doctoral dissertation, University of Essex, 1986).
- Murch, W. (1994). Foreword. In M. Chion, *Audio-vision: Sound on screen* (p. xix). New York: Columbia University Press.
- Pechter, W. (1964). The director vanishes. *Moviegoer*, 2, 48.
- Percheron, D. (1980). Sound in cinema and its relationship to image and diegesis. *Yale French Studies*, (60), 16-23.
- Poissant, L. (Ed.) (2001). New media dictionary. *Leonardo*, 34(3), 261-264.
- Rebello, S. (1998). *Alfred Hitchcock and the making of Psycho*. New York: St. Martin's Griffin, 1998.
- Schafer, R. M. (1994). *The soundscape: Our sonic environment and the tuning of the world*. Rochester, Vermont: Destiny Books.
- Silverman, K. (1988). *The acoustic mirror: The female voice in psychoanalysis and cinema*. Bloomington and Indianapolis: Indiana University Press.
- Sonnenschein, D. (2001). *The expressive power of music, voice, and sound effects in cinema*. Studio City, CA: Michael Wiese Productions.
- Stefano, J. (1959). *Psycho* (screenplay). Retrieved January 27, 2008, from <http://www.imsdb.com/scripts/Psycho.html>
- Truffaut, F. (1985). *Hitchcock* (revised ed.). New York: Simon and Schuster.
- Weis, E. (1978). The sound of one wing flapping. *Film Comment*, 14(5), 42-48.

- Weis, E. (1982). *The silent scream: Alfred Hitchcock's sound track*. Rutherford: Fairleigh Dickinson University Press.
- Weis, E. (1985). The evolution of Hitchcock's aural style and sound in *The Birds*. In E. Weis & J. Belton (Eds.), *Film sound: Theory and practice* (pp. 298-311). New York: Columbia University Press.
- Wheat, L. F. (2000). *Kubrick's 2001: A triple allegory*. Lanham, Maryland: The Scarecrow Press.
- Wollen, P. (2003). 24 mismatches of sound and image. In L. Sider, D. Freeman & J. Sider (Eds.), *Soundscape: The school of sound lectures 1998-2001* (pp. 221-230). London: Wallflower Press.
- Zizek, S. (1991). *Looking awry: An introduction to Jacques Lacan through popular culture*. Cambridge, Massachusetts: The MIT Press.
- Zizek, S. (1992). *Enjoy your symptom! Jacques Lacan in Hollywood and out*. New York: Routledge.
- Zizek, S. (1999). The undergrowth of enjoyment: How popular culture can serve as an introduction to Lacan. In E. Wright & E. Wright (Eds.), *The Zizek Reader* (pp. 11-36). Oxford: Blackwell Publishers.