VA335
SOUND AND IMAGE

Week 2

Sound as a Concept

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Gary Hecker-veteran Foley Artist

Source: http://vimeo.com/11436985

The Sound of Angry Birds

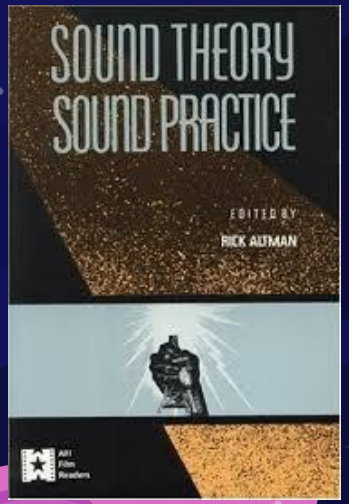
Source: http://vimeo.com/29246407

Recommended for you

https://vimeo.com/170948796

Reading: The Material Heterogeneity of Recorded Sound, Rick Altman

Rick Altman teaches courses on film sound, film genres, and narrative theory.



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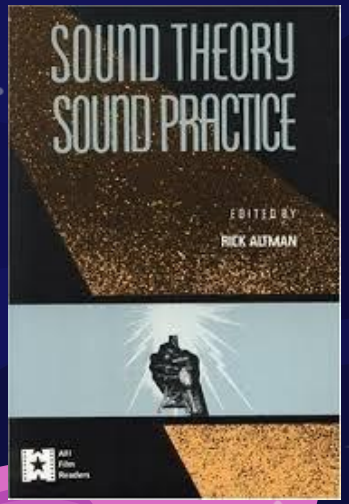


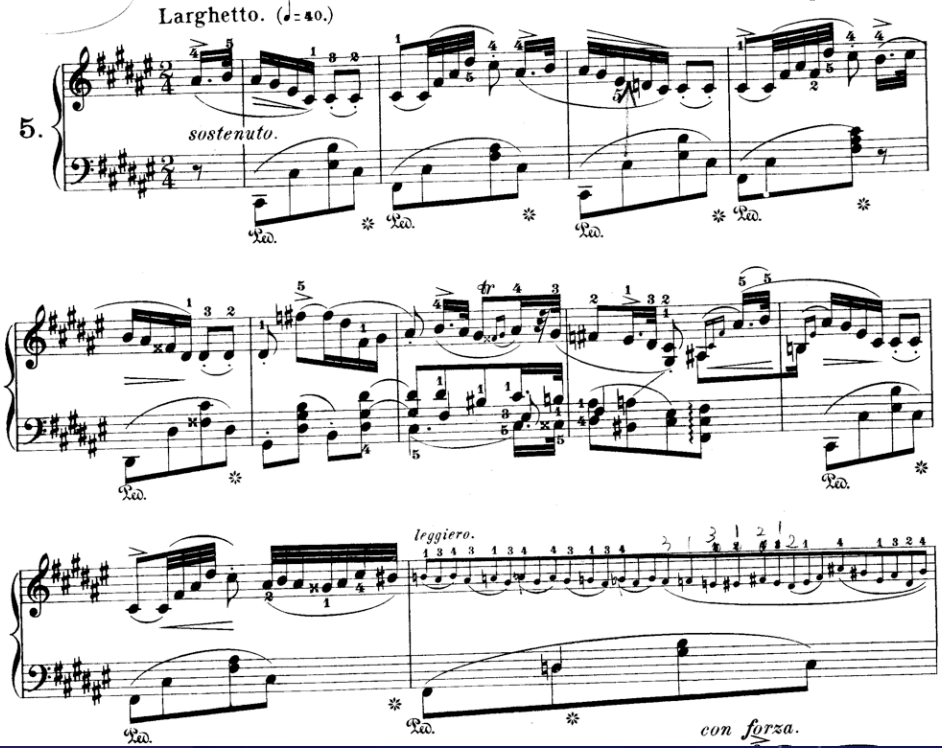
Current approaches to film sound systematically borrow a musical model.

This definition is based on the apparent assumption that all film sounds have the nature of musical notes, that is, they are single phenomena, produced instantaneously, emitted from a point source, and perceived in an immediate and direct fashion.

À FERDINAND HILLER.

Nocturne.

F. CHOPIN. Op. 15, № 2.



Source: http://www.youtube.com/watch?v=oFSRs7iqAv8

In fact, since the terminology is borrowed from the realm of music, we find that with these terms we can handle almost any of the types of analysis typically practiced on a musical score. We note Hitchcock's suspenseful diminuendo from a loud slam to muffled scratching, the harmony of Orson Welles' bass and Joseph Cotten's tenor, the melodic gifts of Cary Grant and Katharine Hepburn, the awkward timbre of Zasu Pitts and Jerry Lewis, or the varied instrumentation of the "Symphony of Sounds" with which Rouben Mamoulian opens Love Me Tonight.

PSYCHO – ALFRED HITCHCOCK

Source: movieclips.com

DYNAMICS : Crescendo & Diminuendo

Source: http://www.youtube.com/watch?v=Tzul5QiuAtU

However, musical sounds can not be fully described with musical terminology.

More appropriate for describing musical scores than individual performances, musical terminology pays little attention to the details of any particular performance, concentrating instead on the common factors joining all performances of the same score.

l attend three concerts of Mozart's "Little Night Music," one in a well-upholstered salon, another in a large concert hall, and a third in a city park, I am in one sense hearing the "same" music three times, that is, music that is represented by a single, identical score.
Yet how different are the sounds that reach my ears during the three concerts!

Musical notation assumes that each sound is single, discrete, uniform, and unidimensional.
Stressing the formal concerns of music's internal, self-referential aspect, musical notation diverts attention from sound's discursive dimensions, concealing the fact that sound is in reality multiple, complex, heterogeneous, and three-dimensional.

As a concept, middle C exists independently of space and time, in the abstract notion of a sound of approximately 262 cycles per second.
As a reality, however, no two versions of middle C are identical, because of the different temporal and spatial circumstances in which they originate and are heard.

Sound Events: The Production of Sound

What is sound? What happens when a sound is made?
Three elements are required for the production of any sound.

PRODUCTION

such as vocal cords or a violin string.

PROPOGATION

such as air, water, or a railroad rail

PERCEPTION

such as ear, microphone

PHYSICS OF SOUND

Source: http://vimeo.com/62625005

In fact, most of the events that we think of as a single sound are not singular at all. The musical model of tone generators and violin strings is extremely misleading.

If a violin note could be produced by a violin string alone, then Stradivarius would never have become a household name. Every violin note is a complex event combining the vibrations of a string, a wooden case, and the air trapped inside that case. Each of these three contributes to the overall tone of the note played.

Yet even individual notes have a temporal dimension. Returning for a moment to our violin string, consider the difference between plucking and bowing the string.
In one case the sound starts suddenly, reaching its full volume extremely rapidly; in the other case the violinist seems to be sneaking up on the note, teasing the molecules into moving rather than suddenly shoving them.

Whether violent or peaceful, this initiation of the sound event is termed the attack. It is followed by the sustain. How long is the note hold? How long does it stay at full volume?

Finally, the sound fades away. This stage is called the decay, implying not only a temporal measure but also a qualitative one.

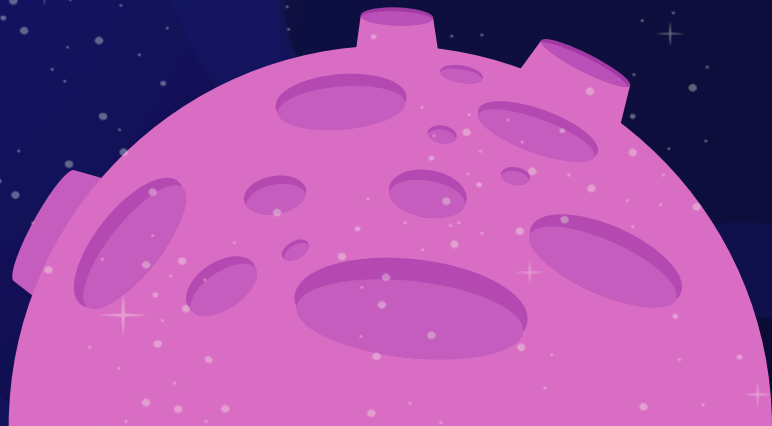
Compare, for example, the decay of a plucked string that is simply allowed to spend its own energy and the decay of a plucked string instantaneously dampened by a finger.

ADSR

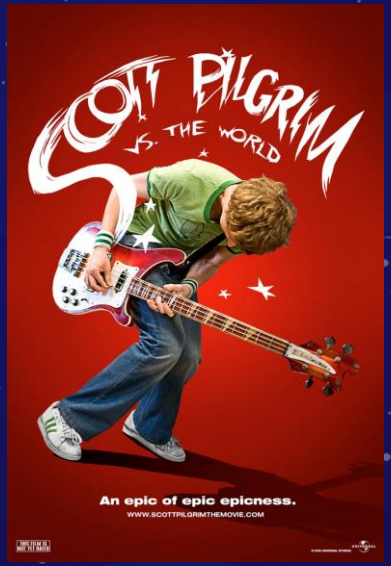
Source: http://www.youtube.com/watch?v=Q-ot9AaJx-Y

Audio Visual Relation
Breaking the Tracks Down

The first thing you have to do when starting a study of sound and picture is to listen to and hear the separation of dialogue, music and sound effects tracks in a film



Breaking the Tracks Down
example :
Scott Pilgrim vs The World




COME IN

The Impact of Sound on Image

Your eye focuses on a point directly in front of them.

Peripheral is clouded.

Ear is omnidirectional

Images exist in space. Sound exists in time alone.

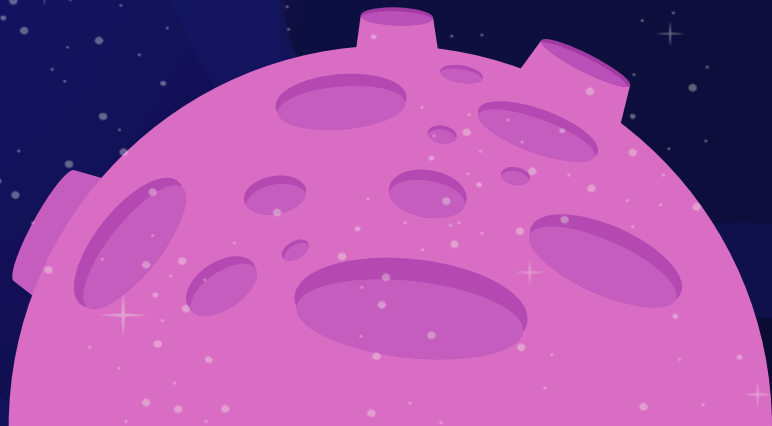
Diegetic on-screen and off-screen sound

In film there are basically three types of sound parameters within the spectrum of all sound

On-screen

Off-screen

Nondiegetic



Diegetic Sound

Present on the screen and is part of the direct communication of the story

Diegetic on-screen example

Diegetic off-screen example : active & passive

Non-Diegetic Sound

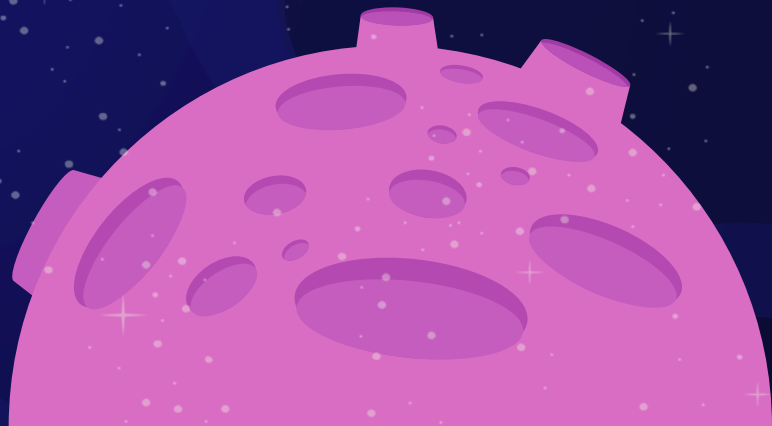
Non-digetic sound is sound that exists outside the on-screen story and events

It is basically sounds not heard by the character or not produced by an event in the story

According to Michel Chion;

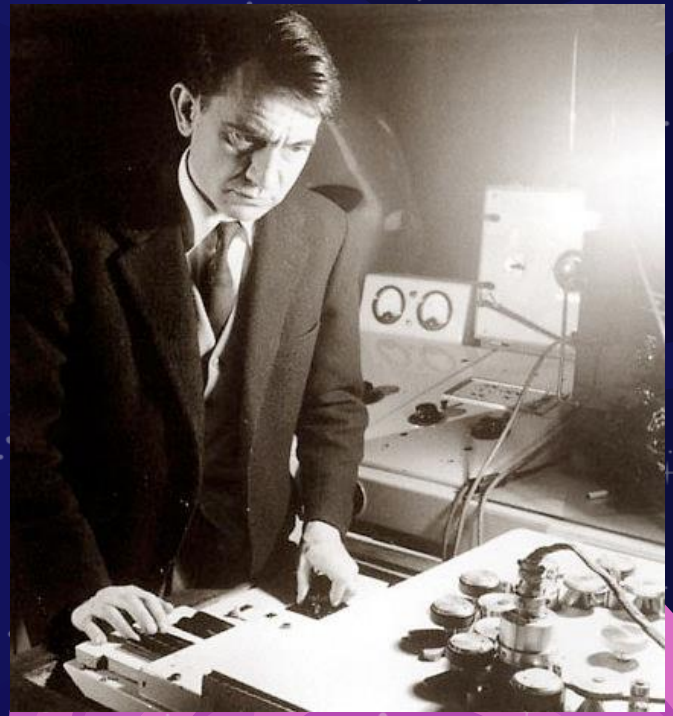
Sound Perception and Sensation happens in three forms

- Causal Listening
- Semantic Listening
- Reduced Listening

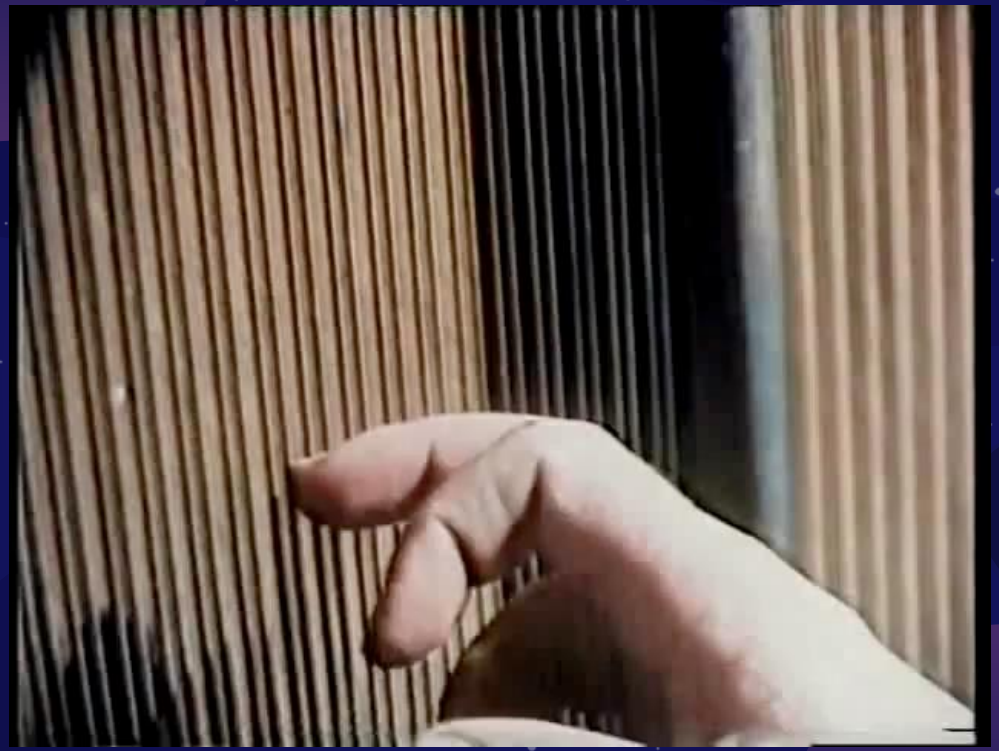


MUSIQUE CONCRETE

Musique concrète (French for "concrete music") is a form of electroacoustic music that utilises acousmatic sound as a compositional resource. The compositional material is not restricted to the inclusion of sounds derived from musical instruments or voices, nor to elements traditionally thought of as "musical" (melody, harmony, rhythm, metre and so on). The theoretical underpinnings of the aesthetic were developed by Pierre Schaeffer, beginning in the early 1940s.

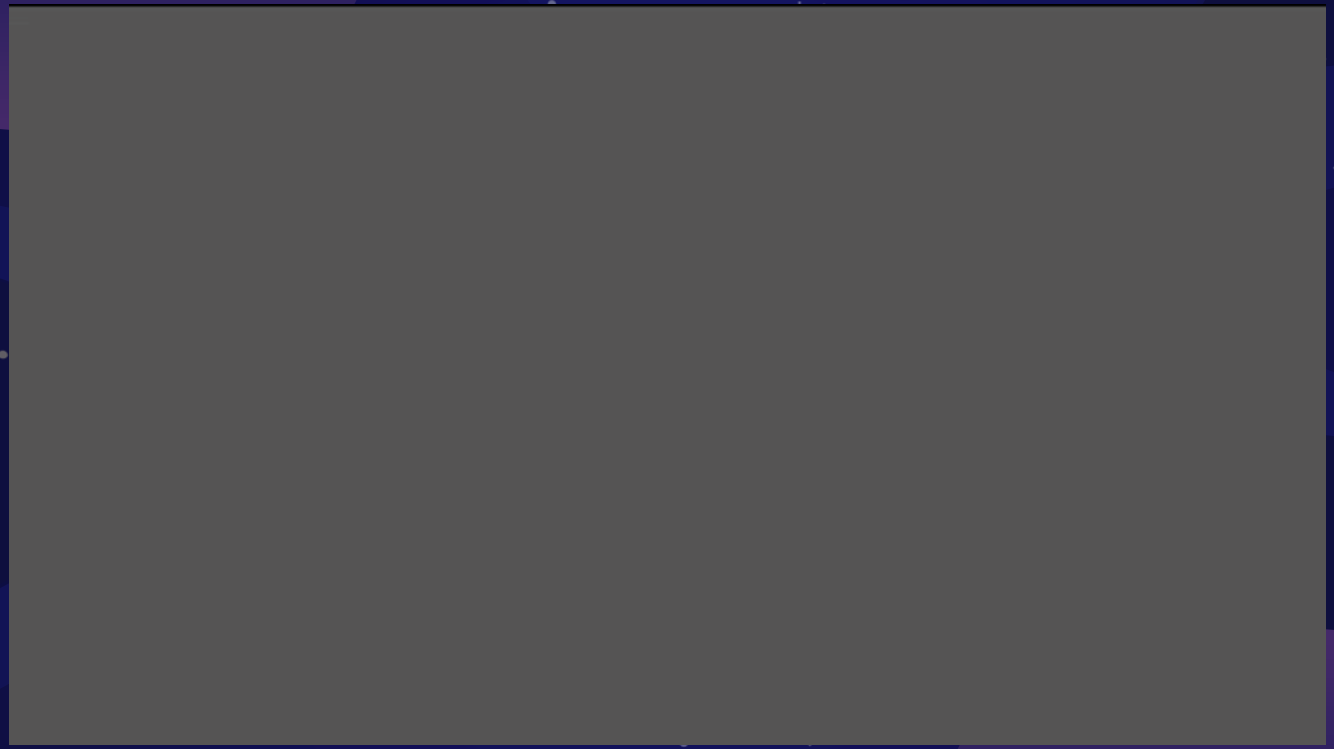


Musique concrete



Source: http://www.youtube.com/watch?v=c4ea0sBrw6M

JOHN CAGE 4:33



Source: https://vimeo.com/3176013