

acousmatique sound diffusion

by S. Wyatt

The term ***acousmatique musique*** designates a music of images that is "shot and developed in the studio, and projected in a hall, like a film."

Sound diffusion or ***acousmatique sound diffusion*** refers to a performance practice of spreading, distributing or diffusing music over many loudspeakers located within a listening space or concert hall.

With sound projection, compositional and performance gestures of the music are identified, analyzed and catalogued. Sound projection gestures are based upon the compositional elements, phrases and gestures of the music—in a non-subversive manner. Timed projections are often notated in a score to be rehearsed and performed live by one or more sound projectionists.

I. Awareness of associated aesthetics:

- *Fixed medium delivery vs. live diffusion*
- *How many channels and in what configuration*
- *Stereophonic sources vs. monophonic sources panned*

II. Scientific factors for consideration:

- *Understanding of ear physiology and HRTF's*
- *Sound source characteristics*
- *Host space characteristics*
- *Factors for determining lateral localization*
- *Factors for determining a sound's distance from the observer*
- *Positional shift cues*

Areas for analysis for creating a composed diffusion of a composition (other than your own):

I. Composition:

identification and examination of:

- *the structural components, their relationships and how they develop*
- *textual aspects*
- *vertical and linear densities*
- *level of importance given to microstructures*
- *temporal settings*
- *use of location and proximity within the composition*

II. Engineered realization

identification and examination of:

- *overall dynamics*
- *prominent frequency elements*
- *point source locations*
- *use of horizontal panning*
- *depth of proximities*
- *reflected sound (local and global reverberation)*
- *juxtaposed environments*
- *superimposed environments*

III. Host space where composition will be presented

identification and examination of:

- *reverberant characteristics of the hall*
- *resonant frequencies of the hall*
- *proximity of the loudspeakers to the audience*

Beginning compositional considerations for multi-channel performance:

- *addition of composed environments*
- *composed shifts of environments*
- *composed simultaneous environments*
- *composed placement of mono point sources for both horizontal and depth proximity locations*
- *composed use of true stereo images juxtaposed with mono point sources*
- *composed shifts in the width of the stereo fields*
- *composed shifts in the depth of the stereo fields*
- *composed use of antiphonal events*
- *creation of dialogue activity among loudspeaker locations*
- *use of non-traditional loudspeaker placement*