

THEATRE DESIGN & TECHNOLOGY MAGAZINE

1987 SUMMER ISSUE - SOUND COLUMN

THEATRE SOUND LEADS FILM SOUND?

By Charlie Richmond

Some time before the term "sound designer" was used in the film industry, I designed the sound for a production of 'Private Lives,' directed by Francis Ford Coppola and produced during a brief break he had just before the release of 'The Godfather.' This was possibly the first time he had been exposed to the concept of a "designer" of sound as practices in professional theatre. Certainly, the film industry had always spent lavishly on scores when it could, and I was a great admirer of the major effort Coppola produced with the assistance of his favourite sound editor Walter Murch in the film 'THX1138.' It is most telling that, when George Lucas finally turned his efforts to creating a high quality, standardized, and defined sound system for cinema playback, he named it "THX" after that early project.

Now, I'm not saying that 'Private Lives' had a spectacular sound -- in fact, it was simply standard professional theatre. We had a live trio led by Carmine Coppola providing period preshow, incidental, scene break, intermission, curtain call, and audience exit music. Playing quietly in an acoustically treated orchestra box, they were almost inaudible without sound reinforcement, yet having them in clear view added a tasteful touch to the production. The instruments were carefully miked with cues and levels carefully noted throughout the regular technical rehearsal process. No live sound operator sat in the house; nothing was left to chance as levels accurate to 1dB were set by the sound designer for every sound the trio made. As usual, levels were increased with the size of the audience, but the cue sheets remained the operator's master for the run of the show. The fact that a "sound designer" was responsible for the artistic aspects of sound within the production and that the production benefitted as a result was not lost on Coppola, since shortly thereafter he directed the first film to my knowledge crediting the services of a sound designer, 'The Conversation.'

In most respects, the film sound designer performs the function of both sound reinforcement and sound score design. The USITT Engineering Subcommittee on Audio & Acoustics opinion consensus report states that the basic purpose of reinforcement in the theatre ". . . is to insure that speech and music . . . is heard with sufficient loudness, clarity, intelligibility, naturalness, and with directional realism by the audience."(1) From the same report: "The purpose [of sound effects] we re most familiar with is the heightening of the illusion of realism. A second purpose is to heighten a particular emotion . . . A third purpose is continuity. Finally, sound may actually become a protagonist . . ."(2)

The most difficult parallel to substantiate is the function of reinforcement. Obviously, since the method of production and presentation of film sound is exclusively from prerecorded

materials, one could hardly agree that it exemplifies live reinforcement. Indeed, microphone, mixing, and vocal alteration techniques are substantially different between live voice reinforcement on stage and production sound or automatic dialogue replacement (ADR) for film, but in both cases the specific goal is expressly as defined in the USITT report. In other words, if the purpose of film sound is specifically to ensure that speech and music (in this case meaning realistic human-generated sounds that precisely coincide with the visual images presented, not underscoring) is heard with sufficient loudness, clarity, intelligibility, naturalness, and with directional realism by the audience, then should it not be labelled reinforcement?

Another parallel between stage and film "reinforcement" that goes beyond the semantic is its relative importance. In most cases sound effects and music scores certainly perform an illusionary, emotional and/or continuity function, but usually have only a nominal effect on communication of the show's meaning to its audience. Reinforcement is essential in both cases: if it disappears during either stage or film presentations, the show simply stops and the price of admission is refunded. This aspect has not gone unnoticed, of course, since personnel have long been employed by both film and stage productions to ensure the message gets across. What is intriguing is that the term "sound designer" did not come into general use in reinforcement (stage or film) until it became a generally accepted precept that all sound within a production is best integrated by someone with a good understanding of artistic intent, physiology of hearing, venue and systems; plus, according to Dr. John Bracewell, "Motivation, Music, Acoustical Reinforcement, Vocal Alteration, Vocal Substitution, Mood and Extension of Dramatic Time/Space."⁽³⁾

Film production has consistently employed some of the most brilliant sound engineers right from the start of the "talkies," and no expense has been spared in many cases to create sound quality, artistry, and imagery. Perhaps it is the advent of more elaborate cinema sound systems -- specifically the THX design mentioned earlier, or more commonly the Dolby stereo and Six Channel surround systems -- that have created a need for film sound designers who are not only able to put good sounds onto a soundtrack but know what those sounds will do to an audience when it is played back in a cinema environment impossible to recreate in the mixing theatre. A good example of this is the custom cinema playback system design employed for the film *Earthquake* with its multiple massive low frequency loudspeakers. It is often a good theatre sound designer's knowledge of the effect a cue will have when reproduced on the theatre's sound system that allows that designer to make effective choices of material and production techniques. Perhaps it is specifically this ability to "second-guess" the end result that has made the difference between the "mixing engineer" and the "sound designer" for both stage and film; certainly it is important.

In fact, sound requirements are remarkably similar for both film and theatre. The number of film sound effects and "foley" sounds (sound made by the human body) is naturally much greater than for stage productions since all natural and incidental sounds must be

recorded, but music requirements are very similar. Films enjoy original scores more frequently than plays, yet both can benefit from having scenes written or directed with the music in mind, and vice versa. Silence, too, has significance in both. Music forms for both tend to be driven by the current trend toward hi-tech stylization, yet classic musical motivations still persist. Because of the superior ability of film to capture spontaneous events, it often contains certain "rough edges" which give just the right feeling; film production frequently exemplifies the philosophy that fine tuning a sequence could spoil it whereas live theatre builds in a feeling of spontaneity if desired but rehearses the scene thoroughly, ensuring it can be reliably reproduced time after time.

Sound -- both effects and music -- tends to be considerably more personalized in film since it usually conforms to the camera's point of view; the point of view of stage sound is almost always seriously constrained by the static relationship between the audience and the play. Introduction of musical elements as early as possible can be equally important since both film and stage actors can gain considerable motivation for certain scenes upon hearing the accompanying score. Rehearsal recordings are considerably more common in stage productions simply because the actors need to hear the sound they will be performing with. It is very rare for an original film score to even be composed until after the picture editing has been done.

Prerecording sound production techniques for both film and stage are very similar. Film sound creation is usually considerably more involved simply because there is more. The major technical difference is that all film sounds are synchronized, edited, and mixed into a final product that remains locked in time. Prerecorded theatrical sounds do not require such slavish adherence to perfect synchronization since the live action has considerable variability. All these sounds must remain temporally discrete until they are required, at which time perfection becomes the responsibility of the stage manager and sound operator.

The quality of most cinema audio systems is rather dismal, ultimately limiting the potential impact of any designer's sound track. Notable exceptions exist, but even high quality multi-channel playback systems have their limitations and are constrained by well-defined "academy" specifications intended specifically to guarantee some consistency between cinema venues. Every film sound designer has these "lowest-common-denominator" playback characteristics to contend with and frequently creates different sound tracks for each of the basic playback systems: mono, Dolby stereo, Dolby stereo surround, and six-track Dolby.

Rarely is a film sound designer given total control similar to that commonly allowed theatre sound designers. Unique film/cinema relationships exist at theme parks, entertainment complexes, exhibitions, world's fairs, and similar situations allowing truly creative and high quality results, yet important differences still exist. These presentations are usually automated and use unskilled operators, resulting in a lack of flexibility and dynamic range. Even relatively low-budget

professional theatre companies can today create special playback capabilities and systems with human operators coupled with high quality audio equipment resulting in a live sound design with greater impact, wider dynamic range, and more flexible control that is ultimately more satisfying than even the highest quality film-based scores.

POSTSCRIPT: There is currently informal discussion within the USITT Sound Design Commission concerning formalizing the distinction between theatre sound designers of the system/reinforcement persuasion and those of the score/effects persuasion. This has come about not so much as a result of desire on the part of designers to be categorically considered one or the other but specifically because Broadway sound designers have formed a local of IATSE and are actively soliciting membership in North America. The difficulty lies in the fact that, even though many of the "sound score designers" working in the hinterlands of (far) Off-Broadway have not particularly felt an urgent need for union representation, they are almost unanimously of the opinion that the most appropriate union to represent their interests is the United Scenic Artists.

This situation is currently complicated by an apparent disinterest amongst sound score designers to commit themselves to joining a USA local, but not by USA itself since it has indicated it is more than willing to assist. Once we overcome the obstacle of communicating effectively with a sparse population of designers we will see the coexistence of two groups with different but complementary interests. It will continue to be the aim of the USITT Sound Design Commission to sponsor projects and disseminate information vital to both groups. Hopefully we will also gain the interest of film sound designers.

Notes:

(1) David L. Klepper, "Theatre Sound and Communication Systems," Theatre Design & Technology, Feb. 1972, p. 12.

(2) Ibid., p. 15

(3) John L. Bracewell, "Sound as a Design Art," Theatre Design & Technology, Winter 1981, p. 4.

Copyright ©1987 Charlie Richmond