How To Make Your Movie Sound Like A Real Movie

I get a lot of questions on if I can "do" sound sweetening, usually by frantic filmmakers, calling in the middle of the night. They are frantic because the sound in their movie or video is bad.

They've used a cheap mic, plugged into the camera, or worse, have used the on-camera mic.

They had a friend aimlessly point the mic at the floor, or the sky, anywhere but at the actor muttering his lines, and moved the mic randomly during shooting.

Some, from the sound of it, have pointed the mic directly at the whirring camera, or rumbling electric generator, or humming air conditioner, or buzzing fluorescent lamp. They've bumped the mic against the wall, or the ceiling, or trees or bushes.

They're far away from what they're recording, not even in the same vicinity. There's so much "room sound," you can barely hear the actor mumbling along.

So, the Sound Guy (whoever they can get for a few minutes - usually a well-meaning person with no experience) turns up the level too far, which just makes the sound distort horribly, or too low, which buries the good sound in the mud.

Sound Editing adds more mistakes, and compounds the problem. The filmmaker has the equipment, and wants the film to be good. You'd think he'd read a book on the subject. You would be wrong.

He chops the sound when he chops the picture, and that's it. He doesn't split it into tracks, or replace bad sound, or finesse the tracks, or otherwise spend time exerting care and craft on his precious film's soundtrack.

Essentially, when he's done shooting and cutting and laying music, he thinks he is done, without spending the minimum of time and care and money it takes, to have a good sound track.

So the filmmaker shows his movie, with its bad sound, to lukewarm audience reaction. Ouch!

People don't know why the movie is bad, actually. Not one in ten can recognize "bad sound," they just think the movie stinks.

If the filmmaker is very, very lucky, somebody will tell him the sound is bad. Otherwise, he has no clue.

He's disappointed, but he still wants to maybe fix it. Somebody says "sweetening" the sound will help. So he comes to me.

He wants to know if bad sound can be fixed. I have to tell him the bad news - no.

At this stage, unless he has a great deal of time and money, and is willing to start completely over and take the proper care, nothing can be done.

Bad sound is the product of negligence. If you spend the time and care, from the beginning, there is no reason for your film or video sound to be bad.

You've probably seen many commercial movies with good sound, so why doesn?t your movie sound like them? You probably don't really know how a good movie sounds, and what effort went into making them sound good.

Take some time, and actively listen. After a while, you'll notice what a good movie sounds like.

I was very lucky when I was starting out. I read a book by Ivan Watson from England, who spelled out precisely what it takes to record and edit and mix good movie sound.

You can still find "Uncle Ivan's" books, either online, http://snurl.com/brbu or at your library. If you haven't read any

filmmaking books, you need to. Get going!

What can you do to make your movie track sound less like a video, and more like a real movie?

Maybe a better question is, "Why does video sound so bad?"

I think that's a fair question, because frankly, most video sound, (all elements music-dialog-effects), sucks. I've heard exceptions, so I know it's not just the video itself.

Film does sound very different than video, I am certain of that.

Real movies are rich-sounding, with only the sounds and music that move the story along. Video, even shot by filmmakers who should know better, often is tinny and muffled, with thumps and noise on the tracks.

How is film sound different from video? Making a movie sound like a movie starts with the production sound.

Film sound is recorded on analog machines (yes, they still exist), or on cool new 96Khz/24bit sampling recorders.

Mini-DV camera sound is uncompressed 48Khz/16bit sampling. That's better-than-CD audio quality, but camera makers save money by using cheap audio circuits in most under- 5k video cameras.

Cheap-and-dirty analog-to-digital circuits add noise and distortion to your high-quality mic's crisp analog sound.

The best video camera sound I've found is on the Panasonic DVX-100A. Its audio section is good as most DAT or solid-state flash memory recorders. Shooting with one is like recording on a separate digital recorder.

Film sound is recorded with a midrange bump, and an EQ raise above 6KHz.

6KHz is the high end of the human voice. ?Midrange? is around 2.5KHz. The film sound "EQ raise" at 6KHz increases dialogue intelligibility and perceived crispness.

In video, sound is recorded without pre or post EQ. Video sound also usually uses inferior mics to those used in film sound.

Film sound mics have a cleaner sound, and flatter response, sounding better than the mics used to record video sound. They are highly directional (rejecting extraneous noise).

Give your video sound's midrange an EQ bump, and a raise at 6Khz, and it will be more like how film sound is recorded.

Get some decent mics, not the cheapies. A Sennheiser ME66, or an Audio-Technika 835b, is mid-level, not terribly expensive, and really works well. Those will give you a rich and full sound.

You may not want to record double-system (sound recorder separate from the camera), but if you can, do it!

If you have a Nagra or other analog tape recorder, use it. They just sound better.

35mm mag film to edit? Sounds great. It should ? it?s a 1/4" magnetic track at 18ips, and if you fill empty spaces with slug stock, it's self-gating.

In film sound, the sound designer matches sound to the look of the film. A sad movie has mood lighting, and the sound will be designed to match it in emotional tone. Its dialogue is EQ'd less crisply, with a lower-frequency boost.

In a happy comedy, lower frequencies are rolled off, and it's EQ'd and mixed to be "brighter."

Film sound is "sweetened" by manipulating room tone, premixing audio levels, and carefully considering dialog, music, and effects for their proper audio EQ.

Film sound expects post-production sweetening, which makes film audio sound so different from audio for video. Video sound can be sweetened, but Indies use it pretty much as it is recorded. Yuck!

What can be done about it? How can you make your movie sound like a real movie?

First, notice how video procedures are designed for quick-and- easy operation, and not really for quality.

I think most video sound sucks because the camera operator is also the sound recordist, and the camera op doesn't care about sound.

He wants the framing and focus and color and bla bla bla. Sound is not his priority, and he's not really listening to what's coming through the mic and mixer and headphones. He can't.

For your sound to be good, you must care about it being good. That care will force you to listen to your track, something most video hobbyists, and many filmmakers, simply don't do.

Until they've lost a film festival, and notice the winner has good sound. Or they see the one Indy film that comes along in a blue moon, the one with good sound.

If you actively listen to your track, you'll start hearing (it takes time to train your ears) all the junk you're recording.

You'll take the steps necessary (filtering, mic placement, EQ, editing) to discard everything that is extraneous. Get rid of anything that doesn't create a mood, or push your story along.

You will put the mic just as close to your subject as you can, and roll off the wind noise, and use a fur piece on the mic, and only mix in enough room or ambient noise, and only when it's necessary.

If there's a single "most important part," I would say it is "gain staging." Set your levels carefully - at every stage!

When we recorded in analog, there was a certain forgiving quality to the recording process. Overmodulation would "saturate" the tape, limiting levels before actually distorting.

Now everything's digital, and if you're recording digitally (to DAT, CD, Mini-disc, or Flash Memory), there is very little "headroom," and much less tolerance for clipping, than in analog.

If your meter goes "into the red," the sound becomes a chattery digital nightmare. It is ruined forever. So make sure you use "-6Db" for your "0Db," to keep it clean.

Always "expect the unexpected" when setting your levels. I've noticed actors always "perform" 6Db louder than they "rehearse," and musicians do too.

I always feed one mono signal to both stereo tracks, with L at the "proper" level, and R backed off 6Db or so.

If the sound gets too loud, L will distort, but I'll still have a chance to salvage that section of R, when I'm editing.

How much is enough? Experience will teach you. Listen!

The major difference between how film dialog sounds and video dialog sounds is the EQ and compression that is used to make it intelligible and "fatter." With practice, you will learn how to get that sound. There is no shortcut - you must practice!

You will learn what distortion sounds like, and you will learn to set the gain properly, and boost the midrange or add compression in recording or mixing, when it's necessary, to push the important signal up out of the mud, and into your audience awareness.

How much boost? Again, experience.

That's why you need a Sound Mixer with sound as his only job, one who cares, with enough faith in his ears, and experience at setting the gain and EQ, and also a trained and experienced Boom Operator, with necessary skills to point and move the boom.

Make it clear to your sound crew that you consider sound just as important as the picture, and you expect good work from them.

Insist they yell "Cut!" if it distorts, and tell you when they need another take.

Don't make the mistake of letting "just anybody" volunteer to record sound. Make sure they've done it before.

Just hanging a mic on a boom stand is better than nothing, but not very much better. Care must be taken at every stage.

Get the best sound you can, when you shoot, so your editing will go smoothly.

Few things are worse than an edit session that becomes an audio salvage operation. It detracts from the creativity, replacing it with an air of desperation. You want to edit, when you edit.

After your picture is locked, start the sound edit. Split your tracks, so you can vary the gain on any element. If two characters are talking, you should have each on his own track.

Cut your dialogue, and then effects. Use your audio editing program to "normalize" your levels, and clean up the sound.

See what needs to be fixed, and fix it. Some stuff can, like Boom mic crashes, and ambient noise, but if something is bad and can't be fixed, replace it with ADR, looping, and foley.

Foley is extremely subjective, that is, it's not realistic. You don't notice footsteps at all in real life, but in the movies, if you need to know somebody's purposefully walking along, the footsteps are loud and pure and pristine. Tik, tik, tik.

Papers or clothes rustling, same thing. There are persons who make their living making clothing rustling noises, and walking and all those noises. They're called "Walkers," or "Foley Artists."

I don't mind having to record every footstep and line of dialogue. I've done it enough, I know how to make it seem real. How? From doing it and doing it, so if you want to learn how, get started, record something.

In fact, I much prefer replacing location dialogue. This frees me to shoot with literally any camera, noisy or not. Eyemo? Arri or Cameraflex? Mitchell, Eclair, Konvas?

All quite delightful results, if you record a track just to use as a guide track.

Or shoot two takes, one with the camera running, one without, but recording sound both times, and cheat the camera-less sound over the camera take, and cut it into sync.

Looney, but it works, and that's what I do, and I get good sound.

The harder and longer you work on your sound edit, the better chance your mix has to be good.

In my experience, looping or ADR are not all that expensive, when you have a vocal room in your house, and some good mics.

In a pinch, a closet full of coats works fine, or a tent made of carpet, hanging from the ceiling. Just put the mics away from your computer fan or open windows.

My friend Jimmy O'Brien, Editor and Dialogue Director at Universal for many years, told me he'd flown to NY and far-off places to record a few lines on occasion, if it would fix or change a line reading, or even change the whole plot line!

I know much of what I know about film sound from a long-ago interview with Walter Murch, in an issue of "Filmmakers Newsletter," where he advised to replace all the lines, rather than just one, so they'll all match. Die-hard attitude, but his tracks are lovely.

One of those that comes to mind is "Apocalypse Now," which had virtually no usable sound when they entered post-production. Think about that - everything was ADR and Foley!

Which brings me to the point in "making your movie sound like a real movie."

Real movies have real good sound tracks to start with, and are willing to replace most, and sometimes ALL the sound, to make it really good.

Use your imagination, to determine what process might make your sound "sound right." Create a sound space for each scene that serves the story. Use EQ and reverb and sound effects to create that space.

Compression is still a useful tool, even in these days of digital audio. It makes the "louds" quieter, and the "quiets" louder, raising the overall perceived level. That makes the track easier to mix, because it is "pre-mixed." The mix flies itself.

Use compression sparingly, so it doesn't make overall changes you don't want. Rather than compressing everything, use your audio editing software to draw in your gain changes.

This is actually a manual type of compression, with intelligence, (yours). Drawing in your level changes makes the track fatter and more intelligible.

Take all the time and care your movie requires, with only one outcome in mind, to make your movie tracks sound better.

Have the picture scored by a composer who knows what he's doing, and get the very best mix you can.

Good audio takes as much planning as good picture, from start to finish. Good audio doesn't "just happen," it is the result of careful listening, and time, and care.

Most video hobbyists don't give sound the attention it deserves, and that's why there's such an astonishing difference in quality between video and film sound. Be different.

Start listening! Take care!

Short note about the author

Sam Longoria is a Hollywood producer, working in film since 1970, in a variety of jobs. His work graces several Oscar-nominated films, and one Oscar winner. Sam teaches Independent Producing at http://hollywoodseminars.com, and writes for his Filmmaking Blog. http://samlongoria.blogspot.com.

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