

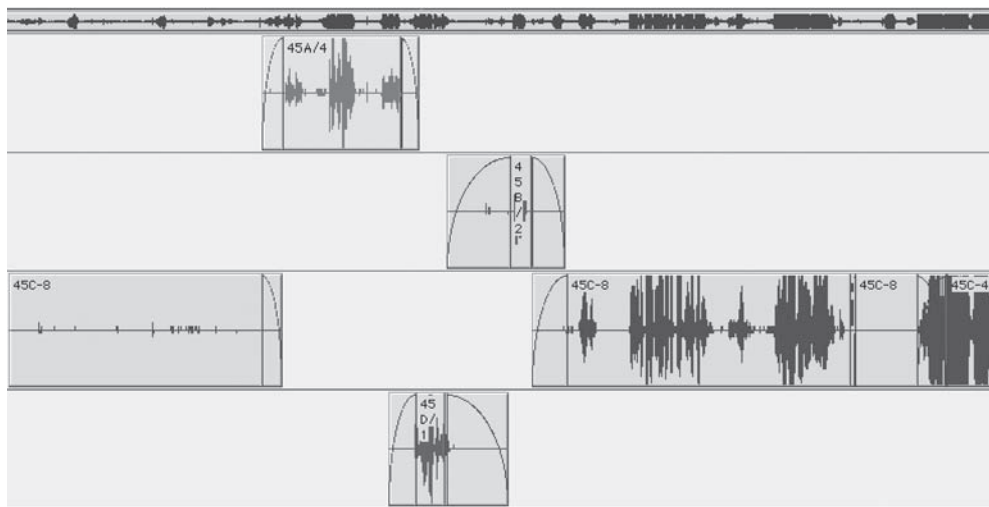


**Figure 10-11** Room tone was applied for the entire duration of scene 45 in an attempt to mask shot mismatches. The underlying problem has not been solved, and the scene will now be much noisier.

### ***Rule One: Whenever Possible, Play Only One Source of Room Tone at a Time***

Let each shot speak for itself, overlapping room tones only at transitions. It's true that there must be constant room tone running the length of a scene. After all, it's the air that a scene breathes. However, in most circumstances the room tone comes from the regions themselves. Only when there's a hole in the production track do you add a steady track of tone.

In Figure 10-12, each shot **crossfades** into the next. Here we were lucky because there was sufficient clean room tone within the handles of each shot to allow for easy crossfade creation. There's no added, steady room tone track; instead, the room tone comes uniquely from the shots that make up the scene so it rarely has more than one source. "But," you ask, "what about the cross-



**Figure 10-12** Detail of preliminary edit of scene 45. Regions overlap more or less symmetrically and there's no supplemental room tone track. The room tone for the scene is carried by the shots themselves.

fades? During these transitions two room tones are playing at once." Yes, but as one shot fades in its partner fades out, so the sum of the two is never more than 100 percent of the average level of the shots. You haven't broken the rule about avoiding more than one simultaneous tone.

Creating crossfades between regions doesn't eliminate sound differences between shots. It merely lengthens the transition so that you don't notice the changes. Human "hearing memory" is surprisingly short, so it doesn't take much to fool the ear into thinking that a transition is smooth. Just spread the transition over a bit of time and most listeners won't hear a thing.

Once you construct smoothing crossfades between shots, the scene will almost certainly sound quieter, as though you equalized or otherwise cleaned it. There will likely remain "swells" as you move back and forth between shots. When the room tone characteristics of two adjacent shots are very different, there'll be peaks and troughs in the overall noise level as well as changes in the sound itself. During the dialogue premix you'll process these crossfaded shots to further minimize the mismatches. This brings us to the next basic rule of dialogue editing.

### ***Rule Two: Evenness Is a Trade-off between Noise and Smoothness***

When two shots don't match well, you'll inevitably hear their transitions despite crossfades. By lengthening a crossfade, you'll smooth the transition and give the impression of evenness. At the same time, this will increase the total noise since there'll be a longer period during which two room tones are playing. What's the "right" length? Of course, there's no answer to that. It's a choice, so use your judgment. Don't be afraid to experiment with fade lengths; a tiny change in overlap can make a huge difference in balance, noise, and smoothness of the crossover.

***Why Bother?*** Since you're going to equalize and noise-reduce the shots during the mix, why go to such editorial trouble to smooth the transitions? Won't the processing during the dialogue premix mitigate the differences between the shots? Yes . . . but. Imagine you're painting a badly damaged window frame. The goal is a smooth, evenly covered surface that you can achieve either by slathering on a couple of thick coats of paint or by carefully scraping and sanding and filling, then applying a primer and sanding again—only then applying several thin coats of finishing paint. Either way the window gets painted. But in the lazy example you lose the details of the carpentry. The surface may be covered but it's not "articulate." It may be relatively smooth, but it's covered with a thick crust of paint that masks the sharp lines, bevels, and joints of the underlying wood. In short, the craftsmanship is lost. Because in the careful example you took the time to fix the holes, mend the transitions, and smooth the surface, you need to apply only as much covering as is absolutely necessary. The paint finish is smooth, yet the personality of the underlying woodwork is maintained.

Such is the case with dialogue editing and mixing. Whereas it's true that you can smooth almost any shot transition if you throw enough EQ and noise reduction at it, you have to ask yourself, "At what cost?" Scenes not properly prepared prior to the mix require much more processing to achieve an acceptable amount of smoothness. Because of the excessive filtering they may lack life, or sound thin and metallic, or at worst like a cell phone. This leads us to the third rule of thumb.

### ***Rule Three: Design Scenes That Require the Least Amount of Processing***

When your transitions are smooth, they're less objectionable to the ear. Hence, they require less shot matching. Of course, certain shots will need to be

“helped along” and the entire scene will need noise reduction, but since your dialogue transitions largely take care of themselves, you don’t need to overcook it. This allows the rerecording mixer to put more energy into making the shots sound nice—robust, full, warm, articulate. The dialogue hasn’t been stripped of its character, so there’s more to play with.

Ironically, the noisier the location of the scene, the bumpier you can leave your dialogue edit. If you’re cutting a scene with lots of traffic noise, rest assured that the sound effects editor can sort out a problematic dialogue transition with a well-placed car-by or other background motion effect. No one will notice one more car-by amid a noisy scene, and the tiny added motion energy will bridge the gap.

On the other hand, no scene is harder to cut than an intimate conversation in a dead quiet bedroom at three in the morning. There’s nothing to hide behind, and if the shots aren’t naturally well matched, it’s a nightmare to cut back and forth. If there’s camera noise on one shot but not on the other, you have very few smoothing resources and you can’t count on the SFX guys to save you. There are few appropriate atmospheric sound effects that can be used to mask the bumps, so you’re on your own.

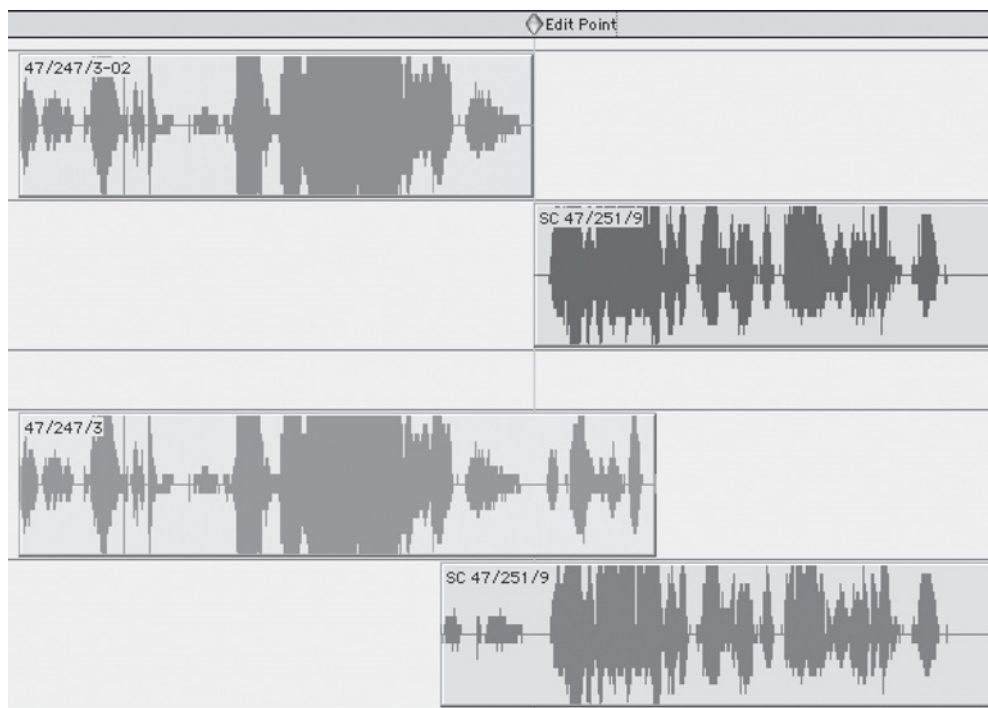
### *Transition When There’s No Handle*

In our restaurant scene with Bob, Betty, and Blanche, the editing gods indeed smiled on us. We were able to create clean room tone bridges merely by opening each shot’s handles. As we pulled out the handles, we didn’t encounter any footsteps, breaths, or words to ruin the room tone. Finding good “free” room tone like this isn’t unusual, but to find it for a whole scene is unheard of. Count your blessings.

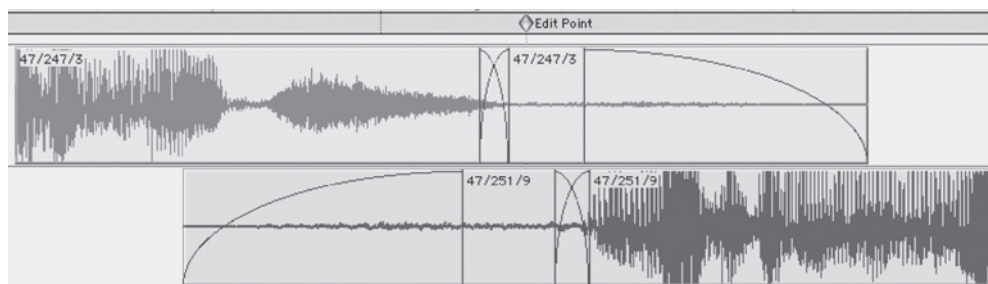
What do you do when the handles don’t provide the room tone you need for transitions, as shown in Figure 10-13? You must create room tone, attach it to the region, and then make your crossfade. The next section deals in depth with room tone—what it is, how to make it, how to manage it. But first let’s look at an example of bridging shot transitions using room tone you’ve found or created. (See Figure 10-14.)

Often when the handle’s room tone is of no use, you’ll find enough elsewhere in the same shot. Since the character of most room tones varies over time, looking nearby has two advantages: It’s easy and it’s likely to match. (See Figure 10-15.)

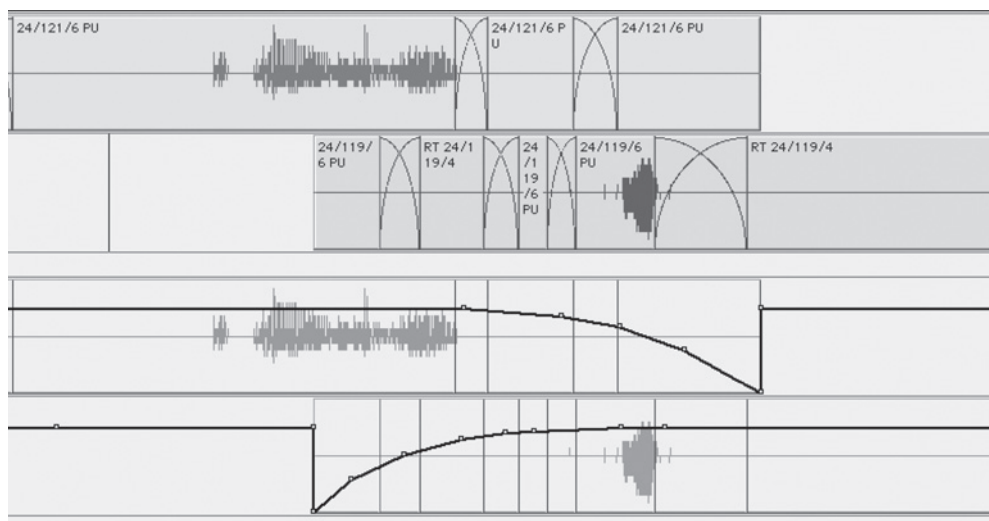
Remember, the room tone you’re attaching to a shot must come from that shot (but not necessarily from the same take). Doing otherwise defeats the point



**Figure 10-13** Just because you have a handle doesn't mean it's useful. Here you see the OMF edit (*above*) and after opening handles (*below*). The marker indicates the location of the original cut. Note that there's no useful room tone in either handle. Always listen for words, breaths, and motion sounds when opening handles for tone bridges.



**Figure 10-14** Create room tone “bridges” from nearby sections of the same shot. Here the two regions from Figure 10-12, which had no usable handles of their own, are linked using copies of adjacent room tone from the same shot.



**Figure 10-15** Room tone bridges are constructed from small segments of appropriate room tone from the same take as the main regions (*above*). Note that crossfades are used between the room tone segments. *Below* is the volume automation showing the crossfade between shots 121 and 119. Many workstations allow you to fade across several faded regions rather than having to resort to level automation.

of splitting tracks and organizing your scenes by shot of origin. If you can't find appropriate room tone elsewhere in the shot, try copying the region to a work track and fishing through the entire take. This technique is described in the next section.

You've now smoothed shot transitions in two ways: the lucky way, where you find usable room tone in the shots' handles, and the more common method, where you copy or construct a tone transition. Although each set of regions poses unique transition problems that require their own solutions, all shot transition puzzles are solved with some variation of these techniques.

## Using Room Tone When Editing Dialogue

Room tone is the single most important tool of dialogue editing. Just as woodwind players are obsessive about their reeds, or fly fishermen have a mystical relationship with their flies, so too are dialogue editors fanatical about room tone. Without it, you can't edit.

At the same time, the term "room tone" is grossly misunderstood and misapplied. To many, it means "an interior atmosphere." To some, it's any

atmosphere. Wrong on both counts. *Room tone* is the “silence” in any location recording, what’s left from a take when you remove the words, the footsteps, and the rustle. It describes the location (interior or exterior) at which a scene was shot, and it helps define the essence of a shot.

Room tone’s lofty position is due both to the trouble it causes and to the way it conveniently rushes to the rescue. Bumps in an edited scene are usually caused not by differences between characters’ voices but rather by differences between their room tone. It’s room tone that sets the shots apart, interfering with the magic of cinema continuity. And it’s room tone that enables you to create a smooth and believable scene. Dialogue editors use room tone in every stage of editing. These are some of the most obvious examples:

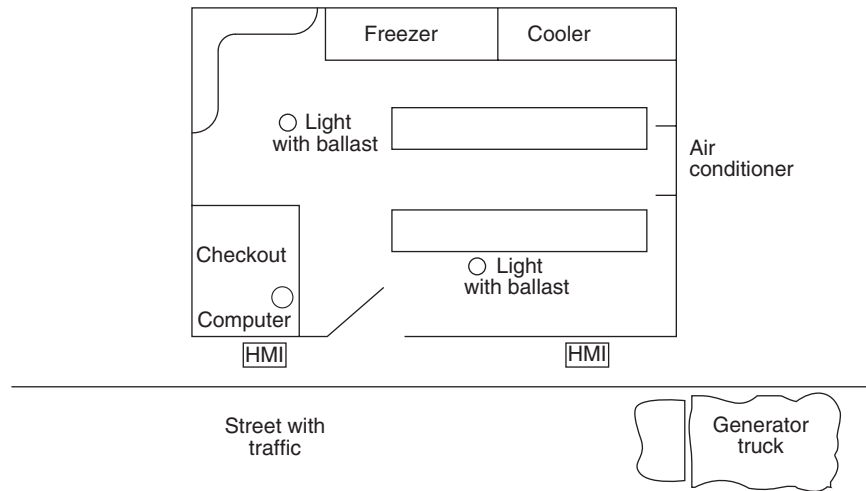
- To bridge between different shots within a scene, lending the impression that the scene is a continuous action rather than a collection of shots.
- If added judiciously, to ease the transition between quiet close-ups and boomy wide shots.
- To remove noises from dollies, denture smacks, lip flaps, offscreen talking, and so on.
- To replace the environmental sound when dialogue must be rerecorded (**ADR**). Any missing body action sounds are replaced with **Foley**.
- To enhance international versions of films (**M&E**) when original room tone is added to atmospheres so that the international version resembles the original-language version.

### *Room Tone versus Backgrounds or Atmospheres*

Simply put, room tone belongs to the dialogue department, whereas atmospheres (also called “backgrounds” or “ambiances” depending on where you live) are the domain of the sound effects/background department. Dialogue recordings are mono (perhaps multitrack, but not stereo), and so is room tone. Atmosphere recordings are usually stereo, although some are mono. Good room tone will have all of the characteristics of the shot that it’s fixing. Level, color, pitch, “action”—all of these attributes must match the shot at the moment in the scene when they’re used. Even if the location mixer records a stereo atmosphere of the set, this is not the same as a room tone and its uses are different.

### *Finding Room Tone*

A location recordist will try to record room tone for each scene filmed. This will solve some of your problems, but it’s not necessarily the answer to your



**Figure 10-16** Shooting on location means mismatched room tones. In this convenience store, there are several sources of steady noise, many of which can't be turned off. Add to that the traffic outside and the noises created by the shoot itself—ballasts and the generator—and you see how it's hard to depend on a “general” room tone recording intended to cover the whole scene.

prayers. If there are four shots for a given scene, for example, each one will have its own distinct sound. Maybe the lights have moved; perhaps there's a noisy highway behind a character in one angle but not in others; or the camera may be closer to the actor (and microphone) in one shot than in the others so the camera noise is discernibly louder in that shot. The reasons for mismatched room tone are endless. (See Figure 10-16.) When the location mixer records 30 seconds of room tone for the scene, whose tone is he recording? The shot with the camera? The shot with the highway noise? The shot with more lighting ballast noise? Or perhaps an “average” room tone for the scene?

To make matters worse, it's often very difficult for the location mixer to enforce a few seconds of *real* silence on the set while she records. Her call for “Total silence!” doesn't mean “Whisper softly into your cell phone” or “Slowly open your lunch.” “Absolute quiet!!” doesn't mean that the continuity person can complete her notes or that the grip can play with his pliers. Bottom line: You'll rarely be able to find good room tone within the wild room tone recordings from the set. You have to make it yourself.