CHAPTER 1

The Evolution of Mixing

Before we get into the actual mechanics of mixing, it's important to have some perspective on how this art has developed over the years.

It's obvious to just about everyone who's been around long enough that mixing has changed over the decades, but the why's and how's aren't quite so obvious. In the early days of recording in the 50's, there really wasn't any mixing per se since the recording medium was mono and a big date used only four microphones. Of course, over the years recording developed from capturing an unaltered musical event to one that was artificially created through overdubs, thanks to the innovation of Selsync (the ability to play back off of the record head so everything stayed in sync) introduced in 1955. The availability of more and more tracks begat larger and larger consoles, which begat computer automation and recall just to manage the larger consoles fed by more tracks. With all that came not only an inevitable change in the philosophy of mixing but a change in the way that a mixer listened or thought as well.

According to the revered engineer/producer Eddie Kramer, "Everything (when I started recording) was 4-track, so we approached recording from a much different perspective than people do nowadays. My training in England was fortunately with some of the greatest engineers of the day, who were basically classically trained in the sense that they could go out and record a symphony orchestra and then come back to the studio and then do the Jazz or Pop, which is exactly what we used to do. When I was training under Bob Auger, who was the senior engineer at Pye Studios, he and I used to go out and do classical albums with a 3-track Ampex machine and three Neumann U47's and a single mixer of three channels. So with that sort of training and technique under my belt, approaching a Rock & Roll session was approaching it from a classical engineering standpoint and making the sound of a rock band bigger and better than it was. But the fact of the matter was that we had

very few tools at our disposal except EQ, compression, and tape delay. That was it."

English mixer Andy Johns, who apprenticed under Kramer and eventually went on to equally impressive credits with The Rolling Stones, Led Zeppelin, Traffic, Van Halen and others, goes a step further. "You know why the Beatles' *Sgt. Pepper's* sounds so good? You know why *Are You Experienced?* sounds so good, almost better than what we can do now? Because, when you were doing the 4-to-4 (bouncing down from one 4-track machine to another), you mixed as you went along. There was a mix on two tracks of the second 4-track machine and you filled up the open tracks and did the same thing again. Listen to "We Love You" (by the Stones). Listen to *Sergeant Pepper's*. Listen to *Hole in My Shoe* by Traffic. You mixed as you went along. Therefore, after you got the sounds that would fit with each other, all you had to do was adjust the melodies. Nowadays, because you have this luxury of the computer and virtually as many tracks as you want, you don't think that way any more."

And indeed, once more tracks were available and things began to be recorded in stereo, the emphasis turned from the bass anchoring the record to the big beat of the drums as the main focal point. This is partially because drum miking typically went from just overhead and kick drum mics to the now common occurrence of a mic on every drum, since the consoles could now accommodate more microphone inputs and there were plenty of tracks on which to record. And, since the drums could be spread out over six or eight or even more tracks, they could be concentrated on more during the mix because they didn't have to be pre-mixed along with the bass onto only one or two tracks. Instead of the drums being thought of as just another instrument equal to the bass, they now demanded more attention because more tracks were used.

At that point (approximately 1975), thanks to the widespread use of the now standard 24-track tape deck, mixing changed forever. And, for better or for worse, mixing changed into what it is today.

Although there's less of a distinction these days than there used to be, where you live has a great influence on the sound of your mix. Up until the late 80's or so, it was easy to tell where a record was made, just by its sound. There's been a homogenization of styles in recent years, mostly because engineers now mix in a variety of locations and many have relocated to new areas, transplanting their mixing styles along the way.

There are three major recording styles and most recordings fall into one of them; New York, LA and London.

The New York Style

The New York style is perhaps the easiest to identify because it features a lot of compression, which makes the mix very punchy and aggressive (just like New Yorkers). In many cases, the compressed instruments (mostly the rhythm section) are even recompressed several times along the way. It seems that every New York engineer that I interviewed (even the transplanted ones) had virtually the same trick. Send the drums (sometimes with the bass) into a couple of busses, send that through some compressors, squeeze to taste, then add back a judicious amount of this compressed rhythm section to the mix through a couple of faders. This can be enhanced even further by boosting the high and low frequencies (lots of boost in most cases) to the compressed signal as well (more on this New York Compression Trick later in the book in the chapter on Dynamics). For an example of this, listen to any of the mixes that Ed Stasium (a proud practitioner of this method) has done, such as the Mick Jagger solo album *She's the Boss*, or anything by The Smithereens or Living Color.

The LA Style

The LA sound is a somewhat more natural sound; it is compressed, but to a less obvious degree than the New York style. There's also a lot less effects layering than the London style. The LA style has always tried to capture a musical event and augment it a little, rather than recreate it. Some good examples would be any of the Doobie Brothers or Van Halen hits of the 70's and 80's.

The London Style

The London sound is a highly layered musical event that borrows some from the New York style in that it's somewhat compressed, but deals with multiple effect layers. This style makes extensive use of what is known as *perspective*, which puts each instrument into its own distinct sonic environment. Although musical arrangement is important to any good mix, it's even more of a distinctive characteristic of a London mix. What this means is that many parts appear at different times during a mix; some for effect, some to change the dynamics of the song. Each new part will be in its own environment and as a result will have a different perspective. A perfect example of this would be Yes' *Owner of a Lonely Heart* or just about anything done by Trevor Horn, such as Seal or Grace Jones.

As we approach the millennium, there's much less of a difference between styles than there was during the 80's, but variations still do exist. Although the style differences blur on most music, Techno and Dance still have considerable variation divided around the traditional geographic boundaries of London, New York and LA

Other Styles

Increased globalization has had its effect on regional styles, too. Where once upon a time Philadelphia, Memphis, Ohio, Miami and San Francisco all had sub-styles of the Big Three, all these areas now line up clearly in one of the Big Three camps.

Nashville today is a special case among the regional styles, though. This is a style that's evolved (some might say devolved) from an offshoot of the New York style during the 60's and 70's to become much more like the LA sound of the 70's. Says engineer/producer Ed Seay, "Back when I used to listen to my dad's old Ray Price and Jim Reeves Country records, they weren't very far from what Pop was in the early 60's. Very mellow, big vocals, very subdued band, very little drums, strings, horns, lush. Mix-wise, there wasn't really too much difference in an Andy Williams record and one of the old Jim Reeves records.

"What happened was that Country got too soft sounding. You'd cut your track and then do some sweetening with some horns and strings. At one time, strings were on all the Country records and then it kind of transformed into where it's at today, with

almost no strings on Country records, except for big ballads. For the most part, horns are completely dead. They're almost taboo. Basically, it's rhythm track-driven and not really very far off from where Pop was in the mid-to-later 70's. The Ronstadt "It's So Easy To Fall In Love" and "You're No Good," where you hear guitar, bass, drums, keyboards, a slide or steel and then a vocal background; that's pretty much the format now, although fiddle is used also. Ironically enough, a lot of those guys that were making those records have moved here because at this point, this is one of the last bastions of live recording."

The globetrotting lifestyle of the 90's engineer has caused a homogenization of regional styles. At one time, most studios had house engineers; today the market is predominately made up of freelancers that freely travel from studio to studio, project to project, bouncing between different cities (and therefore styles) as easily as flipping the channel on a TV. At one time, an engineer might change studios but remain located in a specific area all his working life; now it's not uncommon for an engineer to relocate to several major media centers during the course of his career. All this means a cross-pollination of styles, which blurs the distinction between the Big Three as we move into the next millenium.