

Setting the Standard

by Judith Wink

About 50 years ago the audio industry was thinking of standardizing the widths of magnetic tapes. Remember cassettes and 8-tracks? Those are the kinds of tapes they were talking about. Somebody proposed 1/4 inch for cassettes and 3/8 inch for 8-tracks. Battles ensued. The problem wasn't the widths themselves; it was the concept of standardization. Some audio engineers saw "standard" as a synonym for "mediocre" — "standard," that is, as opposed to "deluxe." I don't know enough about magnetic tape to say why a different width would give better sound quality. It probably doesn't. I don't even know if that was the issue. It might have simply been the don't-tell-me-what-to-do spirit so typical of Americans. In the end, the pro-standardizing side won, and our audio industry could address itself to more pressing concerns, like how to stop Panasonic from eating our lunch. By now the technology is obsolete, so the question is moot, but the squabbling was fun while it lasted.

Fun, but looking back on it, a little silly. The idea of standard measurements surely isn't alien to anyone's thinking. Regardless of the shape, color or material of the measuring device, a tablespoon is a tablespoon, a yard is a yard, a quart is a quart, everywhere that those measurements are used. Standard-gauge railroad tracks have been around since the Civil War. Standard electric light sockets have been around since Herbert Hoover was secretary of commerce, about a hundred years ago. Musical pitch — well, that's a different story. Concert pitch for a modern orchestra is A440. Sure, the violins cheat and tune a little sharp for a brighter sound, but no contemporary orchestra tunes to A420 or 470. Early music, though, is different. Since the historical performance movement got going, Baroque groups play at A415 and an ensemble doing a historically-informed performance of Beethoven or Schubert will tune to A430. By now you may be concluding that pitch crept up over the decades as the pace of life quickened and everybody's nerves got a little tighter. Actually, ego, not nerves, was driving this. Every instrumentalist wanted a more brilliant sound than his rivals', and strings started snapping as pitch started rising.

And what was that pitch, exactly? It depended on where you were. Standard pitch is a pretty new concept. In the olden days, when what we call "early music" was just "music," every town in Europe had at least one church, every church had an organ, and every organ had to be tuned. To what? To the notions of the town's organ-tuner. And any instruments that were going to be played in church needed to play at that organ's pitch. Local wind-makers kept this in mind. No problem, as long as music stayed local, but players of fixed-pitch instruments who traveled to the next town would be hopelessly out of tune with that town's band unless they could transpose at sight. And the trickier the music, the harder this was.

String players didn't have this problem. They could tune to anything. If a Renaissance viol ensemble wasn't playing with other instruments, it would tune to its treble. The treble player would tighten his top string until it was just about to break. An experienced player would know when that was. An inexperienced player would soon find out. The note that this string produced was the D du jour, and everybody else tuned to it. Since atmospheric pressure changes from day to day, and since gut strings are sensitive to it, Wednesday's D would be different from Tuesday's, and both would be different from Monday's.

Nobody thought to standardize pitch until 1859. The first to do it were those inveterate codifiers and systematizers, the French. Pitch had been creeping up during the 19th century until singers started complaining that their throats were killing them. The French passed a law setting the A above middle C at 435 Hz. Twenty-five years earlier, the Stuttgart Conference had recommended A440, but the French pitch was included in the Treaty of Versailles, which gave the Germans yet another reason to repudiate the treaty. In the end, of course, the German pitch won out.

There's nothing sacred about A440, or for that matter A435 or A430 or A415 or A392. How many of us can hear the difference, anyway? All a recorder player cares about, when she sits down with a group, is that all the instruments will have been tuned to some agreed-upon standard and not to the local church organ. This doesn't just make group playing more pleasant. It makes it possible.