

# HISTORICAL TRANSCRIPTIONS

Problems and Techniques  
In the Transfer of Historical  
Recordings to L.P.

by

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The sale of historical recordings in recent years has shown that there is a big market, and the natural result is that companies all over the world are now issuing them. Having been responsible for those issued by World Record Club, I thought it might interest enthusiasts to know what is involved in producing one of these re-issues.

To start with, it has to be decided what material one is going to work from. There are usually three choices: (1) a metal matrix (positive) from the original master; (2) a vinyl pressing derived from (1); and (3) a normal commercial pressing. This last is often used, since with very old material, matrices are often no longer available and commercial pressings have then to be found. These are usually obtained from the EMI Library at Hayes, the BBC Library, the *Gramophone* library, or from specialist private collectors. Frequently, it happens that we can only find one copy of a record, and that is in a bad condition. Then one just has to make the best of it. You can imagine our feelings when the record is eventually issued and a customer writes to say he has a mint copy of that particular track!

However, given the existence of a matrix, I normally ask for vinyl pressings to be made as they have many advantages.

They have very silent surfaces, and are flat and concentric, whilst old matrices are usually the opposite. Matrices are sometimes highly affected by the magnetic field of the pickup, and with some pickups it is difficult to separate them, let alone control the playing weight. Modern cartridges are usually designed to play a vinyl surface and their response changes when playing a metal one.

Next comes the vexed question of playing speeds. As most collectors know, very old records seldom gave the speed on the label and they used to vary over a very wide range. All that can be done is to try and establish the *probable* speed for that particular make of record and compare it with the pitch in which the music was most probably performed. Having done all this, some kind gentleman will write in and say it was all wrong and suggest a most unlikely key as being correct. It is often anybody's guess.

When transferring a long work, special care must be taken to ensure that the pitch is maintained throughout, and especially across each side join. Here I am lucky to have had working with me since we started, Mr. Gadsby-Toni, one-time member of a leading London orchestra, and I rely on him entirely for all matters to do with pitch, which he will continuously check against a tuning fork. Sometimes one comes across a strange case like one of the Toscanini Beethoven symphonies, where each side of the original was at a different pitch from the next, and had to be corrected.

The correct equalization for the record must be selected if known. If not, usually a shrewd guess can be made; but this is not too critical, serving only as a basis from which to work. It always surprises me how many people still use an LP characteristic when playing 78s. This certainly removes a lot of

surface noise, and of course the high frequencies of the music as well, but it also increases the mid-bass region, which can be very troublesome when the transfer to disc is made.

Gramophone records over the years have had all sorts of different shapes to their grooves. It is therefore essential to have a range of six or seven pickup cartridges, each equipped with a different radius tip, and simply select that which gives the best results on that particular record.

There seem to be three schools of thought as to the results to be aimed for. Firstly, that the transfers should be made "flat," reproducing the original recorded sound as near as possible without any corrections or tinkering. This will obviously entail a high level of surface noise. Also, the other extreme in which the surface noise must be reduced at all costs and the resultant sound made as smooth as possible, even though this will certainly mean a severe reduction in the high musical frequencies. Thirdly, the attempt is made to get the best possible from the original sound. It may be that it was too bassy and dead acoustically; it is then legitimate to remove some bass and add some reverberation, if it is considered an improvement to do so. With this method the surface noise has rather to look after itself, though it can be reduced appreciably without affecting the music too much.

I plump for the third method, though many people prefer the second. It is usually only the out-and-out collector who prefers the first, but perhaps the music is a secondary consideration!

I like to do all the equalizing myself, as I have found by experience that when two or more try to agree on this subject the result is neither one thing nor the other - though each view is probably perfectly valid. I also like to work fast, as this helps to keep the sound and level as consistent as possible. Given reasonable pressings, we try to transfer a whole LP in a day.

There are now all sorts of electronic gadgets available to the recording engineer. Some of these have their uses, but it's often found that curing one trouble introduces another. So generally we like to keep things as simple as possible, and often use no more than tone controls and low-pass filters, similar to those found on the better class of domestic audio equipment. Artificial reverberation I normally abhor, but have used it in one or two cases where it seemed beneficial. Limiters and compressors have their uses, especially in "pop" transfers, and those of operas. With the former they can help to equalise the levels of the different tracks. Soprano peaks can be troublesome and a good limiter can control these without becoming too obvious. Ticks and clicks on the original records can be removed manually from the tape or by electronic means.

Finally we come to the joining up of the original 78 rpm sides so that the "seams" don't show; this can be a very fiddly and time-consuming operation. To assist in this one must endeavour to match the quality not only of the sound but also of the surface noise at the end of one side and the beginning of the next. One opera we transferred originated from matrices, vinyl pressings, and even some commercial ones, and this took a lot of time matching and joining up. To make the operation more difficult some artists used to anticipate the end of a side by using a

*rallentando* over the last bar or so, which makes it difficult to disguise the join. I am very fortunate in having the chief tape editor of EMI to take charge of this operation. With years of experience he certainly makes it look very easy, but it can be far from that - as I know from the times I have tried to do it myself. I am very pleased to see that his skill has been recognised in many of the reviews.

If the tape now prepared is transferred to LP disc at a realistic level, it is amazing what quality can be achieved. It says a lot for the engineers in those far-off days, with their primitive equipment, that they were able to get results that, perhaps now with our modern apparatus, we can reproduce with accuracy for the first time. Unfortunately those who decide record repertoire will insist on cramming in the utmost, and this usually means reducing the level on the disc so that a lot of the impact is lost. Of course, some expect their historical records to sound rather dim, but I think this is a pity and it is not doing justice to those fine engineers of the past.

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