

London; 15 August 2017

The greater part of Norman Field's talk was on **Equalisation**, literally trying to make something the same as something else. As applied to cylinders and 78s, it's a matter of trying to get the best representation of the original recording. There is a constraint because the range of audio frequencies was limited. So the argument goes that if we carefully reinforce the low and high frequencies the sound will be better. We listened to a 1911 recording in its original state and then with enhanced frequencies giving a fuller sound.

From equalisation added after a recording, Norman moved to equalisation imposed at the time of recording. The first practical system of electric recording appeared in 1925 using the frequency response system developed by Western Electric. The biggest benefit was in lower frequencies. Double-basses were heard for the first time and orchestral recordings blossomed. But low notes make a large incursion in the groove of a record causing it to break into neighbouring grooves. Western Electric's solution was to reduce the level of bass when cutting a record and to restore it in the replay amplifier when the record was played back. So the record sounded as intended: equalisation imposed on a recording as a temporary expedient, a system which was to last for some 25 years until the coming of the LP microgroove record. This section concluded with Paul Whiteman's *Ragamuffin Romeo* from 1930, an example of Western Electric recording at its best. As Norman said, "*It's not bad sound, is it? Whoever said 78s were scratchy old things.*"

Part 2 was a selection of curiosities. It included a captive nightingale recorded in 1911; radio-telephony security during the war (it confused us, let alone the enemy); a Berliner cornet solo; A E W Mason reading from his novel *No Other Tiger*; and a selection from *The Cuckoos*, played by Van Phillips and his Concert Band the novelty being that an uncredited Jimmy Dorsey pops up with a solo at the end.

Norman has a great gift for explaining scientific concepts in ways that are understandable to the non-scientist; and an equal facility for rooting out obscure issues of interest. More difficult to convey on paper is what fun these occasions are.

London Reporter