

Witnesses' /Victim's Recognition of Once-Heard Voices
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1.

In 1974 in response to media focus on some criminal cases involving what turned out to be false convictions based on mistaken witness testimony, the Government in England and Wales set up an official Committee of Inquiry that sought to better understand how honest witnesses can sometimes give incorrect testimony in court. This Committee was chaired by Lord Devlin and its report was published in 1976.

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In the early 1980s I conducted (with Brian Clifford) for the Government a programme of research studies that was given an impetus by the 1976 publication of this 'Devlin Report'.

The Report stated that as far as the Committee members were concerned no research had been conducted on voice identification (i.e. human recognition of a voice heard only once before) but that "research should proceed as rapidly as possible into the practicality of voice parades ... or any other appropriate methods".

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In a 1984 book chapter in which we reviewed our research studies (and those of others) we concluded that

“Until future, more realistic studies argue to the contrary we would recommend that prosecutions based solely on a witness’ identification of a suspect’s voice (if the suspect is a stranger) ought not to proceed, or if they do proceed they should fail. We say this because we are of the opinion that ear-witnessing and eye-witnessing are similarly and considerably error prone. This is not to say that voice identification should not be used as an aid to the prosecution or the defence, but it should not form any major part of the evidence presented in court.”

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Five years later, in 1989, an overview on ear-witness identification (written by five respected North American psychologists – Deffenbacher et al.) was published that examined all the published research on the accuracy with which people (in experiments) are able correctly to identify a voice they heard once previously. In their concluding paragraph they stated that

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“Inasmuch as the results we have reported are optimal in that witnesses were not stressed and there was no attempt at voice disguise, recognition accuracy at realistic delays and speech sample durations was so low that we would agree with Bull and Clifford’s (1984) conclusions. Depending on the parameters involved, recognition of an unfamiliar voice may have a sufficient probability of accuracy that it could be of use in a police investigation. Unless further more ecologically valid studies argue to the contrary, however, ear-witnessing is so error prone as to suggest that no case should be prosecuted solely on identification evidence involving an unfamiliar voice.”

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A later overview of research on voice identification was published in 1995. In that chapter a Canadian professor of psychology (Dan Yarmey) reviewed not only 12 publications of his own but also some 22 publications by other people on the topic of voice identification. This overview stated that “One of the myths still held by many laypersons and officials in the criminal justice system is the belief that eyewitness memory, including voice recognition, is merely common knowledge” and that “Most voice identification issues of concern to the court, of course, are for voices of strangers...identification for unfamiliar voices must be treated with caution”.

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In December 1998 I was invited by the British Academy of Forensic Sciences to present a paper on ear-witness testimony. In August 1999 the national Criminal Court of Appeal (in the case of *Roberts*) reported in its written judgement that the lawyers for the appellant (i.e. the convicted man who was appealing the conviction) had placed before it that 1998 paper and the Court noted that among the points I made were the following:

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- voice identification is more difficult than visual identification;
- voice identification of a stranger's voice is a very difficult task, even where the opportunities to listen to the voice are relatively good;
- voice identification is more likely than visual identification to be wrong;
- ordinary people seem as willing to rely on identification by ear-witnesses as they are on identification by eye-witnesses;

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- in the light of the above points, the warning given to jurors of the danger of a miscarriage of justice in relation to witnesses who are identifying by voice should be even more stringent than that routinely given by judges in England to jurors in relation to the evidence of eye-witnesses. It should be brought home to jurors that there is an even greater danger of the ear witness believing him/herself to be right and yet, in fact, being mistaken;
- ear witness identification is so prone to error that it should not be relied upon for a conviction unless some other supporting or confirming evidence is available.

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In the light of these points the Court of Appeal decided, in the particular case before it, that “We do not think that the identification, which rested almost wholly on the voice of the appellant as he spoke to the police officers, was good enough to enable us to say that this conviction was safe and consequently we quash this conviction”.

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In some criminal trials judges do not agree with requests from the defence lawyers that ear-witness evidence may be so error prone that such evidence should not be allowed to form part of the prosecution case. Instead, they sometimes allow an 'Expert Witness' (such as myself) to testify (e.g. inform the jury) (i) about research findings on the general reliability of ear-witnessing (such as that mentioned above) and (ii) on factors directly relevant to the ear-witness evidence being presented in that particular trial. Regarding the latter I have, for example, conducted experiments for and testified in a number trials concerning:

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My ‘expert’ evidence in *example case one* was concerned with whether people could tell which one (actually the suspect’s) of several voices in the ‘voice parade’ played by the police to the rape victim was the only one that was an *edited* voice sample (being from a police interview), the others speaking in a *monologue* (that is, unedited) (all the speakers said different things).

The defendant and his lawyers were of the view that if his voice ‘stood out’ in this way from the other voices played to the rape victim her mind might choose his voice (i.e. for the wrong reason). In order to test this I conducted a simple experiment.

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In this experiment I played the 'voice parade' to a number of people and asked them which voice sample was from an interview with the police. The vast majority of the listeners chose the suspect's sample. At trial I was allowed to present my experiment and its results to the jury.

In this trial the jury could not agree a verdict (even by a majority). A year later there was a re-trial and the suspect was convicted (by a majority vote).

In response to this case (and similar cases that I was involved in) the police service in England began to draw up guidelines (in the light of each case and my related expert reports) on how 'voice parades' should be constructed.

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In *example case two* (which took place some years later) my evidence concerned the extent to which the (arson and murder) suspect's voice stood out from the other voices in the voice parade as better matching a major aspect of the brief voice description originally given to the police by the witness of the perpetrator's voice (in terms of it being "high pitched").

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In this case the police had, quite rightly, taken the trouble to consult an expert in phonetics to assist with the choosing of the non-suspect's voices that would appear in the 'voice parade'. This expert had chosen from the several dozen voice samples that the police had given to him, those that best matched the suspect's in terms of accent, recording quality, and the way in which the several (short) samples of each person's speech were put together into a longer sample for that speaker. This expert then took the trouble to conduct a 'mock witness' test in which he could demonstrate that people who listened to the 'voice parade' he had constructed were not likely to pick out the suspect's voice as the one being interviewed (by the police) about an arson attack.

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Unfortunately, the police did not inform this expert that when briefly describing to them the voice he overheard (through a closed door) planning the arson attack the witness had mentioned that the voice was “...high pitched...”. I conducted a small study in which people listened to the voice parade that the police had played to the only witness. I asked them to indicate (on a response sheet involving a seven-point scale) for each voice “how high pitched” it was. Eighty per cent of them indicated that ‘voice G’ was the highest pitched voice and the remaining 20% indicated that voice G and another voice were higher pitched than all the other voices. Voice G was the suspect’s voice.

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At trial (in December 2002) I testified to the effect that the defendant's voice could have inappropriately stood out from the others because the witness had originally said to the police that it was "high pitched".

The jury convicted the defendant of murder (a woman died in the arson attack on her home)

but probably largely because the co-accused (her ex-boyfriend) during the trial changed from his 'not guilty' plea to testifying that he had asked the defendant to carry out the arson attack.

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Largely in the light of the cases I have briefly described (and related guidance produced and updated by the police in response to each of the several cases in which I testified) the Government (in England and Wales) decided to issue official guidance on voice identification (relevant aspects of which are presented in the following three slides).

19. ADVICE ON THE USE OF VOICE IDENTIFICATION PARADES

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PREPARATION OF MATERIAL

6. The identification officer in charge should obtain a detailed statement from the witness. This should contain as much detail and description of the voice as is possible. All descriptions of the voice given by the witness must be included in the material supplied to the relevant forensic phonetics/ linguistics expert. The statement and any 'first description' of the suspect's voice should also be the subject of disclosure to the suspect/ solicitor prior to any identification procedure.

8. The identification officer should obtain a representative sample of the suspect's voice... Experts in the field state that under no circumstances should the suspect be invited to read any set text, as the speech/rhythm/tone may be unnatural and may well be altered by a person reading aloud from prescribed written material.

9. The identification officer should obtain no less than 20 samples of speech, from persons of similar age and ethnic, regional and social background as the suspect. A suitable source of such material may be other police recorded interview tapes from unconnected cases.

20. The expert

11. The identification officer should request the services of a force approved expert witness in phonetics/ linguistics... to ensure the final selection and compilation of the sample voices match with the suspect's as accurately... as possible.
12. The tape containing the sample of the suspect's voice, together with the batch of 'similar voices' tapes should be passed to the commissioned expert witness.
13. The expert should be commissioned to take selected samples of speech from the batch of tape sources ... A total of nine samples should be selected (i.e. the suspect's plus 8 others).
16. It is strongly advised that the expert and identification officer conduct a number of test hearings, utilising mock witnesses... These individuals should be given a brief resumé of the case. They should then be asked to listen to the series of samples under controlled conditions and asked to try and pick out the suspect for the offence (which they will only be able to do on a random basis...).

21. CONDUCT OF AUDIO/VOICE PROCEDURE

22. The suspect's solicitor must be given the opportunity to be present when the voice identification procedure is conducted.

23. The identification procedure should be videotaped and the suspect given the opportunity to review it at a suitable time after the procedure has taken place.

25. The witness must be instructed by the identification officer that the voice of the suspect may, or may not be on one of the samples played during the procedure. The witness must be instructed to listen to each tape at least once before he/she makes a selection. The witness must be allowed to listen to any or all the samples as many times as they wish.

27. Following the procedure a statement must be taken from the witness, recording the events and their selection.

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Thank you for listening to
my voice.