

SUPREME COURT OF THE AUSTRALIAN CAPITAL TERRITORY

Case Title: R v Eastman (No 43)

Citation: [2018] ACTSC 186

Hearing Dates: 28 May 2018; 30 May 2018 – 31 May 2018

Decision Date: 14 June 2018

Reasons Date: 28 June 2018

Before: Kellam AJ

Decision: See [147] – [150]

Catchwords: **CRIMINAL LAW – EVIDENCE** – Admissibility of recordings of the accused speaking – recorded from lawful listening devices – to enhancement of audio-recordings considerations applicable – use of transcripts of audio-recordings – consideration of whether utterances are admissions and, if so, are admissible pursuant to s 90 of the *Evidence Act 2011* (ACT) – whether evidence of admissions should be excluded pursuant to ss 135 and 137 of the *Evidence Act 2011* (ACT) – tendering records as evidence pursuant to s 48 of the *Evidence Act 2011* (ACT)

Legislation Cited: *Evidence Act 2011* (ACT) ss 48(1)(c), 56(2), 79(1), 90, 135 and 137
Evidence Act 1995 (Cth) s 48(1)(c)

Cases Cited: *Butera v Director of Public Prosecutions (Vic)* [1987] HCA 58; 164 CLR 180
Christos v The Queen [2013] VSCA 202
Eastman v The Queen (1997) 148 ALR 107
Honeysett v The Queen [2014] HCA 29; 253 CLR 122
R v Giovannone [2002] NSWCCA 323; 140 A Crim R 1
R v McCaul (Unreported, Supreme Court of Victoria, Stephen J, 22 September 1971)
R v Miladinovic (1992) 107 FLR 241
R v O'Neill [2001] VSCA 227
R v Taylor [1993] 1 NZLR 647
R v Vandergulik (No 1) [2008] VSC 407
R v Watts [1992] 1 Qd R 214

Parties: The Queen (Crown)
David Harold Eastman (Accused)

Representation: **Counsel**
Mr M Thangaraj SC, Ms M Campbell and Mr K Lee (Crown)
Mr G Georgiou SC, Mr M Stanton and Ms L Line (Accused)
Solicitors
ACT Director of Public Prosecutions (Crown)

KELLAM AJ:

1. In September 1989 the Australian Federal Police ('AFP') installed lawfully authorised listening devices ('LD') in the home of the accused.
2. The listening devices were monitored 24 hours per day and tape recorded. Detective Sergeant McQuillen visited the listening post every day and listened to all of the recorded material. Because of difficulty in understanding parts of the recorded material when the accused was whispering, or because of background noise, a team of five detectives was engaged to work on enhancing the audio quality of the recordings and to produce transcripts of relevant recordings. Subsequently enhancement was made when the master tapes were recorded onto digital audio-tapes which were sent to the Forensic Audio Laboratory of the London Metropolitan Police, and also to Forensic Phoneticians of the German State Police. Two forensic phonetic experts were engaged by the German State Police, Professor Hermann Kunzel and Professor Angelika Braun, who enhanced the digital audio-tapes. All of this took place prior to the first trial.
3. The prosecution now seeks to rely upon five LD recordings containing alleged admissions made by the accused on 3 June 1990 (TAB 003), 22 June 1990 (TAB 005), 23 July 1990 (TAB 007), 29 July 1990 (TAB 001) and 7 November 1991 (TB 002). These recordings were also relied upon in the course of the first trial.
4. The prosecution also seeks, in addition to the original versions of the LD recordings, to rely upon the 'enhanced' versions of the recordings produced by Professors Kunzel and Braun between October 1993 and January 1994, and also those produced by the AFP in early 2018. In addition the prosecution seeks to rely upon transcripts prepared by a United Kingdom ('UK') forensic phonetic expert, Professor Peter French. Professor French also produced transcripts of the LD material which was relied upon at the first trial, although the transcripts relied upon now do have differences of some substance.
5. I shall not here detail the convoluted process which has taken place in order for the prosecution to reach its final position in relation to the LD material upon which it seeks to rely. Suffice it to say that I consider it unfortunate that the important issues relating to the admissibility of the material in question had to be dealt with in the few days remaining before the empanelment of the jury. A useful summary of the background to the present argument is to be found in [7] to [13] of the written submissions of the defence dated 18 May 2018. A detailed history to the background of the audio transcription and enhancement process is also referred to in [6] to [30] of the prosecution written submissions dated 24 May 2018. I shall not repeat that history other than to observe that considerable time over the last year elapsed whilst the prosecution sought to rely upon seventeen excerpts whereas only five were relied upon at the first trial. Despite this it is the same five excerpts upon which the prosecution now seeks to rely.

6. The present position of the prosecution is that it intends to rely upon and play to the jury the following audio material in relation to the LD recordings referred to in [3] above:
 - (a) The original, unenhanced tape recordings of the audio;
 - (b) The Kunzel/Braun enhanced recordings; and
 - (c) The AFP enhanced recordings of 2018.
7. In addition, and in order to assist the jury in their attempts to discern what may or may not be contained in the audio material that is relevant to admissions by the accused, the prosecution seeks to provide the jury with transcript, of the AFP enhanced recordings, prepared in 2018 by Professor French.
8. The principal defence position is that the LD recordings and the transcripts most recently prepared by Professor French should be excluded from evidence on the basis that the utterances by the accused that they allegedly record do not constitute admissions and are therefore irrelevant. Alternatively it is submitted that the evidence should not be admitted pursuant to ss 90, 135(b) and or 137 of the *Evidence Act 2011* (ACT) (the 'Act') and/or the residual common law discretion. It is submitted that the opinion evidence of Professor French with regard to the production of transcripts, and Professor Braun, Mr Ringrose and Mr Pavlic-Searle with regard to the enhancement of the original tapes, does not satisfy the threshold of expert evidence under s79(1) of the Act.

Professor French – Transcripts

9. It is convenient at this point to set out the transcripts of the taped material, as prepared by Professor French, upon which the prosecution now seeks to rely. Where words are included in brackets Professor French has expressed a lower level of confidence in the words transcribed. In some instances Professor French has provided two words in brackets, those words denote possible alternatives for a word where he has lower confidence levels. Dots denote unintelligible speech.
10. Transcript of sections of interest in TAB 001, recorded on 29 July 1990, as provided by Professor French on 16 February 2018 and as amended 28 March 2018.

Original time	AFP time	B&K time	Content
09:12	-- [not included]	09:04	(Choose the)...
09:22	-- [not included]	09:14	(You) drove more slow I cannot miss (him). You drove more slowly to gi- to give me a better chance.
09:35	07:27	09:27	In fact, the situation was that I ran out of sight.
09:46	07:39	09:38	... (pathetic). And then even when you called the first (night and I missed you). That was a very frustrating night (and) ... had to come back again the next night to (kill the) ... bugger. And then (all of a sudden, you're dead) ... keep on (there).
10:17	08:10	10:09	Then you go back the following

			night, the same car, the same registration number, the same driver and your film crew's the same and tried to set it up again. Finally, on that second night you succeeded.
10:34	08:28	10:26	... It was like trying to shoot (miracles) ... It required about fifty takes before you finally got what you wanted.
10:47	08:41	10:39	I mean about the only thing you didn't do, you didn't provide me with a bag full of stones.
10:57	08:50	10:49	But in every other (way) you set the deal up (courage) ... You solicited the behaviour which you now have the hypocrisy to come and complain about to this court.
11:16	09:09	11:08	You solicited the very behaviour which you're now complaining about to this court.
11:24	09:18	11:16	This charge is a fraud, your worship.
11:33	09:27	11:25	This is a malicious prosecution. The very behaviour that you are now complaining about you, in fact, solicited. You solicited that very behaviour. You solicited the actions, the very actions about which you are now complaining ... the very actions about which you are now complaining to this court.
12:04	09:58	11:56	I believe that this charge- This- this is not merely a malicious prosecution. It is an exercise in ...
12:29	10:23	12:21	...
12:37	10:32	12:29	[Humming]
12:44	10:38	12:36	[End of section for transcription]

11. Transcript of sections interest in TAB 003, recorded on 3 June 1990, as provided by Professor French on 16 February 2018 and as amended 28 March 2018.

Original time	AFP time	B&K time	Content
[Music playing throughout this section]			
10:40	--	10:39	He must not be. He has to prove it.
10:44	05:09	10:46	Yeah (about a thousand, one thousand) ... (cannot decree) ... that.
10:51	05:17	10:51	[Music Playing]
12:47	06:22	12:47	...I don't suppose they've ever (proved/moved) depression ... lead to proof.

13:04	06:35	13:03	I'd say that. I've had it in me to discover how common this experience along life's rocky road is.
13:18	06:48	13:17	... everybody (to prove) that you didn't do it. And you don't have to feel that your view is shared ... yeah ... then, then I'll ...
13:33	07:04	13:33	... straighten it, you're a cop. (And I'll go for the top).
13:45	07:16	13:44	...
13:56	07:27	13:55	straighten those men, straighten them (officers) ... Let (them/there) (murder) ... but remember ...
14:07	07:39	14:06	They've worked very hard to prove ... (They made me want to kill you) ... remember ... (relax) ... (minions/millions) ...
14:34	08:06	14:33	me and you ... moved...
14:55	08:27	14:54	(realise too) what you want ...
15:09	08:41	15:08	Minimise the reliance on medication ... that's crucial, you know ...
15:27	08:59	15:26	And just think of it (cunt) ... (and I want you to)... because I kept watching (her/them) and nobody in the projection room ... created ...
15:46	09:19	15:45	Had to kill him sitting down (here). Some of them will (take great) ... It's going to make them feel ... (situation) ... (You wait for it.) Everything will be grey ... And yet all it needs is someone to- everything's so (different). The sky is (grey/great).
16:17	09:50	16:16	The sun is not bright. The (depression is one thing) that it gives you ... do you think 'why on earth was I worried about that thing?' (Black or white) ... The nature of depression ...
16:57	10:30	16:56	It causes you great (pleasure/pressure) ... but you can't think about it ... that's what ... (what you want) ... and then ... whatever the promise...
17:41	11:15	17:40	But remember just as depression distorts. If you could just keep that (I don't need anybody) ... the depression is (tightening) ... is fading
18:05	11:38	18:03	... The (scene fades, it's-) it's shrinking, and then it's (magnified) ... (the

			pressure/depression) is making ...
18:26	12:00	18:25	If I could just ... start making the decisions. This story (in fiction), must try and adjust back to reality as they know, they know ... If I don't have to (make) ... decisions ...
18:55	12:29	18:54	Let's imagine that things are ten times better (than they are), good, and then make the decision on the basis of that ten times better ...
19:29	13:04	19:28	He was the first man, he was the first man I ever killed and he ...
20:12	13:39	20:11	... (thousand, one thousand) ... The man, the child, the parent.
20:29	13:53	20:29	[End of section for transcription]

12. Transcript of sections of interest TAB 005, recorded on 22 June 1990, as provided by Professor French on 16 February 2018.

Original time	AFP time	B&K time	Content
Background noise from television/radio throughout			
16:45	15:02	16:50	Shot, But why did (he/they/I) do it ...
17:06	15:23	17:10	...
17:13	15:29	17:17	Looked like I'd have a name (if/when) I killed ... I don't give a bugger. I just wanted to get it straightened ... dig (two holes) ...
17:29	15:46	17:33	I just wanted it straightened
17:35	15:52	17:39	... (bugger. Straightened).
17:40	15:57	17:44	[End of section for transcription]

13. Transcript of sections of interest in TAB 007, recorded on 23 July 1990, as provided by Professor French on 12 March 2018.

Original time	AFP time	B&K time	Content
Material within TAB007 section originally considered for transcription			
18:44 [to 20:17]	11:03 [to 11:59]	18:45 [to 20:19]	[screened out]
Material not within TAB007 section originally considered for transcription			
22:17	13:50	22:19	...
22:32	14:05	22:34	Don't (look) down.
22:42	14:15	22:45	(Do you know something.)
22:45	14:18	22:47	It's terrible.
22:50	14:24	22:53	...
22:53	14:26	22:56	Down (there).
23:08	14:41	23:10	Down, down, down.
23:11	14:44	23:13	I wasn't sure I ...
24:48	16:26	24:51	... (but I now have to move on.)

27:19	18:32	27:21	(Ah, so don't worry.) (I can/could) ...
27:36	18:48	27:38	... (terms). Didn't take long. ... (always) ... do ...
27:48 [to 28:39]	19:01 [to 19:53]	27:51 [to 28:42]	[unintelligible whispering]
29:17 [to 29:31]	20:30	29:19	...
29:23	20:36	29:25	I organised ...
29:26	20:40	29:29	(I had) ...
29:56	21:10	29:59	... distinguish (all of them). I mean I had er ... (change) ... (the time) ... (depressed) ...
34:48 [to 34:54]	25:58 [to 26:04]	34:50 [to 34:56]	[unintelligible whispering]
35:15	26:24	35:17	But they haven't ever produced a scrap of evidence. [Laughs]
--	29:23	--	[unintelligible whispering]

14. Transcript of sections of interest TB 002, recorded on 7 November 1991, as provided by Professor French on 16 February 2018.

Original time	AFP time	B&K time	Content
25:52	10:16	10:30	The first one is wrong, the second one is right.
26:11	10:35	10:49	... (short) ...
26:22	10:46	11:01	Shots.
26:27	10:51	11:05	(You killed)...
26:35	10:58	11:13	(You killed)...
26:39	11:03	11:17	(Your) ...
26:43	11:07	11:21	Must be (guilty).
26:50	11:14	11:28	[Intermittent unintelligible whispering to end]
29:06	13:29	13:42	[End of section for transcription]

The relevant law

15. The law as to the admission of evidence by tape-recording and as to the use of transcripts of such tape-recording is not in doubt. First, it is the evidence revealed by the tape recording which is admissible. Prima facie the transcript is inadmissible. The majority (Mason CJ, Brennan and Deane JJ) in *Butera v Director of Public Prosecutions (Vic)* [1987] HCA 58; 164 CLR 180 at [7] ('Butera') said:

What is a transcript of a tape recording? It is a document setting out words which can be heard on playing over the tape. It is not a copy of the tape, but a written record of what has been heard. Prima facie, the issue whether the recorded conversation took place should be proved by playing the tape in court if it be available, not by tendering evidence, whether written or oral, of what a witness heard when the tape was played over out of court.

16. Their Honours considered at [21] the purpose of using a transcript in circumstances such as occurred in the trial then under consideration by them:

Although evidence derived from a tape recording is not subject to some of the frailties of human testimony, it may exhibit deficiencies from which human testimony is usually free. A tape recording which is indistinct may not yield its full content to the listener on its first

playing over. It may need to be played over repeatedly before the listener's ear becomes attuned to the words or other sounds recorded. This situation has led courts to receive transcripts not as evidence of the conversation or other sounds recorded but as a means of assisting in the perception and understanding of the evidence tendered by the playing over of the tape.

17. Their Honours cited authority and continued:

Where the quality of the recording is such that the provision of a transcript for the use of the jury would permit them clearly to follow an indistinct recording, a transcript may be seen as an aid to listening though it is not independent evidence of the recorded conversation.

18. Their Honours considered the appropriate directions to be given to the jury when a transcript is to be provided to them:

The jury should be instructed that the purpose of admitting a transcript is not to provide independent evidence of the conversation but so as to aid them in understanding what conversation is recorded on the tape, and that they cannot use the transcript as a substitute for the tape if they are not satisfied that the transcript correctly sets out what they heard on the tape. In *Hopes v Her Majesty's Advocate*, the evidence (set out in a transcript) of a person who listened to an indistinct tape played over out of court was held to be "very doubtfully competent" on the ground that it was primary evidence by an ad hoc expert of the tape's content. With respect, it seems better to acknowledge that such a transcript is merely an aid to the jury's understanding of the evidence derived from playing over the tape in court.

19. In a separate judgment, in which Dawson J agreed with Mason CJ, Brennan and Deane JJ that the appeal should be dismissed, his Honour said:

Where a tape recording of a conversation in English is played to a jury and they are given a transcript of the contents of the tape, they ought, of course, to prefer what they have heard, that being the best evidence, if there is a conflict between the transcript and the tape. But the transcript is nevertheless, in my view, evidence, albeit secondary evidence, of the contents of the tape and not merely an aide-mémoire. Where the tape records a conversation which is inaudible or unintelligible to the ordinary listener or where the conversation is not in English, a transcript compiled by an expert, if necessary a translation, may, although secondary evidence, be the best available evidence of its contents.

20. The decision in *Butera* has been applied in numerous criminal trials in this country, with a transcript of the contents of a tape being given to a jury, frequently by consent, when the tape is played in court. An appropriate direction, modelled on the passages from *Butera* referred to in [18] and [19] above, is invariably given to the jury.

21. As stated above, the five excerpts of tape recordings now sought to be relied upon by the prosecution were tendered in the course of the first trial. At that time the prosecution relied upon the enhanced version of the recordings produced by Professor Braun and Professor Kunzel. A transcript prepared by Professor French, after he had listened to those enhanced tapes and the original tapes, was provided to the jury. The Trial Judge gave directions to the jury in accordance with *Butera*.

22. The admission of the original tape, the Braun/Kunzel enhanced tape, and the use of the transcript, was considered by the Full Court in the course of the appeal by the accused to his conviction at the first trial (see *Eastman v The Queen* (1997) 148 ALR 107). Indeed it was a ground of appeal that the trial judge had erred in admitting the above evidence. The Court (Von Doussa, O'Loughlin and Cooper JJ) observed at 112 that:

The evidence of the witnesses on this topic disclosed that the tape recordings upon which the Crown sought to rely are in many places indistinct, and extremely difficult to decipher.

The master tapes were run at a slow speed when the recordings were made, and this added to the difficulties in later deciphering the recorded sounds. The tapes were transferred to a digital form of electronic recording, and then enhanced.

23. The Court continued:

It was common ground between all the witnesses on this topic that the transfer of the recordings to digital form and the enhancement process did not produce artefacts. The jury, when it heard the recordings, listened to enhanced tapes rather than the original master tapes. This was done without objection, and the master tapes were tendered in evidence so that they could have been played had that been requested. The poor quality of recording would have made it very difficult for the jury to have comprehended the recorded utterances if it had listened to the tapes unaided by the transcript... It seems to us that it would have been a largely pointless exercise to have required this...

24. The Full Court observed that the procedure adopted at the first trial was the procedure approved in *R v Miladinovic* (1992) 107 FLR 241 at 248 and *R v Watts* [1992] 1 Qd R 214 at 222. Moreover the Court noted that s 48(1)(c) of the *Evidence Act* 1995 (Cth) (which is effectively identical to s 48(1)(c) of the Act) authorised the reception of the transcripts as evidence in the first trial.

25. However, notwithstanding the conclusions reached by the Full Court in *Eastman v The Queen* (1997) 148 ALR 107 the defence maintains that the listening device recordings and the transcripts upon which the prosecution seeks to rely are not admissible in the current trial.

Dr Helen Fraser

26. The defence relies upon the evidence of Dr Helen Fraser, an adjunct associate professor at the University of New England who is a consultant in cognitive and forensic phonetics. She holds a PhD in phonetics from the University of Edinburgh and a BA (Hons) First Class in linguistics from Macquarie University. It is clear from both her evidence given upon the voir dire and from her publications and presentations as set out in her curriculum vitae that she holds a firm view that *Butera* was wrongly decided by the High Court and that the approach of the courts to the admission of indistinct tape-recorded evidence ever since has been faulty. Furthermore, she holds firm views that the enhancement process, routinely adopted by forensic experts and which has been accepted by the courts, can lead to false interpretation of indistinct audio. Her published works included 'Forensic transcription: how confident false beliefs about language and speech threaten the right to a fair trial in Australia' and 'Miscarriage of justice arising from standard practice with indistinct covert recordings: how one High Court ruling has led to thirty years of problems'. Dr Fraser's curriculum vitae contains reference to a large number of publications and presentations which have a similar theme. In giving her evidence she agreed that she saw herself as an 'advocate for change' and that she had instigated a letter to the Australian Institute of Judicial Administration as a 'call to action'. However, notwithstanding these firmly held views, Dr Fraser was clearly a knowledgeable witness and although other experts who gave evidence did not fully agree with her views as to the effect of enhancement processes, it is apparent that she is accepted as a leading researcher and academic writer in the field of forensic phonetics.

27. Dr Fraser was not requested by those instructing her to create transcripts of the relevant audio files, but did conduct a review of the transcripts prepared by Professor French. Before doing so however, she listened to the AFP enhancement audio and formed some preliminary conclusions.

- (a) Dealing with TAB 001 Dr Fraser observed that the audio, which was approximately 19 minutes in duration, contained several relatively clear stretches of speech, in which the speaker is evidently rehearsing protests over perceived bureaucratic mistreatment. She observed that other sections feature indistinct whispering from which an occasional word or short utterance emerges with somewhat greater clarity.
 - (b) As to TAB 003, a file of approximately 17 minutes in duration, she observed that nearly all of the speech it contained was whispered and whilst a few isolated words emerged here and there, it was not possible in the absence of reliable contextual information to interpret any coherent passages. She did observe that near the end of the file at around 15 minutes and 45 seconds there was a relatively clear section of speech with no apparent relationship to any topic in issue.
 - (c) In relation to file TAB 005, a file of approximately 23 minutes duration, she stated that most of the recording featured a background of sport commentary on either television or radio and most of the speech was unintelligible whispering with a few short phrases emerging more clearly, with no coherent passages.
 - (d) In regards to file TAB 007, a file of approximately 32 minutes in duration, she concluded that although there was no music or sport commentary in the background there was a good deal of shuffling and other movement sounds interfering with speech. The file featured various episodes of whispering, plausibly interpretable as a continuation of a complaining style about bureaucratic process, although 'certainly far from clear'.
 - (e) In relation to TB 002, a file of approximately 15 minutes duration, there were passages of indistinct whispering with occasional isolated words or phrases emerging which included several 'indistinct phrases which might perhaps include a word like "kill" or a phrase containing a stressed syllable'.
28. Overall, Dr Fraser considered that there were significant concerns about the audio evidence sought to be relied upon by the prosecution. Whilst she agreed that some sections of the audio, being those featuring telephone calls or loud self-talking, are fairly intelligible, significant quantities of the speech in all of the recordings is whispered self-talk, much of it masked with substantial background noise from which only a few isolated words and phrases emerge. The poor quality of the audio placed severe limitation on the assistance that could be provided by spectrographic analysis to determine the acoustic nature of particular utterances. She pointed out that the historical transcripts are highly unreliable, some parts being clearly incorrect and others having been 'over-interpreted or unjustified'. She expressed the view that it is a major problem that 'these unreliable transcripts are so well-known to both prosecution and defence and have played such a prominent role in shaping the earlier interpretation of the audio by everyone involved in the case'.
29. Dr Fraser was critical of the use of transcripts which could, in her view, have a priming effect. She stated that 'acoustic cues' combined with knowledge that is 'in the mind of the hearer' creates 'expectations' which may not be explicit or even conscious expectations:

...about what we might be about to hear and the role of that information, or those expectations, is that they prime us to hear the acoustic cues in a particular way. So priming comes from priming a pump, where it gets the process started, gives the process a bit of a head start, so that you're not just listening to the acoustic cues completely cold.

30. She stated that a transcript:

...can prime listeners to hear something that is incorrect but nobody knows for sure that it's incorrect because typically in the forensic context we don't know the ground truth.

31. Dr Fraser gave evidence that:

An unreliable transcript creates a serious risk of misleading the court, not just about the contents of the recording, but also about the significance of other evidence.

32. She stated that:

...the most important thing is to avoid a potentially unreliable transcript because if you create a potentially unreliable transcript, one thing we know about priming with an explicit suggestion as to what words you might hear has an extremely powerful priming effect....

33. In that regard she stated that:

One of the most crucial skills of an expert in forensic transcription is that of knowing when to declare audio incapable of reliable transcription.

34. She observed that:

...it has been common practice in the pursuit of forensic transcripts that in a courtroom context, it's been considered reasonable to provide a transcript on the grounds that it might be this but it might not be this, and it is up to the jury to decide whether the suggestion which is quite often given in brackets, not always but some more responsible transcribers give transcript of which they're not completely certain in brackets or using some other convention. ...And the idea is that this is a suggestion that the jury can be – can evaluate, as to whether it's helpful or not. And I think there's quite a lot of evidence now that it's actually extremely difficult for listeners to indistinct audio to evaluate the reliability of a transcript. Any transcript will provide assistance to perception, even to the point that this – even if the listener says, okay I've seen this transcript and I've listened to the audio and I actually disagree with the transcript, even then experimental work shows that the transcript has affected their perception and potentially misled their perception.

35. In this regard it should be observed that Dr Fraser expressed the opinion that some material in TAB 001 was capable of being reliably transcribed, however she disagreed with the opinion of Professor French in relation to TAB 005 and TAB 003.

Enhancement

36. Enhancement of tape recordings is a further issue in respect of which the views of Dr Fraser vary somewhat from other experts. Her objection to enhancing audio was that 'people believe that you can make unintelligible audio intelligible through this means of manipulating the signal'. She agreed that there were some circumstances whereby something that was 'unintelligible could be made more intelligible', but she said that 'you have to be extremely careful in doing it because, of course, the danger is that you can make something seem more intelligible and you're actually misleading in some way'. She stated that:

In the situation where you listen to some indistinct audio with assistance from both a transcript and enhancement, it's what we call again confounding, you can't separate which assistance you're receiving comes from the transcript and which comes from the enhancement. Objectively you can't separate those things, but subjectively most people would ascribe the assistance to the enhancing for the very reason that they believe that

their perception is created by the signal, and discount the contribution of their perception and the contribution of the transcript.

37. Whilst it is clear that Dr Fraser holds strong views as to whether enhancement is of any value, the fact is that other experts including audio-engineers who gave evidence before me do not agree with her in this regard, save to say that they all agree that care needs to be taken when audio-tapes are being 'enhanced' so as to make the target signal more distinct and to avoid the introduction of artefacts.
38. It is appropriate to observe that when I listened to the tapes in court whilst Dr Fraser was giving evidence and without the assistance of any transcript, I was able to understand considerably more on the enhanced versions, and in particular the AFP version, than on the original tape. I raised that matter with Dr Fraser while she was giving evidence and received the following somewhat enigmatic response:

So I think you've hit the nail exactly on the problem. Enhancing can make things seem clearer and give you more confidence in the words that you're hearing, without actually being closer to the ground truth of what was said. Of course, it can have exactly the same effect if it is closer to the ground truth. The problem is, no listener can distinguish between those situations. Being assisted to hear something that's closer to what we think from the forensic version to assisting to hear something that's closer to the ground truth.

39. I then put the proposition to Dr Fraser that unless the tape-recording is 'totally clear, you'll never have' ground truth. Her answer was 'That's the exact problem'. In essence, Dr Fraser's evidence is that in the absence of the 'ground truth' or having knowledge of what actual words were spoken, no enhancement of an indistinct audio recording can be relied upon to provide an accurate version of the words used. That is not the evidence of the other experts who gave evidence before me on the voir dire.

Professor Angelika Braun

40. One of the four experts who gave evidence before me on behalf of the prosecution was Professor Angelika Braun. Professor Braun had worked together with Professor Kunzel at the Forensic Science Laboratory of the German Bundeskriminalamt (which is the Federal German Police) on the enhancement of the original audio-tapes prior to the first trial. At the time of giving evidence in August 1995, Professor Braun was employed as a forensic phonetician at the Forensic Science Laboratory of the Federal German Police. She holds a doctorate of philosophy in linguistics and phonetics from Marburg University and between 1982 and 1986 was Assistant Professor in the Institute of Phonetics at that university. From 1986 onwards she worked in the Speaker Identification Department of the Federal German Police office. She was also a visiting lecturer in phonetics at Gottingen University, as well as being head of the Speaker Identification Department in the state police force. At the time of giving evidence in August 1995 she was a member of the European Speech Communication Association of the International Phonetic Association, of the International Association for Forensic Phonetics, and of the American Academy for Forensic Sciences. Prior to working on the tapes which were sent to Professor Kunzel, who was in touch with her to assist with enhancement of the tapes relating to the first trial, she had done work on hundreds of enhancement tapes. Professor Braun had, at that time, given evidence in Germany as well as the United States of America in relation to enhancement work.
41. By her report of 28 April 1994 Professor Braun dealt with the reliability of the techniques that were used to engage in the enhancement of the tapes which she examined. She stated that:

...an utterance which has been filtered may sound different from an unprocessed one. That is why the question might arise of whether the meaning of a speech utterance could potentially be affected or changed by technical processing. Although this is a merely theoretical possibility, precautions of different sorts were taken to insure [sic] that this could not happen. One of them was to switch back and forth between the input and the output signal while adjusting the controls in order to make sure that there was no undesirable effect from the processing. Whenever the question of suppressing more noise or retaining more of the voice quality of the speaker came up, it was decided in favour of retaining the voice quality. In that sense, the enhancement can be called rather conservative. In many years of experience with the intelligibility enhancement of hundreds of tapes using the equipment described... there has been no evidence of changes in meaning which were attributable to the technical processing. In the present case, the fact that the enhancement process did not affect the content of the speech signal is easily demonstrated by the voices of radio announcers which are present in most, if not all, recordings at some stage. Their utterances can be heard to be identical in content before and after processing.

42. In giving evidence before me Professor Braun explained the process in which she engaged to enhance the tapes which had been provided to her. She stated that she used two different procedures. One being filtering, mainly to try to suppress noises that have a narrow frequency band, that concern only a few frequencies. The second process was 'de-noising' which is used for broad band noise in order to try to reduce that and improve what 'we call the signal to noise ratio' being basically the intensity or loudness of the speech as compared with the noise. She stated that whilst undertaking that process she was conscious of the possibility of artefacts being introduced. She said:

There is a danger of introducing artefacts, particularly in the de-noising process. If you, in lay terms, over do that, you will get what is called musical noises or metallic noises in the signal which are very disturbing, but they are fairly easy to avoid by listening back and forth between the original and the enhanced signal, so you don't - you can easily adjust your controls so that doesn't happen, but I took particular care, of course, to avoid any kind of artefacts.

43. She stated that she was satisfied that the enhancement undertaken by her did not include any artefacts that impacted on the voice. She stated that nevertheless anyone who was analysing the tapes or transcribing them should also refer to the original tapes. She said it was a 'very important and very basic rule in transcribing that if working with enhanced tapes you also at the end, probably at the end, we work to the original'. Professor Braun was asked what she would recommend if a lay person was listening to the recording. Her answer was:

I don't see any benefit in having them listen to the originals. Once the expert who did the transcript is satisfied that no artefacts were introduced by the enhancement process and that nothing can be gained from listening to the originals, I see no benefit in that, but it can be done but it will probably tire lay listeners to have to listen to two sets of recordings.

44. She said that:

...the way it's done in Germany and the way I have done it in the courtroom is that the jury only got to listen to the enhanced version.

45. In the course of cross-examination by Mr Stanton, on the voir dire, Professor Braun agreed that the tapes which were provided to Professor Kunzel and her were severely degraded tapes. She agreed that one had to be 'incredibly careful with processing of that kind of material' and that there was a danger of introducing artefacts that might impact on the material in ways other than what was intended by the enhancement, and which might impair intelligibility. Professor Braun rejected the proposition put to her that artefacts could create subtle interferences or subtle effects in relation to sound

frequency. She said 'not if you know what you are doing and take good care to avoid those kind of artefacts'.

Professor Peter French

46. Professor Peter French who produced transcripts of the tapes which had been enhanced by Professor Kunzel and Professor Braun prior to the first trial, and who has now had an opportunity to reconsider those tapes and to consider the AFP enhancements undertaken this year, also gave evidence before me. He is a professor of Forensic Speech Science at the University of York. He is chairman of the UK Home Office Group on Forensic Speech and Audio Analysis. He is the president of the International Association for Forensic Phonetics and Acoustics. His qualifications include a PhD on analysis of recorded conversation from the University of Bristol in 1982 and prior to that a Bachelor of Education with Honours in English and Education, and a Bachelor of Linguistics with a Distinction from the University of Manchester. He has been engaged in the area of forensic speech and linguistics for almost the whole of his working life. He has published widely on a broad range of matters to do with forensic phonetics. He was also clearly recognised by Dr Fraser and Professor Braun as a world authority in the area of forensic linguistics.

47. Dr French by his report of 10 May 2018, and in his oral evidence given before me, responded to a number of matters raised by Dr Fraser in her report of 1 May 2018 and which were later the subject of her evidence given before me. In particular Professor French responded to the issue of enhancement and the opinion of Dr Fraser that 'there are no currently known techniques that can reliably make unintelligible audio intelligible' and that although the recording may sound clearer, enhancement has 'no effect at all on intelligibility'. Professor French stated that he had examined a great many enhanced recordings produced by other experts and has produced many himself. He stated that:

While in the majority of cases the results of enhancement are just a reduction in extraneous noise, i.e. an improvement in 'listenability' without an immediate improvement in intelligibility, there are others where the latter type of improvement does occur.

48. Moreover, he stated that 'listenability and intelligibility may be closely linked'. He stated that the:

...benefits of noise reduction include a delay in the onset of listener fatigue, thus allowing one to listen attentively and accurately for longer periods of time and through multiple replays of speech material...

In respect of the introduction of artefacts such that phrases present in the original are distorted and heard as different phrases, [Professor French] agree[d] with Dr Fraser that enhanced versions of recordings should be checked against originals.

49. Indeed Professor French stated this was a large part of his reason for 'switching back and forth' between the enhanced and the non-enhanced versions in preparing his transcripts.

David Ringrose and Geoffrey Pavlic-Searle

50. In addition to Professors Braun and French, David Ringrose and Geoffrey Pavlic-Searle gave evidence before me on the voir dire. Mr Ringrose is a forensic examiner employed by the AFP and is currently attached to the Digital Forensics Team of the AFP. He has been employed by the AFP as a forensic examiner since 2003, specialising in audio, video and image analysis. Prior to that, between 1998 and 2003,

he was employed by the Queensland Police Service in the Technical and Service Branch. He holds a Bachelor of Music (Sonology) from the Queensland Conservatorium. This qualification required study in several technical disciplines including electrical engineering, electronics, magnetic recording, audio production and digital signal processing. These subject areas are directly relevant to the forensic examination of audio recordings. Mr Ringrose gave evidence that the AFP Forensic Facility is accredited under the International Standard ISO 17025 and is compliant with the requirements of that standard.

51. In April 2017 Mr Ringrose commenced copying and digitising original audio-tapes. He commenced audio enhancement examination on 8 January 2018 and enhanced audio files were produced for TAB 003, TAB 005 and TAB 007. The new audio files produced by him were collated with results produced by forensic examiner, Mr Pavlic-Searle. Mr Ringrose gave evidence of the importance of ensuring that there were no artefacts on the tapes after processing and that he had reviewed all tapes to ensure that there were no such artefacts after the tapes had been digitised in detail. The purposes of processing are, he said:

...to improve the clarity or hopefully intelligibility of target speech...If there are degradations that have occurred because of the recording process, and if those degradations can be essentially reversed, we will seek to approach the enhancement with that in mind. So we identify a particular type of degradation, we classify, for example, poor room acoustics due to a microphone being behind somebody in the other corner of the room, we understand what degradation occurs when you record - make a recording that way, and we can apply filtering to counteract that degradation as best we can.

52. Mr Ringrose described the nature of the sophisticated equipment used by the AFP for processing of audio-tapes, which Professor French stated met the 'gold standard nowadays'. Mr Ringrose engaged in two separate tasks, first the digitising of the original tapes and then the processing or enhancement of them. He described the process of digitisation and the care necessary to be taken in the processing 'to preserve as much of the evidence from that physical tape as we can, in a digital format'.
53. The evidence given by Mr Ringrose demonstrated that he had a detailed knowledge and understanding of the processes involved in endeavouring to make indistinct audio-tape more intelligible. Further, his evidence demonstrated that he was well aware of the dangers of artefacts and the care to be taken to ensure, if possible, that the processes in which he engaged did improve the clarity and intelligibility of the target speech without the introduction of artefacts. He stated that in this regard a 'conservative approach' is taken in the filtering process. Whilst he conceded to Mr Stanton in the course of cross-examination that the detection of where the boundary might lie, between low level and high level content which required filtering, was 'inherently subjective', he also pointed out that the AFP engaged in 'blind testing' as part of the accreditation processes.
54. Mr Pavlic-Searle gave evidence before me. He is a forensic examiner with the AFP currently attached to the Digital Forensics Team in the ACT. He has worked with the AFP digital forensic team since 2006 working generally on low quality audio. Together with Mr Ringrose he was involved in the digitisation and enhancement processes undertaken by the AFP of the relevant tapes now in issue. He likewise gave evidence that he was well aware of the danger of artefacts being introduced in the course of enhancement and processing.

The issue of priming

55. There were two aspects to the evidence of Dr Fraser relating to the issue of priming, the first being that she argues that the provision of an unreliable transcript to jurors can lead to priming. The second aspect of her evidence was directed at the transcript prepared by Professor French.

56. Dealing first with Dr Fraser's view of Professor French's transcripts, she was critical of Professor French's methodology. She said in her report of 1 May 2018 that she was surprised by Professor French's 'willingness to provide tentative or unsupported transcripts, with little discussion of the risks of misleading the jury'. She conceded that the danger is not in providing a transcript, which is 'necessary to ensure reliable perception of indistinct audio used as evidence in court', however she stated that:

The danger is in providing an unreliable, inaccurate or misleading transcript'. This, she said, 'is dangerous because, with indistinct audio, listeners' perception is almost inevitably influenced by any transcript they view while listening.

57. It was her opinion that:

Juries should be provided with a single, reliable transcript, laid out in a manner than [sic] enables them to follow the audio, at the time they are listening to the audio...There is no evidence that offering multiple transcripts and inviting them to choose the one they prefer leads to reliable interpretation of indistinct audio.

...If it is not possible to provide a reliable transcript, the audio should be considered 'untranscribable' or inconclusive, and not admitted as evidence.

58. She agreed however that a jury listening to indistinct audio needs to be primed by something in order to interpret the content of indistinct audio at all. In this regard she stated that priming cannot be avoided, but must be managed, and that in relation to forensic audio, managing priming means ensuring the jury is primed only by reliable contextual information and, most importantly, by a reliable transcript.

59. She expressed the opinion that:

Ordinary listeners have a strong tendency to accept their own perception as veridical, and to attribute their perception to the signal, discounting the contribution of their own expectations.

60. That said however she considered that an expert in forensic transcription has a number of important advantages being, first, scepticism about their own perception, secondly, the ability to evaluate their perception against internal evidence and, where appropriate, against acoustic evidence, and thirdly, where there are differences of opinion, the ability to set out reasons explicitly and objectively. She observed that these are largely conceptual abilities, but obtaining them requires considerable training in technical skills of phonetic analysis.

61. In response to Dr Fraser's criticism of Professor French and her view that if uncertainties concerning words spoken cannot be entirely resolved they should be omitted from a transcript, Professor French stated that:

It should be made clear that the outcome of any forensic analysis can rarely, if ever, be expressed as an absolute certainty and transcription is no exception to this. The contents of a transcript are essentially an interpretation of a recording, and the transcriber will, inevitably, have higher levels of confidence in some words and utterances than in others. The adoption of brackets is to indicate reduced certainty relative to the non-bracketed material. It accords with the International Association for Forensic Phonetics and Acoustics Code of Practice, which states: '*In reporting on cases where an opinion or conclusion is*

required, Members should make clear their level of certainty and give an indication of where their conclusion lies in relation to the range of judgements they are prepared to give.'

62. Professor French stated that in 'transcription cases the use of bracketing is a widespread, useful and accepted practice among forensic phoneticians'.
63. The second aspect of Dr Fraser's criticism of Professor French is that she believed he had:
- ...been unable to protect himself adequately from being primed by unreliable contextual information, and that his involvement with the police transcripts in the 1990s has had a continuing influence on his perception of the audio...
64. In her report of 1 May 2018, Dr Fraser stated that 'Prof French's early experience on this case must have influenced his perception of this audio in some lasting way'. Professor French rejected that criticism. In giving evidence before me he said that he did recall three particular phrases from his involvement in the 1990s, and that whilst he did remember what the case was about and the circumstances surrounding the murder, other than those three phrases, if he retained any detail about the contents of certain passages from the recordings, it was not at a conscious level. Professor French gave evidence that he had listened to hundreds of audio-tapes since his previous involvement with this case in the 1990s.
65. Although Dr Fraser considered the similarity of the contents of Professor French's transcripts with those prepared by the AFP prior to the first trial to be evidence of the latter continuing to influence him, Professor French rejected that assertion. The alternative explanation he put forward is that the content that is common to both is as a result of what is 'hearable' in the recordings. Indeed he stated that this view gained some measure of support from the overlap of content between the words recorded in Dr Fraser's notes, which she had made when she listened to the sections that Professor French had transcribed from TAB 001 and TAB 003, and Professor French's transcripts of those sections. Dr Fraser's notes were made before she considered either Professor French's or the AFP's transcripts.

Do the tapes upon which the prosecution relies contain admissions?

66. The first issue to be determined is whether or not the LD recordings and Professor French's 2018 transcripts (the 'French transcripts') should be excluded on the basis that they do not constitute admissions. An admission is defined in the dictionary to the Act as:

admission means a previous representation that is—

- (a) made by a person who is or becomes a party to a proceeding (including a defendant in a criminal proceeding); and
- (b) adverse to the person's interest in the outcome of the proceeding.

67. The defence submits that there is a clear difference between recordings where, taking the French transcripts at their highest, there are utterances which could reasonably be argued to constitute admissions, being TAB 001 and TAB 003, and those where it is submitted there are no admissions, being TAB 005, TAB 007 and TB 002.

TAB 001

68. TAB 001 was recorded on 29 July 1990. The prosecution has stated that it intends to rely upon the original, unenhanced tape recording of the audio, the Kunzel and Braun enhanced recordings, and the AFP enhanced recordings, together with the current French transcripts.
69. The defence submits that there is nothing in TAB 001 that can be properly regarded as an admission. The defence relies in particular upon the fact that on 5 June 1990 the accused is alleged to have thrown a rock at a motor car driven by police officers Rotherham and Saunders, and that on 18 June 1990 he was charged with offences arising from that incident and that the hearing was conducted in respect of the incident on 27 July 1990, two days before the alleged admission contained in TAB 001. Accordingly it is submitted that it is 'highly speculative' that this recording constitutes an 'admission to the murder of Assistant Commissioner Winchester'. It is submitted that there is plainly a reasonable, innocent explanation and that therefore the recording is irrelevant and inadmissible pursuant to s 56(2) of the Act.
70. Alternatively the defence argued that it would be unfairly prejudicial for the accused to have to adduce evidence in relation to the rock-throwing incident in response to a speculative prosecution case that TAB 001 constitutes an admission. In this regard the defence relies upon the judgment of the Full Court in *Eastman v The Queen* (1997) 148 ALR 107 where their Honours observed that the tapes, as deciphered at that time by Mr McQuillen, Mr Lawson and Dr (as he then was) French:
- ...contained statements which the jury would be justified in treating as incriminating in the absence of evidence from the appellant which raised, at least as a possibility, an innocent explanation, there is no merit in the challenge to the exercise of the discretion by the trial judge.
71. The prosecution contends in response that ultimately it is a matter for the jury as to whether the utterances in question constitute an admission and that, in determining that issue, the jury would be entitled to take into account the prosecution case as a whole, rather than consider the utterances in isolation.
72. In my view, taking the French transcripts at their highest, the contents of TAB 001 are capable of being inferred to be admissions on the part of the accused. The defence submits that an alternative inference is open. Whilst that alternative inference may be capable of explaining a number of the words referred to in the tape, and in particular those referring to a bag of rocks, it appears to me that other words recorded are not necessarily related to that possible inference at all. In any event, if evidence of the alternative inference is put before the jury by the defence as an explanation, it appears to me that, subject to a suitable direction, the prejudice that might be suffered by the accused being presented as a person who threw stones at a police car is not so significant that it outweighs the probative value of this particular tape recording.

TAB 003

73. TAB 003 was recorded on 3 June 1990. The defence concedes that of all of the LD recordings proposed to be relied upon by the prosecution, and accepting that if one takes the French transcript at its highest, this recording contains the utterances closest to, what might be argued to be, admissions to the murder of Mr Winchester. However, the defence notes that Dr Fraser was unable to provide a reliable transcript of TAB 003 stating that:

This excerpt features whispering in noise, from which never more than a few words at a time emerge with any clarity. In my opinion none of it is capable of reliable transcription (at least in the absence of reliable contextual information about its content...)

74. Once again, taking the French transcripts at their highest, I conclude that TAB 003 can be said to contain admissions on the part of the accused.

TAB 005

75. TAB 005 was recorded on 22 June 1990. The defence submits that even if one accepts as accurate the transcript prepared by Professor French, there are no admissions contained in TAB 005. It is submitted that the passages in the French transcript are ambiguous and to consider the extracts constitute admissions to the murder of Assistance Commissioner Winchester would be highly speculative and that the recording is inadmissible. The defence relies upon the fact that Dr Fraser was unable to produce a reliable transcript of TAB 005 and that she considered 'even the unbracketed sections of Prof French's transcripts to be at best over-interpreted'.
76. However, taking the French transcripts at their highest and putting it in the context of the whole of the evidence upon which the prosecution seeks to rely, I conclude that the utterances of the accused are capable of being seen as admissions.

TAB 007

77. I set out below something of the history of the creation of the transcript of 12 March 2018. Suffice it to note at this time that Professor French placed the following note on the transcript:

NB: Recording primarily contains sections of unintelligible whispering. DPP specified particular utterances for consideration.

78. TAB 007 was recorded on 23 July 1990.
79. The defence submits that Professor French has now produced a transcript that does not contain any admissions. It is submitted that the only comment that is potentially relevant is 'But they haven't ever produced a scrap of evidence. [Laughs]'. It is submitted that there is nothing to link that to the murder investigation and, even if it could be so linked, the remark itself is intractably neutral. In this regard it is submitted that the accused was charged with multiple other offences during the murder investigation, including in June 1990. It is submitted that the passages in the French transcript are ambiguous, and to consider the extracts to be admissions to the murder of Mr Winchester would be highly speculative. Furthermore, the defence relies upon the fact that Dr Fraser regards this audio, apart from one passage, as not capable of reliable transcription.
80. A further matter that arises in relation to consideration of TAB 007, is that the prosecution has by correspondence to the defence dated 6 March 2018 and 13 March 2018 advised the defence that it intends to submit to the jury that additional words can be heard to those transcribed by Professor French. As I understand the position the prosecution does not seek to rely upon any transcript of that section of the tape that contains, what the prosecution argues, are admissions. The prosecution submits that the jury can determine whether the words, which it submits appear on the tape, are audible.

81. In response to that Mr Stanton in the course of his oral submissions argued that it is an invitation to speculation and ambiguity. He submitted that it is contrary to the evidence of both Dr Fraser and Professor French who are of the view that if transcripts are to be prepared, they should be prepared by experts. On the face of the transcripts I consider that there is weight in the submissions of Mr Stanton in this regard.

TB 002

82. TB 002 was recorded on 7 November 1991. Whilst Professor French has produced a transcript of TB 002, he observed in his email dated 17 February 2018 to the prosecution that it should be noted:

...that the content of my transcript of the section in TB 002 is minimal. I do not now, in the light of developments in the field noted above, consider that recording can reliably be transcribed, even with the benefit of AFP enhancements.

83. The defence submits that there is nothing in the transcript prepared by Professor French which could properly be considered an admission. It is noted that the words 'You killed' were enclosed in brackets by Professor French which means that he had reliability issues with regard to that expression. The defence submits that those words cannot be connected to the death of Assistance Commissioner Winchester as 'it is equally consistent with the accused repeating an allegation being made against him, as occurred with the repeated allegations made in the course of the interview with Mr McQuillen on 26 June 1990', or in the alternative, 'asserting that someone else had killed' Mr Winchester. It is submitted that such speculation means that the statement cannot constitute an admission, and that the recording should be ruled as irrelevant and inadmissible or, in the alternative, excluded pursuant to ss 90, 135(b) and or 137 of the Act.
84. I shall give further consideration to TB 002 below.

Are the enhanced recordings admissible?

85. The defence relies upon the evidence of Dr Fraser that there are no currently known techniques that can reliably make unintelligible audio intelligible. The defence relies upon her statement in her report that:

All the enhancements (historical and current) have been created via highly subjective processes that depend solely on the judgement of the enhancer to decide when optimal clarity has been gained.

86. On these grounds the defence submits that there is no evidence explaining the scientific basis for the process of enhancement, or establishing that the process of enhancement itself involves anything other than a subjective application of filters or other audio tools that improve listenability.
87. However, it is clear that Dr Fraser's view as to the process of enhancement is not a view that is shared by either Professor Braun or Professor French, nor is it confirmed by the evidence of the two experienced AFP audio-engineers. There can be no doubt that the undertaking of enhancement by persons who are not experienced, and who do not understand the danger of creating artefacts, can result in significant problems in terms of the final product. It is apparent that the recording of many of the utterances contained in the listening device audio is of poor quality and difficult to decipher.

88. However, this does not mean that the material is inadmissible. The case law clearly supports the proposition that poor quality recordings do not, for that reason alone, become inadmissible. Furthermore, it is clear from the case law that enhanced tapes are admissible. In *R v O'Neill* [2007] VSCA 227, which primarily dealt with the question of transcripts being provided to a jury, the Court of Appeal (Ormiston, Buchanan JJA and O'Bryan AJA) proceeded on the basis, as is apparent from the judgment of Ormiston JA at [9] and of O'Bryan AJA at [39] and [45] to [48], that the provision to the jury of enhanced tapes is permissible consonant with *Butera*. The New Zealand Court of Appeal had earlier considered the matter in *R v Taylor* [1993] 1 NZLR 647, and at 651 stated:

We therefore accept that Williamson J was correct in holding that the original and the enhanced tapes are admissible and that the written transcripts of them may be used as an aid to the jury's understanding of the tapes. It may, perhaps, bear repeating that, provided the methodology used can be effectively verified, and subject always to the overriding importance of ensuring that nothing unfair to the accused is allowed, the Courts will not exclude from the law of evidence the manifest advantages of electronic techniques and advances.

89. Furthermore, in *Christos v The Queen* [2013] VSCA 202, the Victorian Court of Appeal, Nettle and Coghlan JJA and Dixon AJA, gave consideration to the issue of indistinct audio obtained by use of a listening device. In his judgment, Nettle JA at [7] referred to a submission made by counsel for the appellant, that:

...even with the enhancement to which Federal Agent Grant had subjected the recording, she had had to listen to the recording in places between 40 and 60 times and that, as a result, had altered many passages of the original transcript in order to produce the final transcript of the enhanced recording.

90. Nettle JA listened to the recording and observed at [10] that 'although parts of it are undoubtedly very difficult to follow and other parts of it are completely indecipherable' there were parts that were not so. He stated at [14] that in his view the trial judge 'was right to admit both the decipherable and indecipherable parts of the recording; the latter being necessary for balance'. Nor did Nettle JA accept (see [15]) the argument that because Federal Agent Grant 'had to listen to the recording many times in order to decipher some of its contents, the enhanced transcript was likely to mislead the jury'. He said (at [15]-[16]):

...Rather, to the contrary, as Cooke J observed in *Reg v Menzies* in a passage which the High Court expressly adopted in *Butera v Director of Public Prosecutions (Vic)*:

The problem is how best to enable a jury to assess the contents of a tape, in the light of those aims. It is a problem *sui generis* and not automatically answered by settled principles. If the tape is reasonably short and clearly audible there can normally be no justification for allowing a transcript as well as playing the tape. But there will be cases in which the aid of an expert is reasonably necessary. For example, there may be the use of a foreign language. Or deficiencies in the recording may make it necessary to play tapes more than once to enable a better understanding, yet the sheer length of the tapes may mean that inordinate time would be taken by replaying them to the jury. In such cases, while there should normally be at least one playing to the jury, the evidence of an expert should be admissible as an aid to the jury. He may be a temporary expert in the sense that by repeated listening to the tapes he has qualified himself *ad hoc*. And we see no compelling reason why his evidence should not take the form of production of a transcript which can be admitted as an exhibit. Whether the judge allows the jury to have copies of the transcript, as distinct from merely hearing it read, must be a matter for his discretion in the particular case, bearing in mind the requirements of justice and any risk of unfairness to the accused.

In any event, I do not see how or why the jury's use of the transcript could have been productive of a miscarriage of justice. It was not suggested at trial and, despite the large amount of time since trial in which to compare the recording with the transcript, it is not even now suggested that the transcript was inaccurate. It is also clear that the jury were on notice as to the care to be exercised in considering the recording and transcript.

91. Accordingly, as stated above, it is clear that enhanced recordings are admissible. In the circumstances whereby the evidence of Professor Braun, Professor French and the two audio-engineers from AFP Forensics who gave evidence before me, was unanimous in saying that no artefacts were created in the course of the enhancement, and furthermore, where all of those who worked with the audio material were well aware of the risks of artefacts interfering with the original voice signal, and that care was taken by Professor Braun and the two AFP technicians in that regard, the fact that the original tape-recordings have been enhanced is not a reason to say that the enhanced recordings should not be admitted into evidence.

The opinion evidence of Professor French, Professor Braun, Mr Ringrose and Mr Pavlic-Searle as to the enhancement processes of indistinct audio-tapes

92. The further issue which arose during the course of the voir dire is that the defence contends that the opinion evidence of Professor French as to the production of transcripts, and the opinion evidence of Professor Braun, Mr Ringrose and Mr Pavlic-Searle, does not satisfy the threshold of expert evidence under s 79(1) of the Act which states:

79 Exception—opinions based on specialised knowledge

- (1) If a person has specialised knowledge based on the person's training, study or experience, the opinion rule does not apply to evidence of the person's opinion that is completely or substantially based on that knowledge.

93. It might be observed that in response the prosecution raised the suggestion that Dr Fraser's opinion as to enhancement should not be admitted as her expertise in enhancement appears to be based upon her use of enhanced recordings, as opposed to her expertise in actually enhancing them.
94. In *Honeysett v The Queen* [2014] HCA 29; 253 CLR 122 the High Court said at [23] – [24]:

"Specialised knowledge" is to be distinguished from matters of "common knowledge". Specialised knowledge is knowledge which is outside that of persons who have not by training, study or experience acquired an understanding of the subject matter. It may be of matters that are not of a scientific or technical kind and a person without any formal qualifications may acquire specialised knowledge by experience. However, the person's training, study or experience must result in the acquisition of *knowledge*. The *Macquarie Dictionary* defines "knowledge" as "acquaintance with *facts, truths, or principles*, as from study or investigation" (emphasis added) and it is in this sense that it is used in s 79(1). The concept is captured in Blackmun J's formulation in *Daubert v Merrell Dow Pharmaceuticals Inc*: "the word 'knowledge' connotes more than subjective belief or unsupported speculation....[It] applies to any body of known facts or to any body of ideas inferred from such facts or accepted as truths on good grounds".

The second condition of admissibility under s 79(1) allows that it will sometimes be difficult to separate from the body of specialised knowledge on which the expert's opinion depends "observations and knowledge of everyday affairs and events". It is sufficient that the opinion is *substantially* based on specialised knowledge based on training, study or experience. It must be presented in a way that makes it possible for a court to determine that it is so based.

95. I am satisfied that Professor French, Dr Fraser, and Professor Braun have specialised knowledge in relation to the production of transcript from indistinct audio-recordings. Although Dr Fraser appears to have less expertise in relation to the actual enhancement processing of indistinct audio, I accept that she has specialised knowledge of the nature of enhancement processes. Professor French and Professor Braun, by reason of their training, study and experience, and particularly by reason of their extensive experience, do have specialised knowledge of the actual process and conduct of the enhancement of indistinct audio-tapes. In addition, I am satisfied that Mr Ringrose, by reason of training and experience, and Mr Pavlic-Searle, by reason of experience in forensic audiology, do have specialised knowledge in relation to the process and the actual enhancement of indistinct audio.

Are the French transcripts admissible?

96. The defence submits that 'there is a real issue as to whether Professor French can properly divorce himself' from his engagement of creating transcripts and reviewing police transcripts in the course of the first trial.
97. Furthermore, issue is taken by defence with the use of transcripts in this trial. It is argued that *Butera* is a markedly different case from the present case and that, to the extent that *Butera* is found to apply in the present circumstances, in the light of the opinions of Dr Fraser and the advances in forensic phonetics, the defence respectfully challenges its correctness. I might observe that whilst the defence may respectfully challenge the correctness of the decision in *Butera*, that is a course which is not open to me. It is argued that although the course which was adopted in the first trial, of the approach of the trial judge in listening to the tapes and concurrently reading the transcripts, was approved by the Full Court in *Eastman v The Queen* (1997) 148 ALR 107, this approach is erroneous in the light of the opinion of Dr Fraser and developments in the field of forensic phonetics. Presumably this submission applies also to the numerous cases which have approved a course such as that adopted by the trial judge in the first trial (see for example *R v Giovannone* [2002] NSWCCA 323; 140 A Crim R 1, where Mason P, with whom Hidden J and Carruthers AJ agreed, specifically approved the decision of *Eastman v The Queen* (1997) 148 ALR 107 in this regard).
98. It is submitted by the defence in this case that no transcript should be provided to the jury, as the transcript will have a priming effect and will provide a basis for the jury to defer to the opinion of others, rather than form an independent assessment of the words spoken.
99. Whilst I accept that there can certainly be circumstances whereby a transcript is not acceptable (see *R v McCaul* (Unreported, Supreme Court of Victoria, Stephen J, 22 September 1971), and *R v Vandergulik (No 1)* [2008] VSC 407) this submission appears to be at odds with both other submissions made on behalf of the accused in this case, and with the evidence of Dr Fraser, as well as the other experts. It should be observed that the prosecution seeks in respect of TAB 007 to put parts of the tape before the jury for which there are no transcripts. In the course of her oral submissions Ms Campbell argued (at T928) that:

.... the jury can then determine whether those words can be heard. We say it is audible.

100. Mr Stanton took exception to that course (at T 929), he said:

It's an invitation to speculation, ambiguity, and it's exactly the kind of thing that is – it's contrary to both the evidence of Dr Fraser and Professor French and it's inconsistent with the transcripts prepared by their own expert. It's worse, in a way, than a lay opinion because they can be tested in evidence. This is just mere assertion, inconsistent with their own expert.

101. It might be said that if to leave it to the jury to determine what is on parts of the audio-tape in circumstances where there is no transcript is inviting speculation, then to leave all of the audio-tape to the jury without the assistance of a transcript is to do likewise.
102. Furthermore there is support by Dr Fraser, although with qualification, for the use of a transcript. In her report dated 1 May 2018, Dr Fraser at [4.5.2] to [4.7.3] set out her views as to the use of transcript. Clearly, as she states at [4.6.4], any transcript provided as assistance to a jury must be reliable. At [4.7.1] Dr Fraser states that creating a reliable transcript of indistinct forensic audio is straight-forward assuming two main requirements, being an independent transcriber, to avoid cognitive bias, and a transcriber with sufficient expertise in relevant branches of linguistics science to understand the role of priming on perception, and know the steps necessary to manage it.
103. I accept that Professor French clearly meets both of these requirements. Furthermore, as Dr Fraser observed at [4.7.5.2] the aim of a forensic transcript:

... is not to stand in the stead of the recording, but to guide the jury's perception of words in the recording, while leaving open to them evaluation of the speakers' meanings and intentions...
104. I consider that the fact that more than twenty years ago Professor French was involved with the transcription of audiotapes at that time is not to say that he cannot divorce himself from that previous involvement. There is no reason to say that his approach to his present task was not highly professional. Indeed he gave evidence that when he was first asked in 2017 to give advice as to the matter he gave consideration to the issue and determined that his previous involvement caused him no ethical concerns.
105. The jury will be given clear instructions in accordance with the authorities as to the use of transcripts in this case.

My understanding of the taped audio

106. In the course of the hearing on 29 May 2018 three audio-tapes each of TAB 001, TAB 003, TAB 005, TAB 007 and TB 002 were played. The first of each block of three was the digitised copy of the original, unenhanced audio. The second in each block of tapes was the audio which had been enhanced by Professor Kunzel and Professor Braun, and the third was the AFP enhanced audio of 2018. At the time I did not refer to the transcript when the tapes were first played in court. My impression at that time was that much of the original tape in each case was indecipherable, but that various phrases could be identified both from the Kunzel/Braun enhancement and that more could be identified from the AFP enhancement.
107. Subsequently, in my chambers, I listened to the tapes through headphones using an audio programme 'Audacity Version 2.1.2' and an amplifier. I listened to the tapes several times over without the assistance of the transcript and made notes from the AFP enhanced tapes. Subsequently, I listened to the AFP enhanced tapes using the transcript prepared by Professor French in respect of each tape. I did that on several

occasions. It is appropriate to observe that of course I had seen the transcripts in the course of the oral argument before me and to that extent I may have been 'unconsciously primed' as Dr Fraser suggested could be the case when using a transcript. That said however, when I listened to the audio-tapes in my chambers, although I had a memory of some phrases that had been the subject of argument, I had no conscious memory of most of the transcript. I record below my conclusions having completed that exercise.

TAB 001

108. The TAB 001 tape commences with clearly audible talking by the accused in relation to his apparent dealings with his solicitors and others. The discussion is clearly with himself, and relates to documentation and other matters apparently related to his legal circumstances. Reference is made to the editor of The Canberra Times, police and others. Although whispered, considerable parts of the audio are easily decipherable without the aid of a transcript. In relation to the matters upon which the prosecution relies, commencing at 7.27 of the AFP enhanced tape, the following passages were, after listening to the tape on a number of occasions, discernible to me without the aid of a transcript:

- (a) In fact, the situation was that I ran out of sight
- (b) And then even when you called the first night, and I missed you, that was a very frustrating night...had to come back the next night to kill...keep on...
- (c) Then you go back the following night, the same car, the same registration number, the same driver and your film crew's the same and tried to set it up again. Finally on that second night you succeeded...
- (d) It was like trying to shoot...it required about fifty...I mean about the only thing you didn't do, you didn't provide me with a bag full of stones...but in every other ...you set the deal up...you solicited the behaviour which you now have the hypocrisy to come and complain about to this court...you solicited the very behaviour you're now complaining about to this court...this charge is a fraud Your Worship...this is a malicious prosecution the very behaviour you are now complaining about you in fact solicited. You solicited that very behaviour. You solicited the very actions about which you are now complaining...the very actions about which you are now complaining to this court...I believe that this charge...this is not merely a malicious prosecution. It is an exercise...

109. It should be observed that the transcript produced by Professor French on 28 March 2018 recorded with confidence the matters which I believe I heard on listening to the AFP enhanced tapes on a number of occasions. The transcript also contains 'alternatives' with lower confidence in brackets, much of which I was unable to hear clearly.

110. Dr Fraser agreed that TAB 001 contained 'the largest quantity of out-loud speech of all the current files, creating the longest passages with coherent sentences – and one of these passages is included in the current excerpt'. At 29 and 30 of her report she set out her evaluation of Professor French's transcript showing sections that she thought were 'moderately reliable' and sections which she considered 'unreliable'. There are two surprising things about that evidence. The first is that upon my listening to the AFP enhanced tape I believed I could hear statements clearly that Dr Fraser said were

unreliable. Secondly, albeit that she said that a number of statements contained in the tape were unreliable, and in particular that the accused said 'he had to come back again the next night to (kill the)bugger', Dr Fraser's original notes when she listened to the tape stated that she heard the words 'that was a very frustrating time' and 'tried to kill'. As I understand it these notes were made by her prior to her reading of any transcript. Her notes also reveal that she heard the phrase 'so you come back the following night'.

111. I conclude that the audio recorded on TAB 001 is probative and that the danger of it causing unfair prejudice to the accused does not outweigh its probative value. Furthermore, having listened to the enhanced tape on numerous occasions, I consider that Dr French's transcript generally accords with what I consider is capable of being heard.

TAB 003

112. I turn now to the tape-recording in TAB 003. As set out above I listened to this recording on several occasions and made notes prior to reading the transcript prepared by Professor French. Those notes reveal that in the absence of the transcript the following statements were intelligible to me on the AFP enhanced tape:

- (a) I don't suppose they have ever...depression...I'd say that I've had it in me to discover how common this experience along life's rocky road is everybody...you didn't do it and you don't have to feel that your view is shared...straighten it ...straighten those men...straighten them...they've worked very hard to prove
- (b) Had to kill...everything will be grey...yet all it needs is someone to
- (c) The sun is not bright
- (d) Black or white
- (e) The nature of depression
- (f) You can't think about it
- (g) Just as depression distorts it's shrinking the depression is making...if I could just start making the decisions
- (h) This story
- (i) If I don't have...decisions...let's imagine that things are ten times better...and then make the decision on the basis of that ten times better...he was the first man, he was the first man I ever killed and he...the man the child the parent

113. It should be observed that Dr Fraser's view of the TAB 003 transcript is that it 'features whispering in noise, from which never more than a few words at a time emerge with any clarity'. She is of the opinion that none of it is capable of transcription (at least in the absence of reliable contextual information about its content).

114. As with TAB 001, in my view the TAB 003 audio-tapes are probative and the danger of unfair prejudice to the accused does not outweigh the probative value. Professor French's transcript generally accords with what I consider is capable of being heard.

TAB 005

115. As with the previous tapes I listened to the TAB 005 tapes on several occasions before examining the transcript. I listened to all three recordings.
- (a) On the unenhanced version I heard only the words 'I don't give a bugger'.
 - (b) On the Braun/Kunzel enhanced version I heard 'Shot but why did...looked like I'd have a name...I just wanted it straightened...'
 - (c) On this occasion the AFP version did not assist me any further.
116. Dr Fraser refers to TAB 005 stating that it is less than a minute of audio, heard in loud background noise featuring broadcast speech. She considered 'even the unbracketed sections of Prof French's transcripts to be at best over-interpreted'. Once again Dr Fraser did not concede that any of the words, that I heard and that were transcribed by Professor French, were intelligible.
117. In my view the TAB 005 audio-tapes are probative and the danger of unfair prejudice to the accused does not outweigh the probative value. Professor French's transcript generally accords with what I consider is capable of being heard.

TAB 007

118. I listened to TAB 007 in the same manner, that is, I listened to all three versions several times before looking at the transcript prepared by Professor French. I heard:
- (d) Down...but nothing much there...they haven't ever produced a scrap of evidence...
119. Dr Fraser's view about TAB 007 was that there was extremely indistinct whispering throughout. She stated that she did not 'actively disagree' with the sentence that I heard, being 'But they haven't ever produced a scrap of evidence [Laughs]' but she noted that it is 'an isolated utterance, supported at best by coherence with general themes heard in the more intelligible parts of this audio'.
120. The prosecution raises a further issue in relation to TAB 007. It contends that notwithstanding the fact that Professor French's transcript does not refer to them, utterances other than those included in his transcript can be heard on TAB 007 (and for that matter on other tapes). In particular the prosecution submits that at 11:03 on the AFP tape the accused can be heard to say 'I couldn't wait any longer to commit the crime'. I listened to that segment several times and although I thought that I could hear, and perhaps with the assistance of priming, the words 'I couldn't wait any longer', I could not decipher the rest of the words. Likewise the prosecution submits that at 11:49 on the AFP tape the words 'it wasn't hard to find him either' appear. I was unable to discern anything other than unintelligible whispering at that point. Furthermore, the prosecution submits that at 11:55 on the AFP tape the words 'bang went his head' are capable of being heard. I certainly heard the word 'bang' but the balance of what was recorded appeared to me to be unintelligible whispering.
121. The prosecution submits that these utterances are consistent with the transcript prepared by the defence's then expert, Professor Butcher, as relied upon at the first trial. The prosecution seeks to rely upon the additional words which it contends can be heard. It proposes that it will make submissions to the jury only after all of the recordings have been played and the transcript provided as to those additional words. The prosecution relies upon the opinion of Dr Fraser that:

The 'aim of a forensic transcript...is not to stand in the stead of the recording, but to guide the jury's perception of words in the recording, while leaving open to them evaluation of the speakers' meanings and intentions...

122. Thus the prosecution contends that 'it is the recording that is to be relied upon by the jury, not the transcript'. That is clearly true and is consistent with legal authority. However in circumstances whereby the prosecution has retained an eminent expert witness to evaluate the tapes, and to give evidence as to what in his professional consideration is capable of being reliably heard on the tapes, and what is not capable of being reliably heard on the tapes, it appears to me that, as submitted by the accused, it is an invitation to speculate for the prosecution to then suggest to the jury that things can be heard on the tape which that expert did not hear. In my view the prosecution cannot have it both ways. It seeks to rely upon Professor French's expertise in relation to the evaluation of the tapes, and it seeks to have his transcripts used as an aide mémoire for the jury. Albeit that it is true that the jury will be directed that it is what they hear on the tape that will be the evidence, I consider that there are serious dangers in suggestions being made from the bar table by the prosecution as to what might be heard in addition to those utterances which have been found to be reliable by Professor French. As Dr Fraser stated in her report:

In my opinion it is problematic in general for either side to present a jury with the views of non-experts regarding the contents of indistinct audio... It seems particularly so when those views have been directly contradicted by their own expert, whose opinions they rely on in regard to other aspects of their evidence.

123. In their written submissions the prosecution contends that there is no contradiction between the words that they submit can be heard and the words that were heard by Professor French. That might be strictly so, but in effect for the prosecution to contend that there are words which can be heard in circumstances where Professor French has indicated that there is nothing capable of credible translation other than what he has transcribed, it seems to me that it is not incorrect to say that there is a contradiction. There is certainly an inconsistency. I note further that the prosecution did not seek in the course of Professor French's evidence upon the voir dire to obtain his opinion upon the intelligibility of the words that it claims are intelligible, notwithstanding his evidence. I note also that the prosecution does not seek to rely on any other expert in this regard. In my view the jury should be directed to those parts of the tape-recording that Professor French has identified as reliably containing evidence of utterances by the accused.

TB 002

124. Once again I considered the three audio-tapes of TB 002 before reading the French transcript. I believed that the following words were intelligible on the Braun/Kunzel and the AFP enhanced versions:
- (a) First one is wrong, the second one is right
 - (b) Shots must be
125. Dr Fraser said she would not actively disagree with the sentence 'The first one is wrong, the second one is right', but she considered that the 'rest is too indistinct to make out any words without relying on contextual assumptions'.
126. I then listened carefully to the tape using the transcript prepared by Professor French. I was simply unable to discern, even using the transcript as an aid, any words other than

those referred to by me above. I could not discern the words 'you killed'. In that context it is not without significance that in relation to TB 002, Professor French informed the prosecution by email on 17 February 2018 that he did not 'consider that recording can be reliably transcribed, even with the benefit of the AFP enhancements'. In cross-examination Professor French said that he could not produce a reliable transcript of the whole recording, but that he considered that he had produced a transcript of 'certain isolated lines'. In my view there is nothing that is probative in TB 002 and certainly nothing that could be said to be an admission. Whilst the word 'shot' appears to be audible, the context in which the word was used is not.

Conclusion

127. As to the issue raised by the defence relating to continuity of the tapes it appears to me at the moment that although continuity was not proved fully upon the voir dire, the overwhelming likelihood is that the prosecution will be able to prove it. Unless there is a problem with continuity of which I am unaware, I would have thought that it is possible for the parties to reach agreement on this matter so that the jury is not inconvenienced by having to listen to evidence on continuity which may not be in dispute and may well prove to be a distraction to them.

128. I accept that Dr Fraser is qualified to give expert evidence as to phonetics and as to issues relating to enhancement, although I suspect that her firmly held, and to a degree evangelistic, views about what she perceives to be a failure by the High Court in *Butera*, with its consequential deleterious effect upon the decisions of numerous Courts of Appeal and other courts in Australia over the last thirty years, did tend to somewhat colour her evidence. There were occasions in the course of cross-examination of Dr Fraser where her answers appeared obtuse, if not evasive. On two occasions she made the point that she did not wish to answer until she knew where the question was leading her. At 704 of the transcript the following passage in the course of Ms Campbell's cross-examination appears:

[Q:] You have just said that enhancement may be valuable in very few cases?

[A:] Okay, yes.

[Q:] Is that right?

[A:] I'd prefer to qualify it better.

[Q:] Please qualify?

[A:] (indistinct) let me continue. Okay. I think it would have to be enhancement done by somebody with a background in phonetic science rather than an audio engineer and there would be some qualification. I feel uncomfortable making that generalisation, I suppose partly because I don't know where you're going with - you seem to be asking me to agree with things and I'm hedging all the time, wondering where's this leading me

129. As is apparent from the above transcript, Ms Campbell was merely putting to Dr Fraser something that Dr Fraser had previously said and giving her the opportunity to qualify it. Likewise at 723 of the transcript, in answer to a further question from Ms Campbell, Dr Fraser answered:

...I'm sorry your Honour, I'm sure this is a common thing but sometimes I feel difficulty in answering the questions until I know where they're going.

130. I accept that Professor Braun and Professor French are qualified to give expert evidence in the areas of forensic phonetics and as to issues of enhancement, and where their opinions differ from those of Dr Fraser, I accept their evidence.
131. I am also of the view that notwithstanding the subjective nature of preparing transcripts from enhanced material, that the process undertaken by Professor French is consistent with the best world standards. I reject the submissions by the defence that, by reason of the subjective nature of the preparation of transcripts from indistinct audio, the evidence of Professor French is not that of an expert.
132. There can be no doubt that each of the expert witnesses who gave evidence on the voir dire had specialist knowledge based upon both training and study in phonetics and linguistics, as well as many years' experience in working with indistinct audio. The opinion of Professor French as to what could and could not be reliably interpreted and transcribed from the indistinct audio he listened to, was substantially based upon his specialist knowledge and his many years of experience. In my view, his opinion in that regard was no more subjective than the opinion of an orthopaedic surgeon who might give an opinion as to the likely diagnosis of a patient based upon clinical signs. Both opinions might be said to be in some way subjective, but they are nevertheless clearly based upon specialised knowledge based upon training, study and experience. Indeed Dr Fraser recognised as much when she stated at [4.7.1] of her report that creating a reliable transcript of indistinct audio 'is straightforward, assuming two main requirements', first, that the transcriber is 'independent of the case', and second, that the transcriber 'has sufficient expertise in relevant branches of linguistics science to understand the role of priming on perception, and know the steps necessary to manage it'. My conclusion, having heard the evidence of Professor French is that those requirements are met in his case.
133. Likewise I accept that the evidence of Mr Ringrose and Mr Pavlic-Searle is well-based upon good scientific forensic methodology and practice, and that they are each able to give expert evidence as to enhancement processes of indistinct audio.
134. A document that purports to be a transcript of words recorded on a tape is admissible as evidence of the contents of a recording pursuant to s 48(1)(c) of the Act. It is appropriate here to deal with the submission made on behalf of the defence that because s 48(1) states that a party may present evidence of the contents of a document by tendering the document or by other methods, the prosecution must choose between tendering the document and providing a transcript. The defence argues that the plain words of s 48(1) of the Act do not permit both. It is my view that use of the word 'or' in s 48 should not be read disjunctively. As the prosecution points out, if the defence is correct in its interpretation, a party could not tender the original document and a transcript of it, but could instead choose to tender a copy of it under s 48(1)(b) and s 48(1)(c) of the Act, which would be a perverse reading of the section.
135. When an audio-tape is indistinct, a transcript may be used to assist the jury in the perception and understanding of the audio-tape (*Butera* at 147).
136. If there is doubt or disagreement (as there is here to some extent in relation to some of the words transcribed by Professor French) as to whether the transcript accurately reflects the sounds captured on the tape, the transcript should be used only as an aide-mémoire (see *Butera* at 188).

137. As to the question of whether the original tapes and the two enhanced versions of the tapes should be played to the jury, there was a range of opinion before me. Professor Braun expressed the view that:

Once the expert who did the transcript is satisfied that no artefacts were introduced by the enhancement process and that nothing can be gained from listening to the originals, I see no benefit in that, but it can be done but it will probably tire lay listeners to have to listen to two sets of recordings.

138. Professor Braun said that the way that she had done it in the courtroom in Germany was that 'the jury only got to listen to the enhanced version'. On the other hand Professor French thought that the original, non-enhanced version, followed by the Braun/Kunzel version, which is much more listenable than the original and more listenable than the AFP version, should be followed by the AFP version, which has material which is 'more distinct than in the other two versions'.
139. In my view, and having listened to all three versions, the course suggested by Professor French is the most appropriate. The jury should be provided with the transcript prepared by Professor French as an aide mémoire.
140. As stated above the audio-tapes referred to as TAB 001 are probative and the danger of the evidence causing unfair prejudice to the accused does not outweigh its probative value. The defence concedes that there are utterances which it could be reasonably argued constitute admissions on that tape. Each of the original, the Kunzel/Braun, and the AFP tapes is admissible.
141. Likewise the audio-tapes referred to as TAB 003 are probative. The defence concedes that the tapes contain utterances which could reasonably be argued to constitute admissions. The danger of unfair prejudice to the accused does not outweigh the probative value of the evidence. Each of the original, the Kunzel/Braun, and the AFP enhanced tapes is admissible.
142. In my view TAB 005 is admissible. Although I had some difficulty in hearing every word that Professor French states that he reliably heard, what I did hear was sufficiently probative, in my view, to justify the admission of the evidence before the jury. Accordingly, I find that the danger of unfair prejudice to the accused does not outweigh the probative value of the evidence. Each of the original, the Kunzel/Braun, and the AFP enhanced tapes is admissible.
143. TAB 007 at its highest has nothing probative other than, possibly, the statement 'but they haven't ever produced a scrap of evidence'. However, I cannot see how that statement can be probative of anything. It is not an admission. It should be remembered that at the time this audio was recorded on 23 July 1990 the accused was well aware of the pressure being put upon him by police, and their view that he was responsible for the murder of Mr Winchester. This statement is not of a nature where one could say that there are alternative inferences open which should be left to the jury. In my view, the statement is intractably neutral and, there being nothing of Professor French's transcript of TA B007 which is of probative value, the tape should be ruled as inadmissible.
144. In addition, it should be observed with regard to TAB 007 that Professor French had first expressed the opinion by email on 17 February 2018 that as 'so little could be reliably transcribed' he did not include a transcript. Subsequently, and after the

prosecution had asked him to reconsider, he produced the transcript referred to above saying:

...members of our office have listened to the TAB 007 audio and we believe that various utterances can be heard...

145. Whilst Professor French has produced a transcript of TB 002, he did state at the time of providing the transcript to the prosecution that the content was 'minimal'. He observed that even with the benefit of the 'new AFP enhancements' he did not consider that the recording 'can be reliably transcribed'. He has put the words 'you killed', where it twice appears, in brackets which, as he stated, reflects a lower level of confidence in the fact that the words were actually used. Those words, which I could not hear upon my listening to the tape, together with the word 'shot' are as probative as the extract gets. To say that those words are in all probability an admission is, in my view, speculative. There is no context in which the words appear. It may be that the accused was accusing himself, but it is equally open that, if the words were used, he was talking about something else. I am concerned that I could not hear the words at all, and that Professor French had a lower level of confidence that the words were said. However, even if the jury were satisfied that the accused used the words suggested, in the absence of any context or surrounding words, the jury would not be able to properly draw the conclusion that the accused was making an admission.
146. In all of the circumstances, the danger of unfair prejudice to the accused outweighs such limited probative value as there may be in the TB 002 recording, and it should be ruled as inadmissible.

Orders

147. The original tapes, the Kunzel/Braun tapes, and the AFP enhanced tapes of 2018, of TAB 001, TAB 003 and TAB 005 are admissible.
148. The transcripts of the tapes referred to in the preceding order as prepared by Professor French in February and March 2018 may be used by the jury as an aide mémoire.
149. The tapes TAB 007 and TB 002 are inadmissible.
150. Until further order these orders and the reasons for this ruling are not to be published or disclosed other than to the parties and their representatives

I certify that the preceding one-hundred and fifty [150] numbered paragraphs are a true copy of the Reasons for Judgment of his Honour Acting Justice Kellam.

Associate:

Date: 28 June 2018