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**ICOS No: 14/126080**

**Delivered: 30/09/2022**

**IN THE CROWN COURT OF NORTHERN IRELAND**

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**THE KING**

**v**

**HENRY FITZSIMMONS,  
COLIN DUFFY and ALEX McCRORY**

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**Mr C Murphy KC with Mr S Magee KC and Mr D Russell BL (instructed by the Public  
Prosecution Service) for the Crown**

**Ms E McDermott KC with Mr Jon Paul Shields BL (instructed by Breen Rankin Lenzi  
Solicitors) for the defendant Fitzsimmons**

**Mr M Mulholland KC with Mr J O'Keefe BL (instructed by Phoenix Law, Solicitors) for  
the defendant Duffy**

**Mr B MacDonald KC with Mr D Hutton KC (instructed by Phoenix Law, Solicitors) for  
the defendant McCrory**

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**RULING ON VOIR DIRE**

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**O'HARA J**

***Introduction***

[1] On the evening of 5 December 2013 at approximately 7pm a convoy of three police vehicles was driving along the Crumlin Road, Belfast, in the direction of Twaddell Avenue. A camp had been established there as part of a loyalist protest against a decision on marching taken some months earlier by the Parades Commission. As the convoy moved northwards out of the city it came under attack. The vehicles did not stop when shots were fired until they reached Woodvale Road where the vehicles were inspected.

[2] That inspection revealed a possible strike mark on the first vehicle, a liveried armoured land rover. The second vehicle was a Shogun towing a communications trailer which showed damage consistent with a gun attack. The clearest evidence of the attack was found on a Volkswagen Transporter (the third vehicle), which was

also towing a communications trailer. Bullet fragments were found in the Transporter showing that bullets had struck and penetrated it.

[3] At around the same time police in another vehicle in Ardoyne saw a car on fire at Butler Place. After the Fire Service and police reinforcements were called to the scene a burnt AKM assault rifle was found in the front passenger seat of the vehicle. The following morning a second weapon was found nearby in a flower bed. It was an AK47 rifle in working condition and had been made in Romania though its cartridges had been produced in Yugoslavia in 1982.

[4] Close to this part of Ardoyne stands a high brick wall running alongside the Crumlin Road. The police found a trestle scaffold against the wall. Fourteen spent shell casings were recovered from the grass area around the scaffold. Forensic analysis showed that they had come from the Yugoslavian cartridges of the AK47 found in the flower bed. A person standing on the trestle scaffold would have a view over the high wall onto the Crumlin Road, the spot along which the police convoy had been travelling.

[5] The burnt out AKM assault rifle was forensically examined. It was found that 27 cartridges in its magazine had exploded due to the heat of the fire in the car. They too were cartridges produced in Yugoslavia in 1982. Further analysis led to the conclusion that an attempt had been made to fire this weapon. However, the first cartridge loaded into the rifle was defective and misfired and had not been cleared before the rifle was left in the vehicle which was then set alight.

[6] Also on the morning of 6 December 2013 a man named Seamus Kearney was sentenced at Belfast Crown Court sitting at Laganside for the September 1981 murder by the IRA of Mr John Proctor. The defendant McCrory accepts that he was present at court when that sentence was passed.

[7] At 1:47pm on 6 December a silver Lexus car entered Forest Glade, a street in Lurgan, Co Armagh. The defendant Duffy lives at 30 Forest Glade. The model of the Lexus was IS 200D SE. Its arrival was caught by a camera at the junction of Forest Glade and Antrim Road in Lurgan. The full registration of the car could not be made out but enhancement of images disclosed a partial registration as \*FZ 4\*3\*.

[8] At approximately 1:55pm three men were recorded by the camera walking up Forest Glade, crossing the road and then disappearing briefly out of view. Three men were then captured seconds later on another camera which was deployed at a laneway into Lurgan Park from the Antrim Road. (Lurgan Park is a large public park owned by the local council and was also referred to in evidence as Demesne House/Park.)

[9] It is the prosecution case that the security services had secreted audio devices at various points in Demesne Park. From 1:58pm until 3pm approximately on

6 December the audio devices picked up a conversation which the prosecution contend was an incriminating conversation between the three defendants.

[10] At 3pm the camera shows three men, allegedly the same three men, walking back down Forest Glade and turning off in the direction which would take them towards the defendant Duffy's house.

[11] At 3:56pm the Lexus car which had entered Forest Glade at 1:47pm was captured on camera coming out of Forest Glade and driving off.

[12] The defendants face a number of serious criminal charges. Fitzsimmons and McCrory are jointly charged with attempted murder on 5 December 2013 in connection with the gun attack on the police on the Crumlin Road, Belfast. They are also charged with possession of firearms and ammunition from the same incident, the firearms being the rifles found in the burnt out car and the flower bed. All three defendants are charged with preparing for terrorist acts, contrary to section 5 of the Terrorism Act 2006 and with directing a terrorist organisation, contrary to section 56 of the Terrorism Act 2000. Each of them is also charged with membership of a proscribed organisation, contrary to section 11 of the 2000 Act.

[13] Critical to these charges is what was recorded on the audio devices. On the prosecution case the recordings show that Fitzsimmons and McCrory were intimately involved in the Crumlin Road gun attack and that they knew of it, approved it and, in effect, signed off on it before it took place. If the recordings are authentic and reliable they can or should be interpreted, says the prosecution, as revealing that these two defendants had a level of knowledge about the attack which is more than enough to implicate them in it.

[14] So far as the other charges are concerned the prosecution case is that the nature and detail of the conversation in Lurgan can only be interpreted as meaning that the three defendants are members of an illegal organisation (the IRA), that they are deeply involved in it to the extent of directing its activities and learning lessons from past attacks to plan future crimes.

[15] For these charges to be established the prosecution has to prove that the audio recordings provided to the court are authentic. If they are not proved to be authentic, the prosecution case cannot be proved on any of the charges. This is the main, but not the only, issue upon which a *voir dire* ruling is sought. As the issues have evolved they can be summarised under the following headings:

- (i) Is the Lurgan audio proved to be authentic and, therefore, admissible in evidence?
- (ii) Even if it is, have the prosecution experts complied with the requirements laid down by the Court of Appeal in *R v O'Doherty* [2002] NI 263 when analysing the voices on the recordings and attributing the words spoken to the various

defendants? Or having undertaken auditory analysis did the experts fail to undertake acoustic analysis including formant analysis with the result that their evidence as to attribution should be excluded?

- (iii) Even if that expert evidence is admissible within *R v O'Doherty*, should the findings as to voice attribution and a transcript of the conversation by J P French Associates be excluded on the basis that they are unreliable or affected by bias to the extent that it would be unfair to allow them to be admitted?
- (iv) Should the video footage exhibit VIU 275/5 be excluded because of issues about its creation and integrity and/or because of issues about its quality being insufficient for any reliable recognition or identification of the defendants? Further, should recognition evidence given by police officers which was based on them viewing the video footage be excluded because of the alleged failure to comply with procedures and safeguards which are designed to avoid or reduce the risk of unreliable identifications?

[16] As part of their challenge to the admissibility of the recognition evidence, the defendants Duffy and McCrory relied on the evidence of Mr Grant Fredericks. In very broad terms that evidence was to the effect that in his opinion the video footage was not suitable for use in the controlled viewing procedure. The prosecution submits that this opinion is not admissible as expert evidence. Mr Fredericks further testified that in his opinion as an expert the video footage was not suitable for facial comparison/facial mapping. The prosecution submits that this evidence is not admissible because it is not relevant to the issues at trial.

[17] In the following parts of this ruling I will set out my conclusions on all of these issues. In doing so I have considered all of the evidence given during the trial to date along with the written and oral submissions presented. There is a joint written submission on behalf of the defendants Duffy and McCrory of approximately 375 pages. For the defendant Fitzsimmons there was a submission of 19 paragraphs on two issues only – the first issue relating to the authenticity of the Lurgan audio and a variation on the third issue about the reliability of attribution by experts of certain words to him. The prosecution responded to these submissions with its own written submission of approximately 93 pages together with a five page submission on the Fredericks issue. On the Fredericks issue there was a 10 page response on behalf of the defendant Duffy.

### *Timing of Ruling*

[18] The prosecution case has not been formally closed but it has been confirmed by counsel, and is apparent from the witness lists, that the vast majority of the evidence has been called. This is relevant to one question in debate – whether I should rule only on authenticity and admissibility at this point or whether I should also rule on whether any evidence should be excluded on the basis of fairness by

reference to Article 76 of the Police and Criminal Evidence (NI) Order 1989 or the common law.

[19] This in turn touches on the question of the correct approach in a non-jury case to the issue of evidence being admitted but with a warning by the judge to himself (as the ultimate finder of facts) about the weight which is to be attached to it.

[20] For the prosecution Mr Murphy submitted that any issues relating to fairness should be dealt with only after the prosecution case is formally closed. He referred to discussion of the point in *Valentine's Law* in which it is stated:

“Save in relation to confessions, there is no general rule as to when admissibility shall be determined and the decision on it announced. If the defence makes a submission that it should exclude evidence under PACE Art.76 they are not entitled to have that issue settled in *voir dire*. The duty of the judge under Art 76 is either to deal with the issue when it arises or to leave the decision until the end of the hearing. In some cases the accused will be given the opportunity to exclude the evidence before giving evidence on the main issues because if denied that opportunity his right to remain silent on the main issues would be impaired. But in most cases it is better for the whole of the prosecution case including the disputed evidence to be heard first, because under Art 76 regard should be had to all the circumstances and fairness to the prosecution requires that the whole of its case in this regard be before the court. A trial within a trial may be appropriate if the issues are limited but not if it is likely to be protracted and to raise issues which will need to be re-examined in the trial itself ...”

[21] For the defendants it was submitted that any evidence which is inadmissible on any basis, including both authenticity and unfairness, should be excluded at this point rather than at any later stage.

[22] In some cases that choice might be a difficult one but not, in my opinion, in this case. This is a case in which none of the defendants has ever advanced a line of defence other than to require the prosecution to prove its allegations. And since I have effectively heard the prosecution case (or all of it that I have been alerted to the existence of) I am satisfied that I can form a judgement at this stage in the proceedings on what is admissible in terms of authenticity and in terms of fairness.

[23] In reaching my conclusions on these issues I will, where appropriate, be able to take into account all of the relevant surrounding circumstances which have been

presented in evidence. These will include matters which are referred to in six separate statements of agreed facts.

### *Issue 1*

#### *Lurgan Audio*

[24] The starting point for this is the evidence of a member of the security forces who is identified only as PIN 9281. His evidence was that he had deployed a number of listening devices in Demesne Park prior to the time when on the Crown case the three defendants walked there. Along with a colleague he prepared the devices (14 of them) by clearing them of all content, checking that they were all working and synchronising the times and dates on them.

[25] He further testified that on 8 December 2013 he and a colleague removed the devices from the park and took them to a place where they were kept securely until he personally downloaded the audio content for a specific period which was identified to him. This period was from approximately 1:55pm until 3pm on 6 December.

[26] The audio was downloaded on to a factory fresh (brand new) SD card and a USB device. Those two items were sealed in an evidence bag ending in number ...656. He said the audio was also downloaded on to another USB device which was placed in evidence bag ...655. Both bags were then handed to PIN 9914 on 9 December.

[27] Also on 8 December PIN 9281 testified that he made a further copy of the audio which was placed on another USB drive and given to a person whose identity PIN 9281 could not recall.

[28] According to PIN 9281 a system known as SSR Manager was used to download the audio devices. That system was kept pure and protected from any interference by not being connected to the internet. The same approach was said to be taken in relation to any USB devices or SD cards. It was this witness's evidence that he did not alter, edit, enhance or otherwise interfere with what was on the listening devices prior to, during or subsequent to downloading them. After they had been downloaded the devices were then made available to be redeployed which, he said, was normal procedure.

[29] An element of the defence challenge to this process is that none of the devices has ever been made available to them for expert examination. The prosecution successfully resisted an application for such examination on the basis of national security. A further element of the defence challenge is that the original recordings are not available because once the downloads took place the only available product was the downloaded product, not the original.

[30] While the prosecution contend that critically the evidence of PIN 9281 is not challenged and that, therefore, the authenticity of the audio is established, the defence contend that this is much too simplistic an approach. First, they say that their hands are tied in challenging this evidence because they do not have access to the devices. Secondly, they say that they should be able to but cannot compare the downloads to the originals because the originals have been wiped. And thirdly, they rely on subsequent inconsistencies, flaws and contradictions in the prosecution case which, they submit, raise fundamental and unanswerable concerns about the recordings.

[31] It is indisputably correct that the greater access which expert witnesses have to the devices which were used to record voices and the systems used to process them the more complete is the scrutiny of the authenticity of what is produced in evidence in court. It does not follow however that the withholding of such equipment prevents proper or adequate scrutiny. If that was to be the case then legitimate national security concerns about the appearance and capabilities of equipment would prevent relevant evidence being admitted as evidence. In my judgment that cannot be right.

[32] That being said, it is inevitable that there will be heightened scrutiny of evidence such as was presented in this case if the equipment is withheld. In the present case that scrutiny revealed inconsistencies in the prosecution evidence. On the original version the discs provided to the police for use in questioning the defendants, and later as evidence for the trial, were said to have been downloaded from a system known as "Marshbrook". It had reached Marshbrook as a result of one of the three sets of electronic media referred to above, the third one, being recorded or made part of the Marshbrook system.

[33] Within Marshbrook there were said to be two "sides." On the intelligence side product was fed directly into a database and made available to intelligence analysts who could enhance the product if the quality was poor in order to make it easier to listen to. On the evidential side there was no mechanism to enhance product. That was deliberately done on legal advice, it was said, so that an unimpeachable or evidential version could be produced for use in legal proceedings.

[34] As the case developed, however, in the course of extensive pre-trial case management by Colton J, the prosecution changed its position. It accepted that the audio provided to the defence and the court had NOT emerged from the allegedly unimpeachable "Marshbrook" system. This raised question marks about the reliability of evidence given in written statements by various PIN witnesses about the steps which had been taken to provide audio which the court was being invited to accept as authentic. It does not matter particularly whether the PIN evidence was deliberately misleading or simply mistaken - the result is that the prosecution has to explain satisfactorily the source of the audio evidence which the court has heard the various experts have analysed. And that explanation is not the same explanation as the original explanation.

[35] Ultimately, the prosecution evidence is that, exactly as he testified, on 8 December 2013 PIN 9281 downloaded the 14 devices which he had recovered from the laneway by connecting them to a computer with a cable, using SSR Manager. He did so for the period on 6 December which had been identified to him as relevant, i.e. from 1:55pm to 3pm approximately. On his evidence this left the recorded product unaffected in the sense of being unaltered from what the devices had picked up which was, of course, different in relation to each separate device. Some devices picked up more audio than others. Thereafter, the downloaded audio files were transferred from the computer on to the SD card and the USB sticks.

[36] The idea was floated by the defence that it was somehow possible that someone other than PIN 9281 might have had access to the devices after he retrieved them on 8 December but before he downloaded them. He rejected that suggestion. There is no evidence, circumstantial or otherwise, to support it. I reject it as a possibility.

[37] The revised prosecution position was that the shared audio came from the SD card and USB stick in evidence bag ...656. In August 2019 the USB stick in evidence ...bag 655 was opened in the presence of defence representatives. It is the prosecution case that the audio files from 656 contain the same digital DNA as those from 655. That proposition was queried and challenged at length in cross-examination and through reliance on expert evidence called by the defence. The expert witnesses for the defendants on this issue were Mr Bruce Koenig of BEK TEK and Dr Vivienne Mee of the VM Group.

[38] Mr Koenig has extensive and relevant experience in the United States with the FBI from which he retired as a supervisory special agent in 1995. As part of his work he was involved in formulating technical policies including how audio is handled in the field and in the laboratory. Since 1996 he has worked as a private consultant, inside and outside the United States.

[39] No letter of instruction to Mr Koenig was ever produced to the prosecution or to the court. His own understanding from Phoenix Law was that there were serious evidential concerns about the authenticity of the audio but he was quite unable to say what those concerns were. In fact, he was not instructed that the contents of the audio were being challenged or that the recordings had been interfered with or that the voices were not those of the three defendants. He said that he was not under the impression that a case was being made that MI5 witnesses had lied – the issues were more about general procedures and how they were followed. Ultimately, he suggested that the original main concern was not authenticity but was voice identification. As might be clear from this summary it was not entirely clear to me what the basis for Mr Koenig's instructions was and I am not sure that it was clear even to him what the basis of his instruction was. All of this emphasises the obvious and fundamental significance of a letter of instruction and records being kept of his engagement with solicitors.



[40] Mr Koenig said that examinations are normally conducted of the original equipment but he was familiar with cases where security forces do not release information about the devices used. He added that he had suggested to Phoenix Law that it would be of assistance if the prosecution was asked to provide “exemplars” i.e. a test recording uploaded using SSR Manager which he could then compare the properties of with the properties of the copy recordings in this case. No such request was made to the prosecution. Such a step would have been helpful, he said, although still short of being as conclusive as the original recording or an exact bit for bit copy.

[41] It is relevant to state that Mr Koenig also worked on the Santa Ponsa audio i.e. the recording of the defendant Duffy on holiday in Spain in August 2013. During that holiday Duffy was recorded discussing the purchase of weapons and semtex and terrorist related matters generally. Unknown to Duffy the person he was speaking to was an MI5 agent and the conversations were being recorded. Mr Koenig’s scrutiny of that audio had led him to conclude that it had not obviously been interfered with and he had found nothing which had been altered. (That audio and the surrounding evidence about the Spanish matter were admitted without challenge from the defendant Duffy. This made it all the more astonishing and inexplicable that it was somehow included on Duffy’s behalf in the submissions on the voir dire applications to exclude the evidence.)

[42] What Mr Koenig went on to say about the Santa Ponsa audio and the Lurgan audio is of real significance in the context of the issue about the authenticity of the Lurgan audio. He said that one cannot take words out of one or more sentences in order to form a new but unspoken sentence – that just won’t ever sound right. He also accepted that if, as in Lurgan, there is more than one recording device one would have to interfere with each of those which had captured a snippet or excerpt of the conversation. Furthermore, he accepted that any attempt to manipulate or move words around is even more difficult to achieve when 14 devices have background noises or sounds which vary e.g. traffic noise.

[43] In a further concession, quite properly made by Mr Koenig, he said that it is virtually impossible to add into a recording or recordings words which had not actually been spoken at all by the people who were being recorded. On his evidence interference with the start or the end of a conversation is possible to achieve by omitting the first or last parts but inference with the substance of a conversation, particularly one which is recorded across a number of devices, is close to impossible.

[44] I note with concern that in his first report dated December 2017, under the heading “Results of Examination”, Mr Koenig included a reference to “serious evidential concerns.” As the evidence developed and he was questioned about these concerns Mr Koenig indicated that the concerns were actually those of the solicitors who instructed him rather than his own. This should have been made entirely clear

in his report so as not to give the misleading impression that he somehow shared those concerns.

[45] It is not for the defence to disprove the authenticity of the Lurgan audio. The onus of proving its authenticity, once that issue has been raised, lies on the prosecution. At the voir dire stage the test is whether the audio is prima facie authentic. At the end of the prosecution case the question for me is whether I can fully accept its authenticity. On the evidence which I have heard I have misgivings about the way in which the prosecution evidence was given, especially by a number of PIN witnesses. They were, or appeared to have been, trained to be vague and unforthcoming in certain respects. Some notes which they made were deliberately incomplete and ambiguous. But having said that, in light of all of the evidence the authenticity of the recordings cannot reasonably or sensibly be doubted. To spell it out, there is no coherent allegation of manipulation of the recordings and even if there had been such an allegation, Mr Koenig has confirmed that in the present circumstances such manipulation would be unachievable.

[46] Dr Mee's evidence was called in order to undermine evidence given by a prosecution expert, Dr Philip Harrison. His evidence was about the available metadata on the media files. The core of his work had been to produce a single enhanced recording covering the best quality footage from three of the 14 sets of recordings - DL4, DL9 and DL13 - which came from three separate devices. His conclusion was that the metadata from the available files was consistent with the other evidence and that there was no reason to suggest that the audio files from the 14 devices had been tampered with at any point including during the downloading process. During the course of that evidence Dr Harrison mirrored what Mr Koenig later said, that it is preferable if the original equipment and recordings are available because they copper fasten authenticity but that that is not essential.

[47] Dr Mee's evidence was broadly to the effect that authenticity just cannot be established without access to the original equipment and recordings. In absolutist terms she may be correct but she declined to accept that any of the evidence available to this court gave even a steer on authenticity, a dogmatic proposition which is simply unsustainable. I found her to be partisan and unimpressive. For instance, she demanded absolute adherence to certain ACPO guidelines which are phrased in terms which are less than absolute e.g. "wherever this is possible" etc.

[48] I have already referred at paragraphs [39]-[44] above to issues with Mr Koenig arising from the lack of clear instructions. Notwithstanding that, and the lack of a paper trail, Mr Koenig maintained his independence as an expert and made concessions as every expert should be willing to do.

[49] Regrettably the same cannot be said in respect of Dr Mee. There is a significant lack of clarity about what she was instructed to do and there is quite a hopeless paper trail as to how she did it. Given the constant (and generally

appropriate and legitimate) defence demands for documentation from the prosecution by the defence, it was striking and worrying to see this double standard.

[50] As indicated above, various points were scored in the meticulously detailed questioning of prosecution witnesses, some of whom were less than impressive and some of whom were not as forthcoming in their evidence as they should have been. However, that scoring cannot and does not lead anywhere because the overwhelming balance of the evidence is that the Lurgan audio, as presented to the court, is entirely authentic. The evidence of Mr Koenig is a significant contributory factor to that conclusion but so also is the evidence of Dr Harrison. I conclude that Dr Harrison's evidence has not been in any way damaged or undermined by the evidence of Dr Mee. In addition, I accept what was said in evidence by PIN 9281 as to the placing of the devices, their recovery and the downloading of the recordings for the relevant part of 6 December 2013.

## *Issue 2*

*Even if it is, have the prosecution experts complied with the requirements laid down by the Court of Appeal in R v O'Doherty [2002] NI 263 when analysing the voices on the recordings and attributing the words spoken to the various defendants? Or having undertaken auditory analysis did the experts fail to undertake acoustic analysis including formant analysis with a result that their evidence as to attribution should be excluded?*

[51] The dangers in relying on voice recognition or purported voice recognition were spelt out by the Court of Appeal in the *O'Doherty* case. The defendant had been convicted of serious offences by a jury in reliance, in part, on the evidence of a police officer who said that he recognised the defendant's voice on a call to the ambulance service, the evidence of an expert witness on voice identification to the effect that it was highly probable that the defendant was the person whose voice was heard and the comparisons which the jury themselves were invited to make. No warning was given to the jury about the evidence of the police officer or the expert.

[52] The Court of Appeal quashed the conviction, relying heavily on the evidence of a new expert witness, a Dr Nolan. As appears from the judgment, among the many critical points made by Dr Nolan were:

- It is rarely, if ever, possible to achieve certainty in identification by voice. A person's voice is quite unlike a fingerprint which is unchanging and unique whereas the voice is variable and it has not been scientifically proven how extensively features of the voice are shared among members of the population.
- While auditory phonetic analysis is good at telling us whether two voice samples have the same accent, once it is established that two samples have the same accent and generally similar voice quality, only quantitative acoustic

analysis can go further and come anywhere near determining whether the two samples of the same accent came from the same individual.

- The great weight of informed opinion is that auditory techniques unless supplemented and verified by acoustic analysis are an unreliable basis for speaker identification.
- Auditory (or listening) phonetic analysis tells us principally about the dialect or accent of the speaker; quantitative acoustic (or instrumental) analysis enables one to examine the difference in the acoustic properties of the speech which depend on the individual's vocal tract, mouth and throat.
- An auditory phonetician can helpfully say that it is possible that two samples of speech came from the same speaker. To go beyond that one needs to find an absence of acoustic differences.

[53] In light of Dr Nolan's report for the Court of Appeal, the prosecution was permitted to introduce a report from Dr French who also gave evidence. (This is relevant to the present case in which Dr French personally, together with his colleagues in J P French Associates, gave voice identification evidence on which the prosecution relies.) It appears from the judgment of the Court of Appeal that Dr French agreed with much of what Dr Nolan had said. It is specifically recorded at page 272 of the judgment in relation to Dr French's evidence that:

"He routinely carried out acoustic analysis. Auditory analysis and acoustic analysis provided cross-checks against one another. That would be best practice. It would be the general view."

[54] In light of this evidence the Court of Appeal quashed the conviction with the court saying at page 276:

"... having heard Dr Nolan and Dr French and read the report of Dr Kunzel, that in the present state of scientific knowledge no prosecution should be brought in Northern Ireland in which one of the planks is voice identification given by an expert which is solely confined to auditory analysis. There should also be expert evidence of acoustic analysis such as used by Dr Nolan, Dr French and all but a small percentage of experts in the United Kingdom and by all experts in the rest of Europe, which includes formant analysis."

[55] This background is relevant because the defence challenges the admissibility of the evidence of Dr French and his colleague Dr Kirchubel because, it is said, they failed to conduct formant analysis. Or to put it differently, they purported to

include formant analysis as part of their work but made basic errors in doing so which so undermine their work as to mean that it is not in fact a proper or meaningful quantitative acoustic analysis at all.

[56] This attack was largely based on the expert evidence of Professor Harris who was called on behalf of McCrory. He is originally from Belfast and is now a professor in linguistics at University College, London, with a degree in linguistics and a PhD in Belfast English. The gist of his criticism was that the prosecution experts had gone part of the way in conducting a quantitative acoustic analysis but had reached results which were invalid because of the way in which they failed to recognise the differences between the Northern Ireland accent and what was referred to as "Standard British English" (SBE). The prosecution experts suggested otherwise – they said that they used SBE as a baseline only and that they knew and recognised that there were and are differences between accents of people who have lived their lives in Northern Ireland and SBE.

[57] It is important to note the limitations of what Professor Harris could give evidence about and what his criticisms were. He is not an expert in forensic speech or voice analysis or voice comparison. Therefore, he could not have mirrored the work done by J P French Associates and presented the court with any different conclusions. Instead, his evidence is relied on to suggest that contrary to the *O'Doherty* approach there has not been a quantitative acoustic analysis which includes formant analysis. The question therefore is whether the prosecution experts did, in fact, carry out a quantitative acoustic analysis, as they say, but as Professor Harris contests.

[58] I am satisfied that the prosecution experts did conduct a quantitative acoustic analysis which included consideration of a range of different voice components including analysis of voice pitch, speech tempo, speech fluency and vowel and consonant realisations. The evidence of Professor Harris focused on vowels to the exclusion of any other meaningful analysis. Even if his analysis was correct, that is not in itself, in my judgement, sufficient to exclude the evidence and conclusions of J P French Associates.

[59] I am satisfied, however, that Professor Harris is not correct. There is no data base for the population of Northern Ireland in terms of speech. That is why, according to the prosecution experts, SBE has to be used as a baseline as it is in other regions where there is no database. Those other regions are many. It is no criticism of Professor Harris to say that his primary experience is in research and that he does not have expertise (or claim to have expertise) in forensic speech casework. But it is his absence of such expertise that puts him at a real disadvantage when he challenges the prosecution experts.

[60] The prosecution experts gave evidence that they conducted formant measurements of vowels. Professor Harris accepted that. His query was about what they did with those measurements. He was concerned that they had averaged them,

which was not an appropriate step. On the other hand they said that they had certainly not done that in relation to F1 and F2 - the position on F3 was not so clear. I accept their evidence which is consistent with their notes and records. From this I conclude that Professor Harris's criticisms are misplaced and are based on a misinterpretation or misunderstanding of what the prosecution experts did.

[61] I am further satisfied of two things. The first is that the prosecution experts did not consider the audio they listened to on the basis that the speakers were using SBE. They knew well that it was an accent or variation variously described as Mid-Ulster or Lagan Valley. The second thing is that I was struck by the attention to detail and expertise of the prosecution experts. They did not, in my judgment, make excessive claims for the reliance which can be placed on their work and they fully acknowledged its limitations.

[62] I further add that while experts can all make mistakes, it would be quite remarkable if Professor French, who gave evidence in *O'Doherty* and largely agreed with Dr Nolan, made such a basic error in his approach and understanding of his work more than 10 years later.

[63] I reject the application to have the evidence of the prosecution experts excluded on the basis of a failure to comply with the approach required by the Court of Appeal in *R v O'Doherty*.

### **Issue 3**

*Even if that expert evidence is admissible within R v O'Doherty, should the findings as to voice attribution and a transcript of the conversation by J P French Associates be excluded on the basis that they are unreliable or affected by bias to the extent that it would be unfair to allow them to be admitted?*

[64] When the police were provided with the Lurgan audio, they made a transcript, as best they could, of what words were spoken. At some points there is less clarity than there is at others but significant portions of the audio are very clear about the details of what was being discussed – those issues included the gun attack on the evening of 5 December, whether anyone was at fault in that the attack failed, whether the attack might have been called off in advance, the significance of the loss of two rifles, how many weapons remained available, the Kearney case, how much more difficult it is to kill people than it used to be and how more weapons can be procured.

[65] Not only did the police prepare a transcript but they attributed many of the words spoken to the three defendants. On the audio the men refer to each other as Harry, Colly and Alec. The police suggest that this is Fitzsimmons, Duffy and McCrory. I have listened to the recording during the course of the opening and the evidence. There is little or no debate, on what I have heard, between what was said

and what is contained in the transcripts in the sense of what words are spoken. The attribution of those words is a different matter.

[66] There is more than one transcript because as the work of J P French Associates went on, earlier drafts or versions were tweaked. That, however, was more in relation to the attribution of words rather than what the words themselves were – on the issue of what the words were the variations are very limited indeed.

[67] The first question for me to consider is whether the transcripts, as opposed to the attributions, should be excluded on the basis of unfairness. On the evidence the initial police transcript which was used to question the defendants after their arrests was prepared by a number of officers, including DC Posner between 10 and 13 December.

[68] The defence contend that on the basis of *R v Flynn St John* [2008] EWCA Crim 970 this transcript should be excluded because of a failure to record information such as the date and time spent by each officer compiling his or her part of the transcript. I reject that contention. There is nothing unfair about admitting the transcript in the context of this case. Nor was there anything wrong in the police preparing it for the December 2013 interviews. Further, there is no unfairness about admitting the later versions of the transcripts which have relatively minor alterations of the words which were spoken.

[69] The more difficult question is whether the expert evidence which attributes most of those words to each defendant should be excluded. The defence contention is that there is such a risk of cognitive bias in those attributions that it would be wrong to allow them to form part of the evidence.

[70] In summary form, what happened was that J P French Associates were engaged by the prosecution to provide their expert view on the degree, if any, to which the dialogue on the audio could be attributed to any or all of the three defendants. To equip them for this task the police sent the Lurgan audio together with comparison samples of the defendants speaking in different circumstances e.g. at a public meeting, answering questions in police custody etc.

[71] In addition, however, they were provided with the police transcript including the attributions to the three defendants i.e. who spoke each sentence.

[72] The experts were also provided with the personal details of each defendant in terms of name, address, date of birth and place of birth. While this too was challenged there appears to me to have been justification for it because it would be necessary for the police not to engage as experts anyone who had a conflict of interest because they had advised any of the defendants in the past.

[73] The most controversial element is the degree, if any, to which the analysis by the experts of the voices and their conclusions as to attribution may have been

influenced by them having been given the view of the police, not just on what was said but also on who said it before they started their own independent analysis.

[74] The prosecution experts agreed in their evidence that the way in which they received this attribution can give rise to the risk of bias. And not only did they receive the transcript with attributions but they also had meetings at different points with the police before their expert reports were finalised. One of these was a meeting on 16 April 2014 between two police officers and Dr French and his colleagues during which there was “collective listening” to an enhanced version of DL4 and discussion around the identity of the defendants and attribution.

[75] The J P French Report was sent to the PSNI on 6 May 2014. The opinion offered was that the voices of Fitzsimmons and Duffy were moderately distinctive to the expert ear with the voice of McCrory being highly distinctive.

[76] In November 2017 an issue arose in relation to Fitzsimmons because it turned out that one of the reference samples of his voice, on a phone call, was not actually his voice at all but was the voice of a Mr Conway. This obviously raised an issue about the reliability of the expert finding about Mr Fitzsimmons’ voice on the Lurgan audio. It also therefore raised questions about the reliability of the findings in relation to the two co-accused.

[77] As a result Dr Kirchubel, an expert within J P French Associates, was tasked to provide a separate and new analysis. But she too was given and her report referred to the police transcript with attributions. Her conclusions did not differ in any meaningful or significant way from those of Dr French in his May 2014 Report.

[78] Accordingly, in this case what happened was that the experts were briefed by the police on who the suspects were and who the police believed said which words. To a considerable degree the experts agreed with the police view. Even when the Conway/Fitzsimmons issue emerged, the new expert, Dr Kirchubel, who was not, in fact, entirely new to the process at all did a further analysis still referring to the police transcript with attributions.

[79] I have already referred in this ruling to the recognition that voice identification is not and cannot be as definitive or scientific as fingerprint or DNA evidence. This alone makes it all the more important that any risk or hint of bias is removed as completely as possible from the analysis.

[80] I have been provided with a significant number of authorities, speeches and reports which emphasise the importance of maintaining the independence of expert witnesses by excluding from their brief information which is capable of influencing their approach to evidence or their analysis of it. To be fair to the experts in this case the awareness of this issue has increased significantly since they did their primary work in 2014 but it is an issue to which everyone involved, the police and the experts, should have been alive in 2014. I am concerned that there is a real risk that



the unfortunate combination of factors referred to above gives rise to more than a possibility that the work of J P French Associates was influenced in a manner which makes the admission of their evidence as to attribution of words unfair. Accordingly, I exclude from the evidence in this case their attribution of words to the various defendants.

[81] It is not part of my role to be prescriptive as to what should be done better in the future. There are too many variables about what might happen in the different circumstances of each case. However, I suggest that it will almost inevitably be inappropriate to provide experts with a transcript with attributions in a case as the present. An obviously better and safer route is to provide the evidential audio together with reference samples of one or more suspects/defendants speaking. At that point the question for the experts is whether and with what degree of certainty they can attribute to any individual for whom they have a reference sample words which are spoken on the evidential audio.

[82] It may also be acceptable to provide a transcript of what the police believe was said provided that is done without attribution.

[83] What put this case beyond the line for the expert evidence as to attribution to be admitted is the transcript with the attributions together with the meetings at which there were joint discussions.

[84] The net result of the preceding paragraphs is that I admit in evidence the transcript/s of the Lurgan audio but with the attributions of the words which are spoken being removed. To state the obvious, the police's attributions of those words between the defendants is not admissible evidence for the reasons which the Court of Appeal identified in *R v O'Doherty*.

[85] In light of this ruling I do not need to rule separately on the application on behalf of the defendant Fitzsimmons to exclude the forensic speech comparison evidence of Dr French and Dr Kirchubel. My finding on that is clear from what is set out above. It is excluded. There is no application on behalf of Fitzsimmons to exclude any transcript. In his case, as with Duffy and McCrory, that transcript is admitted but with the removal of attributions. And, in any event, in the case of all three defendants the Lurgan audio which has been played during the trial has already been admitted in evidence.

#### *Issue 4*

##### *Exclusion of the video evidence and recognition evidence*

[86] The first question is specifically about video footage known as VIU 275/5 (also known as AP11 Red) and how it was created. It is contended by the defence that there is no chain of evidence showing how it was created. In consequence, the

defence says, it should be excluded as evidence as should any alleged recognition evidence by police officers who viewed it.

[87] As already indicated in this ruling there were two relevant cameras from which footage has been provided – one at Forest Glade and one at Demesne Lane. The video footage appears to show three men leaving Forest Glade shortly before 2pm, entering Demesne Lane and then emerging a little over an hour later. None of the footage is perfect but, in my judgement, it is clear enough to allow a reasonable effort to be made to identify the three men who are seen walking together. No other person, male or female, is apparent from the footage.

[88] Whether I myself reach a view as to the identity of any or all of the three men is a decision for a later stage. At this point the issue is the admissibility of VIU 275/5 and by extension the so-called recognition evidence of the two constables.

[89] Evidence was given by Mr Adam Coupe as to the way and circumstances in which he produced VIU 275/5. It is properly accepted by the prosecution that there are some differences between VIU 275/5 and AP11 Black. What happened, I accept, is that in an effort to improve the available video footage, work was done which led to changes of the resolution and aspect ratio. This in turn contributes to some distortion of the images with black borders added.

[90] Paradoxically, the effect of this is that the images are perhaps less clear than they are in other footage. This does not mean that the footage has been altered in any improper manner nor does it mean that the evidence of the two police officers should be excluded. It does, however, mean that I must in due course be more cautious about the weight, if any, which I attach to their evidence. On the issue of admissibility, however, I am in no doubt that VIU 275/5 is admissible.

[91] I therefore reject the application to exclude VIU 275/5 and the evidence of Constables Cardwell and Smith.

[92] Turning next to the quality of the footage, it was contended by the defence that the quality is just too poor for it to be admitted as evidence which can be relied on. This was, on one interpretation, the evidence given for the defence by Mr Fredericks. He has significant experience in video identification, is a consultant to the International Association of Chiefs of Police and teaches at the FBI National Academy on the interpretation of forensic video. As such he appeared to be in a position to give significant evidence.

[93] Unfortunately, as with other defence experts, there was a distinct lack of clarity about his instructions and what he understood to be involved in this case. For instance, he gave evidence about facial mapping and comparison which this case does not involve. It also emerged that he has been the subject of strong criticism on at least two occasions, once by a commission in Canada for giving evidence beyond

his expertise and once in a civil case in Canada in which a judgment determined his evidence to be unfounded and unhelpful.

[94] Mr Fredericks kept no records of the work which he did beyond providing his three reports and did not understand that he had any duty to keep such records. This left significant gaps in following the exchanges between him and Phoenix Law which culminated in those reports. For instance, he focused in a report on the defendant, Duffy, alone and speculated that he may have been told orally or by email to ignore the other two accused.

[95] Mr Fredericks' opinion was that the video footage was not of good enough quality to identify anybody from. However, he accepted in cross-examination that AP11, VIU 275/5 and DL16 all showed the same three men in the laneway. This in itself is some indication of the degree of clarity which the video provides. He further accepted that whether an individual might reliably identify any or all of the three men might depend on if, and how well, they were known to him. In other words, an individual might be able to recognise one or more of the three if he knew them whereas another individual who did not previously know them could not identify them reliably.

[96] At another point during his cross-examination by Mr Russell, Mr Fredericks indicated that he was assisting the court in its role on the fitness of the images to be used for identification. Or as he put it succinctly at another point "I just provide the warning."

[97] To that extent I accept Mr Fredericks' evidence as reminding me of the care which I have to exercise in due course in accepting any purported recognition evidence and in forming any judgement of my own that any of the defendants is recognisable from the laneway footage. If his evidence is intended to go further and support a contention that the evidence is inadmissible, I reject that contention. Mr Fredericks has given me the warning - that is as far as he can go, in this case at least.

[98] The final issue on this aspect of the case involves a submission that the so-called recognition evidence of a series of police officers should be excluded because of a recurring failure to adhere to PACE safeguards specifically designed to maximise the reliability of such evidence and protect defendants from the well-known and established risks of mis-identification in such cases.

[99] It is not necessary to repeat at length what those risks are. Regrettably there are multiple examples of honest but mistaken witnesses giving evidence in terms which are entirely confident but which turns out to be quite wrong. In the present case the police officers were not challenged as to the fact that they knew and had dealings with the defendants who they identified. What was suggested repeatedly was that this very knowledge increased the risk of them making an incorrect recognition if they were in any way alerted to the reasons why they were asked to view the footage. In this context reliance is also placed by the defence on the records

which were kept of these controlled viewings. Those records were, in some instances, less than complete, or even minimal, as to the process which was followed and in other cases as to the basis for the alleged recognition.

[100] I have carefully considered these various submissions and have reached the conclusion that all of the recognition evidence is admissible. It obviously does not follow that each piece of that evidence will carry the same weight. However, in my judgment, it is not unfair in any sense or contrary to common law principles to admit this evidence.

[101] In reaching this position I reject the attempt to rely on the proposition that the VIPER procedures should have been followed. They are not appropriate or applicable in this scenario. The correct procedure is as set out in PACE Code D paragraph 3.35 Part B.

[102] Even to the extent that the procedures were followed imperfectly, that is a matter which in my judgment in this case goes to weight. I am not satisfied that in the case of any particular controlled viewing any failings were of a nature and to a degree which warrants the exclusion of the evidence.

#### *Admissibility of the evidence of Mr Fredericks*

[102] At para [16] above I referred to the prosecution submission that I should exclude the evidence of Mr Fredericks. In effect, I have dealt with this in the preceding section of this ruling. In terms I am not excluding his evidence but rather accepting it in the considerably reduced manner which he conceded in cross-examination i.e. "I just provide the warning."

[103] Having said that, I should record that I reject entirely the suggestion at paragraph 2 of the submission on behalf of Duffy that "no objection as to the competence of Mr Fredericks has been raised." The cross-examination of Mr Fredericks raised many issues about his competence and the extent to which his evidence could be relied on, never mind his apparent unawareness of his obligations as an expert to keep records and make them available.