

**IN THE COURT OF APPEAL
CRIMINAL DIVISION**

Royal Courts of Justice,
Date: 27 March 1991

Before:

**LORD JUSTICE LLOYD
LORD JUSTICE MUSTILL
and
LORD JUSTICE FARQUHARSON**

R E G I N A

-v-

**RICHARD MCILKENNY
PATRICK HILL
WILLIAM POWER
JOHN WALKER
ROBERT GERARD HUNTER
HUGH CALLAGHAN**

**Michael Mansfield, Q.C. and Nicholas Blake (instructed by B. N. Birnberg & Co) for
the appellants McIlkenny, Hill, Power, Walker and Callaghan.
Lord Gifford, Q.C. and James Wood (instructed by Geffens, Walsall) for the appellant
Hunter.
Graham Boal, Timothy Langdale, William Boyce and John F.M. Maxwell (instructed
by Director of Public Prosecutions) for the Crown.**

Hearing dates: March 4, 5, 6, 7, 8, 11, 12, 13, 14, 27, 1991

HTML VERSION OF JUDGMENT

LORD JUSTICE LLOYD:

This is the judgment of the Court.

Introduction

1. On August 15, 1975, these six appellants were each convicted, by the unanimous verdict of a jury, on 21 counts of murder. On March 30, 1976, they applied for leave

to appeal. The principal ground of appeal was that the judge, Bridge J. as he then was, had displayed excessive hostility to the appellant's case, and had given so clear an indication of his view of the facts and the witnesses as to deprive the jury of the chance to form an independent opinion. The application was dismissed. In January 1987 the Home Secretary referred the case back to the Court of Appeal under section 17(1)(a) of the Criminal Appeal Act 1968, as a result of certain fresh evidence which had come to light since the original trial. There were two reasons for the Home Secretary's decision. In the first place there was fresh scientific evidence commissioned by the Home Office as a result of a programme in the "World in Action" series featured by Granada T.V. on October 28, 1985. Secondly there was fresh evidence of an inquiry; carried out by the Devon and Cornwall police in 1987, following allegations by a former police officer that he had seen the appellants being ill treated while at the police station. The hearing took place over many days in the autumn of 1987. On January 28, 1988, the appeals were dismissed.

2. On August 29, 1990, the case was referred back by the Home Secretary for the second time, as a result of further fresh evidence which had become available since the hearing by the Court of Appeal in 1987.
3. On February 25, 1991, Mr. Graham Boal Q.C. indicated that the Director of Public Prosecutions, as respondent to the appeals, would not be resisting the appeals, but would give all such assistance as the Court might require. The court decided that it would hear the appeals in the ordinary way. It would not be right, we said, that we should give our secret blessing to a view formed by the Crown Prosecution Service on evidence which had not yet been made public, and much of which we had not yet seen ourselves. The hearing took place on March 4, 1991, and lasted nine working days. At the conclusion of the hearing we announced that the appeals would be allowed, and that we would give our reasons at a later date, which we now do.
4. We start by setting the scene. We can do this briefly, since the facts were fully stated in the previous judgment of the Court in January 1988. We do not repeat the facts in the same detail. But without some account of the background the rest of the judgment would not be easily intelligible. Next we shall summarise the issues at the trial in 1974 and the issues at the Court of Appeal hearing in 1987. We shall then consider the fresh evidence in the present appeal, dealing first with the scientific issue, and secondly with the issue relating to the reliability of police evidence. Finally we shall give our conclusion on the two main issues, with a brief consideration of the proper approach of the Court of Appeal in fresh evidence cases, and the role of the prosecution.

Background

From New Street Station to Heysham - Thursday November 21, 1974

5. During 1974 the IRA mounted a campaign of bombing in the Midlands. It culminated on Thursday November 21, 1974, when explosions occurred at two public houses, the "Mulberry Bush" and the "Tavern in the Town," near New Street station, Birmingham. In all 21 people were killed, and 162 injured. The previous week, on November 14, 1974, James McDade, an active member of the Birmingham IRA, was

killed when a bomb which he was planting at the Coventry telephone exchange exploded prematurely.

6. Five of the six appellants - all except Callaghan - decided to attend McDade's funeral in Belfast, if they could find enough money for the fare. They arranged to meet at New Street station on the evening of November 21, 1974. All except Hill said they intended to catch the 6.55 p.m. train to Heysham, via Crewe, where they would catch the night ferry. Power was the first to arrive at the station. It was about 6.40 p.m. McIlkenny, Hunter, Walker and Callaghan arrived just before 7.0 p.m. They were in fact in time to catch the 6.55 p.m. train, since it left late that night. Instead they caught the next train, which left at 7.55 p.m. Hill said that he did not arrive at the station until about 7.45 p.m. Callaghan said that he had come along to see the others off. While at the station Hunter made two telephone calls to Belfast. He made a further telephone call when changing trains at Crewe.
7. At 8.11 p.m. there was a telephone warning to the Birmingham Post and Mail that the bombs had been planted. At 8.18 p.m. the first bomb exploded at the Mulberry Bush, in the Rotunda, a short walk from New Street station. A few minutes later the second bomb exploded at the Tavern in the Town, about 300 yards away. A third bomb, planted at Barclays Bank, Hagley Road, failed to explode. Hagley Road is about two miles from New Street station. The explosive at Hagley Road was packed in two white plastic bags. It was later shown that the bombs at the Mulberry Bush and the Tavern in the Town were of similar construction to the bomb at Hagley Road, and indeed to all the other bombs during the 1974 campaign. It was the view of the explosives expert that all the bombs had been manufactured by the same team.
8. The five men travelled together on the train. They passed the time playing cards. The train arrived at Heysham on time at 10.45 p.m. The police already knew from the booking clerk at New Street station that a group of men with Irish accents had bought tickets for Belfast earlier in the evening. They got in touch with the British Transport police at Heysham. The message was to look out for a group of six Irish men coming from Birmingham. The ticket collector noticed a group of four such men, with consecutively numbered tickets. They were Power, Hunter, McIlkenny and Walker. Hill had gone on ahead, and was already on board the ferry. All five were interviewed briefly at the station. They were then taken to Morecambe police station for testing.

Morecambe police station - Friday November 22, 1974

9. On arrival at Morecambe police station, all five appellants were seen by Chief Superintendent Ibison of the Lancashire police. He arranged for them to be examined by Dr. Frank Skuse, from the Home Office Forensic Science Laboratory at Chorley. We will return later to the tests which Dr. Skuse carried out. According to his evidence at the trial, the tests showed that Power and Hill had been in recent contact with high explosive. Dr. Skuse was 99 per cent. certain of his results. He was less certain about Walker. The tests on Hunter and McIlkenny were negative.
10. Meanwhile a contingent of police had arrived from the West Midlands to take over the investigation. Detective Superintendent Reade was in charge. There was a dispute at the trial as to when the interviewing started and when some of the interviews took

place, if they took place at all. For the purposes of this narrative, it is convenient to go by the police timing.

11. According to the police, the first interview was with Power. It started at 9.30 a.m. The interviewing officers were D.S. Watson and D.C. French. Power confessed almost at once, when told of Dr. Skuse's findings. After a short interval he made a statement under caution, which he signed at 12.55 p.m. According to the police all five appellants had had their clothes changed before the interviewing started. Power's trousers and underpants were fouled with his own excreta. According to Power his clothes were changed much later. He fouled his trousers as a result of police brutality.
12. The next interviews started at 10.45 a.m. Hunter was interviewed briefly by Superintendent Reade and D.I. Moore, from 10.45 to 11.05 a.m. Hill was interviewed by D.S. Bennett and D.C. Brand from 10.45 to 12.00 midday and again from 1.25 p.m. to 2.30 p.m. They were joined by D.I. Moore at 11.15 a.m. Walker was interviewed by D.S. Kelly and D.C. Sutcliffe from 10.55 a.m. to 12.35 p.m. They were joined by Superintendent Reade at 12.15 p.m. None of the appellants made any admissions during these interviews.
13. Meanwhile a second contingent of police had arrived from the West Midlands, consisting of D.S. Morris, D.S. Millichamp, D.C. Woodwiss and D.C. Bell. They were briefed by Superintendent Reade at 12.00 midday. Between 12.30 p.m. and 1.30 p.m. D.S. Morris and D.C. Woodwiss interviewed McIlkenny. They were joined by Superintendent Reade at 1.20 p.m. McIlkenny denied that any such interview took place. According to the officers, including Superintendent Reade, D.C. Woodwiss took a contemporaneous note throughout the interview. Superintendent Reade subsequently copied the part of the note covering his presence into his own notebook. D.C. Woodwiss's contemporaneous note (together with a very large number of other documents in the case) have been subjected to scientific analysis by a method known as electrostatic document analysis, or ESDA. We shall describe the method of analysis at a later stage. It is sufficient to note here that it was as a result of this analysis of the contemporaneous note of McIlkenny's interview on November 22 that the Home Secretary referred the case back to the court on August 29, 1990.
14. At 3.00 p.m. on November 22, 1974 Superintendent Reade told the appellants they they would be arrested and taken back to Birmingham by car. They arrived back at about 7.30 p.m. At the end of the first day's interviews, only Power had confessed.

Queen's Road Police Station - Saturday November 23, 1974

15. Interviewing started soon after 10.00 a.m. on November 23. McIlkenny was interviewed by the same team, that is to say D.S. Morris and D.C. Woodwiss between 10.10 a.m. and 11.20 a.m. They were joined by Sgt. Langford at 11.10 a.m. It was in the course of this interview that McIlkenny confessed. Between 11.20 a.m. and 12.05 p.m. he made a written statement under caution.
16. Walker was interviewed by the same team as before between 11.15 a.m. and 12.15 p.m., and again between 1.30 p.m. and 2.00 p.m. Superintendent Reade joined them between 1.30 p.m. and 1.45 p.m. Walker made a written statement under caution between 2.00 p.m. and 3.10 p.m., which amounted to a confession. Hunter was

interviewed by D.S. Millichamp and D.C. Bell between 10.15 a.m. and 12.30 p.m., from 2.00 p.m. to 4.30 p.m. and from 5.10 p.m. to 7.00 p.m. They were joined by Superintendent Reade at 6.20 p.m. Hunter never signed a written confession. But according to the police he said:

"This was never meant to be. I had made the phone calls, everything. Just never meant to be. I don't know why I had anything to do with. Please God forgive me."

Hill was interviewed by the same team as before, that is to say D.I. Moore, D.S. Bennett and D.C. Brand. The interview lasted, with a short break, from 11.15 a.m. to 1.10 p.m. Like Hunter he never signed a written confession. But the police say he confessed in the first half of the interview, and, when shown McIlkenny's statement under caution in the second half of the interview, replied; "He's told you the truth there, I never thought he'd make a statement."

17. According to the police, D.C. Brand took a contemporaneous note of the interviews with Hill in his notebook.
18. Finally, Callaghan. He was arrested at his home late on Friday night. He was seen by D.C.I. Powell, D.S. Higgins and D.C. Buxton at Queen's Road. For some unknown reason he was then taken to Sutton Coldfield police station. He was tested for nitroglycerine at 11.20 a.m., and found to be negative. He was seen again very briefly between 11.55 a.m. and 12.05 p.m. At 2.55 p.m. he was seen by a fresh team consisting of D.S. Hornby, D.S. Bryant and D.C. Davies. At the outset of the interview he said he wished to confess. He made a written statement under caution between 3.05 p.m. and 4.30 p.m.

Sunday November 24, 1974

19. At 10.00 a.m. on Sunday morning Callaghan was taken back from Sutton Coldfield to Queen's Road. There was an interview at 11.30 a.m. with D.S. Bennett and D.S. Ball. They had not seen him before. They asked him what rank he was in the IRA. According to the police, Callaghan replied that he was a Lieutenant, that Walker was a Brigadier, that Hunter was a Captain, and the others Lieutenants. Callaghan agreed in his evidence at the trial that he had given the ranks of all the appellants.

Meanwhile Hill had been seen again by D.S. Bunn and D.C. Matthews at 10.15 a.m. According to the police he implicated Murray and Sheehan, who were subsequently charged and convicted on the same indictment of conspiracy to cause explosions. At 11.00 a.m. Power told D.S. Watson and D.C. French that he had nothing further to say. Lastly, at 12.10 p.m. Hunter was seen again by D.S. Millichamp and D.C. Bell. On being shown Callaghan's statement, he said according to the police: "He is as much to blame as I am - why couldn't he keep his mouth shut?"

A little later he said: "We've honoured Jamie (meaning McDade) and people will never forget us." When he was shown photographs in a Sunday newspaper of the scene at the explosions he said; "This was never meant to be. It has all gone wrong."

20. That concluded the interviews. The appellants were charged at 2.00 p.m., or thereabouts, and taken to the central lock - up at 3.15 p.m. Before leaving Queen's

Road they were photographed. The photographs show little if any sign of injury. The appellants were taken to court on Monday morning, and brought up one by one. The usher saw them; so did a court reporter and a solicitor who was attending on another client. None of them saw any sign of injury on the appellants, save the usher, who saw a bruise under Walker's eye.

21. From court, the appellants were remanded to Winson Green prison. On arrival at the prison, the appellants were very seriously assaulted. The judge described the incident as quite outrageous. Fourteen prison officers were subsequently charged with assault. They were tried in the summer of 1976. All were acquitted.

The issues at the trial in 1975

22. The prosecution case at the trial rested on two main pillars. First there was the evidence of Dr. Skuse that Power and Hill had both been in recent contact with nitroglycerine. Secondly there was the evidence of the police officers as to the written confessions of Power, McIlkenny, Walker and Callaghan, and the oral admissions of Hunter and Hill. In addition there was a great deal of circumstantial evidence, including the evidence of witnesses who were entirely independent of the police. Further, if the police officers were to be believed, then all five appellants lied as to their purpose in visiting Ireland. When first interviewed, they told the police - all except Walker - that they were visiting various relations, none of whom was expecting them. In some cases they had not seen these relations for years. Walker had not been to Belfast for over 20 years. He said he was going for the trip with McIlkenny, to visit McIlkenny's mother. But as the judge himself said, when dealing with these background matters near the start of his summing - up:

"These matters do not go beyond raising suspicion; strong suspicion perhaps, but these matters, if they do show motive, opportunity and an intention to make a getaway, still fall a long way short of anything that anyone could possibly regard as proof that any one of these six men participated in the planning or the placing of the explosive devices at the Mulberry Bush or the Tavern."

23. The judge left the jury in no doubt that the two "absolutely critical" issues in the case were the scientific evidence of Dr. Skuse and the police evidence of interviews with all six appellants.
24. As to the first, the appellants called Dr. Black. His evidence was that the tests carried out by Dr. Skuse at the police station were not "specific" for nitroglycerine. In any event his results should have been confirmed by subsequent tests in the laboratory. With one exception, the subsequent tests all proved negative. As we shall see, the judge made no secret of his preference for Dr. Skuse's evidence.
25. As to the second critical issue, the appellant's case was that their confessions, written or oral, were beaten out of them by a sustained campaign of police violence between November 22 and 24, both at Morecambe, and at Queen's Road police stations. The difficulty with that explanation was that there were no signs of injury on the appellant's faces when they appeared in court on the morning of November 25, except for the bruise under Walker's eye. Moreover, if D.C.I. Rawsthorne was to be believed,

the appellants were stripped, in accordance with usual practice when they were taken to the central lock - up on Sunday afternoon. The purpose was not to examine their bodies, but to search their clothes. D.C.I. Rawsthorne said that he would have seen any sign of severe bruising on their bodies. However that particular piece of evidence did not go very far, as the judge pointed out. The only importance of the evidence was that the appellants denied being stripped at all. Finally there was the evidence of the appellant's own solicitors, who did not notice any serious injuries, at any rate compared to the much more serious injuries inflicted after their arrival at Winson Green prison.

26. These, very briefly, were the main issues at the trial. The judge's first task was to rule whether the confessions were voluntary. If not, they would have been excluded altogether. The judge heard the evidence of the police officers, the appellants and the independent witnesses. At the end of a five day hearing - the trial within a trial - the judge ruled that the confessions were voluntary. He was satisfied that they were not obtained by violence, or the threat of violence. Having regard to the absence of any apparent injury on the Monday morning, his ruling was not surprising.
27. All the evidence was then heard again in the presence of the jury. It was the jury's task to determine the truth of the confessions. Again the judge did not attempt to conceal his own views. In particular he was very critical of the evidence of Dr. Harwood, a doctor called by the appellants, who saw them in the afternoon of Monday November 25, 1974. His view was that the bruising which he saw was at least 12 hours old, which would mean that the injuries were inflicted before the appellants arrived at Winson Green prison.
28. But the judge also made it clear throughout the summing - up that it was for the jury, and not for him, to determine where the truth lay, not only as to the allegations of police violence, but also as to the scientific evidence of contamination with nitroglycerine.
29. The jury retired at 3.33 p.m. on August 13, 1975. They returned at 12.28 p.m. on August 15, 1975. After taking the verdicts, the judge described the evidence in the case as the clearest and most overwhelming that he had ever heard.

The issues before the Court of Appeal on March 30, 1976

30. As already mentioned, the main argument on the application for leave to appeal related to the fairness of the summing - up. There was no complaint that the oral and written confessions were inadmissible. Nor was there any application to call fresh evidence on the scientific issue.
31. Once an application for leave to appeal is dismissed, the Court of Appeal is functus officio . There is no right to a second appeal. The only way in which a case can be brought back before the Court of Appeal is by reference from the Home Secretary under section 17(1)(a) of the Criminal Appeal Act 1968 . Matters would therefore have rested with the refusal of leave to appeal in 1976, had it not been for the interest taken in the case by Granada television, the publication of Chris Mullin's book Error of Judgment in 1986, and the support of senior churchmen, and other influential figures, who continued to believe in the appellant's innocence.

The issues before the Court of Appeal in 1987

32. There were, as we have said, two reasons for referring the case back to the Court of Appeal. The first was the fresh scientific evidence commissioned by the Home Office. We will consider the nature of this evidence when we come to deal with the fresh scientific evidence in the present appeal.
33. The second reason was the allegation by former police officer Thomas Clarke that he had witnessed intimidation of the appellants at Queen's Road police station, and seen signs of injury. Mr. Clarke gave evidence at the hearing in 1987. He was on duty from 9.30 p.m. on Friday evening until 5.30 a.m. on Saturday morning, and again the following night. On the Friday night he noticed very few signs of physical injury, despite the treatment which the appellants say they received at Morecambe. He went on to say that on two or three occasions during the night, two police officers pointed their guns through the hatches of the cell doors. The same happened again on the Saturday night. The difficulty with that evidence was that none of the appellants ever complained at the trial that guns were pointed at them through the cell doors at Queen's Road. The explanation may therefore be that Mr. Clarke had heard something which Hunter said happened, not on the Friday or Saturday night, at Queen's Road, but on Sunday night at the central lock - up. Another difficulty is that Mr. Clarke claims to have seen the sixth man, i.e. Callaghan, with marks on his face, as if he had been in an accident. But Callaghan never complained of more than a slap in the face. In the course of cross - examination Mr. Clarke agreed that he may have told a colleague in 1976 that the appellants were "treated with kid gloves" while at Queen's Road. In 1977 Mr. Clarke was dismissed from the police force after being convicted and sentenced to three months' imprisonment on a charge of theft. In 1986 he made an unsuccessful attempt to sell his story to the Daily Mirror. It is not altogether surprising that the Court of Appeal rejected his evidence as worthless.
34. Another witness who gave evidence at the 1987 hearing was W.P.C. Lynas. The difficulty with her evidence was that she told one story under oath in the witness box on Wednesday, November 4, and a completely different story when she was recalled to give further evidence on Monday, November 9. On November 4 she said that she could see no sign of physical injury on any of the appellants when she went off duty at 7.00 p.m. on the Saturday night. Nor had she noticed any misconduct on the part of the police, other than swearing and pushing the appellants "as I would treat my children if they had been naughty ..." Her evidence five days later was very different. When asked why she had changed her evidence, she replied that the main reason was that she had seen a programme on television about bullying in the Army.
35. The only fresh evidence as to events at Morecambe came from Mr. William Bailey, a cleaner. He said that on the Monday morning he noticed streaks of blood on the walls of one of the cells. Here the difficulty was that he did not mention his discovery to Chris Mullin in the course of an extended interview in late 1986. Of course he may have remembered it later. But that was not the reason he gave.
36. There was other fresh evidence designed to show that the appellants may have been ill - treated by the police, as they allege. But the court was unpersuaded. Having read all the fresh evidence at the 1987 hearing, we are not surprised. Neither Mr. Mansfield nor Lord Gifford have attempted to resurrect the argument before us. The ground on

which they now seek to show that the written and oral confessions are not to be believed is very different. We will come to it in due course.

Fresh Evidence - The Scientific Issue

The Griess Test at the Trial

37. We now come to the fresh evidence which has become available since the hearing in 1987. In order to put the fresh scientific evidence in context, it is necessary to go back to the beginning again, and describe the tests performed by Dr. Skuse at Morecambe. Science had moved on since 1974. In those days there were five tests available to show recent contact with high explosive. Three of the tests were designed to detect the presence of nitroglycerine: the other two the presence of ammonium nitrate, with which nitroglycerine is commonly combined to form gelignite.
38. The first of the three tests is the Griess test. The Griess test is a simple colour test, used to detect the presence of nitrite. When the Griess reagent is added to a solution containing nitrite, it changes to a pink colour. It is important to notice that the Griess reagent does not react with nitroglycerine itself. It is first necessary to release the nitrite ions from the nitroglycerine. This is done by treating the nitroglycerine with caustic soda. If the Griess reagent is then added, it will produce the characteristic pink colour within ten seconds.
39. How then was the Griess test carried out in practice? Dr. Skuse took four swabs from each of the appellants, one from each hand, and one from beneath the fingernails on each hand. Having extracted the swabs in ether, and divided the extract into three small porcelain bowls, he added caustic soda and Griess reagent to the first bowl. If he got a pink colour within ten seconds he knew that he had the presence of nitrite. But he then had to eliminate the possibility of free nitrite from some other, innocent, source. This he did by adding Griess reagent to the second bowl, without first having added caustic soda. If he got no pink colour in the second bowl, he was 99 per cent. certain that the presence of nitrite in the first bowl was due to nitroglycerine.
40. The great advantage of the Griess test is its convenience. It can be carried out on the spot. Its disadvantage, as we shall see, is that it is not specific. In other words, there are other substances which may yield a positive reaction to the Griess test, depending on the conditions. Of these the most likely is nitrocellulose. This disadvantage explains why the Griess test has now fallen into disuse. On the Griess test as carried out by Dr. Skuse, Power's right hand proved positive. So did Hill's right hand. All other swabs were negative.
41. The second of the three tests for nitroglycerine is by means of thin layer chromatography, or TLC. Unlike the first test, it can only be carried out in the laboratory. It is a test for nitroglycerine itself, not for nitrite. It is more sensitive than the Griess test. We need not describe it further, since the results were all negative, including the swabs from Power's and Hill's right hands which had proved positive on the Griess test.
42. The third test is by means of gas chromatography/mass spectrometry, or GCMS. It is even more sensitive than TLC, and is said to be a thousand times more sensitive than

the Griess test. Dr. Skuse did not have the GCMS equipment at Chorley. It was necessary for him to take his samples to the Home Office Central Research Establishment at Aldermaston. This he did on November 27, 1974. The equipment was operated by Dr. Janet Drayton. The particular piece of equipment had only arrived the previous year. All the results were negative, except sample FS17 corresponding to Hill's left hand. Dr. Drayton did not give evidence at the trial. Indeed there was very little consideration of the GCMS results at all. Dr. Skuse said he regarded the positive result on Hill's left hand as confirming his Griess result. Instead of being 99 per cent. certain, he was now 100 per cent. certain. He did not regard the negative GCMS results on Power's and Hill's right hands as undermining or invalidating the previous positive Griess results, even though, as we have seen, the GCMS is a thousand times more sensitive than the Griess test.

43. Dr. Black, on the other hand, did not regard the Griess test as being specific for nitroglycerine. It was a preliminary sorting test - no more. A positive result should be followed by a confirmatory test. A possible source of contamination on the hands of the appellants was old nitrocellulose from contact with a wooden surface on the train, or a public house bar top. Unfortunately Dr. Black had conducted no experiments to prove his theory. As for GCMS. Dr. Black was not able to develop his arguments very far, since the points which he wished to make had not been put to Dr. Skuse. In particular, he was about to give evidence, which might have been important, about certain graphs or traces produced by the GCMS equipment. But Dr. Skuse had not been asked about the traces. So they were never produced, and the point was allowed to drop. In Dr. Black's view the GCMS result in relation to FS17 did not prove conclusively the presence of nitroglycerine on Hill's left hand.
44. The judge did not attempt to explain the difference in view between Dr. Skuse and Dr. Black.

"As I have already said, this is such a complicated subject that I am not going to try and reproduce the technical difference on this issue. If I start trying to explain to you the mysteries of gas chromatography and mass spectrometry, what you see and what you do not see with the oscilloscope, and what is meant by atomic units and blips, and so on. I should be getting hopelessly out of my depth and. I suspect, out of yours too, members of the jury. There it is. Was the result described by Dr. Skuse about this scientific question as obtained from the GCMS test by him using the Hill swab from the left hand, or was it not? Alternatively, viewed from another angle, is it as complex as that?"

45. The judge went on to suggest how the jury should approach the scientific evidence.

"Members of the jury the resolution of scientific argument of this sort is difficult, particularly difficult for a jury of lay people, and I say once again that I am not going to try and go into the technicalities in detail because I would be in grave danger of misleading you. The only way that you can resolve these differences is by your impression of the witnesses. Use any technical knowledge that you have, but I suspect that in the end you will judge it primarily by your impression of the witnesses, and secondly perhaps by a comparison of their relative experience."

46. The judge then drew attention to Dr. Skuse's experience, Dr. Black's relative inexperience, the absence of any text book authority in favour of Dr. Black's theory, and his failure to carry out any experiments. He continued:

"I have read the transcript of Dr. Black's evidence and I discover that there is a point when I asked him a question. I said to him, 'Dr. Black, is this conclusion of yours based on anything other than your own theorising?' and he said, 'Oh my Lord, to talk about theorising is rather unfair is it not?' Is it? If Dr. Black was not theorising, what was he doing?"

Please do not think I am seeking to pre-empt your decision on this very important issue. You may see it differently from me. I am afraid that I have made my views on this issue between Dr. Skuse and Dr. Black pretty plain, and that is why it is right that I should emphasise once again what I said at the beginning of my summing-up, namely, that any issue of fact - and an issue of scientific fact is just as much an issue as an issue between a police officer and a defendant as to what was said - is a matter for your decision and not for mine, and if you think that in what I have been saying I have been talking rubbish, just disregard everything I have said and arrive at your own independent conclusions."

The judge concluded;

"Of course, if in forming your own judgment on this matter you prefer Dr. Black's view to Dr. Skuse's view, then you will obviously conclude that the forensic evidence of Dr. Skuse is of no value. Indeed Dr. Black's theory logically seems to imply not only that Dr. Skuse's theories were of no value, but that Dr. Skuse has been spending and must have spent much of his professional life wasting his time because, if Dr. Black is right, the Griess test was not worth carrying out ... Do you think that Dr. Skuse has been wasting most of his professional time? It is a matter entirely for you."

47. We will postpone consideration of the fourth and fifth tests for the detection of ammonium nitrate, until we have seen how the main scientific issue developed in the Court of Appeal in 1987.

The Griess Test in the Court of Appeal - 1987

48. In April 1985 Granada television commissioned Dr. Brian Caddy of the University of Strathclyde and Mr. Baldock of Bericon Services Ltd., Nottingham, to carry out tests to confirm Dr. Black's theory that nitrocellulose could give a positive reaction to the Griess test, depending on the conditions. They reported on May 30 and June 10, 1985. Using 1 per cent. caustic soda, they found that a number of nitrocellulose-coated objects in everyday use gave a positive reaction to the Griess reagent at room temperature, including in particular certain brands of playing cards. These findings prompted the Home Office to commission an investigation by Dr. Whistance and Dr. Fereday at the Central Research Establishment at Aldermaston. Their first report dated February 1986 confirms Dr. Caddy's findings. But, as the report points out, the detection level for nitroglycerine is much lower than for nitrocellulose, when the two compounds are tested under the same conditions. This means that if Dr. Skuse used, as was at first thought, a solution of 1 per cent. caustic soda at room temperature the

positive results which he obtained could have been due to contact with nitrocellulose, especially if he used ethanol as a solvent. But if, as he claimed at the 1987 hearing, he used a much weaker solution of 0.1 per cent. caustic soda at sub - ambient temperatures without the use of ethanol as a solvent, then nitrocellulose could be excluded. Under those conditions the test becomes specific for nitroglycerine.

49. As a consequence, much time was taken up at the hearing in investigating the exact procedure followed by Dr. Skuse in 1974. There were pointers either way. In the event the Court of Appeal held that, as there was so much doubt as to his procedures, and in particular as to the strength of the caustic soda which he used, they could not safely regard his tests as being specific for nitroglycerine.
50. The Court of Appeal was, if we may say so, plainly right. Subsequent evidence has shown (indeed Dr. Whistance and Dr. Fereday had already shown) that Dr. Skuse cannot have used 0.1 per cent. caustic soda to detect nitroglycerine, as he said, because if he had the appellant's hands would have been dripping with nitroglycerine when they joined the train at Birmingham. Although a weak solution of caustic soda increases the specificity of the Griess test, it reduces its sensitivity. Indeed it was Dr. Skuse's case that he deliberately sacrificed one for the other. Dr. Whistance and Dr. Fereday found that with a solution of caustic soda as weak as 0.1 per cent., the detection limit was 500 micrograms. On the surface of the hand the quantity of nitroglycerine required to produce a positive reaction is considerably greater, due to the inefficiency of swabbing. Dr. Lloyd, to whom we will return later, has shown that the minimum amount of nitroglycerine detectable on a hand is 5 milligrams. But nitroglycerine on the hand decays very rapidly. If swabbing started at 5.50 a.m., as Dr. Skuse said, then the time which had elapsed since the appellants caught the train was 10 hours. During that time the nitroglycerine would have depleted by a factor of 10^{-3} . Accordingly the amount of nitroglycerine on the appellant's hands at Birmingham must have been a minimum of 5 grams, which corresponds to about 1 oz of gelignite. This is, as Dr. Lloyd points out, an absurdity.
51. So either Dr. Skuse cannot have used a solution of caustic soda as weak as 0.1 per cent., in which case his test was not specific for nitroglycerine, or, if he did, there must be some other explanation for his positive results. As we shall see, Dr. Lloyd has now hit on another explanation almost, it would seem, by chance. But we must first complete our account of the Griess test in the Court of Appeal.
52. Having held that Dr. Skuse's test could not be regarded as specific for nitroglycerine there remained the question what else, if not nitroglycerine, could have given the positive result which he saw. By the time the case reached the Court of Appeal the only other contender was nitrocellulose. How might the appellants have come into contact with nitrocellulose? Nitrocellulose - coated surfaces on the train were effectively ruled out by the first Aldermaston report; nitrocellulose varnish is not used in trains. So, also was contact with bar counters. That left only the playing cards. Dr. Caddy's experiments had shown that nitrocellulose traces could be transferred to the hands from certain brands of playing cards. The appellants called evidence in support of this theory. But it was rejected by the Court of Appeal for two reasons. The first reason was that any trace of nitrocellulose picked up from the cards would not have lasted long enough. The first Aldermaston report showed that such traces would have disappeared within three hours of the appellants ceasing to play cards. Secondly, the

pack of cards which the appellants used has been tested for nitroglycerine by TLC. It proved negative. If the cards had been coated with nitrocellulose, it would have shown up on the TLC test, even though the laboratory was looking for nitroglycerine, not nitrocellulose. There was a possibility that the nitrocellulose coating on the cards, if any, would have remained intact, since the cards were washed in ether, and nitrocellulose is not soluble in ether. But this explanation was rejected as remote and theoretical.

53. Finally, the court drew attention to the inherent improbability of two of the players picking up nitrocellulose traces on their hands from the cards, and not the other three, including Hunter, the owner of the cards.
54. For all these reasons the court inferred that the cards were not coated with nitrocellulose, and therefore concluded that contact with nitrocellulose was not the explanation of the positive results found by Dr. Skuse. The Court was driven back to the only other alternative then being canvassed, namely nitroglycerine.
55. Two other things should be noted at this stage. First, the Court did not base its decision on the scientific issue on the absence of a possible source of nitrocellulose contamination. It based its decision, as we shall see later, on the positive result of the GCMS test. The court only stated its conclusion on the nitrocellulose theory for the sake of completeness. Secondly, the nitrocellulose theory has not been resurrected before us. The appellant's case before us rests on a quite different explanation.

Griess Test Before Us

56. In July 1990, Sir John May published an interim report on the Maguire case. This led to a fresh review of the scientific evidence in the present case. The review was undertaken by a team of scientists at the Forensic Science Laboratory at Birmingham, under the leadership of Dr. Scaplehorn. Their report is dated September 13, 1990. One of Dr. Scaplehorn's team was Dr. Lloyd, a leading expert in the explosives field. In the course of work which he has carried out since September 1990 in another connection, Dr. Lloyd has discovered the presence of nitrite in an ordinary laboratory detergent, which can persist in a porcelain bowl after it has been cleaned so as to give a positive result to a Griess test. If this is indeed the explanation of Dr. Skuse's results, it is difficult to see why it did not occur to any of the scientists before. Dr. Lloyd has tested a number of different soaps and detergents. In addition to the laboratory detergent, he obtained strongly positive results from Sainsbury's wire wool scouring pad soap, another brand of liquid toilet soap, and a laboratory glasswear cleaner. Dr. Lloyd assumes that nitrite is included in these soaps and detergents as an anti - corrosive additive. Many other ordinary soaps and detergents which he tested contained no nitrite.
57. An obvious objection to the theory that Dr. Skuse's results may have been due to nitrite contamination from the soap used by Dr. Skuse to clean his porcelain bowls is that although some of his results were positive, most were negative. Dr. Lloyd meets this difficulty by another series of experiments designed to show that the persistence of nitrite in the bowl depends critically on the number of times the bowl is rinsed. If it is rinsed twice, he gets a strong positive. If it is rinsed five times he gets a negative.

58. The evidence was that Dr. Skuse washed his bowls with soap. If, to illustrate the point, he rinsed the first bowl twice, and the second bowl five times, he would get nitrite contamination in the first bowl but not in the second. This would have led Dr. Skuse to infer the presence of nitroglycerine. Having listed the other factors which might affect the persistence of nitrite contamination in the bowl, Dr. Lloyd concluded:

"Any slight variation in these factors is liable to erratically switch the response between negative and positive. There is, hence, a clear possibility that bowls washed in such soaps will give at random a response attributable to nitroglycerine."

59. There are two other considerations which lend weight to Dr. Lloyd's explanation. Dr. Skuse gave evidence that in the course of carrying out his tests at Morecambe, he met with an unexpected difficulty. It was his practice, as we have said, to wash his bowls with soap after each test so as to make sure that a positive response on one test would not contaminate the next test. Having washed the bowls, he would then test them. If he did not get a "blank" he would wash them again. After getting a positive result from Hill's right hand, he duly washed the bowls. But he found to his surprise that he was unable to get a blank. We quote his evidence:

"When I had finished testing Mr. Hill, which would be in the region of 7.35 a.m., I began to get ready to receive the next gentleman and I could not get blank tests from my dishes. I tried once; I tried twice; and I was not happy. So I stopped the job."

60. Dr. Skuse thought that the trouble might have been due to the ether which he was using. So he sent for a fresh supply of ether. When he got back to his laboratory he tested the ether. But there was nothing amiss. He was left without any explanation of why he had had difficulty in obtaining a blank. It did not occur to him (or if it did, he did not say) that the cause of the difficulty might cast doubt on his earlier positive identification of nitroglycerine in the case of Power and Hill.

61. Dr. Lloyd's theory now provides an explanation of why Dr. Skuse had so much difficulty in obtaining a blank. In laymen's terms, the harder he washed the bowls, the more likely they were to become contaminated. There is, of course, no evidence that the soap which Dr. Skuse used contained a nitrite additive. Indeed there was some contemporary evidence that he was not using soap at all, but Vim, which gives a low Griess response. But the possibility cannot be ruled out.

62. The second factor which lends weight to Dr. Lloyd's theory is this. One of the questions which Dr. Skuse was asked at the 1987 hearing was why, if TLC is more sensitive than the Griess test, he got a negative result in the laboratory on Power's and Hill's right hands, after a positive result in the police station. Although the Griess test is no longer in use, the better view has always been that it was no more than a preliminary screening test subject to confirmation by some other test. When Dr. Skuse got a negative result on TLC, he should have questioned his earlier positive Griess results. His only explanation at the 1987 hearing was that the nitroglycerine might have evaporated before he got back to the laboratory. Now, of course, a simpler explanation has been suggested. If his positive results at the police station were due to nitrite contamination from the soap he was using, one would not expect the result to

be confirmed by TLC. For TLC is a test for nitroglycerine, not nitrite. It would also explain why Power's right hand was positive but not his left hand, nor the swabs from beneath his finger nails.

63. Another piece of evidence which has emerged since the last hearing is the statement of Dr. Bamford. On the night of the bombing he was called out to swab and test all the passengers on the Liverpool - Belfast boat. Two of the passengers were found to be positive on the Griess test, and were taken away for questioning. It transpired that they had been handling some form of shiny adhesive tape. Dr. Bamford was given a piece of the tape to test. He obtained a similar reaction.
64. Dr. Bamford's most recent statement is dated October 19, 1987, just before the last hearing in the Court of Appeal. It is not clear why it was not made available to the appellants until November 1990. Moreover one would have expected Dr. Bamford to have discussed his results with Dr. Skuse, since they were both based at Chorley. Dr. Lloyd has since tested 38 brands of self - adhesive tape, mainly from the mid - 1970s. Fourteen were shiny tapes of the kind described by Dr. Bamford. Dr. Lloyd has been unable to confirm Dr. Bamford's results. They must therefore remain something of a mystery.
65. Dr. Bamford's statement is important because it shows that even in 1974 the Griess test should only have been regarded as a screening test.
66. At the hearing before us. Dr. Lloyd was unable to give evidence due to ill - health. So evidence was given on his behalf by Dr. Scaplehorn, the head of the team. As a consequence, Dr. Lloyd was not cross - examined. Nor was Dr. Scaplehorn cross - examined, in an adversary sense, by the Crown, since the report was accepted by the Crown as accurate, and indeed had been provided by the Crown in the first place. It may be that, if Dr. Lloyd had been rigorously cross - examined, his conclusions could have been shaken. So far as we are concerned, however, we see no ground for not accepting his conclusions, supported as they were by Dr. Scaplehorn, at their face value. If that is right, then Dr. Skuse's evidence at the trial based on his Griess tests is now shown to be unreliable. There is no satisfactory evidence that Power or Hill had nitroglycerine contamination on their right hands. That leaves only Hill's left hand.

GCMS Test at the Trial

67. The GCMS test consists of two separate stages, carried out in two separate pieces of connected equipment. The extract for testing is first injected into a gas chromatographic column, which is filled with particles of refined earth. The extract is carried through the column by a solvent into a mass spectrometer. Different substances take different times to pass through the column. On the day in question nitroglycerine took 4.2 minutes.
68. When the extract reaches the mass spectrometer, it is irradiated with energised electrons. Fragments of different atomic mass are produced, characteristic of the substance or substances comprising the extract. For nitroglycerine the three most abundant ions are 30, 46 and 76. 46 is the predominant mass. 30 and 76 are less intense. Thus the intensity of 76 is only 9 per cent. of the intensity of 46. As the nitroglycerine passes into the mass spectrometer, one can read off the masses on an

oscilloscope. For a unique identification one would want to see all three masses emerging at 4.2 minutes. But on the day in question, the multiple ion detector was set to show 46, and not 30 or 76. The reason for this was that the extract was extremely small. By setting the multiple ion detector to pick up 46, and not the other masses, it increased the sensitivity to that mass, and so made it easier to observe any signal on the oscilloscope at the correct retention time. As already stated, Dr. Drayton who operated the GCMS equipment at Aldermaston was not called to give evidence at the trial. But Dr. Skuse said that they both saw a small increase in 46 at the correct retention time of 4.2 minutes. This was enough to make Dr. Skuse 100 per cent. certain that Hill's left hand was contaminated with nitroglycerine. The fact that a subsequent Griess test on the same sample proved negative did not concern him, since the Griess test is much less sensitive.

GCMS in the Court of Appeal - 1987

69. Whereas, at the trial, the GCMS result on Hill's left hand was treated as peripheral, presumably because Dr. Skuse was so sure of his Griess results, or perhaps because the GCMS test was likely to prove difficult for the layman to understand, at the 1987 hearing it moved centre stage. Dr. Drayton was called. She proved to be a very impressive witness. We can confirm this, having heard her give evidence ourselves. When the sample from Hill's left hand - FS17 - was injected she said she saw a very small increase or peak on 46 at 4.2 minutes. She was referred to a letter which she wrote to the Director of the Forensic Science Laboratory at Chorley dated December 3, 1974, in which she set out her results in tabular form. In three cases, from another investigation, she detected nitroglycerine. In two of those three cases she added the comment "large increase in 46." In the other case she found a small increase in 46. In the case of FS17, she reported "possible nitroglycerine present", and added "very small increase in M/E46". We quote a short passage from her evidence - in - chief.

"And when you wrote your letter of 3rd December, your interpretation of that which you recorded was 'possible ng present'; A. Yes.

Q. Why did you qualify it in that way?

A. I qualified it with the word 'possible' mainly because the peak at 46 was very small.

Q. Any other reason?

A.No.

Q. Was that combined reading of 46 at 4.2 minutes consistent with anything else that you were aware of?

A. Detecting the 46 mass at 4.2 minutes was, as far as I am aware, only consistent with nitroglycerine."

In her written statement she had said;

"It is extremely unlikely that there is another compound which has the same retention (under the set conditions) and has an abundant ion at mass 46."

70. Alternative explanations were suggested by Dr. Caddy and others at the 1987 hearing. One suggestion was that the sample may not in fact have emerged from the G.C column at 4.2 minutes. Another suggestion was that a fragment of nitroglycerine might have become trapped in the G.C. column, from a previous run, and then been dislodged, by chance, at precisely the correct retention time. As to the latter

suggestion, the Court of Appeal agreed with Dr. Drayton that it was not worthy of sensible rational consideration. As to the former, Dr. Drayton said that if there had been any doubt as to the retention time, she would have run the sample again. In the light of Dr. Drayton's evidence, and in the absence of any alternative explanation for the peak on 46 at 4.2 minutes, the Court of Appeal found that the presence of nitroglycerine on Hill's left hand, for which there could be no innocent explanation, was proved beyond reasonable doubt. Mr. Mansfield made clear that it was not part of his case before us that the Court of Appeal misunderstood Dr. Drayton's evidence.

GCMS Before Us

71. In opening the appeal before us Mr. Mansfield indicated that he would not be calling Dr. Drayton. He was content to rely on Dr. Scaplehorn. Since the decision of the Court of Appeal in 1988 was clearly based on their acceptance of Dr. Drayton's evidence, it seemed to us that we ought to hear from Dr. Drayton direct. So it was arranged that she would be called by the respondent.
72. Dr. Scaplehorn's evidence was that the significance of the peak seen by Dr. Drayton was rather limited. In the first place the response was very weak. In the second place Dr. Drayton was not able to say that mass 46 was the preponderant ion, since the multiple ion detection screen was set to detect one ion only. Other compounds exhibit a weak ion at 46. A peak at 46 is of limited significance unless it is shown to be the preponderant ion. It is only conclusive if the other ions are 30 and 76.
73. Dr. Lloyd conducted a series of experiments to see what other substances might account for the increase in 46 seen by Dr. Drayton. Unfortunately, the GCMS equipment used by Dr. Drayton has now been superseded. Science, as she said in evidence, has moved on in 16 years. It was found impossible to reproduce the conditions under which she tested FS17. But one of the swabs tested by Dr. Lloyd proved crucial. It was taken from the hand of a smoker, although that was not in itself of any significance. He clearly had not been handling explosives. Yet it showed a distinct peak on 46 at about the same retention time as nitroglycerine. Dr. Lloyd is unable to say what the substance was which produced the peak. A typical swab contains a myriad of different substances. But there it was, for all to see, in the chromatogram included among our papers.
74. Dr. Drayton was naturally asked whether she disagreed with the conclusions reached by Dr. Scaplehorn and Dr. Lloyd as a result of their recent work. She said she did not. In 1987 she had regarded it as extremely unlikely that any substance other than nitroglycerine could produce a peak on 46 at 4.2 minutes. In the light of the fresh evidence she has now modified her view. There is something else, which has not yet been specifically identified, which is capable of producing a similar response. In her letter of December 3, 1974 she reported the possible presence of nitroglycerine in FS17. She now accepts that what she saw may equally have been due to something else. The court would like to express its admiration for the way in which Dr. Drayton gave this evidence.
75. Another development since the last hearing is the discovery of a small orange cardboard box containing a number of ultra - violet charts or traces produced by the mass spectrometer on November 27, 1974, recording some of the samples run on that

day. It seems extraordinary that the box, which might have contained vital evidence, was not discovered before. As it happens the charts are of no real significance, since the chart for FS17, if it ever existed, is missing.

76. But, two of the charts are so - called background charts. They show a slight increase on 46, even though no sample was being run at the time. In opening the appeal, Mr. Mansfield submitted, on the strength of these background charts, that a peak may have been present all day, and that Dr. Drayton may, as he put it, have "miss - seen" the background peak when reporting on FS17. But this point was not put to Dr. Drayton in cross - examination. Indeed Mr. Mansfield did not cross - examine Dr. Drayton at all. Dr. Drayton told us that she would never have tested a sample without being sure, as she said, that the system was clean. It was her machine. We accept without hesitation what she said. In the end the point was not pressed.

Ammonium Nitrate

77. Lastly we return to the fourth and fifth tests carried out by Dr. Skuse. These were, it will be remembered, designed to detect the presence of ammonium nitrate, a constituent of gelignite. We need only mention the fourth and fifth tests for this reason, that they were the sole basis for Dr. Skuse's evidence that Walker could have been in contact with commercial explosive. Walker was negative on all other tests.
78. There are two tests for ammonium nitrate, one for ammonium, the other for nitrate. According to Dr. Scaplehorn, the presence of ammonium ions is of no significance. As for nitrate ions, there is some doubt as to which of two tests Dr. Skuse carried out. But according to Dr. Lloyd, neither test was capable of distinguishing between nitrate and nitrite. Since nitrite is commonly found (it was found on five out of 38 swabs taken at random) Dr. Lloyd's view is that the test for nitrate should be disregarded.
79. Once again we emphasize that neither Dr. Scaplehorn nor Dr. Lloyd have been cross - examined. But once again we see no reason not to accept their conclusion, supported as it was by Dr. Drayton. As a consequence there is now no satisfactory evidence that Hill's left hand was contaminated with nitroglycerine, nor that any of the appellants were contaminated with ammonium nitrate. That disposes of the scientific evidence on which the prosecution case at the trial was based.
80. Lastly we should mention that Dr. Skuse himself wrote to the court prior to the hearing saying that he might have relevant evidence to give. The Crown Prosecution Service gave him every opportunity to indicate what he might want to say, and took great pains to furnish him with all the material he required. We have looked through a large bundle of correspondence passing between him and the Crown Prosecution Service. It contains nothing which we ought to receive in evidence under section 23 of the Criminal Appeal Act 1968 .
81. Through his solicitor, he has furnished us with two statements of Dr. Toseland, of Guy's Hospital, President of the British Academy of Forensic Science in 1988 - 1989. The first statement is dated just before the last hearing in the Court of Appeal. The other is dated February 28, 1991. In the latter, Dr. Toseland makes two points. They both relate to the detection level for nitroglycerine with 0.1 per cent. of caustic soda. Neither side sought to tender Dr. Toseland's statements as fresh evidence before us.

So it was not necessary for us to decide whether to receive these statements. We did not feel competent to assess the statements ourselves, without help. In any event they related to only one aspect of the scientific evidence.

Fresh Evidence - The Police Issue

82. We now come to the second of the two pillars on which the prosecution case at the trial rested. On March 20, 1990, the Home Office wrote to the Chief Constable of West Midlands asking for his comments on ten questions which had been raised by the solicitors acting for the appellants. On the following day, March 21, the chief constable wrote to Mr. Evans, Chief Constable of the Devon and Cornwall Police, asking him to carry out a further investigation. On March 26, Mr. Evans appointed three senior officers to help him, including Chief Superintendent Essery. All three officers had been involved in the 1987 enquiry. Mr. Evans did not confine himself to the 10 questions, later increased to 12 questions, raised by the Home Office. His investigation covered every possible aspect of the case, and was of quite extraordinary thoroughness.
83. One of the first decisions which Mr. Essery took was to submit virtually all important documents in the case to electrostatic document analysis, or ESDA. Included among these documents was the contemporaneous note made by D.C. Woodwiss of the interview with McIlkenny at 12.30 on Friday, November 22. (We shall refer to this interview as the first interview although there was some brief questioning by Superintendent Ibison at 5.50 a.m. when he took McIlkenny to see Dr. Skuse). The ESDA test showed, or appeared to show, that the note cannot have been contemporaneous. Since all the officers present at the interview, including Superintendent Reade, swore at the trial that the note was contemporaneous, they were asked to comment. Superintendent Reade was seen on August 21, 1990. The interview was taped. Towards the end of the interview he was asked to comment on the result of the ESDA test on the notes of McIlkenny's first interview. He could give no satisfactory explanation. We quote some passages from the interview.

"A. What you are suggesting in effect is that the thing has been re - written?

Q. That is correct Mr. Reade.

A. Well not to my knowledge.

Q. Do you understand the implication?

A. I understand the implications, what I am saying to you is I have no knowledge of those notes being rewritten and I cannot explain it but I can see reasons for it and I can see explanations for it if we can both, if we've got somebody, an expert went through it, I can see a way it can be done and it could be done quite accidentally.

Q. But you are unable to offer me an explanation?

A. I can't, I can't."

And a little later, when given another opportunity to explain, he said;

"No I can't not at this stage. I'll give it a lot of thought when I can sit down and listen and study this. I will probably be able to, but not at this stage."

Mr. Evans reported to the Home Secretary on August 27.

84. It was Superintendent Reade's inability to explain the ESDA test of the McIlkenny interview, and the refusal by D.S. Morris and D.C. Woodwiss to answer any questions, which led the Home Secretary to refer the case back to the Court of Appeal. We quote from his letter dated August 29, 1990.

"It appears to the Home Secretary that these developments raise questions about the reliability of evidence given at the trial by the police officers who conducted the investigation and, therefore, constitute a new fact which might affect the safety or reliability of the convictions of the six men. In these circumstances the Home Secretary considers that the Court of Appeal should have the opportunity to consider whether the six men's convictions should be regarded as unsafe or unsatisfactory."

85. Although the reference back to us was on the single ground which we have just mentioned, the appellants were not confined to that ground: see Chard (1984) 78 Cr.App.R. 106 . Mr. Mansfield was entitled to develop other grounds, as for example in relation to the scientific evidence. It will be seen, however, that the ground on which the case has been referred back to us has nothing to do with the allegation of police brutality which formed the principal ground of appeal in 1987. We repeat that while Mr. Mansfield has not abandoned those allegations, he has not developed them before us, or indeed relied on them in any way.

The Investigation by Mr. Evans - 1990

86. Once the Home Secretary had referred the case back, the Director became respondent to the appeals. There was a meeting with the Director on September 4, when it was decided to submit the original documents to further detailed examination by Dr. Baxendale at the Home Office Forensic Science Laboratory, Birmingham. Other areas for investigation were the so - called Reade schedule, a document which surfaced just before the 1987 hearing, and the failure to keep custody records both at Morecambe and at Queen's Road.

87. A very large number of documents, including all the relevant police notebooks, were submitted to Dr. Baxendale on September 17. His report is dated December 11. Meanwhile Mr. Evans and his team had identified the 25 police officers whom they wished to interview, including those they had already interviewed in August. They prepared lists of over seven thousand questions, and individual questionnaires for each officer. Interviewing started on January 14, 1991. D.S. Morris, D.C. Woodwiss and D.C. Langford declined to answer any questions on the advice of their solicitors. Other police officers said they would deal with the questionnaires by furnishing a written statement. We have seen those statements. In the main the police officers sought to rely on the evidence they had given at the original trial, and on their answers at the earlier investigation by the Devon & Cornwall Police in 1987. Superintendent Reade was the last to be interviewed. He had told Mr. Evans the previous August that he would be visiting relations in Australia at Christmas. He has since returned. He was interviewed at Melbourne over a total of 10 hours on February 14 and 15, 1991. We have seen the transcript. He co - operated fully. He answered or attempted to answer all Mr. Evans' questions. But he was still unable to give any satisfactory explanation for the "contemporaneous" note of the first McIlkenny interview. We now take each of the three main areas of Mr. Evans' investigation in turn.

ESDA - the McIlkenny Interview

88. When something is written on a sheet of paper, an imprint or indentation will normally be found on the sheet immediately below. Depending on the pressure of the writer, this imprint may be carried through to a third or fourth sheet. The purpose of ESDA is to make it easy to read the imprint on the sheet below. The sheet in question is placed on a metal plate, and covered with a very thin film. The plate is given an electrostatic charge, and sprinkled with a fine powder. The effect is that the indentations show up black on the ESDA foil, and the writing on the sheet itself shows up white. The foil may be photographed for subsequent reference. The imprint from the sheet above, and occasionally from the sheet above that, can be read by the naked and untutored eye. In addition to ESDA. Dr. Baxendale also examined the paper on which the notes of the McIlkenny interview were written, as well as the ink.
89. The interview occupies 10 pages. It started at 12.30 and finished at 1.30. It was signed at the bottom of page 10 by D.S. Morris and D.C. Woodwiss, and countersigned by Superintendent Reade. Superintendent Reade added the date, November 20, 1974 (an obvious but curious error) and the time, 1.35. On page 11 D.C. Woodwiss has added a note of McIlkenny's arrest at 3.00 p.m. the same afternoon, when D.S. Morris and D.C. Woodwiss told him that he would be taken to Birmingham for further enquiries. Near the top of page 7, D.C. Woodwiss records the arrival of Superintendent Reade, who then took over the interviewing for the next four pages, that is to say pages 7 - 10. It will be remembered that Superintendent Reade's evidence was that he joined the interview at 1.20 p.m. D.C. Woodwiss said at the trial that he took his notes on a pad of paper which he was given at Morecambe, since he had left his own notebook behind in Birmingham.
90. Dr. Baxendale's findings on the paper and ink can be summarised as follows.
- (1) Pages 1 - 6 and page 11 all come from the same pad. Pages 7 - 10 come from a different pad. The dimensions are very slightly different, and the striations along the top edge are different.
 - (2) Pages 1 - 11 are written with a black ballpoint pen. But on pages 7 - 10 the ink is more heavily deposited. Dr. Baxendale concludes that they were written with a different pen.
 - (3) Neither of the two pads used for pages 1 - 11 were of the same paper as the standard pads issued to the Lancashire Constabulary in 1974.
91. But much more important than these findings is what was revealed on the ESDA foils. Pages 2 - 6 all bear the imprint of the previous pages 1 - 5, as one would expect, but page 7 does not bear the imprint of page 6. On the contrary; page 11 bears a partial imprint from page 6, and more important still, an imprint from the top of page 7, ending with the words "we then leave room 1.30 p.m." The inference is inevitable that the notes of the interview originally ended at the top of page 7. The original page 7 was then torn up, a new page 7 substituted, and pages 8 - 10 added, recording the part of the interview in which Superintendent Reade was said to be present.

92. There is a further fact which points in the same direction. There was a subsequent interview with McIlkenny, also recorded by D.C. Woodwiss, on pages 12 - 19. It lasted one hour and 10 minutes. The required speed of writing works out at 60 characters per minute. At the first interview, lasting one hour, the required speed of writing works out at 96 characters per minute. But if the interview had ended, not at page 10, but at page 7, the required speed of writing would work out at almost exactly the same as the second interview, namely 61 characters per minute.
93. Nobody has been able to think of an honest explanation for the result of the ESDA test of the first McIlkenny interview. At best, the officers were lying when they told the court that D.C. Woodwiss was noting the interview continuously from 12.30 to 1.30. At worst they must have put their heads together to fabricate the part of the interview at which Superintendent Reade was said to be present, or perhaps even the whole of the interview.
94. A curious fact is that McIlkenny did not make any admissions during his first interview. What purpose then could the police have had in fabricating the interview? Perhaps we shall never know. But in the absence of an honest explanation for the "contemporaneous" notes, the impact on the trial of this new evidence must have been very great, all the more so since McIlkenny was steadfastly denying that any such interview ever took place at all. McIlkenny said that the only interview which he had on November 22 was much shorter, and much earlier.
95. We turn now to the second interview at 10.10 a.m. on Saturday November 23. It is recorded on pages 12 - 19. The interview finished at 11.20 a.m., when the officers took a statement. The statement was finished at 12.05 p.m. when the notes were signed by D.S. Morris, D.C. Woodwiss and D.C. Langford. Pages 12 - 16 are from the same pad as pages 1 - 6 and 11. Each bears the imprint of the preceding page. Page 17, however, is from a different pad and so are pages 18 - 19. So four different pads were used in all for the two interviews. The ink on page 17 is also different. It was at the foot of page 17 that McIlkenny confessed. If the interview was being noted continuously, one would have expected page 17 to bear the imprint of page 16. But it does not. It bears the imprint of a different page 16. Since the existing page 16 bears the imprint of page 15, it looks as though the officer started on a rewrite of page 16, and then, for some reason, tore it up. Similarly one would have expected page 18 to bear the imprint of page 17. But it does not. It bears the imprint of an earlier version of page 18, which has since been torn up. It is possible that page 17 was the last page of the pad. But bearing in mind that it is on different paper from any other page in either interview, it looks as though it has been rewritten at some stage. On any view the second interview cannot have been noted contemporaneously as the officers insisted.

Police Notebooks

96. Dr. Baxendale conducted a minute examination of Superintendent Reade's notebook, and the notebooks of the other officers concerned. He has shown that in many cases the marginal notes in Superintendent Reade's notebook are entered in a different ink, and therefore at a different time from the text. These marginal notes record the time when he wrote up the various interviews. Sometimes the time of an interview has been inserted subsequently in the text itself. The same is true of some of the other

officers' notebooks. Mr. Mansfield relies on this evidence to support an argument that the interviews may not have been noted up at the times stated by the officers in evidence. Indeed he argued that the notebooks may not have been written up until sometime in 1975, when the officers were making their statements.

97. In this connection there is a significant mistake which appears to have been made on three different occasions in three different notebooks. On two occasions the mistake was made by D.I. Moore. In D.C. French's notebook, at page 52, there is a note of an interview in another investigation which took place on October 29, 1974. The note was countersigned by D.I. Moore on October 31, 1974. But the oval rubber stamp over which his signature is written bears the date, subsequently altered in ink, February 3, 1975. In D.C Watson's notebook at page 36, D.I. Moore has countersigned the note of an interview with Power on November 22, 1974, with the date "22nd November 75" subsequently changed to "74." In D.S. Millichamp's notebook at page 10, the note of his arrival at Morecambe police station is headed "Friday 22nd November 1975" subsequently changed to 1974.

98. There is a further perplexing feature. Superintendent Reade's evidence was that he copied that part of McIlkenny's first interview at which he was present into his own notebook. Why he should have done this, at 2.00 p.m. on November 22, when he presumably had much else to do, is not clear. At the trial he said he did it because he found it difficult to read D.C Woodwiss's handwriting. Putting that on one side, at the bottom of page 8 of D.C. Woodwiss's note of the interview, it reads;

"Hunter says that you all met yesterday and that you and Walker were together , that you met last night at New and were all going to Belfast together for various reasons, it that true?"

When Superintendent Reade transcribed that passage into his notebook at p. 66 he wrote;

"Hunter says that you met last night at New Street and were all going to Belfast together for various reasons. Is this true?"

99. It will be seen that Superintendent Reade has left part of the sentence out. Yet another version appears in Superintendent Reade's pre - trial statement dated January 20, 1975.

"Hunter says that you all met yesterday and that you and Walker work together, that you met last night at New Street, and were all going to Belfast together for various reasons. Is that true?"

100. At the trial he said he was refreshing his memory from his notebook. Yet his evidence corresponded to his statement.

101. A similar problem arises in relation to his interview with Hunter at 10.45 a.m. on November 22. In his notebook at page 47 appears the following passage.

"Last night something like between 15 and 20 people were killed in Birmingham by two bomb explosions. You have already told me that you have

been friendly with a known IRA man who blew himself to pieces whilst carrying a bomb, I mean McDade."

102. His statement is based on his notebook, and so was his evidence. Yet when D.I. Moore gave evidence about the same interview, refreshing his memory from the same notebook, his evidence was as follows:

"What we are concerned with is that last night something like between 15 and 20 people were killed in Birmingham by two bomb explosions. You and others left Birmingham shortly before these explosions. You have already told me that you have been friendly with a known IRA man, who blew himself to pieces whilst carrying a bomb, I mean McDade."

103. From D.I. Moore's evidence it is clear that the second sentence ending with the word "explosions" has dropped out from Superintendent Reade's notebook. This suggests that Superintendent Reade's notebook, as we have it, is not the original composition. It must have been copied from some now missing source, which then resurfaced in the course of D.I. Moore's evidence.

104. It may be said that none of this really matters; that in the real world police officers making up their notebooks after an interview, as they did in 1974, must have made some preliminary rough notes. Even if their notebooks were not made up until much later, perhaps in 1975, it does not necessarily mean that their evidence cannot be relied on. The difficulty, however, is that this is not what the officers said at the trial.

Reade Schedule

105. Unlike the McIlkenny interview and the police notebooks, the Reade schedule was the subject of extensive evidence and argument at the previous hearing in the Court of Appeal. The document came to light in the course of the earlier investigation by the Devon and Cornwall police in 1987. It consists of seven pages divided into large squares. Each page has seven columns headed across the top "date" "time" "officers" "prisoners" "place" "reference" "knowledge of." There are 27 entries down the left hand margin starting at 3.15 a.m. on November 22 and ending at 3.15 p.m. on November 24. The document is in Superintendent Reade's handwriting. It contains many additions and corrections, also in Superintendent Reade's handwriting.

106. Superintendent Reade says he cannot remember what was the purpose of the document. He has given a number of different explanations, the most recent of which is that it was prepared for the use of counsel at the trial. It is quite clear to us, from internal evidence, that that explanation cannot be correct. Equally it cannot have been prepared before the interviewing began. It is much more likely to have been prepared shortly after the interviewing was completed. What then was its purpose? At the 1987 hearing Mr. Mansfield put it to Mr. Reade that the purpose was to enable him to decide during which interview, each of the appellants should be said to have confessed.

"[Lord Chief Justice]: So this was a blue print for a completely false case to be put forward by the police witness at the trial?"

[Mr. Mansfield]: That is right."

107. At 3.05 p.m. on Saturday November 23 there was an interview with Callaghan. In the column headed "officers" it reads "D.S. Hornby and crew" the letters "D.C." have been crossed out. On the last page, beneath the last entry, appear the words "Davies and Bryant will be OK." It was suggested by Mr. Mansfield that Superintendent Reade had to "square up" something with the two officers before entering their names in the schedule, and that is why he wrote "DS Hornby and crew." Superintendent Reade replied:

"Not at all. As I have said to you previously you are suggesting to me I was picking the names out of a hat to interview prisoners fictitiously. That, as I have said before, is postposterous. I could not do that sort of thing.

[Lord Justice Stephen Brown]: Is the suggestion, Mr. Mansfield, that this witness instructed two other officers to make a false allegation of a false confession.

[Mr. Mansfield]: My Lord it does not write it all out.

[Lord Chief Justice]: This is the master perjury plan?

[Mr. Mansfield]: Yes."

108. There remains the most puzzling entry of all. At 3.40 p.m. on Saturday November 23 there is recorded an interview with Hill. Under the "officers" column there appears D.I. Moore, D.S. Bennett, D.C. Brand. "D.C. Bennett leaves room 4.30 to 4.40 p.m. gets information re Callaghan's statement." In the reference column there is a question mark. Subsequently the entire entry has been scratched out, and the word "out" underlined three times appears in the "prisoners" column. Hill's evidence at the trial was that there was indeed an interview in the afternoon of November 23, at just about the time of the interview which has been crossed out in the Reade schedule.

109. Mr. Mansfield's explanation of the crossing out is that there was no need for the interview, once it had been decided that Hill should confess in the course of the morning interview, on being shown McIlkenny's statement.

110. Superintendent Reade was asked about the crossing out of the Hill interview, just as he was asked about the first McIlkenny interview, at the resumed interview with Mr. Evans in February 1991. But he could think of no explanation other than that he must have been misinformed.

111. The Court of Appeal heard Superintendent Reade give evidence in 1987. They were certain that he did not seek to deceive them. Whatever else it might be, they said, the Reade schedule was not a blue print for perjury. Having seen Superintendent Reade the court did not think him capable of organising or carrying through such a huge and complicated conspiracy. We are now three years on. We know now that Superintendent Reade, whether or not he is capable of organising a conspiracy, is at least capable of deceiving the court with regard to the McIlkenny interview.

112. We are not persuaded that the many alterations in the Reade schedule, and in particular the adjustments to the timing of interviews, had the sinister implication for which Mr. Mansfield contended, if, as we think likely, the schedule was prepared in the week or so following the completion of the interviewing. It is equally consistent with Superintendent Reade working out, on incomplete information, exactly what had happened, and when. But the crossing out of the Hill interview is much more difficult to explain. In the absence of any explanation from Superintendent Reade, it must cast additional doubt on the honesty and reliability of his evidence. It is highly reprehensible for a police officer to deceive the court. But it is another thing to be capable of organising a widespread conspiracy of deceit. We need not go further than say, that on the evidence now before us, Superintendent Reade deceived the court. We do not think we should go further than that, without having heard Superintendent Reade, and the other officers alleged to be party to the conspiracy.

Custody Records

113. Another area of fresh evidence since the 1987 hearing is the absence of properly completed charge sheets and custody records, particularly at Queen's Road. The records were only made up just before the appellants were transferred to the central lock - up. It is not clear who gave the order that custody records should not be kept in the ordinary way. Certainly the decision was taken at a high level. Whoever took the decision, Mr. Mansfield argued that it allowed Superintendent Reade a free hand to weave his intricate web of deceit. We attach little weight to that argument in isolation. It was further suggested that D.S. Higgins' signature on Callaghan's custody record was a forgery. But the evidence about that was inconclusive, so we say no more about it.

The Role of the Court of Appeal

114. Since the present appeal has given rise to much public discussion as to the powers and duties of the Court of Appeal (Criminal Division), and since the Home Secretary has set up a Royal Commission to investigate and report, it may be helpful if we set out our understanding of the present state of the law.

(1) The Court of Appeal (Criminal Division) is the creature of statute. Our powers are derived from, and confined to, those contained in the Supreme Court Act 1981, the Criminal Appeal Act 1968 and the Criminal Justice Act 1988. We have no inherent jurisdiction apart from statute: see *Jefferies* (1968) 52 Cr.App.R. 654, [1969] 1 Q.B. 120, *Collins* (1969) 54 Cr.App.R. 19, [1970] 1 Q.B. 710 and *D.P.P. v. Shannon* (1974) 59 Cr.App.R. 250, [1975] A.C. 717. Thus we have no power to conduct an open-ended investigation into an alleged miscarriage of justice, even if we were equipped to do so. Our function is to hear criminal appeals, neither more nor less.

(2) Just as we have no powers other than those conferred on us by Parliament, so we are guided by Parliament in the exercise of those powers. Thus by section 2(1) of the 1968 Act we are directed to allow an appeal against conviction if, but only if, (a) we think that the conviction is unsafe or unsatisfactory; (b) there has been a wrong decision on a question of law or, (c) there has been a material irregularity. In all other cases we are obliged to dismiss the appeal. Where we allow an appeal, we are directed by section 2(2) to quash the conviction. Where we quash the conviction, the order

operates, by virtue of section 2(3) as a direction to the trial court to enter a verdict of acquittal, except where a retrial is ordered under section 7 of the Act. Nothing in section 2 of the Act, or anywhere else obliges or entitles us to say whether we think that the appellant is innocent. This is a point of great constitutional importance. The task of deciding whether a man is guilty falls on the jury. We are concerned solely with the question whether the verdict of the jury can stand.

(3) Rightly or wrongly (we think rightly) trial by jury is the foundation of our criminal justice system. Under jury trial juries not only find the facts; they also apply the law. Since they are not experts in the law, they are directed on the relevant law by the judge. But the task of applying the law to the facts, and so reaching a verdict, belongs to the jury, and the jury alone. The primacy of the jury in the English criminal justice system explains why, historically, the Court of Appeal had so limited a function. Until 1907, there was no Court of Criminal Appeal at all. If, before then, a point of law arose in the course of a trial, the judge could "reserve" the point, if he thought fit, for consideration by the Court for Crown Cases Reserved. In the event of the point being decided in favour of the accused, the conviction would be quashed. But there was no right of appeal as such. The Criminal Appeal Act 1907 created the right of appeal for the first time. It also enabled the Court of Criminal Appeal to receive fresh evidence. There was no power to order a retrial, except by way of the writ of venire de novo. But that writ only issued when the trial had been a nullity. There was no general power to order a retrial until the Criminal Appeal Act 1964, and then only in fresh evidence cases. The power has since been greatly extended.

(4) The primacy of the jury in the criminal justice system is well illustrated by the difference between the Criminal and Civil Divisions of the Court of Appeal. Like the Criminal Division, the Civil Division is also a creature of statute. But its powers are much wider. A civil appeal is by way of re-hearing of the whole case. So the court is concerned with fact as well as law. It is true the court does not re-hear the witnesses. But it reads their evidence. It follows that in a civil case the Court of Appeal may take a different view of the facts from the court below. In a criminal case this is not possible. Since justice is as much concerned with the conviction of the guilty as the acquittal of the innocent, and the task of convicting the guilty belongs constitutionally to the jury, not to us, the role of the Criminal Division of the Court of Appeal is necessarily limited. Hence it is true to say that whereas the Civil Division of the Court of Appeal has appellate jurisdiction in the full sense, the Criminal Division is perhaps more accurately described as a court of review. In the 1907 Act there was a power to set aside a verdict if the court thought it unreasonable, or that it could not be supported having regard to the evidence. This power was very narrowly construed. The wording has now been changed. We have power to upset the verdict of a jury' on a question of fact if we think a conviction unsafe or unsatisfactory under all the circumstances of the case. These words were substituted by section 4 of the Criminal Appeal Act 1966. We shall return to their meaning later.

(5) Another feature of our law, which goes hand in hand with trial by jury, is the adversarial nature of criminal proceedings. Clearly a jury cannot embark on a judicial investigation. So the material must be placed before the jury. It is sometimes said that the adversarial system leaves too much power in the hands of the police. But that criticism has been met, at least in part, by the creation of the Crown Prosecution Service. The great advantage of the adversarial system is that it enables the defendant

to test the prosecution case in open court. Once there is sufficient evidence to commit a defendant for trial, the prosecution has to prove the case against him by calling witnesses to give oral testimony in the presence of the jury. We doubt whether there is a better way of exposing the weaknesses in the prosecution case, whether the witness be a policeman, a scientist or a bystander, than by cross - examination.

(6) A disadvantage of the adversarial system may be that the parties are not evenly matched in resources. As we have seen, one reason why the judge expressed his preference for Dr. Skuse was that Dr. Black had carried out no experiments to prove his theory. Experiments presumably cost money. Whether Dr. Black could have carried out any experiments within the limitations of legal aid, or the time available, we do not know. But the inequality of resources is ameliorated by the obligation on the part of the prosecution to make available all material which may prove helpful to the defence. The later history of the present appeal shows how well the prosecution can perform that obligation.

(7) No system is better than its human input. Like any other system of justice the adversarial system may be abused. The evidence adduced may be inadequate. Expert evidence may not have been properly researched or there may have been a deliberate attempt to undermine the system by giving false evidence. If there is a conflict of evidence there is no way of ensuring the jury will always get it right. This is particularly so where there is a conflict of expert evidence, such as there was here. No human system can expect to be perfect.

(8) Just as the adversarial system prevails at the trial, so also it prevails in the Court of Appeal. It is for the appellants to raise the issues which they wish to lay before the court. Those issues are set out in the grounds of appeal. It will be remembered that at the initial application for leave to appeal, virtually the only issue before the court was the fairness of the summing - up. If the appellants had insisted on raising other issues, they could have done so. The same applied when the case was referred back to the Court in 1987. A number of distinguished scientists were called on both sides. But as we have seen, the scientific issues before the court in 1987 were not the same as they are now. Thus nobody suggested in 1987 that Dr. Skuse's results could have been due to nitrite contamination from the soap he was using to clean his bowls. Nobody knew that Dr. Drayton would modify her view in the light of later scientific research. Nobody knew that the "contemporaneous" notes taken by D.C. Woodwiss of the two McIlkenny interviews were written on four different pads of paper. So the issues were very different.

(9) For an adversarial system to work, there must be an adversary. One of our difficulties in the present appeal has been that we have listened to the fresh evidence of Dr. Scaplehorn and Dr. Baxendale, without the benefit of hearing any cross - examination. We say at once, and as emphatically as we can, that this is no criticism of the Director or Mr. Boal. They have acted with perfect propriety. The concluding paragraphs of the Farquharson Committee's Report on The Role of Prosecuting Counsel , May 1986 (Archbold 43rd ed. para. 4 - 47a) deals with prosecution counsel's function in the Court of Appeal in this way:

"If prosecution counsel has formed the view that the appeal should succeed he should acquaint the Court with the view and explain the reasons for it. If the

court disagrees with him counsel is entitled to adhere to his view and is not obliged to conduct the appeal in a way which conflicts with his own judgment. At the same time it remains counsel's duty to give assistance to the court if requested to do so."

115. Mr. Boal and the DPP had a number of very difficult decisions to take in the abnormal circumstances of the present appeal. Having decided that they could not support the scientific evidence on which the prosecution was based, or the police evidence, it was their duty to say so. They have since given us every possible assistance. But the effect of their decision was, inevitably, that we have not heard the other side put, if indeed there is another side.

(10) This has led us to consider whether some other system might be devised in the very exceptional class of case, of which this is one, where fresh evidence comes to light long after the conviction. In the ordinary case, not depending on fresh evidence, there is no difficulty. Nor is there any difficulty in fresh evidence cases, where the fresh evidence is discovered soon after the trial. If the evidence is incredible, or inadmissible, or would not afford a ground for allowing the appeal, we decline to receive it. If the fresh evidence surmounts that preliminary hurdle, we first quash the conviction, if we think it unsafe or unsatisfactory, and then order a retrial under section 7 of the Act, if the interests of justice so require. Where new evidence is conclusive, we quash the conviction without ordering a retrial: see *Flower & Others* (1965) 50 Cr.App.R. 22, [1966] 1 Q.B. 146. There is a view, put forward notably by Lord Devlin in *The Judge*, that we should always quash a conviction where fresh evidence has been received, since a conviction is bound to be unsafe, or at least unsatisfactory, where it has not been based on all the evidence. But this view did not find favour with the House of Lords in *Stafford and Luvaglio v. D.P.P.* (1973) 58 Cr.App.R. 256, [1974] A.C. 878.

116. The difficulty in fresh evidence cases arises where a retrial is no longer practicable, as in the present case. The difficulty becomes acute when there is no contest. For we then have to make up our own minds whether the convictions are unsafe or unsatisfactory without having the benefit of hearing the evidence tested by cross - examination. Where a retrial is still possible, the quashing of the conviction is, as it were, only the first half of a two stage process. Where a retrial is no longer possible, it is the end of the road. This is not the occasion to offer a solution to the difficulty ourselves. No doubt all these problems will be reviewed by the Royal Commission.

The Prosecution Case in the Present Appeal

117. In making submissions before us, Mr. Boal had two distinct, and in a sense contradictory purposes. In the first place he was concerned to explain why it was that the DPP had decided not to oppose the appeals. In the second place he was concerned to submit that even if the convictions are unsatisfactory, as he conceded, they are not necessarily unsafe. In the first connection he was making points in support of the appeals. In the second connection he was emphasising the strengths of the prosecution case. He pointed out, correctly, that the words unsafe or unsatisfactory are disjunctive. He referred us to a number of reported cases (there must be many more unreported cases) from which it appears that in allowing appeals the court sometimes uses one

word, sometimes the other, and most frequently both together. It was said that we might discern a pattern. But if so we failed. Lord Devlin suggests a possible distinction at p. 158 of his book, assuming the words are not tautologous. It has never been argued in any reported case that the words bear different meanings, save, in passing, by Mr. Hazan Q.C. in the course of his argument in reply in *Stafford and Luvaglio v. D.P.P.* (see [1974] A.C. at p. 888). In *Graham* (1975) 61 Cr.App.R. 292 the court contemplated that a conviction might be unsatisfactory without being unsafe, but the circumstances were very special. It has never been decided by any court that there is a difference in meaning, and we could see no purpose in Mr. Boal advancing the argument that there is such a difference in the present case.

118. But the second part of Mr. Boal's argument served a different purpose, and one of great importance. He pointed out, again correctly, that it is for the court to decide whether we think the convictions safe and satisfactory, not the Director. In reaching our decision, we must take all the circumstances into account, as section 2(1)(a) of the Act requires: This means that we must consider not only the weaknesses of the prosecution case, but also its strengths. We have already indicated some of the strengths. They are most clearly set out in the previous decision of this court. We do not repeat what was then said. It is sufficient for us to draw attention to some of the points relating to two of the appellants by way of illustration, concentrating on those points which are independent of police evidence. We do so first in relation to Walker, and then in relation to Callaghan.

The Prosecution Case Against Walker

119. The case against Walker depends primarily on his confession. His statement under caution was taken between 2.00 p.m. and 3.10 p.m. on Saturday November 23, and signed in eight places. He said he planted his bomb at the Tavern in the Town with Hunter. His explanation for signing the confession is that he had been subjected to continuous police brutality from 7.30 a.m. on Friday November 22, and had in particular received a heavy blow in the face on the car journey from Morecambe to Queen's Road, which knocked him unconscious. P.C. Coles, the driver, says he photographed Walker about midday on Sunday November 24. Walker said it was on Saturday. Whichever it was, the photograph shows no sign of injury, other than a small mark below the eye, which Walker told his solicitor happened when he fell. (Walker said in evidence that he thought his solicitor was a policeman). As already mentioned, Mr. Mansfield does not rely on Walker's injuries to explain his confession.

120. As to the circumstances in which Walker signed his confession, he said:

"I signed a statement under caution which had been prepared for me and brought into the room, having been made by the police. I was in such a state, having been subjected to brutality, that Sutcliffe had to hold my hand while I wrote the caption."

121. In other words Walker was saying that the statement was placed before him, already completed, for his signature. But there are difficulties about that. Walker's statement under caution was examined by Dr. Baxendale. There is a change of ink half way through. Walker's signature appears in one colour ink at the commencement of the statement, when he countersigned the caution, and in a different colour ink

thereafter. This suggests that the statement cannot have been complete when it was put before him. He said further that his hand was badly swollen, so much so that D.S. Sutcliffe had to hold his hand while he wrote the caption. But Dr. Baxendale could see no sign of this. If Dr. Baxendale is right, it would appear that Walker must have lied as to the circumstances in which his statement under caution was written.

122. In the course of his interview with D.S. Kelly on Saturday November 23, Walker drew a rough sketch plan of his movements on November 21. The plan became exhibit 109 at the trial. The plan has the words "Old square" written on it, (spelt "Old Sqoid") and the time "6.50." It also has an X which marks the spot where, according to the police account, Walker said he placed his bomb. When Walker gave evidence, he denied writing the words "Old Square" or placing the X. Dr. Baxendale was asked to compare the writing on the plan with another specimen of Walker's writing. He said that there was conclusive handwriting evidence to show that Walker wrote the plan. "The possibility" he said "of another person being the writer can be excluded."
123. At the trial within the trial Walker said that he knew McDade, but did not know that he was a member of the IRA until well after he had blown himself up. He was asked about his co - defendant Kelly, who lived at 22 Lime Grove, Birmingham. He said he had been there once in the summer or autumn of the previous year. He never mentioned anything about any black bag. Kelly's defence at the trial, which the jury accepted, was that he had infiltrated the IRA in order to become a police informer. On being interviewed, Kelly described an occasion in August 1974 when Sheehan and Walker had arrived at his house, and asked him to keep a dark blue carrier bag, and a plastic carrier bag. In them there was an automatic pistol, three to four hundred rounds of ammunition and about 100 detonators. When Sheehan was interviewed, he confirmed that he took some guns, ammunition and detonators to Kelly's house, and that Murray and Walker were with him. None of that was at that stage evidence against Walker. But when Detective Chief Superintendent Robinson was called, he was cross - examined by Mr. Jowitt on behalf of Kelly, to elicit the circumstances in which Kelly was arrested. Mr. Robinson's evidence was that on Tuesday November 26, he interviewed Walker at Winson Green Prison, at Walker's urgent request. According to Mr. Robinson, Mr. Walker said that he could point out the house where some detonators and ammunition had been taken. Detective Superintendent Crawford was then recalled at Mr. Jowitt's request to say that on Thursday November 28, the day on which Walker was due to appear again in court, he took Walker by car accompanied by D.S. Langford, with P.C. Cole as driver. Walker pointed out 22 Lime Grove as the house in question. The house was searched, and in due course Kelly was arrested. Detective Superintendent Crawford said that until they had the information from Walker on November 26, they knew nothing at all about Kelly.
124. This evidence which was, as we say, not led by the prosecution, but elicited on behalf of Kelly, put Walker in some difficulty, not least because it was unlikely that Walker would have volunteered to help the police if he had been treated by them in the way he said. So it was put to Mr. Robinson that the interview on November 26, in Winson Green prison at Walker's request had never taken place at all. Mr. Robinson said that it had.

125. When Walker came to give evidence himself, his explanation was as follows. There was an afternoon, he said, in May or June 1974 when he met McDade, whom he knew. McDade had with him a black cloth bag. He said it contained two wirelasses, and some cigarette lighters. They were prizes for a raffle. He asked Walker to keep the bag, which he did. He put it in his wardrobe. He never looked inside. The next evening Sheehan came for the bag. He had been asked to collect it by Murray. Sheehan gave Walker a lift in his van. On the way they called at 22 Lime Grove, where Sheehan spoke to Kelly. Sheehan asked Walker to bring him the bag from the car, which he did. That was Walker's explanation of how he came to be involved with the bag. He still had to explain how the police came to know about Kelly. He denied altogether having told Mr. Robinson on November 26, and he denied that he had gone by car to 22 Lime Grove on November 28, to point out the house. He said that he had told the police about the bag in the course of his interview on November 23.

126. But again there are difficulties. Why, if he never looked inside the bag, and thought that it contained prizes for a raffle, did he tell the police at all? Walker's answer to that was that he knew by then that McDade was a member of the IRA. Then why, if the police knew about the bag on November 23, did they do nothing about it until November 29? Why if Walker was told by Sheehan, as he says, about a fortnight after the black bag incident, that the bag did indeed contain two guns and some ammunition did he not at once realise that McDade was a member of the IRA? Yet in answer to Mr. Jowitt he said he did not realise that McDade was a member of the IRA until he picked up a leaflet at the Crossways public house on Wednesday November 20, 1974. The leaflet, which became exhibit 124, was found at Walker's home. It reads:

"Funeral Lieut. James McDade ... died on active service 14.11.74

The Irish Republican movement in England wish to state that on Thursday 21st November at 3.30 p.m. the remains of their comrade Lieutenant James McDade will be escorted from Coventry mortuary to Birmingham airport and flown to Belfast ...

We the Irish Republican movement consider that it is the duty of all Irish people in England to be present at Coventry mortuary, where a Roman Catholic priest will officiate ...

Support us in our struggle for which many have died."

127. It was put to Walker that he was going to the funeral because he was a member of the IRA.

"Q. You have not told us why you were going to this funeral?

A. I was just going for no reason.

Q. No reason?

A. No.

Q. One does not generally go to a funeral without a reason. Just think. What was your reason for going to this funeral?

A. No reason at all I was just going to a funeral.

Q. How often do you go to a funeral in Belfast for no reason?

A. This is the first time, Sir I have never been to Belfast.

Q. You were, were you not, an active supporter of the IRA.

A. No Sir.

Q. It was part of your role as an active supporter to go to this funeral was it not?

A. No Sir."

128. He was asked about an account book which he kept, which records the payment of £1 to "J. McDade" on May 15, 1974. He was asked if it was the James McDade. Walker said no, and that it must be another man of the same name. Later, in cross - examination by another counsel, he changed that answer.

129. In addition to Walker's own evidence about the McDade bag, there was independent evidence from Mrs. Wickett, his neighbour, and her son Paul Wickett. They gave evidence about two separate occasions. On the first occasion Mrs. Wickett saw Walker and two other men get out of a car at about 1.00 a.m. at night, and carry two plastic bags, like sand or cement bags, into Walker's house. On the second occasion Paul Wickett witnessed a similar incident also at night. It was the same night as an earlier explosion at the Rotunda. There could of course be an innocent explanation for these two incidents. But both were denied by Walker.

130. Then there was Mr. Watt, a fellow employee of Walker, who said that Walker had drawn him a sketch of how a bomb circuit works. On the afternoon of November 21 Walker told him not to go out for a drink that night. On previous occasions when Walker had told him not to go out, there had been an explosion. Then there was Mr. McEleavey. According to him, Walker had said, with reference to the death of McDade, "when the light comes on you run like hell." Finally, Paul Wickett again, who said he saw Walker carrying what looked like a heavy bag on the afternoon of November 21. Yet when Walker arrived at Heysham he had little more than a change of clothes.

The Prosecution Case Against Callaghan.

131. As with Walker, the case against Callaghan rests primarily on his written statement under caution. He confessed almost at once when seen by D.S. Hornby, D.C. Bryant and D.C. Davies at 2.55 p.m. on Saturday November 23. As with Walker, his statement under caution is in two colours of ink. Some of Callaghan's signatures are in black ink. Some in blue. Unlike the other appellants, Callaghan does not allege police brutality, other than a single slap in the face. Part of what appears in his statement is, he said, true; part he made up for the benefit of the police, and part the police made up themselves. He signed the statement under caution, implicating Hunter in the bombing of the Mulberry Bush, because he felt threatened. On the Sunday, he was seen again, when he told the police that Walker was a Brigadier in the IRA, Hunter a Captain and the others all Lieutenants. This was not a police invention, since Callaghan admitted in evidence that he had given their ranks, but said that he had picked those ranks at random, and that they were not in fact members of the IRA.

Our Approach

132. We now come to the last chapter. There is House of Lords authority, binding on us, as to the approach we should adopt: see *Stafford and Luvaglio v. DPP* (*supra*). It was summarised by the Court of Appeal in the 1988 judgment in this case as follows:

"Although the court may choose to test its views by asking itself what the original jury might have concluded, the question which in the end we have to decide is whether in our judgment, in all the circumstances of the case including both the verdict of the jury at trial upon the evidence they heard and the fresh evidence before this court that we have heard, the convictions were safe and satisfactory. If so the convictions must stand. If not the convictions must be quashed."

133. A Court comprising Lord Lane C.J., Russell J. and Taylor J. had previously applied the same test in *Mycock*, December 5, 1985. Since 1988, the same test has been applied by differently constituted courts, with Lord Lane presiding, in *Armstrong (The Guildford Four)*, October 19, 1989, *Khan*, February 23, 1990 and, most recently, *Edwards* January 16, 1991. In each case the convictions were quashed. So there is no doubt as to the test we must apply. Indeed it was common ground between the parties. Thus we start by asking ourselves what sort of impact the fresh evidence would have had on the trial, as a step towards answering the essential question, whether we think that in all the circumstances the convictions are unsafe or unsatisfactory.

Conclusion

134. It was the jury's duty at the trial to reach verdicts on the evidence before them. There can be no doubt that on the evidence at the trial the case against these appellants was convincing. But equally there is no doubt that the case, as left to the jury, depended heavily on the scientific evidence of Dr. Skuse and the police evidence of their interviews with the appellants. They were the two critical matters for the jury to consider.

135. Mr. Mansfield submits that the scientific evidence of Dr. Skuse can now be seen, in retrospect, to have been irrelevant and inadmissible. He further submits that the written confessions and admissions of the appellants were inadmissible, since they were obtained by wrongful reliance by the police (he does not suggest impropriety in this context) on the findings of Dr. Skuse. We reject these submissions.

136. But the question remains whether, in the light of what we now know, the convictions are unsafe or unsatisfactory.

137. So far as the scientific evidence is concerned, Dr. Skuse's findings are now in doubt. So far as the police evidence is concerned, the fresh evidence shows, in the absence of any explanation, that Superintendent Reade, D.S. Morris, D.C. Woodwiss and D.C. Langford were at least guilty of deceiving the court.

138. At the trial the appellants relied on various inconsistencies between the four written confessions so as to show that the confessions were not genuine, or that the police evidence as to the circumstances surrounding the confessions was not to be

believed. If the confessions had been shown to be unreliable, then the prosecution case would very probably have failed. This was the ground on which the Court of Appeal quashed the convictions in Lattimore (the Confait case) (1975) 62 Cr.App.R. 53 . We do not mention the inconsistencies in any detail. By way of example, Walker said he went with Hunter to place his bomb in the Tavern in the Town. Callaghan said he went with Hunter to place his bomb in the Mulberry Bush. So Hunter was in two places at once. There were also inconsistencies with the facts as now known. Thus Power said he placed his bomb by the juke box in the Mulberry Bush. The evidence of the explosives expert showed that that could not be right. Callaghan said he placed his bomb outside the Mulberry Bush. Again that could not be right. They all refer to placing their bombs in white plastic bags or "parcels." It was suggested that this may have been because the police already knew that the Hagley Road bomb was contained in two white plastic bags. But the evidence of the explosives expert is that the bombs were placed in something more substantial than plastic bags, because of the discovery at the seat of both explosions of D shackles, such as are found in the handles of a case. There were also certain curious omissions. In none of the statements do the appellants describe the way in which the bombs were primed. The judge went through these inconsistencies with the jury. He suggested for their consideration that the appellants might be telling the truth in their statements, but not the whole truth.

139. What then would the impact of the fresh evidence have been? One possibility is that the jury felt no doubt in accepting the police evidence at the trial. If so then the addition of the fresh evidence and in particular the evidence as to the McIlkenny interview, might well have caused them doubt. Another possibility, much pressed by Mr. Mansfield in the course of his argument, is that the jury may have already been in doubt whether to accept the police evidence, by reason of the inconsistencies in the written confessions, or for some other reason. If so the scientific evidence, confidently expressed by Dr. Skuse, may well have carried the day. Either way the impact on the jury of the fresh evidence would have been considerable.
140. For our part, we would say that in the light of the fresh scientific evidence, which at least throws grave doubt on Dr. Skuse's evidence, if it does not destroy it altogether, these convictions are both unsafe and unsatisfactory. If we put the scientific evidence on one side, the fresh investigation carried out by the Devon & Cornwall Constabulary renders the police evidence at the trial so unreliable, that again we would say that the convictions are both unsafe and unsatisfactory. Adding the two together, our conclusion was inevitable. It was for these reasons that we allowed the appeals.