



Select Committee on Science and Technology

Corrected oral evidence: Forensic Science

Tuesday 4 December 2018

3.20 pm

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Members present: Lord Patel (The Chairman); Lord Borwick; Lord Fox; Lord Griffiths of Fforestfach, Lord Hunt of Chesterton; Lord Kakkar; Lord Mair; Baroness Neville-Jones; Lord Oxburgh; Lord Renfrew of Kaimsthorpe; Lord Thomas of Cwmgiedd; Baroness Young of Old Scone.

Evidence Session No. 13

Heard in Public

Questions 132 - 146

Witnesses

Paul Harris, Senior Partner, Edward Fail, Bradshaw & Waterson Solicitors; Michael Caplan QC, Consultant, Criminal Litigation, Kingsley Napley LLP; Sarah Whitehouse QC, Barrister, 6KBW College Hill.

USE OF THE TRANSCRIPT

This is a corrected transcript of evidence taken in public and webcast on www.parliamentlive.tv.

Examination of witnesses

Paul Harris, Michael Caplan QC and Sarah Whitehouse QC.

Q132 **The Chairman:** Good afternoon, lady and gentlemen. Welcome to this evidence session and thank you for coming to help us with this inquiry. We are on live broadcast, so anything you say, including any private conversations, will be recorded, but if you want to consult please feel free to do so. Before we start, it would be helpful if you would introduce yourselves. If you want to say any more than that or want to make a short statement, feel free to do so, and we will progress with the questions.

Michael Caplan: I am a solicitor and I was a senior partner at Kingsley Napley, dealing primarily with criminal litigation for 30 years, and in the last couple of years I have remained as a consultant. I also sit as a recorder in the Crown Court.

Sarah Whitehouse: I am a barrister and I am currently senior Treasury counsel, and I will explain what that means. As criminal Treasury counsel, I am appointed by the Attorney-General to prosecute high-profile or complex serious crimes, such as murder, terrorism and fraud. There are seven senior Treasury counsel in England and Wales. The result of that is that, although I remain an independent barrister and defend as well as prosecute, currently I mostly have time only to prosecute. Like Michael, I also sit as a recorder and part-time judge in the Crown Court.

Paul Harris: I am the senior partner at Edward Fail, Bradshaw & Waterson Solicitors in London. I have been a police station and court duty solicitor since 1993. I am a former president of the London Criminal Courts Solicitors' Association and I sit on the Criminal Procedure Rule Committee as one of the two solicitor representatives.

Q133 **The Chairman:** Do any of you wish to make a statement? If not, we will progress with the questions.

The first question is about the level of understanding in the criminal justice system of the whole area of forensic science. How good is the understanding of the veracity of forensic science? What is the communication system? How do lawyers, judges, et cetera, communicate on whether the forensic science in the evidence they are presented with has any validity? How can all this be improved?

Michael Caplan: I think it is varied. There are a number of specialists with a great deal of knowledge, but forensic science is a specialist activity and discipline, and one of the difficulties is that those who approach it for the first time, which is often the juries, need assistance.

As practitioners, if you are involved in a number of cases, you learn about forensic science, and there are training courses, but a criticism that I often make about this area is that those who produce reports on various matters do not often take account of the fact that those who are reading the reports are not as experienced or as knowledgeable as they are,

particularly when it comes to understanding the outcomes or what a forensic scientist is saying. Sometimes it is a case of having to rewrite that or re-look at in a way that can be presented for example to a court and particularly to a jury. Putting my hat on for a moment as a part-time judge, I often find it necessary to say to those who are giving forensic evidence, "Do you really mean this? A summary would be this, which is more understandable".

So I think the picture is varied, and there are training courses, but there are difficulties, and perhaps it is necessary to reduce what is being said to something that can be understood by everyone. Those would be my remarks.

Sarah Whitehouse: In my experience, the general levels of understanding among the judiciary and the Bar are very good, because they are adept at absorbing new scientific ideas and concepts quite quickly. The presentation is more difficult, but some of the difficulties that Michael has mentioned are remedied in practice by the way in which the advocates present the evidence and challenge it before a jury.

The Bar trains its own advocates, both on training courses, which happen three times a year in various centres, and on an international advanced course in Oxford in the summer, which many attend. The difficulty lies with juries, because juries do not always understand that forensic science is not a magical golden key and that they must slot the scientific evidence they hear into the context of the other evidence in the case. Too often they have watched too much American television and think that DNA will solve everything.

Paul Harris: The understanding by lawyers of expert evidence is patchy. Certainly many defence solicitors have to learn on the job. There are courses to go on and lectures to attend, but there are no mandatory requirements, and often you find out about a particular expertise when you are first dealing with the evidence in relation to that expertise.

The defence position is different, because normally they are reacting to the evidence that is served and looking at its strengths, weaknesses and limitations and how it relates to the case against its client. The defence then has to be able to explain it to their clients, some of whom will have vulnerability issues and will struggle to understand its significance. Sometimes that is lost and the defendant can fall outside the process, when in fact they are the most important person in the process, because it is difficult to explain the expert evidence in a way that they will understand.

The Chairman: How often would a lawyer, whether from the defence, the prosecution or the judiciary, come across cases where forensic science is used as one piece of evidence?

Sarah Whitehouse: All the time.

The Chairman: It is common for lawyers to come across these situations, so the education of lawyers—I use the generic term—on a continuous basis in forensic science is important. Is that correct?

Sarah Whitehouse: Yes, it is, and many lawyers, and I am sure I speak for solicitors as well as barristers, take the opportunity to attend the seminars, which are organised by many of the forensic science providers.

The Chairman: But they are not mandatory.

Sarah Whitehouse: They are not mandatory. One possibility is that a mandatory module is included as part of the Bar Professional Training Course, and the equivalent for solicitors, or that it is included as part of the compulsory training that takes place three years after the call for barristers. I am not sure about solicitors.

Paul Harris: One issue is that the nature of scientific evidence improves and changes all the time. When I qualified 30 years ago, the scientific evidence in existence then was completely different from the evidence that is available now, so regular training and updates will be key.

In relation to your first question about communication, if there was some kind of panel of experts, the judiciary, lawyers for the prosecution and the defence, the police, and all other relevant stakeholders, that might be a way of keeping the professions up to date and addressing challenging issues—by issuing regular bulletins and updates.

The Chairman: Who might do that?

Paul Harris: I do not know who might do that. I have an idea, but I cannot say. It may be a combination of different bodies getting together to put something like that together. The Criminal Procedure Rule Committee, for example, is made up of different stakeholders in the criminal justice system—solicitors, barristers, prosecution, defence; all types of stakeholders—and you could have a similar body to look at expert evidence, particularly as it is becoming more and more important and cropping up in most cases.

Q134 **Lord Fox:** Building on that, there are certain types of evidence where a substance is present or not present, an email was sent or was not sent, and other forensic evidence that is probabilistic, where there is mixed DNA or partial fingerprints. Is that distinction clearly understood, and does the legal profession understand the difference and nature of probabilities? Is that taken on in the process of a trial by the defence and the prosecution?

Sarah Whitehouse: The Inns of Court College of Advocacy has just produced a report on that very topic with the Royal Statistical Society.

Lord Fox: Marvellous.

Sarah Whitehouse: It is called *Statistics and Probability for Advocates* and is an example of the sort of innovation which the Inns of Court College of Advocacy has started and will build upon.

The straight answer to your question is that it is probably not well understood in all areas, which is why it is being addressed in this publication. Every time any lawyer embarks upon a case, they will learn more about the developments in forensic evidence since they last

encountered whatever area it is. So we are continuing to develop professionally, in fact, every time we encounter such evidence.

Lord Fox: Is that true for the defence as well, because it perhaps has less time and fewer resources?

Michael Caplan: Certainly from a defence point of view, there is inevitably a funding issue—and it is a real issue; there is no question about it—as to the time they are entitled to spend on the case for which they might be properly paid. Those who look at that perhaps do not understand that when you are looking at forensic evidence, it often takes a considerable time, especially in new areas that are evolving all the time.

One example is facial mapping, which has been looked at in recent years. You have to look at that and understand it. It is very much a living issue, and I think there are real difficulties, especially as a solicitor acting for a defendant may well not know at the very beginning that he may encounter somewhere down the line this type of evidence when it comes through.

Lord Fox: The timing of that evidence is important.

Michael Caplan: The other point, if I could take up what was mentioned before, is that more and more forensic evidence is available and is being used or looked at in cases. As you probably know, virtually every case throughout the Crown Courts is now what we call a digital case, which is a case with an index that is all there digitally, and there is more and more evidence of a forensic nature in a case. I am sure my colleagues will agree with me. This type of evidence is evolving and my colleagues and I as individuals need time to master all these things.

Paul Harris: There are huge challenges in cases where the defendant is subject to a legal aid order. Most criminal cases are legally aided, and in order to instruct an expert you have to persuade the legal aid authority to authorise the expenditure, and you have to find an expert who is prepared to do it at the rates that are available. That is a huge challenge, and it arguably differentiates between a privately paying client and what they have access to and a legally aided client.

Q135 **Lord Hunt of Chesterton:** We have been touching on the differences between forensic science provision for the prosecution and the defence. We keep hearing about forensic science as an activity of scientists specialising in forensic issues, but there are many cases in which you need to bring in scientists who do not normally do this. I had experience of this in the Jenkins case, where specialists dealing with the human body were used.

We have not really heard about this. We have electronics, dynamics, medicine and all these areas, but part of a case is research. Is the research that is being developed in these areas being fed through to forensic cases in the way that it should be, or is it just up to the barrister to try to find somebody somewhere to do that? Is there a systematic process in which all the different areas of knowledge can be brought to

bear?

Sarah Whitehouse: There is no systematic process that I know of. May I say that the funding constraints are as difficult for the prosecution as they are for the defence? There is no difference.

My experience is that when a case arises, the parties to it on both sides will seek to find out whether there are developments in that area that might be of assistance in the more arcane areas that are not commonly encountered. My colleagues may have more to say, because they see it from the defence perspective.

Michael Caplan: A decade ago, you did not have the expertise in certain areas perhaps that you have now. It has opened up. We all know examples; we have all seen what has happened with DNA evidence over the years. That will continue to evolve.

It never ceases to amaze me that you often find an expert in a field you have never heard of until you come to a case where the issue has arisen. That feeds into a point that I think we have all made: that we have had to learn the effect and the use of that evidence and how we might present that in court. That is another area that people perhaps do not fully appreciate.

Q136 **Lord Griffiths of Fforestfach:** You said that you thought the resources available for the prosecution and defence were both constrained in some sense.

Sarah Whitehouse: Yes.

Lord Griffiths of Fforestfach: The strong impression that I have had, although if you asked me to give hard evidence of exactly what it was I could not, is that the resources for the prosecution have been greater than the resources for the defence.

Sarah Whitehouse: I cannot give you hard evidence and I cannot give you the numbers. All I can say is that the prosecution does not have unlimited resources, and when forensic testing is carried out in relation to a murder trial, for example, limited testing has to be done according to a very tightly focused investigation. There are simply not the resources to test every blood stain and every piece of DNA.

The resources of the barristers involved for the prosecution are exactly the same. In fact, as far as remuneration is concerned, prosecution barristers are paid rather less than defence barristers, as it happens.

Paul Harris: I accept that there are huge limitations for the police and the prosecution in relation to seeking expert evidence, but it is a completely different challenge for the defence, which is reacting to the evidence that the prosecution has chosen to serve, usually in a limited time, and it has to persuade another government agency, who are not lawyers, whether they will authorise the expense to look at that expert evidence.

Additionally, the prosecution is set up in such a way that it can bulk purchase expert evidence and reports from expert companies, whereas of

course the defence has to find a one-off, a particular, expert who will do it. Usually, in my experience, the Legal Aid Agency wants three different quotes. Finding three people who are prepared to do it for those sorts of rates in any event is hard enough, and it will always go with the cheapest one. There are significant disadvantages to the defence in obtaining expert evidence that do not necessarily apply to the prosecution.

Lord Hunt of Chesterton: What happens if the defendant is in prison already? In the case I mentioned, there was a retrial. I should imagine that many people who have been convicted would rather like a retrial in the hope that they might go free.

Michael Caplan: If someone is in prison, that raises another difficulty, which we as defence lawyers know, of taking instructions and seeing them. I know that is not an issue for the Committee today, but I should like to emphasise what Paul has said: that you should not underestimate the fact that if you are defending someone, and you think it is necessary to have a report, you have to get permission for public funding, and that takes time. It is scrutinised, as indeed it should be, but there are shortcomings and difficulties in getting it, not least of all the fact that, it being public funding, there are considerable constraints on the funds available. We can all give examples if you want them, but they are there.

Q137 **Lord Mair:** Following on this point, how can it be ensured that a proportionate amount of forensic investigation is taking place? Leaving aside the question about prosecution and defence, in an ideal world one would hope that in any trial there would be enough forensic investigation undertaken to ensure a fair trial.

In the discussions leading up to the trial between prosecution and defence, and indeed during the trial, how does the system ensure that a proportionate amount of forensic investigation has been done? Funding might be the big issue, but leaving funding aside just for a moment, how do we know nowadays, with all the new scientific developments, that there has in fact been enough forensic investigation for the trial in question?

Sarah Whitehouse: I will give you an example of how it might work in an ordinary murder trial. A murder takes place and a crime scene manager will go to the scene of the crime, together with many others, and will decide—I am putting this quite broadly—on the parameters of the testing that must initially be carried out. That is sent to the in-house lab, where a senior scientist will decide whether it is proportionate or necessary.

There are gatekeepers all the way along who decide how much should be tested and how much does not need to be tested, according to what is known about the circumstances of the murder. The question might be: we know who did it but we do not know why they did it, or we do not know who did it, and so on. It depends on the issues in the case.

Very often there are understandable criticisms that not enough testing has been carried out. Engagement between all the parties is necessary at

an early stage, so that the defence case is known to the Crown and any further testing that should be carried out, that may be of assistance to the defence, is done in a timely fashion.

I think I can speak for us all in saying that funding constraints lead to difficulties in timing, because there are not enough scientists to carry out all the tests, which means that the Crown's initial results go to the defence but not always in as timely a fashion as they might.

To go back to your original question, there are checks and balances all the way through to ensure that as much as needs to be done is done, but no more, because it is too expensive.

Lord Mair: Being too expensive is the key point here, is it not? It might be agreed by lawyers on both sides that investigations need to be done in a number of different areas on forensic science, but there is a point at which someone says, "There are no longer the funds to support this".

Sarah Whitehouse: Yes, horror stories abound. I will not give anecdotal evidence, but I will give you an example. In one case, a scientist in the lab refused to test a knife and said, "We know this is the murder weapon and we know who wielded it. We need no further tests". You need further tests, because if the issue is self-defence you may need to know what position the fingerprints were in on the knife and whether another knife might have been used in addition and so on.

Michael Caplan: Can we look at it from a practical point of view, with an example, and developing what Sarah has said? The defence, for whatever reason, and on its instructions, might consider that it is necessary to have forensic evidence on a particular issue, perhaps because that is the defence or because it is consistent with its responsibility to prepare the case as fully as possible for its client. You can run into terrible funding issues as to whether that would be permitted and how much is available. That is a real issue and it can raise difficulties, which I am sure we have all seen.

Paul Harris: There is also a funding issue and a manpower issue. I am not sure there are enough people to do the work. A whole series of recent high-profile sex offence cases have been dropped because, on further analysis of the phone evidence and the digital downloads, the evaluation of the realistic prospect of conviction completely changed. A very high-profile case was dropped. It is a very difficult balancing exercise, because there is a huge growth in digital evidence with iPhones, computers and all those sorts of things, and often the trail of phone messages, WhatsApp messages and all the various different things can tell a whole narrative which potentially either strengthens the prosecution case or undermines it, but I accept that often the prosecution simply does not have the resources.

I was recently involved in a very substantial firearms conspiracy case involving eight or nine defendants. Six or seven weeks before the case came to court, 30,000 pages of phone evidence were served which, upon far greater analysis and having taken detailed instructions, changed the case, and we were able to engage with the prosecution in what schedule

was presented of that evidence and in a format that the jury might understand. Of course, that presents real challenges, and in more and more cases that is the type of evidence that is being served.

Q138 **Lord Fox:** Coming back to the crime scene manager, it seems as if that person has a central role in directing what forensic information is collected. For whom does the crime scene manager work? Do they have a public duty to collect forensic information on behalf of the defence as well as the prosecution, and how is that policed or managed?

Sarah Whitehouse: The crime scene manager is employed by the police and works in conjunction with the senior investigating officer who is allocated to that particular case.

Lord Fox: That is kind of what I thought. So there is no public duty to work on behalf of the defence on that basis.

Sarah Whitehouse: There is a public duty to investigate a case pursuing all reasonable lines of inquiry.

Lord Fox: That does not sound like a public duty to work equally on behalf of the defence.

Sarah Whitehouse: It is to keep an open mind on behalf of everybody. When a murder takes place, what is important is that it is investigated promptly and diligently and that, in the end, the right person is brought to trial.

Lord Fox: Of course, justice is what we are looking for.

Sarah Whitehouse: It is not a question of working on behalf of the prosecution or defence. It is a question of carrying out the duty.

Lord Fox: Once a crime scene is no longer a crime scene, there is no more forensic evidence from that crime scene, so that person plays a very crucial role in determining what gets collected and what gets investigated.

Sarah Whitehouse: Absolutely.

The Chairman: Are these crime scene managers usually private operators?

Sarah Whitehouse: No, they work for the police.

The Chairman: They are employed by the police.

Sarah Whitehouse: Yes, but policy books are kept on what decisions are made. Everything is documented and recorded.

Lord Fox: They decide what is done.

Sarah Whitehouse: Yes.

Lord Fox: It cannot be redone, or often it cannot be.

Sarah Whitehouse: In my experience, although I am sure my colleagues will speak for themselves, it is rare that something so crucial is missed at a crime scene that it causes a real difficulty later on.

Q139 The Chairman: You have all suggested that part of the problem is the resources available, both financial and expertise. Apart from funding and resources, how else can this be sorted, or are those the only issues?

Paul Harris: Other than funding, there is the fact that there are fewer experts available who are willing to do the work and fewer solicitors who are interested in going into legal aid work. A recent survey by the Law Society found that the average age of the duty solicitor in this country is 49 and there are many areas where there is insufficient duty solicitor cover. Arguably, the role of the duty solicitor, who gives the first advice both at the police station when a suspect is first arrested and requests a duty solicitor and at court, is absolutely crucial. There is a resource issue.

The Chairman: Is this all likely to lead to injustice?

Paul Harris: If proper legal advice is not available, it could lead to injustice. Many of the people who are represented, particularly by the duty solicitor, are vulnerable and disenfranchised and have a number of difficulties, and they could say and do things without proper legal advice.

Q140 Lord Griffiths of Fforestfach: I wanted to ask precisely the question my neighbour Lord Fox asked about, which is crime scene managers. As I listened to your reply, the question going through my mind was the following: to what extent is there a bias in the system towards the prosecution and against the defence? If I lived in a very low-income inner-city family somewhere and I had three teenage sons who got into trouble with the police and got on the wrong side of the law, to what extent would I have confidence that they would have a fair hearing when the crime scene manager is like a quarterback dictating the game? Is there any way in which the public can be given greater confidence in what that key person does?

We would start from the assumption that a person acting in that capacity acts in the public interest. On the other hand, as you have said, there could be miscarriages of justice and so on. Particularly in the climate that we are now in in our society, what more can we do to reassure people that this process of justice is the very best that we can have?

Michael Caplan: First, may I come back on one point that Sarah made about crime scene managers? The short answer to your question, which I will then develop, is to allow more funds to be made available so that cases can be more deeply investigated and the defence can if necessary instruct more experts in this particular area.

Frankly, it comes down to funding. I have no doubt from my experience that in the vast majority of cases the crime scene manager is trying to do his very best. He is trying to look at what has happened in an unbiased way and report on that. Of course, he is accountable, and if necessary what he has undertaken, done or not done can be examined in detail. Of course, there are constraints on his time and upon the number of people that there are, as we have already touched upon.

In my view, that is what it comes down to, because we are all—the crime scene manager, the prosecution— looking over our shoulders at what can

be investigated, how far we can go, and whether the defence will get allowances from public funding. You can well understand why there should not be more public funding, because everyone is trying to save money, but you go on from there, and you may find at the end of the day there are miscarriages of justice, not because of what we want to do as individuals but because things have not been properly investigated. Why have they not been properly investigated? Because the funds were not available and people were looking over their shoulders to save money. I am afraid it is rather stark, but that would be my reaction to your question.

Baroness Young of Old Scone: Before I go on to the question I wanted to ask to comment briefly on streamlined forensic reporting and whether it works or not.

Sarah Whitehouse: May I answer that, building on what Michael has just said?

Streamlined forensic reporting gives us this opportunity, returning to Lord Fox's question, to identify where the scientific evidence falls, sometimes within a matter of hours while the crime scene is still open. Streamlined forensic reporting offers the ability to save a great deal of time and money and to allow early engagement by the defence in obtaining their own forensic experts, if, indeed, the forensic reports are acted upon as soon as they are handed over to the other side.

Broadly, they are a very good tool, but there are caveats. One caveat is that they are very brief reports. The report may tell you that a person's DNA is in a particular location but not necessarily what the source of the DNA is, how much of it there is, or, indeed, what the significance of it is. They are a very positive innovation, but all the parties need to use them in the right way.

The Chairman: Can you go on to your question, Baroness Young?

Baroness Young of Old Scone: Could Mr Harris say what he was going to say?

The Chairman: I am conscious of the time because there are lots more questions to get through.

Baroness Young of Old Scone: The next question will be very short, I promise.

Paul Harris: In certain cases, they are very cost-effective and helpful, but there are a number of potential issues with them that we have already seen in some authorities. The limits of the report can be problematic. Often the context of the evidence is not entirely clear, and if you want to take it further there are often issues about whether you have enough information to be able to get prior authority to seek your own expert.

There are also issues of continuity regarding who does work and who writes the report. I think there are positives to it, certainly in the less serious cases, perhaps the cases that are generally dealt with in the magistrates' court, but I think there are potential dangers. While it has its

positives, it needs to be reviewed to take away some of the dangers and problems that have arisen.

Q141 **Baroness Young of Old Scone:** The question I was supposed to be asking was about disclosure. Obviously that has run into trouble recently and a lot is being done to improve the situation. Is enough being done or ought more to be done to get pre-trial and post-trial disclosure sorted out?

Michael Caplan: There is a lot that needs to be undertaken. It comes down to having to look at the material and deciding whether it should be disclosed, and to look at the material you have to have people who can look at all the material, information and evidence. From my experience recently, and as the years have gone on, I am afraid you come back to manpower and those who look at it before they can judge what can and should be disclosed. Because of that, you run into the inevitable difficulty that we have seen, I am afraid, where on the day of the trial, and sometimes, sadly, later than that, what should have been disclosed is found not to have been disclosed, and it has had a crucial effect on the trial process.

The answer is that there needs to be another look at what should be disclosed. I know it is being considered by the Attorney-General, and we have heard what he has said, and the Justice Select Committee has looked at it, and we have all seen its report. It comes back, I am afraid, to the question of manpower.

Baroness Young of Old Scone: Who should do it? Who should make the decision?

Michael Caplan: The prosecution has to look at the material that it has in its locker, so to speak, and it has to decide whether it meets the criteria and should be disclosed. One of the problems is whether it looks at or is able to look at all the information and evidence that it has and decide whether it is evidence that should be disclosed, whether it will undermine its own case or assist the defence, and those are the criteria.

Sadly, when one explores later why it has not been disclosed, you will often find that one reason is because it has not been properly looked at. It may not have been properly looked at, because those who are looking at it are not properly trained. We have all experienced situations where those who have to make the judgment call are not properly trained in certain forensic issues. Those are the difficulties.

Baroness Young of Old Scone: Is there a case for a stand-alone paid-for disclosure expert reaching that view?

Michael Caplan: If you are asking me, I would say that years ago we had a disclosure officer with the job and duty to do that and if you were able to, and the funds were available, most certainly there should be a stand-alone person to look at that.

The situation comes to mind, which many of us will remember, when, in the days before we had custody officers in the police station, whether someone should be detained and his welfare in the police station were a

matter for the officer in the case. It is much better now that there is a stand-alone officer, the custody officer, who is accountable and looks at and considers the welfare of someone in custody.

Again, it comes back to funding, but if you want a justice system where you avoid some of the sad situations and controversies that we have had about whether someone has had a fair trial or whether there has been a miscarriage of justice, you have to consider why that is, and one of the reasons may well be that there are not the people in place to look at that.

Sarah Whitehouse: May I make a very important point about disclosure, because very often it is misunderstood? There is no question, normally, of material existing and never being disclosed to the other side, because in every criminal trial the police have a schedule of material with a brief description of every document and item, and that schedule is given to the defence in its entirety. The existence of the material is disclosed in its entirety.

That is not often understood when people talk about disclosure. When people describe disclosure, they mean the actual documents being handed over as opposed to merely appearing as items on a schedule. If the defence wish to see any document on the schedule, it can ask for it. If the Crown takes the view that it undermines the prosecution case or assists the defence, it will be handed over. If the Crown and defence disagree on this, a judge will make the final decision. It is very important to understand that these schedules are schedules of every piece of material the police have in relation to that case.

Paul Harris: I am afraid that I do not totally agree with my colleague. In the types of cases Sarah does, the schedules may well be accurate, but in many cases, in the less serious types of cases, the normal cases, the schedules do not contain all the items. You frequently get updated schedules very close to the trial. You raise inquiries and suddenly something comes up and a new schedule appears. This is because of the varying experience and ability of the person who is completing the schedule and their understanding of the disclosure rules.

I suspect that in most of the very serious trials that are heard at the Old Bailey, you are getting the more experienced and able officers who are completing those schedules. I do not think that is the case with a large number of your day-to-day bread-and-butter cases, and I think that is a problem.

Q142 **Lord Renfrew of Kaimsthorn:** I would like to return to the issue of training in forensic science for lawyers and for judges. As I understand it, it is not mandatory, so what sort of training in practice do they get? Are there areas that are completely overlooked? Are there specific areas where there should be more training? What training is available to them and what training in reality do they get other than, I suppose, experience in court, but that is not training in itself?

Sarah Whitehouse: Certainly the judges get very little training. Those who take part in the serious sex crime course, which is for judges who are going to try serious sex offences and serious crimes such as murder,

have a limited amount of training on their judicial courses. There is none on the recorder course for part-time judges.

One of the difficulties with training is that there is such a vast amount of possibility in forensic science. Of course, you could provide training in DNA, for example, particularly the interpretation of DNA results. The primers produced by the Royal Society are a very important development in that area, but you could never train everybody in everything that might arise.

Lord Renfrew of Kaimsthorn: One might expect reference to be made in Bar examinations to the range, which emphasises that, and that would be an appropriate thing for training to be given in.

Sarah Whitehouse: It would, and I think I mentioned earlier the possibility of a module on the Bar Professional Training Course, merely to make people aware of the range and perhaps some training in the most commonly encountered forms of forensic science.

Michael Caplan: Your last point there, Sarah, is very important. Forensic science is such a vast subject, and every so often you come across something in court that, frankly, you have never heard of where there is an expert in it, and quite properly so, but you could not sensibly put that into a training module.

Lord Renfrew of Kaimsthorn: You are saying that you have not heard of it. If you had a good training module, you might have heard of it, even if not in any depth.

Michael Caplan: With respect, a training module, which I am all in favour of, given where we are, would, as Sarah said, have to cover the more usual types of forensic science that you come across: DNA, facial mapping and these types of things.

As far as I know, there is no module for solicitors. There are very good training courses, but it clearly needs to be looked at, and, again, it comes back to funding and time. Certainly anecdotally in the past, when I have been involved in defending cases and an issue has come up, sometimes in my own time I have gone off and learned about it, which can be quite interesting, especially if you never knew it existed in the first place.

Lord Renfrew of Kaimsthorn: That point has been raised with us before, I think, and it is an important point.

Lord Kakkar: To be clear, how can a practitioner feel confident about practising if they are not trained in the area? How does one get to the position where one is confident that one can discharge this hugely important function in the criminal justice system?

Paul Harris: There are huge challenges for the practitioner in getting on top of all the different types of expert evidence, but most practitioners will attend various lectures and updates on scientific evidence. You tend to learn about a new science when you first have to deal with it in a case. I think there would be benefit in some kind of formalised educational requirement or at least some way, as I mentioned before, of issuing regular updates about new types of expert evidence.

I do not think you will ever totally solve the problem that you are addressing, and it is a problem that all practitioners, barristers for the prosecution and the defence and the judiciary face. Continuing education and engagement between the experts and the lawyers is the only way to address that challenge in the best way possible.

The Chairman: If it is not possible to get the vast amount of knowledge that any given lawyer will need to have, might it be helpful if all lawyers were trained in the basic scientific understanding of the principles and the statistics related to it, so that when they are presented with any forensic science evidence, even one that they have not come across before, they can ask about the scientific basis of that evidence and the probability of that being accurate or substantial?

Sarah Whitehouse: I think that would be a good idea, and a module on the Bar Professional Training Course would be sensible. However, it must be remembered that many lawyers may go for 15 years and not see a particular type of forensic science on a case. Lawyers are reasonably bright, in fact.

The Chairman: Reasonably. You said it; I agreed.

Sarah Whitehouse: I do not think most lawyers would come to this Committee and say, "I do not feel confident in calling this evidence or challenging this evidence". If they were in that position, they should not be doing the case. I think most of us feel confident that we can get on top of it in time to properly represent the interests of our clients, but knowledge of statistics and the use of them and this sort of publication is helpful.

Lord Hunt of Chesterton: May I go back to the business of so-called streamlined forensics? In my own experience of over 50 years of engineering, to start with, people were doing very simple calculations. Then they had computer packages, and there was the question of whether these computer packages were appropriate and people were trained on them.

You can imagine that in forensics there are a lot of computer packages that would provide you with assistance. Is that the direction you are going in? Obviously, you have mentioned statistics and the business of how a human body responds to being knocked and so on and so forth. Is that trend going to continue? Nowadays there are remarkable computer simulations of lots of different types of nasty things that might happen. Is this a pretty strong line of progress?

Michael Caplan: It seems to me that all forensic science is getting more complicated—complex is perhaps a better word. There are potential shortcomings in streamlined forensic science, because often, by its very nature, it is short, and very shortly written, and there can be problems. Sometimes perhaps it is not properly understood. Certainly, with the complexities as we see them, and from what I have seen, that is the way we are going. That is underlined by the fact that the number of disciplines or areas of expertise that you see now were not heard of even a decade ago.

Q143 Baroness Neville-Jones: Listening to the picture you paint, I am quite struck by the fact that there are no very formalised educational requirements in relation to understanding forensic evidence and limited funding for access to expertise, with the danger of price in the end potentially trumping the quality of the help that you get, and thinness in the system generally.

This is against a background, it seems to me, of what you have all remarked on, and I think what strikes the members of the Committee, of a digital age that itself is getting more complex, and the ability both to produce relevant evidence and to understand what it means is going to increase very greatly.

My question to you is a system-design question. If you had the opportunity to do a bit of system design, how would you go about trying to improve the ability of the forensic expert to give you good advice and to be sufficiently innovative that your job is also made easier when you are, in a sense, consuming the advice and the evidence and using it in a criminal trial? How can that be done in a way that serves the needs of the criminal justice system?

I am asking you now to pitch into an ideal world and say what you would like to see happen and what you think the really important things are that you should be trying to do.

Sarah Whitehouse: That is a very broad question.

Baroness Neville-Jones: Absolutely.

Sarah Whitehouse: Across a very vast field, because in the familiar areas of forensic science—perhaps I am being overly Pollyanna-ish here—there are not too many difficulties about pathology or DNA testing and those sorts of areas.

The really problematic area is digital evidence, because it is vast and getting bigger, and because the software and operating systems are constantly being updated, and I have the impression that many experts themselves are struggling to keep up with what is available.

Baroness Neville-Jones: The criminal justice system and forensics have to work together.

Sarah Whitehouse: They do.

Baroness Neville-Jones: How would you go about designing an improvement in the system?

Sarah Whitehouse: The system works reasonably well. Communication between experts and lawyers and judges, in my experience, is very good. Communication between experts is very good. They are getting increasingly good at producing agreed statements of agreement and dispute, for example. Communication is generally good. It can, of course, be improved. One can set up panels, and as Paul suggested earlier one could have a panel that issued updates, although who would pay for it and sit on it is another matter.

Baroness Neville-Jones: I am positing an ideal world. Think of

something that would actually provide it. I am trying to elicit some system reform.

Paul Harris: Can I make a suggestion? I am reinventing what previously existed when there was a public body, the Forensic Science Service, which was a leading institution in the world for research into expertise. You had lots of independent experts working there who the defence also had access to, who led research and developed various different new expertise. That was largely based on quality, rather than perhaps economics and getting the cheapest price. I thought that was a really good thing in equipping the criminal justice system for the challenges that new scientific evidence presented.

While I appreciate that it may be unrealistic to go back, having some kind of body that deals with digital evidence would be really helpful. If you think about it, it spans so many different types of crime: cybercrime, terrorism, fraud, serious sexual offences, huge security issues, interfering in democracy and all those sorts of things.

It is absolutely massive, and to have a properly funded body to look at those issues and move things forward and that can work side by side with the criminal justice system, which I accept we partly had, would be a really good way forward and would be better than the current system, which I do not think works, because the police are under huge financial pressure, so they have to take economic decisions about what expert work to commission, and there are bound to be situations where that does not necessarily coincide with the interests of justice.

Michael Caplan: In this brave new world that we would like to see, I agree entirely with Paul that you need a central body that is going to deal with all the forensic issues. The lawyers, defence or prosecution, are then dealing with one body when it comes to any kind of expertise. That is the first thing.

The second thing is that, sadly, you would have to look at the funding of all this, because it needs, and must have, a relaxation, if I can be kind about it, to allow the prosecution and the defence to explore more issues. The prosecution has its problems, which Sarah has mentioned, such as the constraints on the system. You have also heard what the defence has, and people may well say that it is complaining about the same old things.

Unless you relax that, you are going to be confronted with the same problem down the road with arguments and possible miscarriages of justice. If I were truthful, I would say that we would have to do that, but, again, it comes back, sadly, to the same problem: unless the money is going to be made available, we are not going to be able to advance this.

Baroness Neville-Jones: You said that it is difficult to go back to a publically funded service. Would it be feasible, if you did not do that, to build the sort of expertise that you are talking about based on, say, university departments being suitably funded? Would that be a way forward so that you got a sufficient research base as well as capacity for innovation? Should the research councils be looking at this?

Michael Caplan: I think you need an independent body of some kind. It may well be able to call, quite properly, upon expertise from elsewhere, but it needs to be an independent body.

Baroness Neville-Jones: You need a panel of some kind.

Michael Caplan: Yes. When I started off in practice and I was defending someone, if my leading counsel said that I needed an expert's report, he wrote an opinion, and that was sufficient for me to employ an expert. The counsel and I then saw them in conference. I accept that things have moved on, and you cannot do that now, but with the constraints that there are at the moment, there are difficulties that, sadly, have led to the problems that we now encounter and we all know about.

If you were asking me about this model, and if I were looking into a crystal ball, there certainly needs to be an independent organisation to work with the lawyers, and the judges, who play an increasing part in this. There is co-operation, as Sarah said. There is no question about that.

The Chairman: If there was such a body, how significantly would it improve outcomes in the criminal justice system?

Michael Caplan: I think it would avoid later arguments in some cases, such as: "Why wasn't a report available? Why couldn't we get one? Why wasn't the court allowed to have one, and did that mean that there was a miscarriage of justice?" It is not going to be a panacea for everything. It cannot be. There will always be potential miscarriages of justice, but you would decrease that number significantly if we had a body that we could all look to and that allowed the funds to be made available to both the prosecution and defence to use.

Sarah Whitehouse: The Forensic Science Service was owned by the Government. Are you suggesting that there would be a body of scientists that defence and prosecution could both draw on?

Paul Harris: The defence and prosecution could draw partly on that body.

I was going to add to what Michael said. Such a body could also regulate the experts and their expertise. You could have approved experts and rates so that you could cut through some of the bureaucracy in the defence seeking to obtain expert advice. One of the constant challenges that courts face is whether what the expert is giving evidence about is within his expertise or whether it goes beyond what he is saying. Lots of those things could also be addressed on such a panel. You could look at expert evidence in its entirety in assisting the prosecution, the defence and justice.

- Q144 **Lord Fox:** We have covered digital somewhat and the evidence load that it generates. Are we right in assuming that you think that is putting a real strain on the system? Given that is the case, and coming back to the prosecution and defence issue, is it putting more strain on the defence than the prosecution, or is there an equal jeopardy in this process? We have talked about the financial side and some of the other things, but are

there other things to do with skills, automated systems or whatever that need to be put in place to try to alleviate the workloads that it has created?

Paul Harris: Earlier disclosure of digital evidence would help. Often we get it very late.

Lord Fox: "We" being the defence, for clarity.

Paul Harris: Apologies, yes. The defence would benefit from earlier disclosure of digital evidence. Often it is voluminous. It would give us more time to consider it and more time to get expert evidence, if necessary. It would remove some of the pressure on the system. There is a huge reluctance to adjourn trials, which often creates a very unreasonable pressure on both prosecution and defence in considering material that arises. That is one step that would make a difference.

Sarah Whitehouse: I am afraid it comes down to resources again, because whenever a computer or a telephone or multiple telephones are seized, they are sent to a place called the London Hub, where there are very limited numbers of officers who are responsible for ensuring that the integrity of the data on those devices is preserved and perfect copies are made. There is often very late sharing of this information with the other side simply because there are hordes of devices backed up waiting to be downloaded.

Michael Caplan: It is resources. If we had those available, I think a lot of issues would be resolved.

Sarah Whitehouse: There are systems already in place for trying to ensure, through co-operation between defence and prosecution, that the relevant data are extracted from that.

Lord Fox: The other point is what can be disclosed across to the defence, given that some of the information is not appropriate for disclosure and that the decision-making process is presumably quite a lengthy process.

Sarah Whitehouse: What we have now is disclosure management documents whereby the prosecution produces a policy—"This is how we are going to interrogate this computer. These are the key terms that we are going to ask for. We are going to ask for certain search phrases. Now, defence, is that correct? Should we widen the parameters, and is there anything else we should be searching for?"—and that enables earlier disclosure.

Lord Fox: Of course, photography is very difficult. You have lots of photographs and search phrases.

Sarah Whitehouse: Absolutely, and telephone downloads, which are very difficult, and lots of personal data.

Lord Fox: That is the problem.

Q145 **Lord Thomas of Cwmgiedd:** May I ask one question in relation to searching using the sort of system that is used in civil cases? What progress is being made on that, and does the defence co-operate, because there does not seem to be much evidence that this is going

forward at the pace needed?

Paul Harris: One of the problems is that, because the civil system works in a different way from the criminal system, that would sometimes not be totally appropriate. Also, there are issues with the language that is used when you are doing some kinds of search. In a criminal case, there is often a whole hidden undercurrent of different words to describe drugs, drop-offs, firearms and things like that, which makes conducting these types of searches harder.

One of the issues is getting the funding for the defence to contribute properly. There are different challenges for civil and criminal. Clearly, the current manual method of trawling through lots of digital downloads and texts takes a huge amount of time, and looking at ways of short-circuiting that is important, but the challenges between civil and crime are very different when it comes to what is at stake.

Lord Thomas of Cwmgiedd: I follow that, but is the problem that you do not want to agree search terms because that can give too much away? How do we cope in the end with this vast amount of documentation, or material on a phone, unless you can agree search terms? It may be an insoluble conundrum, but we have to solve it, do we not?

Paul Harris: I agree, and I apologise for putting my defence lawyer hat on.

Lord Thomas of Cwmgiedd: That is your job.

Paul Harris: It depends largely on the disclosure that we have received before that. It depends on what instructions, if any, our client can give, and on us providing the appropriate advice before volunteering those kinds of terms. I recognise that it needs to be addressed, because often if the defence wants to carry out those searches on its own and to look at the material itself, again that takes up a large amount of manpower and resources, which are often simply not available.

Sarah Whitehouse: You are quite right that if the defence engages early—as Paul says, it is sometimes not appropriate to do that—that early engagement in the issues can benefit the defendant by ensuring that the searches are properly targeted.

The Chairman: We have identified across this inquiry lots of issues related to training and forensic service availability for both prosecution and defence. Is there a body that tells the Home Office or the Ministry of Justice the problems with forensic science delivery to the criminal justice system?

Sarah Whitehouse: There are several bodies, I would have thought, the Criminal Bar Association being one.

The Chairman: How effective is it?

Sarah Whitehouse: I would have thought that it was very effective, but, again, I cannot give chapter and verse. It is certainly a powerful body and it has a voice. At the moment, it has other considerations to deal

with, in particular the funding of the criminal justice system generally. The solicitors may also have some input here.

Paul Harris: The London Criminal Courts Solicitors' Association frequently responds on consultations, engages, makes representations and has seats on many of the boards. It faces similar challenges to those faced by the Criminal Bar Association in the funding overall of the criminal justice system, of which this is a very important part.

Lord Hunt of Chesterton: We keep calling for more effective forensic data and so on. Has anybody done an economic study? This is a question that my other colleagues might ask. What is the economic benefit of having a more accurate and reliable criminal justice system? Has this been studied? That is the question. It is not just a question of whether there is money. Normally in government you find an economic case for spending the money. Has that been done and perhaps we have not heard about it?

Michael Caplan: We all accept, I am sure, that the whole purpose of the criminal justice system is to ensure that those who commit offences are brought to trial and convicted and that those who are innocent are found not guilty. We have, especially in recent years, what appears to be an upturn of complaints about disclosure and miscarriages of justice and, of course, rather trenchant comments made by the courts.

Is not the answer to why you need to ensure that you have the best available criminal justice system that we can carry out what I have just said, which I know everyone will agree to? How you would measure that I do not know.

Lord Hunt of Chesterton: That is the point. Everything is done by measurement, and nobody believes anything until you find an economic case for it.

Michael Caplan: Do you want to cut the funding that appears to have been going on year on year of both the prosecution and the defence and potentially have further complaints, controversies and miscarriages of justice, or do you want to put the funding in place to try to ensure that does not happen?

Q146 **Lord Kakkar:** We have probably covered this, but just for good order and completeness could you give a single recommendation that you think would be most beneficial for securing the impact of appropriately high-quality forensic science in the criminal justice system?

Michael Caplan: Leaving to one side the money, of course, I would say a new central body that would be accountable.

Lord Kakkar: A central body for delivering the forensic science service.

Paul Harris: Yes.

Lord Kakkar: Very good, thank you.

Sarah Whitehouse: I agree—perhaps a royal society of some sort, if it were one that was accepted by everybody in the criminal justice system as independent.

Lord Fox: Is that for regulation or delivery, or both?

Sarah Whitehouse: Both.

Paul Harris: Linked to that would be a panel to improve communication and education, made up of forensic scientists, the judiciary and lawyers from both sides. That could be linked to the other body.

Lord Kakkar: Thank you very much indeed.

The Chairman: Lord Griffiths.

Lord Griffiths of Fforestfach: Would there be any concern that you are creating a monopoly?

Sarah Whitehouse: That would have been my concern, but my colleagues who defend say that they would call it an independent body that all parties could rely upon. I agree with you, and the whole idea behind abolishing the Forensic Science Service, as it was, was so that there could be a free market in the provision of forensic science.

The Chairman: But the market is not working.

Sarah Whitehouse: Well—

Paul Harris: We went partly in that direction for the probation service and the prisons, and I do not think it has worked there either.

In relation to criminal justice, I am not sure that having a competitive market with the lowest price is necessarily consistent with having a properly functioning justice system. That is almost more important than the economic argument, although I would add that if lots of cases are adjourned because disclosure is not completed, and if there are lots of successful appeals, that is a false economy, because there are extra costs at the end that may not have been incurred had the job been done properly earlier.

The Chairman: Thank you all very much. It has been most helpful for us. You will get a transcript, and if you have any corrections, please let us know.