Your Witness

Newsletter of the UK Register of Expert Witnesses, published by J S Publications

R -v- Sally Clark

Experts and lawyers alike are awaiting the handed down judgment in the appeal of Sally Clark. But already there are vociferous calls for changes to be made in the way expert evidence is prepared, presented and dealt with by the court.

The circumstances surrounding the Clark case have given it an unusually high profile. Even before the recent successful appeal, The Times described the case as 'one of the worst miscarriages of justice in the past decade'. The Guardian echoed this, calling it 'one of the most controversial in recent criminal history'. Following the appeal decision, the clamour for change has, if anything, become more strident. 'An unsafe system', trumpeted The Times in its leader of 30th January 2003.

A tale of two experts

The facts in the case of R -v- Sally Clark and of the subsequent appeals are well known. The current debate centres around the evidence given by Professor Sir Roy Meadow, a paediatrician, and Dr Alan Williams, a pathologist.

The statistical evidence given by Meadow has been described as the 'smoking gun soundbite which stuck in people's minds' (Law Society Gazette 25th July 2002). Meadow disputes this. Writing in the BMJ (vol 324) he points out that the judge's summing up extended to about 170 pages. There were only a few paragraphs about statistics. In these, he says, the judge advised the jury to treat the statistics with caution.

However, the criticism levelled at the evidence of Alan Williams, and which was instrumental in securing Sally Clark's acquittal, is far more important. The crux of the matter is his alleged failure to disclose vital evidence in the form of microbiological test results. These test results had been obtained in February 1998 and showed a bacterial infection which had spread as far as the child's cerebral spinal fluid. This was a possible cause of death which, said the defence, Williams had chosen to ignore and, what is worse, keep secret from Sally Clark and her advisers. So what lessons can one draw from this case?

Inside

Focus on ADR

Court report

Electronic documents

Letter

Issue 31

Some have said that there is a need for expert evidence to be considered and evaluated before it ever reaches the adversarial stage of court proceedings. The courts, after all, are not there as

A lesson from the civil courts

a forum for scientific debate. Nor do they have the luxury of time for learned debate. They require the presentation of expert evidence in such a way that it can be considered, weighed and, ultimately, accepted or rejected according to

the basic precepts of reasonableness and doubt. Where doubt exists, or there are areas of weakness in the evidence, it is the lawyers' job to tease these out. It is the function of the judge to offer direction and guidance.

Sally Clark's conviction was quashed by the Court of Appeal for precisely those reasons. It was found that there was sufficient doubt surrounding the expert evidence so as to make the conviction unsafe. It seems likely that an earlier examination of the evidence would have brought about a speedier identification of this.

So, is it necessarily to tamper with the rules and procedures relating to experts in criminal cases? Well, maybe. The changes in the civil arena in recent years have, by most accounts, helped to engender a more open approach to expert evidence. If adopted in a new criminal code, written in response to the Auld Report, it may be possible to avoid many of the expert evidence problems that have plagued the prosecution in recent times.

A lesson about accreditation

There have already been calls for tighter controls on experts and the widening of the scope for existing accreditation schemes. It is to be hoped that there is no knee-jerk reaction that places an unnecessary or onerous burden on expert witnesses in matters that properly lie within the purview of the parties' lawyers. It is a matter for debate whether tighter controls would, in any event, have prevented the miscarriage of justice in Sally Clark's case.

Dealing firstly with the statistical evidence given by Meadow, I can see no system that might have prevented an expert putting forward such an opinion. Even if the opinion is erroneous or inaccurate, a person as eminent in his field as Sir Roy is hardly going to be denied accreditation by any scheme devised to weed out inept experts. It is surely a matter for the opposing barrister to identify and pursue areas of weakness and for the trial judge to highlight these to the jury.

In the case of Dr Williams, there are, of course, already established principles relating to disclosure in criminal cases. Sally Clark's QC, Clare Montgomery, in her skeleton argument, identified the common law rules on disclosure in relation to expert scientific witnesses. She made no bones about the fact that, in her view, Dr Williams had failed to discharge his duty in relation to disclosure. But until experts are given conduct of cases, surely it is for the lawyers to disclose, not the expert.

Chris Pamplin

ADR - the road to Damascus?

Is ADR the equivalent of the Sinclair C5?

In the Brave New World that followed the Woolf reforms, 'alternative dispute resolution' were the buzzwords of the moment. But were we sold a false vision of the future? We examine the progress of ADR and look at areas where there are still opportunities for expert mediators.

Why explore ADR?

The Civil Procedure Rules (CPR) impose a duty on both the court and the parties to fully explore the possibilities for negotiated settlement before embarking on expensive litigation. This is not a sanguine hope, but a real requirement. The expectation was that, by referring more cases to mediation, the courts would become less clogged and the resolution of disputes would be quicker and less costly.

True, there are particular types of dispute that lend themselves very well to mediation. The practitioner's experience is that a very high percentage of such cases referred to mediation (or other forms of ADR) settle either during the mediation process or shortly afterwards. Equally, it is almost always true that mediation can bring about a satisfactory conclusion with comparatively modest expenditure in time and money. Why, then, are we not all beating a path to our friendly mediation service?

Has the new requirement had an effect? The stark truth is that the number of cases referred to mediation since 2000 has shown little sign of any appreciable increase. Indeed, the Centre for Effective Dispute Resolution (CEDR), the largest single provider of mediation services, reported a 28% drop in the number of mediations handled in 2001/02 compared with the previous year. The Lord Chancellor's Department (LCD), in a report published in August 2002, confirmed a discernible levelling off in the number of cases referred to ADR.

The Government, which might be expected to be at the forefront of the drive towards greater reliance on ADR, has been one of the worst performers. An LCD report published in July 2002 showed that there had been only 48 cases involving government departments where ADR had been attempted. This is despite a pledge by the Government in March 2001, given on behalf of all departments, that it would actively consider and use ADR in all suitable cases.

The Government has recognised that this has been a slow beginning. The Lord Chancellor, Lord Irvine, has worked hard to promote ADR to government departments and, at the launch of the Law Society's Civil Commercial Mediation Panel in May 2002, he reaffirmed the Government's commitment to ADR and stressed that ADR can be appropriate in public law cases.

Part of the blame must rest firmly with solicitors. Lawyers, if not reactionary, are certainly not lacking in circumspection. Those solicitors who have tried ADR have, for the most part, embraced it. However, if Lord Woolf's expectations are to be realised, the general perceptions must undergo a more rapid conversion. It will be no surprise, then, that the courts have already taken steps in that direction.

Courts reinforce requirements to mediate The widely reported cases of *Dunnett -v- Railtrack plc* (2002) *2 All ER* 850 and *Cowl & Others -v- Plymouth City Council* (2002) *1 WLR* 803 established that, far from being empty rhetoric, the overriding objectives contained in CPR Part 1 and implicit in the pre-action protocols (so far as they apply) are to be applied rigorously. It is not sufficient to merely pay them lip service.

The Court of Appeal followed these rulings in *Hurst -v- Leeming* (2002), when it held that a party refusing to proceed to mediation or arbitration without good and sufficient reasons can be penalised for that refusal, particularly in relation to costs. It is no excuse that substantial costs have already been incurred at the point at which the offer to mediate has been made and refused. Neither is it reasonable to refuse an offer to mediate if a party thinks it has a watertight case that is unlikely to fail at trial.

In Hurst, a barrister, Mr Leeming, had been sued for professional negligence. After proceedings had begun, Mr Leeming was invited to mediate but refused to do so, citing the legal costs already incurred, the seriousness of the allegations and the lack of substance in the claim. He also pointed to the lack of any real prospect of the mediation being successful and the obsessive character of Mr Hurst as revealed by his history of litigation. The Court of Appeal rejected all of these reasons save that, on the facts of this case, Mr Leeming was justified in refusing an offer to mediate as it had no realistic chance of success given the character and attitude of the other party. The Court made it clear, however, that the circumstances were exceptional and that a party would ordinarily be taking a great risk in refusing to mediate on this ground.

With some gentle prodding from the Court of Appeal, the message is now starting to hit home. While solicitors may still not actively encourage their clients to consider ADR, an offer from the opposing party will certainly start alarm bells ringing. It is likely, then, that we will begin to see a steady increase in the number of such referrals.

Look to Leeds, Manchester and Birmingham In some areas, ADR is a real growth industry. Indeed, Leeds, Manchester and Birmingham have all established mediation schemes.

The Leeds scheme, introduced in July 2000, ensures that the court sends out a mediation form with each allocation questionnaire issued. If both parties (or their representatives) sign the form, it is forwarded automatically to the regional law society, which will then appoint a suitable mediator from their rota of panel

An offer to mediate must be considered carefully members. There is no fee for the service and the mediator's charges are fixed (from £125 to £500 per party) according to the value of the claim.

The Birmingham scheme, launched by the Lord Chancellor in December 2001, is much more far-reaching and might be a taste of what is to come in other court areas. The Birmingham Civil Justice Centre provides an introduction to a qualified mediator, together with a venue at which a 3-hour mediation can be conducted at a modest fee. The scheme is open to any case in which the sum in issue exceeds £5,000. For claims between £5,000 and £15,000, each party pays a mediator's fee of £75. There is then a sliding scale of fees up to a maximum of £250 for claims involving more than £50,000. Referrals can be initiated by either the parties or the court.

The effect of such schemes is that they serve to focus the minds of the litigants on the possibility of ADR *and* allow the court to monitor compliance with CPR Part 1. The low cost of the scheme serves as a powerful inducement to avoid contested court proceedings, and may cause some solicitors to look to their laurels!

Opportunities across borders

Another area in which we should expect to see a marked increase in ADR is in cross-border disputes. With increasing trade between European countries, the introduction of the Euro and trade over the internet, cross-border litigation, particularly in consumer law cases, has brought its own problems. First, there has been a difficulty in knowing where to sue. Having settled on a jurisdiction, the litigant might then be faced with having to take advice and proceed in an alien court with an unfamiliar judicial system and in accordance with foreign law. It's not surprising, then, that many disgruntled consumers have been discouraged from pursuing their rights and chalked the whole thing up to experience.

In October 2001, EC Commissioner David Byrne and the Belgian Presidency launched the pilot phase of the European Extra-Judicial Network (EEJ-Net). The Commission worked in close collaboration with Member States to establish 'clearing houses' in each participating State. These clearing houses will provide information and assistance to consumers in pursuing their claims by ADR in the country from which the goods, product or services were acquired. Practical assistance will be given in all aspects of the matter, such as having to deal with the dispute in a foreign language.

A similar scheme exists for financial services disputes (FIN-NET), and it is likely that, in time, others will be established to deal with different types of claim. Indeed, in April 2002, the European Commission produced a Green Paper on ADR in civil and commercial law, which envisages a directive that will harmonise ADR practices throughout Europe.

Established ADR arenas

Whilst lawyers may have been slow to embrace ADR, others have been less reticent. Indeed, many trades and professions have lived with it for years, e.g. the construction, shipping and technology industries.

Government departments, too, are starting to rise to the possibilities. We have already seen a pilot scheme by the NHS to resolve minor negligence claims. Furthermore, the Department of the Environment, Food and Rural Affairs adopted a quasi-ADR approach using a system of early case assessment when dealing with the large number of claims following the recent outbreak of foot-and-mouth disease.

Qualities of a mediator

Mediators can come from a wide variety of professional backgrounds. Naturally, they need the interpersonal skills of a trained negotiator, but knowledge gained in a particular field is also of significant value. In a technical dispute, it is clearly an advantage if the mediator has a sound understanding of the issues involved and 'talks the same language' as the parties.

Preparation for mediation, as with all forms of ADR, will often involve expert opinion. Indeed, depending on the type of ADR, there may be less restriction on the use of expert evidence than in the civil courts. Consequently, there is unlikely to be a drop in the number of disputes calling for expert input of some kind. But there are still relatively few expert mediators.

Many of the organisations providing mediation services also offer training and accreditation for mediators (see Factsheet 42 for details). Whilst some aim their training principally at solicitors and persons with legal experience, many welcome enquiries from other professionals.

What the trainers say

CEDR's Chief Executive, Professor Karl Mackie, contends that Woolf laid the foundations for mediation to become an integral part of the judicial system. He believes we are currently in a 'breathing space', but thinks that we will see another surge of interest soon.

Michael Lynd of the ADR Group has responded to calls for better education about ADR by launching four new programmes designed to take the focus away from the judiciary and to further educate lawyers, clients and the public.

Conclusions

If the optimistic predictions for growth in ADR are realised, experts will need to get used to this different and less adversarial approach to dispute resolution. They will also have to consider whether they have a wider role to play in the process and are able to match their expertise in a particular field with the skills required to mediate.

Philip Owen

Cross-border disputes set to rise

There's a real opportunity for experts to diversify

Court report

How far can a judge go in disregarding an expert's evidence? Disregarding the expert

In recent months, the Court of Appeal has considered a number of cases where the decision of the trial judge has failed to give a clear statement of reasons for seemingly disregarding or otherwise failing to give proper weight to expert evidence

The role of the expert in the administration of justice was set out in The Ikarian Reefer case and is largely embodied in Part 35 of the Civil

Procedure Rules. The White Paper Justice for All Judges are not obliged to accept expert

forward to a similar code in the forthcoming **Criminal Procedure**

Rules. The State, then, has

made it quite clear what is expected of the expert witness. But what is the expert entitled to expect of the court, and how far can a judge safely go in disregarding an expert's evidence?

The somewhat pious expectation enshrined in the CPR is that it is the duty of experts to help the court on matters within their expertise. This duty overrides any obligation an expert might owe to the instructing party or the person paying the bill. Provided the experts are competent in their field of expertise and apply their knowledge honestly and objectively, they should naturally expect the judge to attach proper weight to this when arriving at a just and considered judgment.

Court of Appeal gives guidance

In April 2002, the Court of Appeal gave guidelines on how and when to appeal in circumstances where the grounds for such an appeal were that the trial judge had given inadequate reasons for a decision. The appeal arose following three separate decisions given in the cases of Peter Andrew English -v- Emery

Reimbold & Strick Ltd, DJ & C Withers (Farms) Ltd -v- Ambic Equipment Ltd and Verrechia (t/a Freightmaster Commercials)

-v- Commissioners of Police for the Metropolis.

In both the English and Withers cases, expert evidence was a crucial component. In the former, the Court was required to decide whether a dislocation of the claimant's spine was attributable to an injury caused by the defendant, or was the result of a pre-existing congenital condition. In the latter, the principal issue was whether a milking machine supplied by the defendant had been the cause of an outbreak of mastitis in the claimant's herd of cows.

In both cases, expert evidence had been adduced and, in the submission of the appellants, had not been sufficiently and properly addressed in the judgments. The appellants relied on the decision in Flannery -v-Halifax Estate Agents (2000) 1 WLR 377, in which the Court of Appeal had previously allowed an appeal on the ground that the trial judge had failed to give adequate reasons for his decision in his judgment.

It was held, inter alia, that judges have a duty to produce a judgment giving a clear explanation of their order. An unsuccessful party cannot seek to overturn a judgment simply upon the ground

that it does not set out clear and adequate indicates that we can look evidence, and neither are they required to reasons for that order. The only avenue open is if, when taking into account that party's knowledge of the

> evidence given and submissions made at trial, the party is unable to understand why the trial judge arrived at that decision.

give detailed reasons for this in their

judgment or summing up...

... but where the matter dealt with is

properly within the purview of the

expert, the court must attach (and be

seen to attach) proper weight

Where permission to appeal is sought from the trial judge on grounds that the judgment contains inadequate reasons, the judge must consider whether the judgment is defective. If the judge duly decides it to be so for failing to give adequate reasons but considers that in all other respects the original judgment is sound, leave to appeal may still be refused. However, the judge may seek to remedy the defect in judgment by issuing additional reasons for the decision.

In circumstances where permission to appeal is granted, the appellate court is required to consider the judgment in the full context of the submissions made at trial and the evidence adduced in the lower court. It will then determine whether the reasons for the judge's decision are apparent. If, following consideration, the reasons are not apparent, the appeal court may proceed itself to a new hearing or order a new trial.

> Put simply, the trial judge's decision can fly in the face of cogent expert evidence. A failure to address in the judgment this apparent incongruity will not give

rise to an appeal on the ground of inadequate reasons. This is subject to the proviso that those reasons should have been apparent and there has otherwise been a clear explanation of the order. Alternatively, and at their own discretion, judges are able to atone for their laxness by stumping up a crop of additional reasons not referred to previously in their judgments.

The guidelines given by the Court of Appeal are laudable in their intention but still leave substantial areas of doubt. Are we to conclude that, after sitting through a lengthy trial and having had the benefit of hearing all the evidence, a litigant is required to guess at why the judge has chosen to disregard or reject the

Decisions can fly in the face of cogent expert evidence

evidence of an expert? How is a litigant or expert supposed to understand why other evidence has been preferred if the reasoning is not referred to specifically in the judgment?

Judge's discretion to reject expert evidence Trial judges must be expected to give reasons for rejecting expert evidence. Indeed, in the majority of cases they do. In rejecting such evidence, however, how wide is their discretion? This was tested recently by the Court of Appeal in $Re\ N-BCM\ (Children)\ (2002)$.

The case concerned an application for a residence order by the father of a child. The local authority opposed the application and sought care or supervision orders on the ground that the father suffered from a damaged core personality and continuing psychological and emotional instability.

The father's life experiences had, indeed, been a sad catalogue. He had married the child's mother following his release from a life sentence. She already had three children by a previous marriage. Following the birth of their first child, she had again conceived but suffered a brain haemorrhage during pregnancy and was maintained on a life support system until the birth of the child. Following delivery, her life support was terminated. The baby, too, died shortly afterwards.

The local authority initially voiced concerns that the father had absconded with the children, and this led to a revocation of the father's licence by the Home Office. The children were subsequently reunited with their maternal uncle. In reality, the father had merely been staying with friends.

The experts in the case were agreed in their opinion that the father had a damaged core personality and was unsuitable for providing primary care for the child. However, despite unanimous expert opinion to the contrary, the judge made an assessment of the father as being emotionally stable, and he rejected the local authority's claim. He refused an application by the uncle for a residence order and returned the child to the custody of its father.

The child's uncle appealed the decision on the ground that the judge had been wrong in making his order against the weight of expert evidence. He also ventured to suggest that the judge's decision had been influenced by a desire to remedy the injustice done to the father when he was wrongly thought to have absconded.

It was held on appeal that credibility of the father was a matter for the judge, but that the father's core personality and emotional disablement were matters for the experts. The judge was at liberty to depart from expert opinion on the issue of future placement, but it was not open to him to disregard their evidence on the father's psychological and emotional state simply on the basis of the judge's own appraisal of the

father as a witness or the desire to right a previous injustice. Under those circumstances, the Court of Appeal felt it right to interfere with the judge's decision and to allow the uncle's appeal.

The jury can get it wrong as well

The Court of Appeal has followed a similar line in jury trials. In October 2002, it heard the appeal of the defendant in Carl Ryan Masters -v- Chief Constable of Sussex. Mr Masters had alleged that he had been wrongfully arrested, assaulted and unlawfully imprisoned, and had been a victim of malicious prosecution. During the course of his arrest. Mr Masters's arm had been broken. He had claimed that this was as a result of excessive force by the arresting officers and that his arm had been twisted behind his back whilst he was being pinned to the ground. During the trial, expert evidence was given by a consultant orthopaedic surgeon. This evidence tended to support the police officers' claim that one of them had accidentally fallen onto Mr Masters's arm in the course of the struggle. The expert's opinion was that the type and nature of the fracture were more consistent with a direct blow than with a twisting injury. The trial judge had given no direction to the jury in relation to the medical evidence. Despite the expert evidence, the jury found in favour of Mr Masters and he was awarded substantial damages.

In considering the appeal of the defendant, the Court of Appeal decided that this was not a case where the jury could reject the evidence of the expert. While a jury is not always bound to accept medical evidence, it was so strong in this case that it would be perverse to reject it. The trial judge was criticised for failing to properly summarise and consider the effect of the medical evidence. The jury, they said, should have been given further assistance.

Conclusions

Judges, then, are not obliged to accept expert evidence, and neither are they required to give detailed reasons for this in their judgment or summing up. The Court of Appeal has made it clear, however, that there will be a ground for appeal if the reasons are not otherwise apparent or appear perverse. Similarly, where the matter dealt with is properly within the purview of the expert, the court must attach (and be seen to attach) proper weight.

In the light of the recent appeal case of R -v-Sally Clark, the courts will also need to balance the requirement to give proportionate weight to expert evidence with the need to identify those areas that might not lie within the witness's area of expertise.

The guidelines given by the Court of Appeal leave ample room for improvement and greater clarity. Certainly, these difficult areas will be tested further and we shall continue to watch with interest.

Juries can also reject expert evidence

Clear reasons for rejecting expert evidence essential

Electronic documents

What constitutes a document?

The use of writing to record information can be traced back at least as far as the Sumerian culture of Mesopotamia and, arguably, to the cave paintings of Early Man. Since then, and up to the digital age, the question of what constituted a document, and whether it was an original, whilst important to the legal system, was relatively clear cut and unambiguous. Now, in the digital age, much that was previously obvious has become unclear.

The Investigation of Electronic Document The Civil Evidence Act 1995 states that a document:

'means anything in which information of any description is recorded, and "copy", in relation to a document, means anything onto which information recorded in the document has been copied, by whatever means and whether directly or indirectly'.

This deliberately wide interpretation goes a good way to clarifying the situation that existed previously under the 1968 Act. However, despite a clearer definition, the situation can become complex when dealing with actual situations. Take the following hypothetical example:

Frank writes a letter on a wordprocessor with the intent of e-mailing it to his two friends, Bob and Tom. The letter is duly created, formatted and saved to the hard drive of Frank's computer. Being cautious, Frank also decides to save a copy of the letter to a floppy disk. Frank then prints the letter on his printer to read before sending it, and turns off the computer.

Satisfied with the letter, Frank turns the computer on again and loads the document created earlier from the hard disk drive to make sure he has the corrected document. He then attaches the document to a single e-mail and sends it to Bob and Tom.

Bob and Tom receive the e-mail containing the attachment and save the document to their hard drives. They then look at the documents sent.

Now consider this: there are now a number of distinct and individual copies of the document in existence (probably about 15 by this time, although maybe more), as per the definition of the 1995 Act. Not all copies of the document will contain identical information. The text Frank wrote and the text Bob and Tom read are all different, yet they all believe they are looking at the original document. If this sounds like a bizarre question from a logic puzzle magazine, then welcome to the world of computer investigation.

The imaginary scenario painted above is not impossible and is by no means implausible. It highlights the need for, and importance of, precision when defining exactly what is the original document. As much depends on the when and the 'where', as the 'what'.

It is not the intention of this article to discuss issues covered by the Regulation of Investigatory

Powers Act 2000. It is worth mentioning in passing, however, that the act of e-mailing creates a communication which passes through a variable and unknown number of intermediary hosts or nodes. At some of these points a copy of the e-mail will be created.

'Hidden' information

The complexity associated with electronically generated documents is that they will, by their nature, always contain far more information than is displayed to the user. A variable number of time and date stamps are recorded for key events in the history of the document, tracking features may be enabled within the software used to create the document, and large quantities of formatting information will be stored for the purpose of making the document more effective for the reader. None of this 'additional' information is seen by a user, nor should it be. It is generally encoded in a user-unfriendly manner, and much of it is included not for the direct benefit of the user, but for the general expediency of the application software and operating system.

Additional complexity is added by the operating system used on the computer. During the normal course of its operation, the operating system may duplicate, move the location of and backup files without any operator intervention. This applies equally to letters or memos, spreadsheets or web pages; in fact, virtually everything done on a computer is recorded and tracked somewhere within the system. This is the nature of a standard computer system.

A further dimension is added if this computer is part of a network. As a matter of course, modern network storage systems attend to the routine data housekeeping tasks automatically, backing up files and perhaps moving the files around the network without the user's knowledge.

To consider an electronic document as a means of simply storing the information printed out on paper is to ignore the depth and diversity of information truly contained within. It is analogous to defining a car by its colour without reference to any other information.

If you are involved in the disclosure of electronic documents, you might like to take time to consider the implication of the preceding statements.

What information is available?

It is now widely understood by the average computer user that simply deleting a file from a modern computer hard drive does not immediately remove the information from the hard disk. This is clear and easily understood. The analogy most often used is that of removing a reference from the index of a book, whilst leaving intact the main text within the book to which the index pointed.

Deleting a file does not remove data from the disk What is not generally appreciated or understood is the magnetic tenacity and, paradoxically, the extreme fragility and susceptibility to unintentional change of the magnetic information stored on the computer hard disk. Whilst information is difficult to remove, it is easily tainted by the incautious or inexpert. Compromising evidential integrity by well-meaning but inappropriate activity, possibly to the point of rendering evidence ineligible in court, is all too common.

So what information can be discovered using appropriate procedures and the correct hardware and software tools for the job? Without even looking for instances of particular evidence, the following can frequently be determined from a cursory examination of the information stored on a computer's hard drive and associated storage systems:

- · General educational standards
- Numeracy
- Literacy/dependence on the spell checker
- Typing skills
- · Hobbies and interests
- Broad work patterns
- · Frequency and duration of breaks
- · Technical capability

It is often possible to gain an appreciation of far more private areas of the user's personality. (This type of analysis strays outside the strict disciplines of computer investigation and more into the area of psychoanalysis, which I am not competent to comment on with any authority.) The key point is that this information is available from most PCs, should it be required. It is occasionally used for background and intelligence purposes.

Leaving aside the subjective analysis of the data above, consider the evidence that may be presented as fact before a court of law. Times, dates and content of files are the obvious starting point. To many, this represents the sum of the information available. This is, of course, not correct, and it is possible to take matters much further if the appropriate resources are applied. The following case studies serve to illustrate the point.

Case Study 1: R -v- Jayson

Background: The Child Protection Unit of Bedfordshire Police contacted Vogon to investigate the contents of a computer hard disk drive seized from the premises of Jayson, a suspected paedophile. The brief was to investigate the contents of the drive for evidence of activity on the web, specifically the downloading of paedophile images.

Following an initial examination, it was discovered that the hard disk drive had been formatted some 3 days prior to the drive being seized. Whilst this may seem suspiciously coincidental, based on any conventional

definition the drive contained no images or other documents and therefore no evidence.

Utilising specialist software developed primarily for use in our data recovery laboratories, we were able to locate and subsequently recover both thumbnail images from the disk and larger images identical in content to the images portrayed in the thumbnail. These images contained material of a paedophile nature. Crucially, the existence of both the thumbnail and larger images indicated to us, beyond reasonable doubt, intent on the part of the user to actively seek out and view larger paedophile images. This, to our mind, removed credibility in any defence, based on a suggestion that the images had been inadvertently and innocently loaded onto the computer whilst the user was browsing an unknown site.

The Crown Prosecution Service decided that there was a strong case and charges were pressed. A defence expert was appointed who claimed that the larger images could not be found, and therefore were not present on the disk. A plea of not guilty was entered. As a result of this conflicting expert testimony, Vogon carried out further investigation work.

Additional recovery work was carried out in our data recovery laboratories on the captured data from Jayson's hard disk drive. The result of this in-depth and lengthy process was that we were able to uncover more detailed information and to recreate the complete sequence of events that took place during the web browsing session carried out by Jayson. This included the keywords used to initiate the web-based searching, the individual web pages viewed, together with their times and dates, and the sequence in which the web sites had been navigated. At the web page level we were able to prove which thumbnail images had been displayed on the screen, and which of these were actively clicked on to load the larger images. These larger paedophile images were also recovered from the disk drive.

As with many forms of expert testimony, the key here was to present the evidence in such a form that the court could understand clearly and unambiguously the issues at hand. In this instance, the evidence was demonstrated using a PC set up in the courtroom, so that the court could view the evidence in the same manner as had Jayson.

The key issue here is that all of the evidence presented was derived from files that had, to all intent and purpose, been deleted. Recovery was possible only after the application of specialist software tools and techniques. Mr Jayson changed his plea to guilty and was sentenced to seven counts of 12 months in prison to run concurrently.

This case was appealed to the Law Lords, where it was dismissed. The suspect was

and fragility of the disk are the key

Magnetic tenacity

The trail led from thumbnail to full-size image Continued from page 7

convicted solely on the evidence of reconstructed HTML files, in effect proving that, given the right circumstances, deleted files are sufficient in their own right to convict paedophiles. In addition, the fact that clicking on a thumbnail picture to create a full-size image constituted the 'making' of child pornography marks a clear, and to my mind wholly sensible, widening of what is acceptable to the courts. This is vital information for all prosecuting authorities.

Case Study 2

Background: It was alleged that a wordprocessing document contained information relating to a contractual arrangement, and that it had been created on a particular date.

The date information on the document seemed to confirm this assertion. However, the defendant claimed that the document seen originally did not contain the same information, and that the document produced had been subsequently altered. This alteration had the effect of creating a significant financial loss to the defendant.

The case was listed in the High Court of Justice, and Vogon was asked to act as experts on behalf of the defence.

The plaintiff's expert's view was that the time and dates associated with the files were valid and consistent with the dates when the file in question had allegedly been created. We were substantially in agreement with this statement as far as it went.

We conducted a careful, low-level examination of the document under consideration. From our analysis of the information embedded within the file, it was possible to prove conclusively that the software used to create the file had not existed until after the claimed date of creation of the document.

Further, by analysis of other date and time information available, it was possible to identify the original document from which the forgery had been generated. We were able to demonstrate that the computer used to create the document had had its internal clock set back to the date of the alleged wordprocessing file. The clock was then set forward again to make it appear as if the creation date of the document predated its actual creation date.

Upon presentation of our findings, the matter was settled.

In both case studies outlined above, the information accessible following what would typically be considered a reasonable level of examination would not have resulted in the true facts of the case being uncovered. With the widening definition now in force of what constitutes a document, a range of specialist techniques need to be employed to ensure that all of the available information can be found, and appropriate conclusions drawn.

Clive Carmichael-Jones, Vogon International Ltd

Address J S Publications

PO Box 505 Newmarket Suffolk CB8 7TF UK

DX 50519 Newmarket

Telephone +44 (0)1638 561590

Facsimile +44 (0)1638 560924

e-mail yw@jspubs.com

Web site http://www.jspubs.com

Editor Dr Christopher F Pamplin

> Staff writer Philip Owen

Letter to the Editor

R -v- Sally Clark

Dr Peter Wood, Consultant Forensic Psychiatrist, writes:

One factor that appears to be missing from the debate generated by the Sally Clark case is the difference between the three areas of work in which doctors become involved, criminal, personal injury and child care. As a psychiatrist who has been involved in all three, I am aware that, particularly in the post-Woolf era, communication between doctors and the sharing of information are both considerably greater in civil and child care work than in criminal work.

Having been engaged in care work at a time well before the Woolf reforms, when round table meetings between experts were held as a matter of routine, the changes brought in, in personal injury work, were very welcome and, in most instances, have made life a great deal easier.

Although the proportion of criminal work I undertake nowadays is quite low, it remains difficult to engender the same type of sharing of clinical knowledge and opinion in criminal cases. It has always seemed to me to be important, where a jury is involved, to attempt to de-mystify the clinical aspects of cases before the courts and to reflect the range of views in a particular case rather than being dogmatic and backing one horse in the race to conviction or acquittal, as the case may be. When complex medical issues need exploring, there should be a mechanism for the experts, who are there to assist the jury in understanding issues, to meet and to clarify the arguments from the clinical point of view before the lawyers lead the evidence to the jury.

On the whole, it seems to me, that the system of experts appointed by one or other party or jointly works reasonably well in care work and personal injury work, and what is needed is an effort to bring the standard of reporting in criminal cases up to this sort of level. This has implications for the funding of expert assessments in criminal cases so as to allow adequate levels of time to be committed to this task, including the detailed assessment of documentation. It is also necessary to pay experts at a reasonable level to enable them to spend the necessary time in the criminal courts, so as to hear the lay evidence upon which a jury may have to decide, before adding to the process as an 'expert'. Ironically, as a psychiatrist, it is often more important to listen to evidence as it unfolds in the criminal arena than in many civil cases, where the witness statements are taken as the evidence in chief, before attempting to give evidence on issues such as diminished responsibility, yet the current system actively discourages the process of doing so and heavily restricts the potential quality of the expert's contribution. It has occurred to me on several occasions that the lack of investment in the trial at first instance costs the tax payer a great deal more at the end of the day!