EXPERT EVIDENCE: LAW, PRACTICE, PROCEDURE AND ADVOCACY by Ian Freckelton and Hugh Selby, Sydney, Lawbook Company, 2002, 867pp, ISBN 0 455 21842 0

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As knowledge becomes more specialised and complex, so too does the expert evidence called upon to settle disputes in a legal context. Expert evidence has evolved into a fascinating and increasingly complicated area of law, in both civil and criminal contexts. Whilst legal practitioners and law students will be familiar with the basic principles of expert evidence in the Australian system: the rules concerning expertise, the areas of expertise, the basis of opinions, common knowledge and the ultimate issue, this text provides accessible information which goes well beyond a restatement of the law, by delving into practice, procedure, advocacy and legal perspectives on specific scientific disciplines.

The text combines legislative bases, case references, academic and professional debates and international developments in expert evidence presentation and advocacy, in such a way that the reader is easily able to appreciate the development of the law in response to the rapid growth of scientific and expert knowledge. Useful contrasts are also made between the current state of Australian law and that of other important jurisdictions. For example, chapter 4 is a thorough discussion of admissibility issues relating to *Frye v US* (293 F 2d 1013 (1923) and *Daubert v Merrell Dow Pharmaceuticals* (509 US 579; 125 Ed 2d 469 (1993); 113 S Ct 2786; 43 F 3d 1311 (1993)), as well as specific applications of these rules to odontology, DNA and novel psychological evidence.

A thorough summary of the rules relating to expert evidence, and more importantly, the basis, development and application of these rules in several jurisdictions, is encompassed within the first ten chapters of the text. Students will find these chapters particularly useful. Of more use to the legal practitioner will be chapters 11 to 17, which focus on specific areas of expertise, including novel psychological evidence, trauma evidence, DNA profiling, fingerprint evidence, document analysis and tracker-dog evidence. More information on each of these topics can be found in the five-volume loose-leaf service *Expert Evidence* (Lawbook Company, 2002) also by Freckelton and Selby. The reviewed text does provide direct references to the loose-leaf service where appropriate and this does ameliorate the lack of detail sometimes noticeable in the present text.

1. DNA Profiling Evidence

DNA profiling evidence is a now familiar tool in the hands of the prosecution and those seeking to assert or deny parentage. Chapter 14 opens with a warning that as

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DNA profiling techniques rapidly change, the legal practitioner is well advised to consult the experts when seeking to use or discredit this evidence. This reminder adequately reflects the fact that DNA profiling is perhaps the most complex, most common and potentially the most misunderstood type of forensic science used in criminal prosecutions. Unfortunately chapter 14 does little to alleviate the difficulties, consisting as it does of a fairly brief but also complex and jargon-laden description of the main DNA profiling techniques used in Australian forensic laboratories today. Extensive quotations from the judgement of Mulligan J in *R v Karger* [2001] SASC 64 and in *R v Jarrett* (1994) 73 A Crim R 160 do little to simplify the concepts or terminology. In this respect the looseleaf service (chapters 80 and 82) is a more valuable resource, as it is written by scientists for a legal audience and contains useful diagrams, references, explanations and glossaries, which were beyond the scope of the current text.

More attention is paid to the problems associated with the calculation of DNA profile statistics. Whilst this section is headed 'Statistical Interpretation' (p492) it in fact deals with the theory, case law and National Research Council Reports (US, 1992 and 1996) on how DNA statistics ought to be *calculated*. Useful discussion of the independence of alleles, the particular genetic features of racial groups and the hetero- or homogeneity of any population is followed by a summary of NRC recommendations for statistical calculations. An understanding of this section of the text (or at least an appreciation of the issues) will be useful for defence counsel who might otherwise have avoided attacking the 'maths' part of DNA profiling evidence.

The remainder of the DNA profiling chapter (ch14) examines the case law of the US, Scotland, Canada, Australia, New Zealand and England. It is necessary and enlightening to cover so many jurisdictions, because between them they raise several additional areas in which DNA evidence ought to be scrutinised (p499–501): discrepancies between forensic reports and laboratory findings; deficient laboratory records; the use of controls; identification and matching standards for DNA bands; impact of degradation of DNA samples; impact of probe contamination; and calculation of match probabilities.

The section on United States case law and DNA profiling evidence (p496–506) gives a clear, concise history moving from *Frye* through to *People v Castro* (144 Misc 2d 956; 545 NYS 2d 985 (NY 1989)) and then post-*Daubert*. This section proves particularly interesting because the various rulings as to the admissibility and weight of DNA profiling evidence reflect the high level of defence preparation in the US. Challenges to laboratory methods, testing, sampling, handling, safeguards, calculations and interpretation of DNA profiles have been extensive and repeated in the US courts, to a much greater degree than most defence challenges in Australia.

DNA profiling evidence in Australia is discussed with a timely reminder that 'matters of dubious methodology'(p510) and other aspects of faulty science 'are all issues that have arisen previously — in particular in *R v Chamberlain* ((No 2) (1984) 153 CLR 521)' (p510). *Chamberlain* is a spectre well worth raising, because although legal wisdom traditionally posits that **jurors** may be

overwhelmed and overawed by DNA profiling evidence (p511), if the level of sophistication in challenges to DNA profiling evidence by American lawyers is compared with the Australian experience, Australian lawyers have some way to go before **they** have thoroughly challenged, probed and investigated the DNA profiling evidence presented here. Perhaps they too are overawed and/or overwhelmed by DNA profiles? Certainly it is worth noting that 'a match obtained by any blood tests, DNA or otherwise, between the suspect and the offender does not establish that the two are the one and the same person ... "It establishes no more than that the accused *could* be the offender"' (p517 citing *R v Pantoja* (1996) 88 A Crim R 554 at 560 (Hunt CJ at CL and Hidden J) [Emphasis added.]).

Chapter 14 does briefly deal with the difficulty of presenting DNA evidence to a judge or jury in a comprehensible manner. The authors suggest that counsel ought to focus on ensuring that the significance of the DNA results is clear and that the 'experts' reports must not be cryptic and allusive' (p538). As the authors acknowledge, this is no easy task. The statistics and the underlying scientific principles of DNA profiling are exceedingly difficult. Unfortunately, scientific accuracy can not be dispensed with for the sake of legal comprehensibility. For these reasons, the section dealing with how lawyers can encourage scientists to explain their findings when in court (through diagrams, overhead transparencies and so on (p538)) may be of great use to practitioners.

2. *Practical Matters*

Chapters 18–22 cover the more routine, but still important, aspects of expert evidence including payment of experts, and civil and criminal liability of expert witnesses. This section of the text culminates in a discussion of practice rules and codes of ethics for expert witnesses (ch 23). The Code of Ethics of members of the Australian and New Zealand Forensic Science Society is discussed in detail (p677), as are the various practice directions for expert witnesses issued by the Australian Federal Court and various Supreme Courts (p660–677). Brief commentary is also given on the ethical guidelines of other professions, mostly medical and psychological (p681–698). These directions and codes of ethics are informative and should be made familiar to all expert witnesses and legal counsel. They reinforce two basic principles: the expert must be completely impartial and the expert's primary duty is to the court/tribunal — not to the party that called them. In an adversarial system such as Australia's, it can be difficult for both counsel and their witnesses to remember these points.

3. *Advocacy, Examination-in-chief, Cross-examination and Re-examination*

It is lamentable that in a work of this kind, which will (in many respects, rightly) be seen as the authority in the field, the authors write: '... the expert must bear in mind that his or her report must be written to persuade' (p700). This reviewer* does not contest the fact that court proceedings rely on persuasion. The triers of fact may be persuaded by reliable or unreliable evidence. They may be persuaded

by a convincing advocate. However, it is the *role of the advocate* to persuade. It is the **duty** of the expert witness to deliver their findings accurately and precisely. They do not have to persuade the court, the jury or the advocate. At no time should experts be encouraged to write their reports 'persuasively'. Matters of persuasion are for counsel, not for expert witnesses. It is of some relief that a subsequent section on expert reports (p705) does revisit the 1998 guidelines of the Australian Federal Court, where the expert's overriding duty to the court is restated.

On a less controversial subject, the section 'Advice to Expert Witnesses Before Court' (p706) will be immensely useful to expert witnesses who have not given evidence in court before, or who would like to improve their experience. The advice given is detailed, practical and comprehensive and relates well to what 'good' expert witnesses do in court.

Throughout the remainder of chapters 24–26, the text also gives useful examples of how advocates can elicit information efficiently and effectively from expert witnesses. Not only do the authors give examples of appropriate questions and answers, but they relate these to how persuasive such questions would be, and the order in which certain information should be adduced. Inexperienced counsel may find this very helpful and expert witnesses may also find it interesting to know *why* lawyers do things in the way that they do.

4. *Conclusions*

Expert Evidence: Law, Practice, Procedure and Advocacy is a worthwhile addition to the Australian literature on this subject. The authors have compiled a concise account of the law, both domestic and international, with specialised chapters on scientific disciplines, professional and legal ethical obligations, and matters of advocacy.

Expert witnesses will find much that explains their role and the role of the advocates who engage them. This text provides clear reasons for why expert evidence is allowed, why witnesses are accepted, dismissed and limited by the courts. Beyond this, it may provide legal practitioners with a deeper insight into the law relating to expert evidence and indeed, a deeper insight into some of those areas of expertise that are highly utilised but also complex. Whilst much is left unexplored, the text provides adequate references and is a useful complement to the more expansive looseleaf materials available.