

CROSS EXAMINING EXPERT WITNESSES

Deone Provera

Barrister

Marbury Chambers

Introduction

You know a lot about a man named Gordon Wood. You know that:

- in 1995 his then girlfriend Caroline Byrne, tragically fell to her death at the Gap in Watsons Bay, Sydney;
- police believed at that time that Ms. Byrne had committed suicide;
- he was later charged, tried and, in 2008, convicted of her murder;
- in 2012, after Mr Wood had already served three years imprisonment, the NSW Court of Criminal Appeal quashed that verdict and substituted a verdict of acquittal.¹

You may not be aware of the paucity of evidence against him.

- There was no direct evidence;
- There was no evidence that Mr Wood had been at the Gap at the time that Ms Byrne fell from the cliff. The only evidence as to his location was that he was home in Edgecliff;
- No evidence from Ms Byrne's body that anyone had been directly involved in her fall;
- No evidence from the scene that anyone had been directly involved in her fall;
- No certain evidence as to the point at which Ms Byrne left the cliff edge;
- No certain evidence as to the point at which she landed.

¹ *Wood v R* 2012 NSWCCA 21

Crucially the Crown, in a circumstantial case, could not exclude the reasonable hypothesis that Ms Byrne had voluntarily jumped, or slipped, to her death. See Shepherd's case.²

How then was he ever convicted?

A vital part of the case was an 'expert's report' by Honorary Associate Professor Rod Cross formerly of the University of Sydney. Professor Cross later wrote a book is entitled *Evidence for Murder: How Physics Convicted a Killer* (University of New South Wales Press Ltd 2009).³

On appeal, it was found that Professor Cross "had been allowed to express opinions outside his field of specialised knowledge. For example, he was not an expert in the critical area of biomechanics. His qualifications were in physics and his primary area of expertise was "plasma physics". The Court was also very critical in that Cross "set about proving" that Caroline must have been thrown rather than having voluntarily jumped. The Court also found that Cross' evidence was incomplete in that he failed to inform the court that he had discovered that a critical photograph (relating to vegetation on a ledge and the possible distance for a run-up) dated "1996" had actually been taken in 2003. McLellan J commented about the book that Cross "appears oblivious of the serious problems which the book reveals about his own involvement in the police investigation" (at para. 715)."⁴

Mr Wood's case demonstrates the power and danger of expert evidence.

² *Shepherd v The Queen* (1990) 170 CLR 573

³ <http://www.betterconsult.com.au/blog/the-role-of-expert-evidence-in-the-conviction-of-gordon-wood/>. "The book cover states that some of the "most crucial" evidence in the case was provided by Cross, whose "ingenious experiments showed conclusively that Caroline Byrne must have been thrown with great force from the cliff top". The cover also claims that "the outcome of one of Australia's most notorious court cases hinged on the evidence of a physicist".

⁴ *Ibid.*

Wrongful convictions in the USA

Of the 362 people exonerated by later DNA analysis in USA to the end of 2018 almost half of the convictions were based on blood splatter expert analysis.⁵

It requires 40 hours of training to be certified as a blood splatter expert in the USA. Most certified experts are police officers.

There is no body of knowledge, research, studies or other evidence to establish the reliability of blood splatter analysis.

Bite mark analysis evidence was involved in 31 exonerations.

Expert witnesses gave evidence later assessed as unreliable in 95% of 268 trials reviewed in the USA.

Hair microscopy, a technique still used by FBI analysts, lead to the conviction of 75 people later exonerated.⁶

Hair microscopy — which uses a microscope to compare two different hair samples — is cheaper than DNA testing, but a 2009 report of the National Academy of Sciences called the technique “highly unreliable.”⁷

Expert Code of Conduct

The Expert Code of Conduct is contained in Schedule 7 of the *Uniform Civil Procedure Rules 2005*.⁸

In practice it is applied to criminal as well as civil proceedings, although there is no statutory basis for the practice.

⁵ Cited by Pamela Colloff in an interview 2/2/19 - <https://art19.com/shows/today-explained/episodes/ac835168-427c-46b6-a62c-cd87c0935a04>

⁶ Ibid

⁷ <https://www.businessinsider.com.au/its-terrifying-that-prosecutors-are-relying-on-hair-microscopy-2015-5?r=US&IR=T>

⁸ http://www8.austlii.edu.au/cgi-bin/viewdoc/au/legis/nsw/consol_reg/ucpr2005305/sch7.html

An expert witness is not an advocate for a party and has a paramount duty to assist the court impartially.

Every report prepared must contain:

- (a) the name and address of the expert, and
- (b) an acknowledgement that the expert has read this code and agrees to be bound by it, and
- (c) the qualifications of the expert to prepare the report, and
- (d) the assumptions and material facts on which each opinion expressed in the report is based (a letter of instructions may be annexed), and
- (e) the reasons for and any literature or other materials utilised in support of each such opinion, and
- (f) (if applicable) that a particular question, issue or matter falls outside the expert's field of expertise, and
- (g) any examinations, tests or other investigations on which the expert has relied, identifying the person who carried them out and that person's qualifications, and
- (h) the extent to which any opinion which the expert has expressed involves the acceptance of another person's opinion, the identification of that other person and the opinion expressed by that other person, and
- (i) a declaration that the expert has made all the inquiries which the expert believes are desirable and appropriate (save for any matters identified explicitly in the report), and that no matters of significance which the expert regards as relevant have, to the knowledge of the expert, been withheld from the court, and
- (j) any qualification of an opinion expressed in the report without which the report is or may be incomplete or inaccurate, and
- (k) whether any opinion expressed in the report is not a concluded opinion because of insufficient research or insufficient data or for any other reason, and
- (l) where the report is lengthy or complex, a brief summary of the report at the beginning of the report.

Preliminary issues

1. Be conscious of the "CSI effect".⁹ This is the hypothesis that juries expect expert and/or scientific evidence and are reluctant to convict if none is presented, and/or the hypothesis that juries place extremely high reliance

⁹ https://en.wikipedia.org/wiki/CSI_effect

upon expert and/or scientific evidence.¹⁰ Both beliefs could be valid, and there is empirical evidence for the hypothesis.

2. Opinion evidence is generally inadmissible, subject to some exceptions. One exception is for 'expert' opinion.

Section 79 of the *Evidence Act 1995* (NSW) and (Cth) provides an exception to the opinion rules where:

- a. Opinion is based on specialised knowledge;
 - b. The person has specialised knowledge based on the person's training, study or experience.
3. In *Makita v Sprowles* (2001) 52 NSWLR 705 Heydon JA found at para [85] that for evidence tendered as expert evidence to be admissible, it must be demonstrated that:
 - a. there is a field of specialized knowledge;
 - b. the witness has become an expert in (an identified aspect of) that field of specialized knowledge by reason of specified training, study or experience;
 - c. the opinion proffered is based wholly or substantially on the witness's expert knowledge;
 - d. the facts upon which the opinion is based must be identified and proved;
 - e. there is a demonstrable scientific basis to show how the specialized knowledge applies to the facts to produce the opinion propounded.
 4. You might challenge their qualification as an expert.

¹⁰ Ibid.

5. You might challenge if the 'expert' is an expert of the relevant field of knowledge. The NSWCCA found that Professor Cross was not.
6. You might challenge as to whether there really is specialised field of knowledge. For example, can someone be a shoe expert? Are there areas in which no one can be an expert?

Veleski v R. (2002) 76 ALJR 402 (per Gaudron J at [82], Gummow and Callinan JJ at [154]) suggests that for it to be established that there is a field of specialized knowledge, it must first be established that there is a reliable body of knowledge and experience.

7. You can challenge the assumptions.
8. You can challenge the source of background material.
9. You might object that the 'expert opinion' presents a bare '*ipse dixit*', a Latin phrase meaning "he himself has said (it)". This essentially where an expert witness expresses a conclusion but does not explain the process.
10. You might object that opinion is as to the ultimate issue, i.e. the defendant is liable, or is guilty.¹¹
11. Note that Practice Rules and Court Rules apply to expert reports: including Supreme Court of NSW practice directions SC Gen 10 and 11, and Sc Eq 5; and Part 23 of the *Federal Court Rules 2011* .

Elements of cross examination

12. Forensic purpose. There are 5 legitimate forensic purposes for cross examination:
 - a. Adduce favourable evidence;
 - b. Adduce evidence for the cross examination of other witnesses;

¹¹ *Allstate v ANZ (No 33) (1996) 137 ALR 138* at 143.

- c. *Brown v Dunne*, ventilate your case;
- d. Attack the credit of the witness's evidence;
- e. Attack the credit of the witness – caution, and note *Clyne v New South Wales Bar Association* (1960) 104 CLR 186; [1960] HCA 40.
Essentially, questions of a witness must have a proper basis. A questioner can hope that the answers will provide a proper basis.

13. Suggestions for structuring questioning:

- a. Use short leading questions;
- b. One fact at a time;
- c. Crystallise and isolate the evidence;
- d. Then contrast it with propositions established by logic or by other established evidence;
- e. Challenge assumptions and basis;
- f. Attempt to get the expert to adopt conclusions favourable to your case theory.