

CASE NOTES

R v Keir

Court of Criminal Appeal (NSW) No. 60092/00

Judgment of Giles JA, Greg James J and McClellan J delivered
28 February 2002

CRIMINAL LAW - DNA EVIDENCE - "PROSECUTOR'S FALLACY"

The Crown alleged that the accused murdered his wife somewhere in Sydney on or about 8 February 1988, and buried her beneath the foundations of their matrimonial home in the western suburbs. The (allegedly) deceased wife was on the evening of that day driven home by her former lover.

Human bone fragments were discovered in 1991. During the trial in 1999, a former school acquaintance of the wife told the jury that she believed she had seen the wife from a distance in late 1988. The accused, his parents and his (in 1999) 12 year old son, all testified that they had either seen or spoken with the wife during the 1990s. The mother and son claimed to have seen the wife not long before the commencement of the trial.

DNA statistical evidence concerning the bone fragments was an important part of the Crown case. The wife's parents had only one child and the DNA sample which they provided to Police was analysed using the Profiler Plus system. A forensic biologist told the jury:

"...it is approximately 660,000 times more likely to obtain this particular DNA profile found in the bones if it comes from a child of... (the parents)... than from a child of a random mating in the Australian population".

The trial judge repeated to the jury the Crown's submission, that there is a 660,000 to one chance that the bones are not those of the wife. His Honour was not asked to direct the jury against reasoning in this way.

HELD

1. Appeal against conviction allowed; new trial ordered.
2. The Crown had introduced into the trial the "prosecutor's fallacy", which was then adopted by His Honour the trial judge.

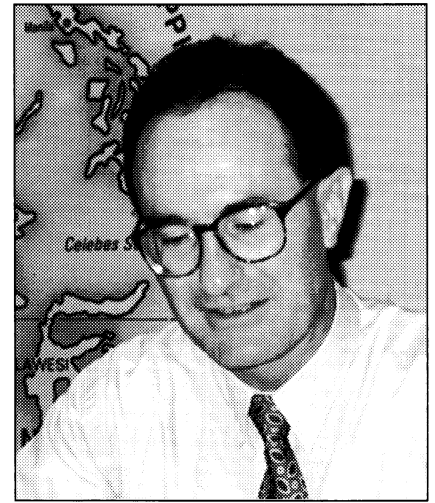
APPEARANCES

Accused - Byrne SC & Bashir / Greg Goold (solicitor).

Crown - Sexton QC, S-G & Baker / DPP.

COMMENTARY

The "prosecutor's fallacy" was given this title by the English Court of Appeal in *R v Deen* (1993). With the exception of



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paternity cases, it is believed that *Keir* is the first authority, at least in Australia, which deals with the intrusion at trial of the prosecutor's fallacy in relation to non-crime scene DNA statistical evidence.

In *R v Galli* (NSWCCA, unrep12/12/01) Spigelman CJ explained:

"The logical problem with the Prosecutor's Fallacy, in its most usual form, is that it ignores the number of persons who may have committed the offence by purporting to devise a statement as to the odds (that the accused is implicated)...from what the DNA tests indicate is the probability (that the accused is implicated)...rather than the person taken at random from the community"

In *Latcha* (1998) 104 A Crim R 390, the Northern Territory Court of Appeal considered the admissibility of statistical evidence regarding the "likelihood ratio" in a relevant population of a DNA match.

The jury was in that trial asked to compare the DNA of the accused with sperm taken from underwear worn by the victim of a sexual assault. The Court of Appeal emphasised the need for care, lest the jury confuse two questions:

- What is the probability of obtaining a matching analysis of the crime scene sample if someone else (other than the accused) left it? (**proper**); and
- What is the likelihood that it was the defendant's DNA found at the crime scene? (**improper**)

Whether or not a trial judge is required to direct the jury as to impermissible reasoning processes depends upon the particular circumstances of the case.

A direction as to the use of probability by means of examples that are more likely to be within the experience of the members of the jury may avoid the need for an express warning against one particular kind of impermissible reasoning (see *R v Galli*, *supra*).^①