

Modelling Expert Opinions: Combining Good Character Evidence

Insights from the use of Tendency & Coincidence Evidence in Cardinal George Pell's Trial & Acquittal

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Tendency and Coincidence Evidence indicating a pattern of criminality is admissible under certain conditions in most jurisdictions in Australia. This area of law remains marred by a myriad of judicial opinions, apparently contradictory case outcomes and sometimes overwhelming and impenetrable complexity that results in an inordinate number of appeals, conflicting appeal judgments between and within courts and the potential for unfairness to both victims and accused. Attachment 1 contains a summary of the use of Tendency and Coincidence Evidence.

There have been recent advances in the application of Tendency and Coincidence Evidence. For example in New South Wales the Evidence Act was amended from July 2020 to presume that the probative value of such evidence substantially outweighs its prejudicial effect in criminal proceedings of a sexual interest in a child or children and/or a tendency to act upon such an interest.

In a recent unanimous decision by the High Court of Australia, innovations in the use of Tendency and Coincidence Evidence for sexual crimes involving minors may have been set back. The High Court overturned the Victorian Court of Appeal's judgement in Cardinal George Pell's conviction. The High Court said that the evidence in that case could not support a guilty verdict. In its summary, the High Court stated the Victorian Court of Appeal judges "failed to engage with the question of whether there remained a reasonable possibility that the offending had not taken place" and "with respect to each of the offences for which he was convicted." As a result, the High Court said there was the possibility that an innocent person had been convicted "because the evidence did not establish guilt to the requisite standard of proof." The history of Cardinal George Pell's trials and acquittal is provided in the Attachment 2.

Good Character Evidence is Tendency and Coincidence Evidence of a pattern of good reputation and behaviour. In some ways it is the inverse of a pattern of evidence for a crime. The intent of Good Character Evidence is to express a lack of probability that the defendant would commit a crime given the defendant's known good character and behaviour. It is well established in law that good character evidence is admissible and that a jury may engage in a form of propensity reasoning based on it. Attachment 3 provides a summary of the use of Good Character Evidence.

Examples of Base Rates of Conviction and False Positive Rates are provided in Attachment 4. The overall base rate for criminal prosecutions resulting in conviction is approximately 92% with corresponding acquittal of 8%. Therefore, the odds are 11.5 to 1 in favour of

conviction. In order to overturn the odds, the evidence for innocence needs to be very significant. As Carl Sagan's standard aphorism says "extraordinary claims require extraordinary evidence."

The Base Rate of Conviction for serious criminal cases that go to court is approximately 60%. Non-conviction cases comprise those where the evidence for innocence is significant. Good Character Evidence seeks to increase the evidence of innocence by expanding reasonable doubt of guilt and offsetting, safeguarding or eliminating the risk of Tendency and Coincidence Evidence of a pattern of crime.

Evolution in the Court's use of Good Character Evidence provides a guide to how evidence is best modelled in Bayesian and Markov Networks. In the trial of Cardinal George Pell, Pell's lawyers submitted 10 character references, including one from former Australian Prime Minister John Howard. The issue is the degree of weight that might be given to such Good Character Evidence.

There are two approaches in modelling expert opinions such as Good Character Evidence. These are the Independent Likelihood Pool and Linear Opinion Pool. These approaches may be illustrated by the analogy of a COVID19 test that provides, say, a 42% chance of having the virus.¹ If two tests, say one by nasal swab and the other by blood antigen, are combined using an Independent Likelihood Pool there would be approximately a 93% chance of having the virus². Independent Likelihood Pool combination would be inappropriate if each test was similar, for example by nasal swab. Instead the tests would need to be averaged using a Linear Opinion Pool, where the probability of two tests is 42%, which is the same as the probability of one test.

Where Good Character Evidence has a high probative effect, a set of 10 character references (as in Cardinal George Pell's case) considered as Independent Likelihood Pool opinions would cumulatively constitute something approaching 100% likelihood that the individual did not commit the crime. This would be almost equivalent to Exculpatory Evidence, which exonerates the individual.

However, if Good Character Evidence is considered to be non-independent evidence and averaged using a Linear Opinion Pool, as is mostly done with the combination of expert opinions, then 10 positive references merely have the same probative value as 1 positive reference.

Intuitively, there seems to be more value in both the volume and implicit pattern in 10 references than is inherent in just 1 reference. The law recognises this and also seeks to maximise the accused's possibility of defence by permitting a jury to use propensity reasoning with Good Character Evidence. The law has developed an approach where the weight of Good Character Evidence lies somewhere in between the extremes of Independent Likelihood Pool and Linear Opinion Pool.

¹ RT-PCR – the reverse-transcriptase polymerase chain reaction virus RNA test with 5% prior probability, 70% sensitivity and 95% specificity

² Following RT-PCR test1, test 2 on a blood sample for IgM antibody serology with 42% prior probability (the result of test 1), 95% sensitivity and 95% specificity

The Court seeks to control the exonerating effect of Good Character Evidence by setting bounds against the over-weighting of the character evidence, in particular preventing Good Character Evidence removing the probability of guilt; treating character evidence as a single idea; and limiting the use to be made of Good Character Evidence if there is a danger that a particular use of the evidence might be unfairly prejudicial to a party, or might be misleading or confusing.

There is a principle in predictive modelling that the best performance in forecasting is achieved through extremised parameters. An evidence modeller would be happy to combine Good Character Evidence using either of the extremes of Independent Likelihood Pool or Linear Opinion Pool and both methods are used regularly. Of course, the evidence modeller would be interested to understand and choose the correct method.

Furthermore, an evidence modeller does not have the Court's social objective of maximising the prosecutor's challenge by allowing Good Character Evidence its greatest effect within controlled limits. Also the Court recognises that Good Character Evidence can be best treated as a single idea, which is another way of expressing combination by Linear Opinion Pool.

The Court's practice suggests that before Good Character Evidence is introduced into a Bayesian or Markov Network, where it will be combined with other independent evidence of the case in an Independent Likelihood Pool, the evidence modeller first combines or averages the Good Character Evidence using a Linear Opinion Pool approach.

Tendency and Coincidence Evidence

- Tendency and coincidence evidence, also referred to as propensity or similar fact evidence, is evidence that an accused has a tendency to commit certain acts, based on the assertion that they have done it before, or that it is likely that an accused committed multiple acts based on the similarity of multiple allegations against them.
- It is evidence of the character, reputation or conduct of a person to prove that a person has or had a tendency to act in a particular way, or to have a particular state of mind
- In many cases the same evidence is capable of being relied on as both tendency and coincidence evidence. For example, where two sexual assault complainants give evidence that the same defendant assaulted them:
 - Tendency evidence - if the court is satisfied that Complainant A is telling the truth, this establishes that the defendant has a tendency to commit sexual assaults and therefore, it is likely that the defendant sexually assaulted Complainant B
 - Coincidence evidence - it is unlikely that two independent complainants have made similar but false allegations against the same person
- There are two types of coincidence evidence:
 - Where two or more events have occurred in circumstances where the conduct is ambiguous, the similarity of the events can be used to argue that it is unlikely the events occurred accidentally or coincidentally and that they were, in fact, the result of criminal actions by the defendant
 - Where there is evidence that two or more similar allegations were made in circumstances where it is implausible that two or more complainants have independently come forward to make similar yet false allegations against the same defendant, the similarity of the allegations leads to the conclusion that the witnesses are telling the truth
- Under the common law similar fact and propensity evidence, although of potentially high probative value, has been considered inherently dangerous and highly prejudicial because it remains generally accepted that in criminal trials juries were liable to place weight on such evidence beyond its logical limit:
 - It permits a person to be judged by his or her conduct on other occasions rather than by evidence directly or indirectly focused on the subject event.
 - It erodes the presumption of innocence by substituting trial by prejudice and suspicion
- In all jurisdictions in Australia legislation permits the use of Tendency and Coincidence Evidence in circumstances more permissive than the common law.
- Evidence of the character, reputation or conduct of a person or a tendency that a person has or had to act in a particular way or have a particular state of mind is admissible only if:
 - The party seeking to adduce the evidence gave the other parties reasonable notice in writing of their intention to do so;
 - The court thinks that the evidence will have significant probative value given factors such as

- The number of occasions the conduct occurred
- The time gap between occasions
- The degree of similarity between different occasions
- The degree of similarity in the circumstances on different occasions
- Whether the tendency evidence is disputed
- The issue to which the evidence is relevant
- In a case where tendency evidence involving multiple complainants is proposed to be adduced, the evidence will be inadmissible if there is any 'reasonable possibility' that there has been concoction, collusion or contamination among the complainants
- The probative value of the evidence substantially outweighs its prejudicial effect. (Evidence Act, Sections 97 and 101)

Attachment 2

History of Cardinal George Pell's Conviction and the High Court's Quashing of that Conviction

- Between 1980 and 2015, 140 people made claims of child sexual abuse against priests and religious figures operating within the diocese of Ballarat where Cardinal George Pell was ordained and worked as a priest between 1973 and 1984
- November 2012 Royal Commission into Institutional Responses to Child Sexual Abuse announced
- June 2017 Cardinal George Pell charged with historical child sexual abuse offences
- December 2017 Royal Commission into Institutional Responses to Child Sexual Abuse releases its Final Report after dealing with about 75,000 calls, letters, emails and interviews and making 2,575 referrals to authorities including police; about 60 pages of the Commission's findings concerning the Melbourne and Ballarat dioceses were heavily redacted in order to avoid prejudicing the ongoing trial of Cardinal Pell
- August 2018 County Court of Victoria commences first trial
- September 2018 County Court of Victoria first trial jury unable to reach a verdict and is discharged
- November 2018 County Court of Victoria second trial commences
- December 2018 County Court of Victoria second trial jury finds Cardinal Pell guilty of abusing two choirboys in the 1990s, while he was the archbishop of Melbourne; a suppression order banning all reporting on the trial is in place until the delivery of a verdict in a second case relating to separate historic sex offence allegations being prosecuted by Victoria's Director of Public Prosecutions
- February 2019 Victorian County Court second trial verdict released after Victoria's Director of Public Prosecutions drops the second case
- March 2019 County Court of Victoria sentences Cardinal Pell to six years' jail, with a non-parole period of three years and eight months
- August 2019 Victorian Court of Appeal unanimously rejects two of Cardinal Pell's three grounds for appeal, and a 2-1 decision rejects the third ground; Cardinal Pell's convictions are upheld
- April 2020 High Court unanimously quashed Pell's convictions on the basis that the evidence could not support a guilty verdict
- May 2020 Royal Commission into Institutional Responses to Child Sexual Abuse releases the redacted sections of its Final Report

Attachment 3

Good Character Evidence

- Character evidence addresses a person's inherent moral character. The relevance and admissibility of character evidence, as well as the need for a direction and the content of that direction, depend on whether the evidence is of the accused's good character or bad character
- Bad character evidence is generally inadmissible on the basis that it is unfairly prejudicial (*Melbourne v R* (1999) 198 CLR 1; *R v Thomas* [2006] VSCA 167; *Donnini v R* (1972) 128 CLR 114; *Perry v R* (1982) 150 CLR 580). At common law, there was seen to be a high degree of risk that a jury would use bad character evidence to engage in impermissible propensity reasoning. Therefore, bad character evidence can only be used to negate evidence of good character. It cannot be used as directly relevant to the issue of guilt (see, e.g., *BRS v R* (1997) 191 CLR 275)
- Good character evidence
 - The accused's general good reputation and favourable disposition
 - Good character evidence cannot make it "improbable", that the accused committed the offence (*R v Stalder* [1981] 2 NSWLR 9)
 - Good character evidence may be used to prove that the accused is a good person generally, or in a particular respect (Evidence Act 2008 s110(1)). This differs from the common law, which treats character as indivisible (with people considered to be either of good character or bad character) (*Melbourne v R* (1999) 198 CLR 1; *Bishop v R* (2013) 39 VR 642)
 - The jury is allowed to use good character evidence to engage in a form of propensity reasoning that is not permitted for bad character evidence. This anomaly is deeply rooted in the law (*Melbourne v R* (1999) 198 CLR 1).
 - Good character evidence may make it more likely that the accused's evidence is credible for evidence given in court and statements made out of court (*R v Vollmer & Ors* [1996] 1 VR 95; *R v Vye* [1993] 1 WLR 471; *Melbourne v R* (1999) 198 CLR 1)
 - Good character evidence may make it less likely that the accused committed the offence (*Melbourne v R* (1999) 198 CLR 1; *R v Baran* [2007] VSCA 66; *R v Zecevic* [1986] VR 797; *R v Murphy* [1985] 4 NSWLR 42; *R v Trimboli* (1979) 21 SASR 577; *R v Warasta* (1991) 54 A Crim R 351; *Attwood v R* (1960) 102 CLR 353; *Eastman v R* (1997) 76 FCR 9)
 - In some cases the two uses of good character evidence will entirely overlap, and will function as a single idea rather than as two discrete issues (*R v Trimboli* (1979) 21 SASR 577)
 - The court may limit the use to be made of good character evidence if there is a danger that a particular use of the evidence might be unfairly prejudicial to a party, or might be misleading or confusing (Evidence Act 2008 s136). However, this will be rare (see, e.g., *R v Lawrence* [1984] 3 NSWLR 674; *R v Murphy* (1985) 4 NSWLR 42; *R v Hamilton* (1993) 68 A Crim R 298).

- The probative effect of good character evidence on the accused's credibility, and on the likelihood that he or she committed the offence charged, will vary depending on the circumstances of the case. The probative value of good character evidence may also be affected by:
 - The nature of the offence charged (*R v Trimboli* (1979) 21 SASR 577);
 - The relationship between the type of character established and the type of offence charged (*R v Arundell* [1999] 2 VR 228; *Braysich v R* (2011) 243 CLR 434); and
 - The strength of the other evidence supporting the charge (*Simic v R* (1980) 144 CLR 319).
 - In some cases, the only evidence of the accused's good character will be his or her lack of prior convictions. The probative value of the character evidence in such cases is usually extremely limited (*R v Cumberbatch (No 5)* [2002] VSC 289; *Melbourne v R* (1999) 198 CLR 1).
- In criminal law matters, such as drink driving offences, character references are most commonly used to help the Judge (in the District Court) or Magistrate (in the Local Court) consider the subjective features of an individual

Source: Victorian Criminal Charge Book, Published in Melbourne by the Judicial College of Victoria, Chapter 4.3 - Character Evidence <https://www.judicialcollege.vic.edu.au/eManuals/CCB/1486.htm>

Attachment 4

Base Rates and False Positives

Base Rates of Conviction

- In its 2017-18 annual report, the Victorian Office of Public Prosecutions says that guilty outcomes were recorded in 91.8% of the more than 2500 criminal cases the organisation prosecuted. This was an increase from 90.1% the previous year and 88.5% in 2013-14. Just 7.5% of people who had their cases prosecuted in either the Supreme or County courts in 2017-18 were found not guilty, through a jury verdict. There were 351 trials in Victoria's two highest courts over the year, and the figures show that about four in 10 people who front a jury are acquitted. The conviction rate at trial in 2009-10, the latest report says, was 52.3 per cent. Forty-eight per cent of people charged with sexual offences go to trial, which reflects the preparedness of those accused to go before a jury rather than plead guilty. This is a much higher rate than the general list, where approximately 26 per cent of cases proceeded to trial.
- The Commonwealth Director Public Prosecutions Summary prosecutions in 2018-19
 - Defendants convicted after a plea of guilty 917
 - Defendants convicted after a plea of not guilty 33
 - Defendants convicted ex parte 53
 - Total defendants convicted 1,003 (98.5% of 1,018)
 - Defendants acquitted after a plea of not guilty 15 (31% of 15+33)
 - Total 1,018

False Positive Rates

- It has been suggested that in Australia, the UK and the USA, that the likely error rate in courts was “about 0.5%” (Prof Samuel R. Goss in the US, more than 40 years ago). Sometimes, the “guesstimate” by judges, lawyers and the like in all three nations was “maybe 1%”. These error rates are for all cases before the courts.
- Findings of a three-year investigation into wrongful convictions worldwide by Civil Liberties Australia are that about 7% of major crime convictions are false positives. This is the same as the UK Criminal Cases Review Commission. Over 20 years, the CCRC has reviewed about 10,000 cases which pass its stringent standards for being accepted for review (for example, the prisoner must have exhausted all appeal opportunities before applying to the CCRC). The CCRC says, 7% of the 10,000 cases it has studied in detail are of innocent people wrongly convicted. That is, about 700 individuals should never have gone to jail in the UK. By May 2017, the CCRC had referred 632 cases back to superior appeal courts of the UK for re-assessment. Of the 632, the appeal courts had agreed with the CCRC in 418 cases (67% of the 7%) and set the prisoner free.
- The term base rate refers to the proportion of individuals in the group being examined who can be expected to engage in violent criminality. It is the average, or

"chance," rate that prediction seeks to improve upon. In a Michigan parole prediction study the base rate for violent recidivism among all persons released from prison was 10%. A prediction scale was devised that could identify one subgroup of which 40% committed a violent crime after release. This device, therefore, improved on the base rate by a factor of four, although 60% of the individuals predicted to be violent were still false positives.