Evidence and Truth^{*} The Honourable Justice Stephen Gageler AC⁺

The task of the judge or jury in the adversarial system is not the pursuit of truth, but the arbitration of a contest between parties who assert different versions of the truth. The facts need to be proved to the requisite standard, for example, "on the balance of probabilities" in a civil trial. Behavioural science shows that humans are not particularly good at estimating probabilities of the likelihood of an existence of a fact on the basis of incomplete information or uncertainty, with consequent errors or biases. The rules of evidence are designed to mitigate the combined difficulties of the uncertainty of the existence of a fact in issue and the subjectivity of the process of finding that fact in an adversarial system. The construction of the rules of evidence are designed to take into account the psychological and cognitive processes about how people make judgments and draw inferences and about how information is stored and retrieved from memory.

Sir Owen Dixon retired from the office of Chief Justice of the High Court of Australia in 1964. The following year his collected speeches were published in a book entitled *Jesting Pilate*.¹ The editor of the book took its title from the title Dixon had given to a speech he had made towards the end of his long judicial career. The speech was to a gathering of medical practitioners. Dixon had taken the title of the speech from a line in Francis Bacon's essay entitled "Of Truth" published in 1625.² Bacon was, amongst other things, a lawyer and a natural philosopher. He is regarded by some as the father of jurisprudence and by many as the father of scientific method.

Bacon's inspiration came from the biblical encounter between Jesus and Pontius Pilate as told in the Gospel of John. Pilate asked him:

+ Justice of the High Court of Australia.

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¹ O Dixon, "Jesting Pilate" in Judge Woinarski (ed), Jesting Pilate, Law Book Co, 1965, p 10.

² F Bacon, "Of truth" in *The works of Lord Bacon*, William Ball, 1837, vol 2, p 261.

"Is it true you claim to be a king?"

Jesus replied, "They are your words, not mine. I came into the world to bear witness to the truth. Everyone who is of the truth hears my voice."

"What is truth?" said Pilate, who then turned and left the praetorium.³

"What is truth? said jesting Pilate; and would not stay for an answer." Bacon penned those words as the first line of a philosophical dissertation.⁴ Dixon quoted them as the penultimate line of a personal reflection on his long career as a judge. Dixon's last line was, "I have not forgotten that when Pilate said this he was about to leave the judgment hall."⁵

The same weary scepticism expressed in "Jesting Pilate" is reflected in a story about Dixon recounted by his biographer, Philip Ayres:⁶

At a dinner party, a woman seated next to him was enthusing about how splendid it must be to dispense justice. Dixon replied, in a tone that could only be his:

"I do not have anything to do with justice, madam. I sit on a court of appeal, where none of the facts are known. One third of the facts are excluded by normal frailty and memory; one third by the negligence of the profession; and the remaining third by the archaic laws of evidence."⁷

My present concern is with the third of the impediments Dixon identified to a court having knowledge of facts within our inherited common law system of justice: what Dixon described as the "archaic laws of evidence". My concern with the third of the identified impediments nevertheless encompasses a strong element of concern with the other two: what might be described in terms more general and less critical than those used by Dixon as normal human frailty and the in-court conduct of the legal profession.

Historically, rules of procedure and rules of substantive law were very much more blurred than they are now. Many rules that a century before would have been considered rules of evidence had been transmogrified by the time of Dixon's retirement into rules of substantive law. The so-called "parol evidence rule" in the law of contract and the pervasive doctrine of

³ John 18: 38–40.

⁴ Bacon, above n 2, p 261.

⁵ Dixon, above n 1, p 10.

⁶ See P Ayres, Owen Dixon, 1st edn, Miegunyah Press, 2003.

⁷ P Ayres, "Owen Dixon's causation lecture: radical scepticism" (2003) 77 ALJ 682 at 693.

estoppel are examples. Other rules previously thought of merely as rules of evidence have since been recognised as manifestations of substantive immunities from the compulsory disclosure of information. They reflect systemic values and individual interests (some in the nature of human rights) the protection of which our society treats as of sufficient importance as to always or sometimes outweigh the importance of ascertaining the truth in order to do justice in an individual case. Privilege against self-incrimination, client legal privilege and public interest immunity are examples.

Yet many truly procedural rules of evidence derived from the tradition of the common law persist within our contemporary legal system, albeit that they have become increasingly the subject of legislative restatement, modification and exception. They include rules regulating the form and method by which evidence is adduced in a court together with rules regulating when evidence adduced is admissible to prove or disprove a fact in issue.

The basic rule of admissibility, to use the language of its modern statutory restatement in Australia, is that evidence is admissible if but only if it is relevant,8 evidence that is relevant being evidence that, if it were accepted, could rationally affect (directly or indirectly) the assessment of the probability of the existence of a fact in issue.9 But from that basic rule of admissibility, there are exceptions, each of which is itself the subject of exceptions. The exceptions include, to use their modern statutory labels: "the hearsay rule" (that evidence of a previous representation made by a person is not admissible to prove the existence of a fact that it can reasonably be supposed that the person intended to assert by the representation);¹⁰ "the opinion rule" (that evidence of an opinion is not admissible to prove the existence of a fact about the existence of which the opinion was expressed);11 the "tendency rule" (currently stated in terms that evidence of the character, reputation or conduct of a person, or a tendency that a person has or had, is not admissible to prove that a person has or had a tendency to act in a particular way, or to have a particular state of mind unless, amongst other things, the court thinks that the evidence will have significant probative value);¹² and the "coincidence"

⁸ See Evidence Act 1995 (Cth), s 56.

⁹ ibid s 55.

¹⁰ ibid s 59.

¹¹ ibid s 76.

¹² ibid s 97.

rule" (currently stated in terms that evidence that two or more events occurred is not admissible to prove that a person did a particular act or had a particular state of mind on the basis that it is improbable that the events occurred coincidentally unless, amongst other things, the court similarly thinks that the evidence will have significant probative value).¹³

How is it that exclusionary rules of such a nature should come to exist? Apart from evidence that is confusing or so marginally relevant that it would be a waste of time to admit and which can in any event always be excluded for those specific reasons as a matter of discretion,¹⁴ why should evidence that is relevant ever be excluded? How is it that our system of justice should have come to accept that less evidence that is relevant should be preferable to more? Within what rational system is evidence that could rationally affect the assessment of the probability of the existence of a fact?

Scholars who began to ponder those sorts of questions in the nineteenth century tended to see the answer as lying in the traditional distinction in courts of common law between the role of the legally trained judge to orchestrate the proceeding and to state the law and the role of the randomly chosen jury of laymen to find the facts.¹⁵ The exclusionary rules had evolved, as they saw it, to limit the scope for the jury to be swayed by prejudice. But not many exclusionary rules in their overt formulation differentiate between fact finding undertaken by a jury and fact finding undertaken by a judge. More recent historical research has tended to link the emergence of exclusionary rules of evidence less to the emergence of the jury as the finder of facts than to the somewhat later emergence of the adversary system under which a trial of fact, whether in a civil proceeding or a criminal proceeding, came to be treated as a contest between parties.¹⁶

The essential feature of fact finding within an adversary system of justice is that the tribunal of fact — whether it be a jury or a judge — is tasked not with the independent pursuit of truth but with arbitration of a contest between parties who assert different versions of the truth. Within an adversary system, the party who asserts the existence of a fact

¹³ ibid s 98.

¹⁴ cf ibid s 135.

¹⁵ See, eg, J Thayer, "The present and future of the law of evidence" (1898) 12 Harv L Rev 71.

¹⁶ See, eg, T Gallanis, "The rise of modern evidence law" (1999) 84 *Iowa L Rev* 499; S Landsman, "The rise of the contentious spirit: adversary procedure in eighteenth century England" (1990) 75 *Cornell L Rev* 497.

which another party disputes ordinarily bears the burden of its proof. The question for the tribunal of fact is not the abstract question of whether the fact exists but the more concrete question of whether the tribunal is satisfied at the conclusion of the contest that the fact has been proved to the requisite standard. The requisite standard of proof in a civil proceeding is traditionally expressed as being "on the balance of probabilities".

Expression of the standard of proof in a civil proceeding as satisfaction on the balance of probabilities is an acknowledgement that the judgment to be made by the tribunal of fact is inevitably to be made under conditions of uncertainty. Unless we were there, and even if we were, we can perhaps never be absolutely certain that an historical event occurred.

Satisfaction on the balance of probabilities, however, has not been equated with mere satisfaction as to the balance of probabilities. While there are many concrete examples in the case law,¹⁷ two hypothetical examples derived from academic literature best illustrate that point.¹⁸ One example is of a sports stadium that holds 1,000 people and is full. There is a turnstile and there is a hole in the fence. The counter on which shows that 499 people have paid to enter, meaning that 501 of the people sitting in the stadium must have slipped through the fence. Can the owner of the stadium recover the turnstile price as damages for trespass against a person sitting in the stadium chosen at random on the basis that there is a 50.1% chance that that person did not pay? The other example is of a town in which there are just two bus companies. The Blue Bus Co has 95% of the buses. The Red Bus Co has the other 5%. The evidence shows only that the plaintiff was knocked down at night by a speeding bus and nobody saw the colour. Can the plaintiff obtain damages from the Blue Bus Co simply on the basis that there is a 95% chance that the bus was blue? The answer in both cases has been generally thought to be "no".

Theoretically, our legal system could have taken a different approach to fact finding and a correspondingly different approach to the imposition of liability. We could have accepted an entirely probabilistic approach to finding facts in issue and could have adjusted liability to reflect the probabilities. On the basis that there is a 50.1% chance that that person did not pay, we could, for example, have imposed liability in damages for

¹⁷ See, eg, West v Government Insurance Office (NSW) (1981) 148 CLR 62.

¹⁸ See R Eggleston, "Focusing on the defendant" (1987) 61 *ALJ* 58, referring to L Cohen, *The probable and the provable*, Clarendon Press, 1977, p 75; and G Williams, "The mathematics of proof: part I" [1979] *Crim L Rev* 297 at 304.

trespass assessed at 50.1% of the turnstile price, on any person chosen at random in the stadium. On the basis that the split reflects the probability of each being responsible for the bus that was negligently driven, we could have held the Blue Bus Co liable for 95% of the damage sustained by the plaintiff knocked down by a bus and held the Red Bus Co liable for the other 5%. The approach we have taken, however, is all or nothing. We treat past events, the occurrence of which is uncertain, as having either happened or not happened. We force ourselves to decide one way or the other and we impose or decline to impose liability according to the outcome of that binary decision. Whatever its underlying probability, a disputed fact once found is a fact which is taken to exist for the purpose of resolving the legal rights or liabilities in contest in the proceeding. The fact once found is treated as certain for that purpose even though the existence of the fact remains uncertain outside the scope of the proceeding. But the process is not entirely linear. The certainty attributed to found facts loops back to have consequences in practice for the way evidence is evaluated to find them.

Quite what is involved in the notion of satisfaction on the balance of probabilities was spelt out by Dixon J in *Briginshaw v Briginshaw*,¹⁹ one of the most frequently cited and persistently misunderstood decisions in Australian legal history. The explanation was as follows:

The truth is that, when the law requires the proof of any fact, the tribunal must feel an actual persuasion of its occurrence or existence before it can be found. It cannot be found as a result of a mere mechanical comparison of probabilities independently of any belief in its reality. No doubt an opinion that a state of facts exists may be held according to indefinite gradations of certainty ... Except upon criminal issues to be proved by the prosecution, it is enough that the affirmative of an allegation is made out to the reasonable satisfaction of the tribunal. But reasonable satisfaction is not a state of mind that is attained or established independently of the nature and consequence of the fact or facts to be proved. The seriousness of an allegation made, the inherent unlikelihood of an occurrence of a given description, or the gravity of the consequences flowing from a particular finding are considerations which must affect the answer to the question whether the issue has been proved to the reasonable satisfaction of the tribunal ... Everyone must feel that, when, for instance, the issue is on which of two dates an admitted occurrence took place, a satisfactory conclusion may be reached on materials of a kind that would not satisfy any sound and prudent judgment if the question was whether some act had been done involving grave moral delinquency ... This does not mean that some standard of persuasion is fixed intermediate between the satisfaction beyond reasonable doubt required upon a criminal inquest and the reasonable satisfaction which in a civil issue may, not must, be based on a preponderance of probability. It means that the nature of the issue necessarily affects the process by which reasonable satisfaction is attained.

What Dixon J was saying in *Briginshaw* was that satisfaction on the balance of probabilities involves the formation under conditions of acknowledged uncertainty of a subjective belief. The requisite belief is an "actual persuasion" that the fact in issue actually exists — that a past event the occurrence of which is uncertain and is disputed did indeed occur. Satisfaction "beyond reasonable doubt", the universally accepted expression of the requisite standard of proof for a fact asserted by the prosecution in a criminal proceeding, is similar in that it is subjective belief and different only in that it is belief that must be held with greater subjective conviction.

The suggestion has been made that the "actual persuasion" of the existence of a fact in issue to which Dixon J referred in *Briginshaw* has a somatic component in that it can be related to activity in the region of the pre-frontal cortex of the brain that is associated with emotion as well as with activity in the region that is more classically associated with reason, deliberation and judgment.²⁰ More profound neurobiological insights into the process of fact finding will possibly emerge as expansion of the frontiers of neuroscience increases our understanding of processes of reasoning more generally.

In the meantime, our understanding of the cognitive processes involved in evaluating evidence and finding facts has been increasing through advances in behavioural science which have occurred in recent years, particularly those building on the pioneering work of Daniel Kahneman and Amos Tversky in the 1970s on judgment under uncertainty.²¹ Humans it seems, whether judges or jurors, are not particularly good at estimating probabilities. Tasked with forming a judgment as to the likelihood of the existence of a fact on the basis of incomplete information of uncertain

²⁰ H Bennett and G Broe, "The civil standard of proof and the 'test' in *Briginshaw*: is there a neurobiological basis to being 'comfortably satisfied'?" (2012) 86 ALJ 258. See also L Capraro, "The juridical role of emotions in the decisional process of popular juries" in M Freeman (ed), *Law and neuroscience: current legal issues*, Vol 13, Oxford University Press, 2011, p 407.

²¹ A Tversky and D Kahneman, "Judgment under uncertainty: heuristics and biases" (1974) 185 *Science* 1124.

veracity, we all have an innate tendency to adopt rules of thumb or "heuristics" which work well-enough in most situations, but which can lead in other situations to systematic and predictable errors or "biases".

The present utility of focusing on the explanation of the process of fact finding contained in Briginshaw, is that the Briginshaw explanation provides a bridge between those developing fields of biological and behavioural science and orthodox legal theory. When acknowledgement of the inherent uncertainty of the existence of a fact that is in issue is combined with acknowledgement of the inherent subjectivity of the process of finding that fact, scope emerges within the confines of accepted legal analysis for conceiving of at least some of the rules of evidence as measures serving a function of compensating for, or mitigating difficulties faced by, a tribunal of fact attempting to weigh some types of logically probative evidence. What emerges is the potential for conceiving of the existence and application of at least some rules of evidence as methods for correcting and improving the making of judgments of fact under conditions of uncertainty within the context of an adversary system - for conceiving of rules which Dixon sardonically described as archaic rules impeding a court's knowledge of the facts, as measures, which to the contrary, might serve to align the court's perception of what is likely to have occurred more closely with an objective (Bayesian) assessment of what probably occurred. At the very least, what emerges from an appreciation of the Briginshaw explanation is the capacity for behavioural science to contribute to the evaluation and improvement of the statement and application of existing rules.

The capacity for behavioural science to explain and critique some of the rules of evidence inherited from the tradition of the common law is the subject of a book entitled *The psychological foundations of evidence law*, published in the United States in 2016 and authored by Professor Michael Saks of Arizona State University and Professor Barbara Spellman of the University of Virginia, each of whom is a lawyer with a doctorate in psychology.²² "When creating a rule of evidence", the authors suggest, "the rulemakers often, and unavoidably, must act as applied psychologists. The rules of evidence reflect the rulemakers' understanding — correct or incorrect — of the psychological processes affecting witnesses and the capabilities of factfinders."²³

²² M Saks and B Spellman, *The psychological foundations of evidence law*, 1st edn, New York University Press, 2016.

²³ ibid at p 1.

They continue:24

If we ask why we have the rules of evidence we have rather than other rules, a large part of the answer will be that they take into account the cognitive machinery and psychological processes possessed by witnesses and factfinders — or at least those processes as they are perceived by the rulemakers. The premises on which many of the rules of evidence are constructed, and the procedures in which they are embedded, are in large part a product of the rulemakers' beliefs about human psychology: beliefs about the way that people receive, store, and retrieve information, about how people make judgments and draw inferences from verbal and other reports about objects and events in social contexts, and about the organization and operation of the court as well as the larger society. Different underlying beliefs would have led to different rules than the ones we have.

After analysing in some detail the law governing the adducing and admissibility of evidence that currently applies in federal courts in the United States, the authors conclude some 200 pages later:²⁵

Some of these choices have been right, some wrong. Some are headed in the right direction but are too difficult to apply, or they expect too much of the human mind, or have not yet found the right technique to engage what the mind can do. Empirical evidence about the best ways to manage and use trial evidence will continue to grow, and the law will have increasing resources to draw from regarding how best to accomplish its purposes.

Much closer to home, the Royal Commission into Institutional Responses to Child Sexual Abuse, chaired by McLellan J, has in the last couple of years commissioned and published the results of research including clinical trials by psychologists evaluating, amongst other things, how evidence is adduced from complainants in sexual abuse cases²⁶ and jury reasoning in joint and separate trials.²⁷

²⁴ ibid p 2.

²⁵ ibid p 241.

²⁶ See M Powell et al, "An evaluation of how evidence is elicited from complainants of child sexual abuse", Research Report, Royal Commission into Institutional Responses to Child Sexual Abuse, 2016.

²⁷ See J Goodman-Delahunty, A Cossins and N Martschuk, "Jury reasoning in joint and separate trials of institutional child sexual abuse: an empirical study", Research Report, Royal Commission into Institutional Responses to Child Sexual Abuse, 2016.

These are quite recent developments. It would be wrong to attempt to pre-empt them, and foolish to attempt to predict at this stage where they might lead.

Having started with reference to Sir Owen Dixon, arguably the greatest exponent of that strand of the tradition of the common law which emphasises the importance of "strict logic and high technique",²⁸ I will conclude with reference to Oliver Wendell Holmes, indisputably the greatest exponent of the complementary strand of the common law which emphasises the importance of practical contemporary decision-making within a broad historical context. The difference between the two strands to some extent reflects the epistemological divide between empiricism and rationalism apparent even at the time of Bacon. Caricaturising the protagonists, Bacon is reputed to have said: "Empiricists are like ants; they collect and put to use; but rationalists are like spiders; they spin threads out of themselves".²⁹

The theme Holmes introduced in 1881 in his book *The common law* through the aphorism "[t]he life of the law has not been logic: it has been experience"³⁰ he developed in an article published in 1897 titled "The path of the law". Referring to the study of law, Holmes then said, in a passage with which Dixon no doubt became familiar and with which it is difficult to think that Dixon would entirely disagree:³¹

History must be a part of the study, because without it we cannot know the precise scope of rules which it is our business to know. It is a part of the rational study, because it is the first step toward an enlightened scepticism, that is, towards a deliberate reconsideration of the worth of those rules. When you get the dragon out of his cave on to the plain and in the daylight, you can count his teeth and claws, and see just what is his strength. But to get him out is only the first step. The next is either to kill him, or to tame him and make him a useful animal. For the rational study of the law the black-letter man may be the man of the present, but the man of the future is the man of statistics and the master of economics.

The future is now with us. Holmes's "black-letter man" is a man of the past. The women and men of the present are masters of statistics, of economics and more broadly of the behavioural and biological sciences. It is they who

²⁸ O Dixon, "Concerning judicial method" in Judge Woinarski (ed), Jesting Pilate, Law Book Co, 1965, p 153.

²⁹ Quoted in J Cottingham, The rationalists, 1st edn, Oxford University Press, 1998, pp 1–2.

³⁰ O Holmes, The common law, MacMillan, 1968, p 5.

³¹ O Holmes, "The path of the law" (1897) 10 Harv L Rev 457 at 469.

will shape the future of the laws of evidence. With that, they will shape the future of the adversary process; and with that, they will contribute to providing our legal system's best contemporary answer to Pilate's eternal question.