

PROBABILITIES AND PROOF

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If A proves that B has tossed a coin a certain number of times, the result of each toss being unknown to A, and the issue for the jury being whether any one or more of the tosses resulted in a head, is there evidence on which a jury could find in favour of A? If so, how many tosses must be proved to justify a finding in A's favour?

To questions of this kind, the law provides an answer only in general terms. Moreover, judges do not agree about the form in which the answer should be expressed. The purpose of this article is to examine the answers which have been given in order to see whether they can be reconciled with each other, and whether they are capable of being expressed in a form which does not admit of differing interpretations. In order to introduce the subject in lawyers' language, we may quote what was said by Denning L.J. (as he then was) in *Bater v. Bater*:¹

As Best C.J. and many other great judges have said, "in proportion as the crime is enormous, so ought the proof to be clear". So also in civil cases, the case may be proved by a preponderance of probability but there may be degrees of probability within that standard. The degree depends on the subject-matter.

Later in the same judgment His Lordship said:

So the phrase "reasonable doubt" takes the matter no further. It does not say that the degree of probability must be as high as 99 *per cent.* or as low as 51 *per cent.* The degree required must depend on the mind of the reasonable and just man who is considering the particular subject-matter. In some cases 51 *per cent.* would be enough, but not in others. When this is realized, the phrase "reasonable doubt" can be used just as aptly in a civil case or a divorce case as in a criminal case²

We shall examine at a later stage how far this approach to the relationship of civil and criminal standards of proof represents the Australian position. We must first discuss the standards of probability involved in the concept of a range of probability between 51 *per centum* and 99 *per centum* or, more completely, between 0 and 100 *per centum*.

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¹ [1951] P. 35. 37.

² *Ibid.*

Probabilities may be expressed as a percentage, as in the above passage, or as odds (ten to one on, or six to four against), or as a fraction or decimal, but however they are expressed they measure the proportion which favourable chances and unfavourable chances bear to each other or to the total number of chances involved. If a coin is tossed once, there is one chance of a head and one of a tail and these (in the absence of psycho-kinesis or of any peculiarity in the coin) are equal. The chances of a head may therefore be expressed as 'even money', 50 *per centum* or $\frac{1}{2}$ or $\cdot 5$. The chances of two heads in two tosses are the product of the chances on each toss, and this can be calculated by the multiplication of the fraction or decimal expression of the probability. Thus the probability of getting two heads in two tosses is $\cdot 5 \times \cdot 5 = \cdot 25$ or 25 *per centum*, and the odds against are three to one. There are, in fact, four available combinations (2H, H + T, T + H, and 2T) and of these only one is favourable. The probability of three successive heads is $\cdot 5^3$ and of N successive heads is $\cdot 5^N$. The notation of probabilities by fractions or decimals is the most convenient for calculation but other modes of expression are used hereafter where it seems more convenient to do so. In the fractional or decimal scale, the maximum probability, which is certainty (no unfavourable chances) is 1, and the minimum, or impossibility (no favourable chances) is 0.

In order to enable the reader to test his own reactions to the questions of probability posed from time to time in this article, it is convenient to set out the probabilities of obtaining successive heads in any given number of tosses in the form of a table.

Number of tosses

1	2	3	4	5	6	7	8	9	10	11	12
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{32}$	$\frac{1}{64}$	$\frac{1}{128}$	$\frac{1}{256}$	$\frac{1}{512}$	$\frac{1}{1024}$	$\frac{1}{2048}$	$\frac{1}{4096}$

It will be realized that the probability of not getting any head is the same as that of getting all tails, and so the probability of one head turning up in a series of tosses is ascertained by deducting from 1 the probability of getting all tails, since the probabilities of all possible results must add up to 1.

In order to get a realistic picture of the probability of 51 *per centum* referred to by Lord Denning, we can imagine a bag containing 100 marbles, of which 51 are black and 49 are white. The probability of drawing a black marble in one draw is 51 *per centum* and of a white one 49 *per centum*.

Sometimes the probabilities involved in determining an issue of fact in litigation can be expressed mathematically, but in the great

majority of cases there is no material available upon which a mathematical expression of the probabilities can be based. But it is useful in considering some of the problems to test them by reference to examples of known probabilities.

Questions of probability may arise at various stages of the trial, and some of these will be discussed before concentrating on the two questions, 'Is there evidence on which a jury could find?' and 'Ought the jury to make such a finding on the evidence?' These questions will be discussed as they arise in trials with a jury, but a judge sitting alone will ordinarily have to give himself the same directions as to standards of proof as he would give to a jury in a similar case.

The stages of the trial at which questions of probability may arise are, when a question of admissibility of evidence has to be decided, when a defendant submits that the plaintiff has failed to establish a *prima facie* case, when the jury has to be directed as to standards of proof, when the jury has to determine questions of fact, and when the jury has to assess the damages. It will be obvious that in many cases similar questions arise at various stages of the trial and it is impossible to make a rigid separation in the discussion of these questions.

Our primary concern is with standards of proof in relation to facts, that is to say, with the proper directions to be given to the jury, and with the function which the jury has to perform in arriving at a decision, and it is convenient in considering these questions to deal mainly with cases in which the evidence is uncontradicted, and in which the question is, what finding is the jury at liberty to make on that evidence. But, of course, the inherent probability or improbability of the story told by a witness may be used as an aid in judging the truthfulness of his testimony. For this reason counsel sometimes devote considerable time in cross-examination to eliciting the surrounding details of an incident described by a witness, on the lookout for any inherent improbability which may render the evidence less credible. Thus in the *Tichborne Case*, when Bogle, the negro servant, testified that he had seen Sir Roger's bare arm on three occasions, and that there were no tattoo marks on it, Hawkins Q.C. succeeded in inducing Bogle to say that each occasion occurred at about ten past eleven in the morning, and that on each occasion Roger was rubbing his arm as if he had a flea on it. He then disposed of the witness by remarking that it 'must have been a very punctual old flea'.³ Although it is less confusing to discuss questions of prob-

³ Harris, *Illustrations in Advocacy* (3rd ed. 1888) 239. But a perusal of the cross-examination as there reported gives the impression that Hawkins could extract such improbabilities from almost any witness. It is said that Hawkins and Giffard (who was one of the counsel for the claimant at one stage) agreed that if they had been

ability in relation to cases in which there is no conflict of evidence, the same considerations of probability or improbability may be decisive in choosing between conflicting versions of the facts.

As we have said, the first stage at which questions of probability arise is when questions of admissibility have to be determined.

In determining whether evidence is admissible, the first question to be asked is whether it is relevant to any issue in the case. If it is relevant it is admissible unless excluded by some rule such as that which forbids hearsay, or the proof of prior convictions against an accused person whose character is not in issue. The evidence tendered may, of course, be direct testimony as to a fact in issue (for example, in a murder case, evidence of a bystander that he saw the accused stab the person whose death has given rise to the charge), or it may be 'circumstantial evidence'.

The admissibility of circumstantial evidence will depend on whether it tends to prove or disprove a fact in issue. If it does neither, it is, generally speaking, irrelevant. This may be expressed in terms of probabilities.

The class of acts and occurrences that may be considered includes circumstances whose relation to the fact in issue consists in the probability or increased probability, judged rationally upon common experience, that they would not be found unless the fact to be proved also existed.⁴

Of course, it will rarely be possible to show the actual degree of probability involved, as a mathematical quantity, but in an appropriate case a rational judgment upon common experience may include a consideration of the numerical chances. Let us suppose that B is known to have tossed a coin. The fact in issue is whether it was heads or tails. It is proposed to prove that prior to the toss in question, B had tossed eleven heads in succession and it is said that the odds against tossing twelve heads in succession are 4,095 to 1, and that accordingly proof of the result of the previous tosses will show the improbability of a head turning up on the twelfth toss. The evidence would, however, be inadmissible. The probability of a head on the twelfth throw is still only .5. To prove that B had already tossed eleven heads in succession would merely show that he had already achieved a performance against which the odds were 2,047 to 1, or of which the probability was $.5^{11}$, and would not throw any light on the probability or improbability of his having thrown a head on the twelfth toss.

together they would have won the case for the Claimant: Woodruff, *The Tichborne Claimant* (1957) 171.

⁴ *Martin v. Osborne* (1936) 55 C.L.R. 367, 375 per Dixon J.

On the other hand, if the question was whether B had tossed a head in any throw on that day, evidence of the number of tosses would be relevant, since the more tosses he had, the greater would be the probability of his having tossed a head on at least one occasion.

The question of admissibility, and accordingly of relevance, is for the judge and not for the jury. Ordinarily, he will have to use his experience of every day affairs to determine whether the fact sought to be proved is capable of throwing any light on the probabilities in relation to the facts in issue, since, as we have said, it is rarely possible to make a mathematical analysis.⁵

Sometimes a party tendering circumstantial evidence seeks to establish facts from which the fact in issue can be inferred as a logical deduction. But in other cases what is sought is to establish that the probability is so high that the tribunal of fact ought to infer the existence of the fact in issue. In the first class of case the argument may be expressed in the form of a syllogism, and if the premisses are accepted the conclusion follows inevitably. But in the second class of case there is no such inevitability; the party seeking to prove the fact relies only on the improbability of any alternative hypothesis put forward to explain the proved facts.⁶ Many examples of this approach are to be found in cases concerning the admissibility of evidence of 'similar facts'. Thus in *Makin v. Attorney-General for New South Wales*⁷ the two accused were charged with the murder of a child. It was held that it was admissible to prove that they had 'adopted' a number of other infants from their respective mothers, receiving small sums of money for their upkeep, that the infants had not since been heard of, and that the bodies of eleven infants had been found buried in premises occupied by the accused. Such evidence was relevant to show that the accused had deliberately caused the child's death. The admissibility of evidence of this kind is complicated by the rule excluding, in criminal cases, evidence of the bad character or criminal tendencies of the accused, and the subject is too complex for full treatment here. The admissibility of such evidence may depend upon the degree of probability or improbability established by the evidence tendered. In *Martin v. Osborne*, Evatt J. thought that evidence of similar facts was only admissible where it was such as to render it 'very highly improbable that on the occasion in question the performance by the party concerned of the further act in issue would not accompany his proved acts',⁸ but logically there is no reason why,

⁵ Cf. *Flannery v. Waterford & Limerick Railway Company* [1877] I.R. 11 C.L. 30, 37.

⁶ *Martin v. Osborne* (1936) 55 C.L.R. 367, 381, 385 per Evatt J.

⁷ [1894] A.C. 57. See also *The Queen v. Grills* (1956) 73 W.N. (N.S.W.) 303 (a case of repeated poisoning by thallium).

⁸ (1936) 55 C.L.R. 367, 392. Cf. the statement of the rule by Dixon J. in the same case at 376.

in a civil case, the evidence should not be admitted even though it supports only a weak inference, unless it be that such evidence is to be excluded where its probative force is weak, in order to avoid the possibility of multiplying issues of fact. It is of course clear that the degree of probability required to sustain a conviction for serious crime is higher than that required to establish an ordinary civil claim.

In the inculcation of an accused person the evidentiary circumstances must bear no other reasonable explanation. This means that, according to the common course of human affairs, the degree of probability that the occurrence of the facts proved would be accompanied by the fact to be proved is so high that the contrary cannot reasonably be supposed.⁹

When the plaintiff's evidence is complete, and he has closed his case, the question may arise whether there is a case to answer. There is clearly a distinction between the degree of proof required to establish a *prima facie* case, and that required to enable a finding of fact to be made. Thus it is established that a magistrate may hold that there is a 'case to answer' and yet, when the defendant calls no evidence, may announce that he is not satisfied beyond reasonable doubt of the guilt of the defendant.¹⁰ Equally, the judge may decide that there is evidence fit to be considered by a jury in a civil case, but the jury may find for the defendant even if he calls no evidence.

What degree of probability is required to establish a *prima facie* case? It is sufficient that the plaintiff has shown a balance or preponderance of probabilities in his favour. In the example given earlier, if B were the defendant, evidence that he had tossed the coin twice would, it is submitted, be sufficient to call on him to say whether in fact a head had turned up. As we have seen, the odds against two heads or two tails in two tosses are three to one. A mere scintilla of evidence is not enough,¹¹ but where

⁹ *Ibid.* 375 per Dixon J. See also *Morgan v. Babcock and Wilcox* (1929) 43 C.L.R. 163, 173.

¹⁰ *May v. O'Sullivan* (1955) 92 C.L.R. 654. Even if there is evidence which technically provides a case to answer, the magistrate (or a jury) can decide to acquit at the end of the Crown case without calling on the accused: *Benney v. Dowling* [1959] V.R. 237.

¹¹ Formerly it used to be held, that if there were what was called a scintilla of evidence in support of a case, the judge was bound to leave it to the jury. But a course of recent decisions—most of which are referred to in the case of *Ryder v. Wombwell* (1868) L.R. 4 Ex. 32, has established a more reasonable rule, viz. that in every case, before the evidence is left to the jury, there is a preliminary question for the judge, not whether there is literally no evidence, but whether there is any upon which a jury can properly proceed to find a verdict for the party producing it, upon whom the onus of proof is imposed. *Giblin v. McMullen* (1868) 5 Moo. P.C. (N.S.) 434, 458, per Lord Chelmsford. See also *Hiddle v. National Fire and Marine Insurance Company of New Zealand* [1896] A.C. 372.

all the facts are peculiarly within the knowledge of the defence, although the plaintiffs are not absolved from the obligation of establishing a *prima facie* case, the doctrine of the scintilla is applied somewhat indulgently, and comparatively slight evidence may be regarded as calling for an explanation.¹²

The fact that the truth of a party's allegation lies peculiarly within the knowledge of his opponent does not alter the burden of proof,¹³ but once a *prima facie* case has been made out, the failure of the defendant to give evidence in a case in which the facts are within his knowledge may increase the probabilities in favour of the inference which the plaintiff seeks to draw.¹⁴ This principle applies equally to criminal cases¹⁵ and, apart from statutory provisions, it is permissible for the trial judge to comment on the failure of the accused to deny suspicious circumstances on oath,¹⁶ but the position has been regulated by statute¹⁷ and even where it is not so regulated, the discretion of the judge should be exercised with great care.¹⁸

Where the plaintiff relies on circumstantial evidence to establish a fact in issue, and gives evidence of facts which have a bearing on the probabilities of the fact in issue having occurred, the question arises whether the judge should leave the case to the jury only if he thinks the evidence would, if accepted, render the plaintiff's case more probable than not (*i.e.* better than .5) or whether he should leave the case to the jury if he considers that the jury, relying on their knowledge and experience of human affairs, could reasonably consider that the probabilities exceed .5. As the assessment of probabilities is essentially a matter for the jury, it would appear that the latter view is the logical one, and it is supported by high authority. In *Cofield v. Waterloo Case Co. Ltd.*,¹⁹ Isaacs J. (with whom Rich J. agreed) said:

¹² *Parker v. Paton* (1941) 41 S.R. (N.S.W.) 237, 243.

¹³ Despite what was said by the Full Court of New South Wales in *Bellia v. Colonial Sugar Refining Company Limited* [1961] S.R. (N.S.W.) 401, 407. See *Rex v. Burdett* (1820) 4 B. & Ald. 95, 140; *Ex parte Ferguson; re Alexander* (1945) 45 S.R. (N.S.W.) 64, 67; and the cases cited in the next footnote.

¹⁴ *Tozer Kemsley and Millbourn (Australasia) Pty Ltd v. Collier's Interstate Transport Service Ltd* (1955) 94 C.L.R. 384, 403, *per* Fullagar J.; *Black v. Tung* [1953] V.L.R. 629, 634; *Waddell v. Ware* [1957] V.R. 43; *Jones v. Dunkel* (1959) 101 C.L.R. 298. *Cf. Hook v. Stevenson* (1935) 9 A.L.J.R. 127.

¹⁵ *Graves v. Roth* [1904] 29 V.L.R. 841, 845; *Morgan v. Babcock and Wilcox* (1929) 43 C.L.R. 163, 178.

¹⁶ *Kops v. The Queen* [1894] A.C. 650.

¹⁷ See Crimes Act 1958 s. 399; *Cf. Crimes Act 1900 s. 407* (N.S.W.).

¹⁸ *Waugh v. The King* [1950] A.C. 203, 211, 212.

¹⁹ (1924) 34 C.L.R. 363, 375 citing and relying on *Canadian Pacific Railway Company v. Pyne* (1919) 48 Dom. L.R. 243 (Privy Council); *Jones v. Canadian Pacific Railway Company* (1913) 29 T.L.R. 773 (Privy Council); *Williams v. G.W.R. Company* (1874) L.R. 9 Ex. 157; *Kerr v. Ayr Steam Shipping Company* [1915] A.C. 217; *Craig v. Corporation of Glasgow* (1919) 35 T.L.R. 214 (House of Lords). In *Pyne's case* (1919) 48 Dom. L.R. 243, 246 their Lordships said: 'It was within the province of the jury to estimate the comparative degrees of probability ascribable to the rival explanations

A Court has always the function of saying whether a given result is "consistent" with two or more suggested causes. But whether it is "equally consistent" is dependent on complex considerations of human life and experience, and in all but the clearest cases—that is, where the Court can see that no jury applying their knowledge and experience as citizens reasonably could think otherwise—the question must be one for the determination of the jury.

Nevertheless, it must be conceded that there are many cases in which an appellate court has held that there was no evidence to go to the jury on the ground that the facts raised no probability in favour of the plaintiff.²⁰ These cases often exhibit the characteristic of demonstrating that it is possible for some members of appellate tribunals to conclude that there is no evidence on which the jury or other inferior tribunal of fact, as reasonable men, could find in favour of the plaintiff, while other (presumably reasonable) members of the same appellate tribunal assert that they would have reached the same conclusion as the jury judge or arbitrator in the tribunal below.²¹

We have said that the test for determining whether there is a case to answer is whether the judge thinks that reasonable men could consider that the probabilities in favour of the plaintiff exceed .5. He may leave to the jury a case in which he himself thinks that the probabilities favour the defendant at that stage, and since the opinion of the jury is not sought until the end of the case, they may in some cases treat the failure of the defendant to call evidence as sufficient to turn the scale in favour of the plaintiff even though they might have agreed with the judge that the plaintiff's evidence considered by itself would not have shown a balance of probability in his favour. But as the jury are not required to give reasons for their findings, it will not be known whether they have acted in this way, or whether they would have considered the plaintiff's evidence sufficient without reinforcement.

advanced by the parties . . .', but neither *Jones*' case (1913) 29 T.L.R. 773 nor *Craig's* case (1919) 35 T.L.R. 214 goes the same distance, as in each case their Lordships themselves thought the probabilities were in favour of the plaintiff.

²⁰ *Luxton v. Vines* (1952) 85 C.L.R. 352; *Marshall v. Bennett and Wood Ltd* 76 W.N. (N.S.W.) 436. In each case the appellate court, or a majority thereof, assumed the function of determining the degree of probability to be attributed to the competing hypotheses. 'The circumstances give rise to nothing but conflicting conjectures of equal degrees of probability.' *Luxton v. Vines* (1952) 85 C.L.R. 352, 360.

²¹ See the remarks of Lord Shaw in *Kerr v. Ayr Steam Shipping Company Ltd* [1915] A.C. 217, 232. In this case it was the minority who thought that there was no evidence on which a reasonable man could find for the pursuer. In *Owners of Ship Swansea Vale v. Rice* [1912] A.C. 238, 239 *per* Lord Loreburn L.C. it was said: 'What you want is to weigh probabilities, if there be proof of facts sufficient to enable you to have some foothold or ground for comparing and balancing probabilities at their respective value, the one against the other.' *Jones v. Dunkel* (1959) 101 C.L.R. 298 illustrates the two points of view: Dixon C.J. and Taylor J. thought there was no evidence from which an inference could be drawn, but the majority thought otherwise. (*E.g.* Dixon C.J. 304-305; Windeyer J. 319, 320). This case is further discussed below.

Conversely, the judge may leave the case to the jury, considering that on the plaintiff's evidence the probabilities are in his favour; yet the jury may find for the defendant, either because they do not share the judge's view of the probabilities, or because, although they consider that the probabilities exceed .5, they do not regard the degree of probability established as high enough to justify the finding they are asked to make. They may, of course, simply disbelieve the plaintiff's evidence.

We can now turn from the consideration of the degree of probability requisite to establish a *prima facie* case, to the degree of probability required to enable a verdict to be given in favour of the party on whom the burden of proof rests. Of course, if the probabilities are known, and are known to be less than .5, or exactly equal to .5, the plaintiff fails to discharge the burden. The question is, how far above .5 must they be to enable a finding to be made in his favour? There are three classes of case to be considered, namely, criminal, civil and matrimonial cases. There is also one exceptional case, that of interference with the custody of a child, which calls for separate treatment.

Before discussing the terms in which various attempts to define the criminal and civil standards of proof have been expressed, it is necessary to make some preliminary observations. In the first place, as we have seen, the traditional statement of the distinction does not mean that a criminal case must be established by 'irrefragable inference'.²² The prosecution does not have to exclude every hypothesis logically consistent with innocence, but only every 'reasonable explanation'. That is to say, if an hypothesis put forward to account for the proved facts is in itself extremely improbable, the jury may reject such hypothesis in the absence of any evidence supporting it.

If the evidence is so strong against a man as to leave only a remote possibility in his favour, which can be dismissed with the sentence "of course it is possible, but not in the least probable", the case is proved beyond reasonable doubt but nothing short of that will suffice.²³

Thus, in both civil and criminal cases the question may be whether the degree of probability established by the facts proved is high enough to warrant a finding against the defendant or the accused. In the nature of human affairs, however, no accurate statement of the degree of probability required is possible, so that judges and juries are left to apply various verbal formulations of the nature of their task. In many cases, judges who have loyally attempted to apply the directions

²² *Rex v. Burdett* (1820) 4 B. & Ald. 95, 121 *per* Best J.

²³ *Miller v. Minister of Pensions* (1947) 63 T.L.R. 474 *per* Denning J. See also *Hornal v. Neuberger Products Ltd* [1957] 1 Q.B. 247, 262 *per* Hodson L.J.: 'the measure of probability is still involved in the question of proof beyond reasonable doubt'.

which they are bound by higher authority to give themselves have been held to have misapplied the tests. As the operations of the jury in the jury-room are secret, one can only assume that they are at least as bewildered as the judges, but unless they add riders to their verdicts the bewilderment is rarely detected.²⁴

Another point which deserves preliminary discussion is the meaning of the word 'satisfied'. Let us suppose that a jury in a civil case is told that it can decide the case on a 'balance of probabilities' or on a 'preponderance of probabilities' and that they are also told that they must be 'satisfied' of certain facts, otherwise they must decide for the defendant. If by 'satisfied' is meant that they regard the probability as high enough for reasonable men to act upon in the class of case before them, they may find for the party who has the onus of proof without at the same time being convinced of the truth of the facts which they find to be proved. But if the term 'satisfied' means that they must have an actual conviction of the truth of those facts, a much higher standard of certainty is required. To develop further an earlier example, let us suppose that B is known to have tossed a coin a certain number of times. The question is whether any one or more of the tosses resulted in a head. The successive probabilities of not tossing a head are .5, .25, .125 and so on, or 'even money', 3 to 1 against, 7 to 1 against, and so on. How many times must B be proved to have tossed the coin before a jury would be 'satisfied' that he had tossed a head on at least one occasion? After seven tosses, the odds would be 127 to 1 in favour of at least one head, and one would suppose a jury in a civil case might properly consider the fact 'proved', yet it might well consider that it was a real possibility that B had tossed seven tails in succession. Of course, it is not suggested that odds of more than 100 to 1 should be accepted as a standard. There is no mathematical standard, and the above example is given merely to illustrate the proposition that there is a difference between considering that the probabilities are high enough to justify the finding of a fact, and being convinced of the truth of that fact. It may be further observed, that if 'satisfied' is interpreted in the second sense, as equivalent to 'convinced of the truth', it indicates a higher standard than the expression 'satisfied beyond reasonable doubt', since this expression implies that the jury may have doubts, but that unless they are such as 'reasonable men may reasonably entertain, and not the doubt of a weak or vacillating mind'²⁵ they should be disregarded.

In criminal cases, the standard for Australia is well settled. The

²⁴ See Norval Morris, 'Corpus Delicti and Circumstantial Evidence' (1952) 68 *Law Quarterly Review* 391, 396.

²⁵ *Emperor v. Shafti Ahmad* 31 Bom. L.R. 515. Cf. the statement of Denning J. in *Miller v. Minister of Pensions* (1947) 63 T.L.R. 474.

jury should be told that the burden of proof is on the prosecution and that they must be satisfied beyond reasonable doubt of the guilt of the accused. As we have seen, this does not mean that the jury must find the case proved by 'irrefragable inference' nor does it mean that the case must be proved beyond any possibility of a doubt.²⁶ It is highly unsafe, however, for trial judges to attempt to improve on the time honoured expression and I believe that most judges who have to direct juries in criminal cases are content to adopt the formula, reminding the jury of it from time to time during the summing up. Formerly, the expression 'moral certainty' was sometimes used but the term is now little used in the courts.²⁷

The difficulties arising from the attempt to explain to the jury what is meant by the term 'reasonable' in the expression 'reasonable doubt' appear to have been responsible for an attempt to discourage the use of the formula in England. It is not necessary for present purposes to trace the story fully, but the *Criminal Law Review* was able to comment in 1960 that the use of the traditional phrase 'would now appear to be fully restored to favour'.²⁸ The discussion in the English cases is of interest, however, as it bears on the question of standards of proof in divorce which is discussed below.

It is frequently said that in civil cases the jury are entitled to find the case proved on a balance of probabilities. In *Cooper v. Slade*²⁹ Willes J., one of the judges advising the House of Lords, said that 'in civil cases the preponderance of probability may constitute sufficient ground for a verdict' and cited a decision of the justices of the Common Pleas that the jury 'may found their verdict upon that which appears the most probable'³⁰ and in *Hollingham v. Head*³¹ the same learned judge cited with approval the following passage from Best:

There is a strong and marked difference as to the effect of evidence in civil and criminal proceedings. In the former, a mere preponderance of probability, due regard being had to the burden of proof, is sufficient basis of decision, but in the latter, especially when the offence charged

²⁶ See notes 22, 23, and 25 *supra*; Norval Morris *op. cit.* suggested that a higher standard might be required in respect of some aspects of a criminal case, but this depends on whether 'moral certainty' differs from 'satisfaction beyond reasonable doubt'.

²⁷ For a discussion of 'moral evidence' and 'moral certainty' see Wills, *Circumstantial Evidence* (7th ed. 1936) 6-10.

²⁸ [1960] *Criminal Law Review* 630, commenting on *Reg. v. Rice*. Despite the comment, trial judges seem to have taken some time to catch up with the restoration: see cases 2149, 2151, 2152, 2154, 2160 in [1961] *Current Law Year Book*. The history of the deviation may be traced in *Rex v. Kritz* [1950] 1 K.B. 82; *Reg. v. Summers* [1952] 1 All E.R. 1059; and *Reg. v. Hepworth and Fearnley* [1955] 2 Q.B. 600.

²⁹ (1858) 6 H.L.C. 746, 772.

³⁰ *Newis v. Lark* (1571) 2 Plowd. 403, 412.

³¹ (1858) 4 C.B. (N.S.) 388, 392.

amounts to treason or felony, a much higher degree of assurance is required.³²

In *Davis v. Bunn*,³³ Evatt J. dealing with the proper direction to be given to the jury in a case where the defendant decides not to call evidence, said

The charge may well add (1) that the merest balancing of probabilities in the plaintiff's favour is sufficient to satisfy the onus of proof, and (2) that, in the special circumstances of the case, the defendant's failure to call evidence may properly lead to certain inferences being drawn against him if he alone has had the opportunity of explaining the precise cause of the injury to the plaintiff.

Insofar as these statements imply that a jury need only be told that a probability exceeding .5, by however small a margin, will be sufficient to justify a finding in favour of the plaintiff, it would appear from other authority that such a direction would be insufficient. In *Briginshaw v. Briginshaw*³⁴ Dixon J. pointed out that

in civil proceedings 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.

Thus, in civil cases, no less than in criminal cases, the seriousness of the allegations will regulate the degree of probability which a jury or a judge should require before finding a fact proved, a proposition to which effect was given shortly afterwards in *Helton v. Allen*.³⁵ In that case the defendant was the residuary beneficiary under the will of a testatrix who died of strychnine poisoning. The defendant had been tried for her murder, and acquitted. Her next of kin took civil proceedings for the purpose of establishing that the defendant was disqualified from taking a benefit under the will by reason of the fact that he had murdered the deceased. This issue, although determined in the defendant's favour in the criminal proceedings, was still open for determination in the civil proceedings, as the parties were not the same. The High Court, while holding that an allegation of a crime made in civil proceedings need not be proved beyond reasonable

³² Best, *Principles of Evidence* (2nd ed. 1855) 14.

³³ (1936) 56 C.L.R. 246, 267.

³⁴ (1938) 60 C.L.R. 336, 362.

³⁵ (1940) 63 C.L.R. 691.

doubt,³⁶ nevertheless held that there must be a new trial because of the fact that the trial judge, in answer to a question by the jury, had in effect told them that they could be satisfied as to the facts if there was some preponderance of probability in the plaintiff's favour. This was a misdirection, as he should also have reminded them that where a serious charge was made they ought to require a higher standard than in matters of less moment.

It is clear, therefore, that it may be a misdirection to tell a jury in a civil case that a mere balance of probabilities is sufficient to justify a finding of fact. The jury should also be told that they must take into account the seriousness of the allegations made, and the consequences of their finding. Should they also be told that they must be satisfied that the plaintiff's allegations of fact are true? In *The King v. Parker*³⁷ Cussen J. said:

Now, I do not take it that in judicial inquiries you have to be satisfied to the point of a mathematical demonstration—as you require to be satisfied of the truth of a proposition of Euclid. All that is required is that the evidence is such as reasonable men would act on in their own serious affairs, and this is all that is intended I think, when juries are told that they “must be satisfied beyond any reasonable doubt” in criminal cases, or “must be satisfied” in civil cases.

Expressing this in terms of probabilities, it could be said that the jury must be satisfied that the probability of the fact alleged by the plaintiff being true is high enough, in their judgment, to justify them in treating the fact as established, in the same way as they would act on similar probabilities in their own serious affairs.

In *Briginshaw v. Briginshaw*³⁸ the question of standards of proof in civil cases was discussed at length by Dixon J., as he then was. After citing *Starkie's Law of Evidence*³⁹ and Professor Wigmore⁴⁰ he said:

It is evident that Professor *Wigmore* countenances as much flexibility in the statement and application of the civil requirement as did Mr *Starkie*. 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

³⁶ The decision in *Helton v. Allen* that an allegation of crime in a criminal case need not be proved beyond reasonable doubt was based on *Doe d. Devine v. Wilson* (1855) 10 Moo. P.C. 502. In *King v. Crowe* [1942] S.R. Qd. 288 and *Origliasso v. Vitale* [1952] S.R. Qd. 211 it was held by the Full Court of the Supreme Court of Queensland (Townley J. dissenting in the latter case) that the decision of the Privy Council in *Narayanan Chettyar v. Official Assignee of the High Court, Rangoon*, reported only in 39 Allahabad L.J. 683, required that the criminal standard be applied in such a case. The problem is discussed in a note in (1953) 26 *Australian Law Journal* 480. See also the comment of Dixon J. in *Hocking v. Bell* (1945) 71 C.L.R. 430, 500.

³⁷ [1912] V.L.R. 152, 160; affirmed: *Parker v. The King* (1912) 14 C.L.R. 681. This case is interesting on the probative value of fingerprint evidence.

³⁸ (1938) 60 C.L.R. 336. ³⁹ (1824).

⁴⁰ *Wigmore on Evidence* (2nd ed. 1923) v, s. 2498.

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; and this has led to attempts to define exactly the certainty required by the law for various purposes. Fortunately, however, at common law no third standard of persuasion was definitely developed. 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 consequences of the fact or facts to be proved.⁴¹

His Honour went on to point out that the seriousness of the allegation made, the inherent unlikelihood of the fact alleged, or the gravity of the consequences flowing from the finding are considerations to be taken into account, and dealt with the question whether proof beyond reasonable doubt is required where an allegation of crime is made in civil proceedings, referring to decided cases on these matters. He continued:

These illustrations show the good sense of Professor *Wigmore's* statement that, in civil cases, it should be enough to say that the extreme caution and the unusual positiveness of persuasion required in criminal cases do not obtain.⁴²

In *Luxton v. Vines*⁴³ Webb J., relying on Dixon J.'s statement of the rule, said that the question was whether the facts could have been 'such that the jury might have felt an actual persuasion that the injuries had been caused by the negligence of an unknown driver of a motor vehicle'. In *Holloway v. McFeeters*⁴⁴ Kitto J., in a dissenting judgment, said:

⁴¹ (1938) 60 C.L.R. 336, 361.

⁴² (1938) 60 C.L.R. 336, 362-363. In the third edition of his work Professor Wigmore revised the passage quoted by Dixon J. from s. 2498 of the second edition. In the third edition the passage reads: 'In civil cases the extreme caution and the unusual positiveness of persuasion required in criminal cases do not obtain. It is customary in this field to attempt to define the quality of persuasion necessary by an expression which unfortunately has no logical or conceptual correlation with the "beyond a reasonable doubt" of criminal cases; the phrase is that there must be a "preponderance of evidence" in favour of the demandant's proposition. Here too, moreover, this simple and suggestive phrase has not been allowed to suffice; and in many precedents sundry other phrases—"satisfied", "convinced" and the like—have been put forward as equivalents, and their propriety as a form of words discussed and sanctioned or disapproved, with much waste of judicial effort.' *Wigmore on Evidence* (3rd ed. 1940) ix, 325. The cases cited in the footnote indicate that in some American jurisdictions it has been held that where a 'preponderance of evidence' is considered sufficient it is a misdirection to direct the jury they must be 'satisfied' or 'convinced'. The phrase 'preponderance of evidence', as Professor Wigmore points out, is 'apt to lead the discussion close to the danger line of the fallacious quantitative or numerical theory of testimony'. *Ibid.* 334. This danger is at least lessened by using the phrase 'preponderance of probability', which also has the merit of being capable of logical and conceptual correlation with the criminal standard.

⁴³ (1952) 85 C.L.R. 352, 363. ⁴⁴ (1956) 94 C.L.R. 470, 488.

The jury were entitled to find for the plaintiff if they were reasonably satisfied of the facts constituting her case, and they might be so satisfied on any real balance of probabilities, slight though it might be. On the material before them, however, it seems to me that when all is said and done the true explanation of the collision was left wholly in the realm of conjecture. It provided them with no foundation that I can discern for reaching any state of mind which could properly be called a satisfaction.

In *Murray v. Murray*⁴⁵ Dixon C.J. said:

What the civil standard of proof requires is that the tribunal of fact, in this case the judge, shall be "satisfied" or "reasonably satisfied". The two expressions do not mean different things but as in other parts of the law the word "reasonably", which in its origin was concerned with the use of reason, makes its appearance without contributing much in meaning. However, its use as a qualifying adjective seems to relieve lawyers of a fear that too much unyielding logic may be employed. But the point is that the tribunal must be satisfied of the affirmative of the issue. The law goes on to say that he is at liberty to be satisfied on a balance of probabilities. It does not say that he is to balance probabilities and say which way they incline. If in the end he has no *opinion* as to what happened, well it is unfortunate but he is not "satisfied" and his speculative reactions to the imaginary behaviour of the metaphorical scales will not enable him to find the issue mechanically.⁴⁶

In *Tcaciuc v. Broken Hill Proprietary Co. Ltd*⁴⁷ the Full Court of the Supreme Court of New South Wales, after pointing out that the degree of probability required must be 'commensurate to the occasion and proportionate to the subject matter', concluded:

It thus appears that in a civil case based on negligence a jury should ordinarily be told that an affirmative view of the issues on behalf of the affirming party, usually the plaintiff, may be derived from a consideration of the preponderance of evidence, or as it is sometimes put, of the probabilities. . . . We will not deny that the truth is that standards of proof are impossible of precise and definitive distinction by mere words however technical the language used. All that can be said is that judges and jurors alike must be "satisfied" of the truth of allegations or denials of fact.

If it be true that standards of proof in civil actions cannot be defined, and that juries can be told no more than that they must be 'satisfied of the truth'⁴⁸ of the allegations, but that they may be so satisfied on a 'preponderance of probabilities' or a 'balance of probabilities', judges who have to direct juries can only adhere to these formulae and hope for the best. But unfortunately juries sometimes

⁴⁵ (1960) 33 A.L.J.R. 521, 524.

⁴⁶ Author's italics.

⁴⁷ [1962] S.R. (N.S.W.) 687, 694.

⁴⁸ As it seems to be generally agreed that a greater degree of certainty is requisite in criminal cases, a civil jury can presumably be 'satisfied' even if it has a 'reasonable doubt' of the truth of the allegation; but see n. 86 *infra*.

ask for further enlightenment and are not likely to be comforted by a statement that it is sufficient to say that in civil cases the extreme caution and the unusual positiveness of persuasion required in criminal cases do not obtain.⁴⁹ Clearly 'satisfaction' cannot be obtained on a mere 51 *per centum* probability if it requires a belief in the truth of the allegation. If a coin is tossed twice, few people would be prepared to form a belief, in the absence of knowledge of the results, that at least one toss resulted in a head; yet, as we have seen, the probability in favour of such a result is 75 *per centum* or three to one on. Nor would they be likely to have a persuasion of the truth of the allegation, even if this implies something less than belief. They might have an opinion that a head had turned up at least once, but opinions can be held with varying degrees of assurance, and a weak opinion would clearly be less than satisfaction. Moreover, if the probabilities are capable of being calculated with reasonable accuracy and there is no other evidence available to solve the problem the jury may well ask for a specific direction, to which the only possible answer is that they must fix their own standard having regard to the seriousness of the allegation and the consequences of their finding. It is suggested that the solution of these problems is not to be found in an attempt to define the intensity of *belief in the fact* which the jury must have, but that the jury must be told that it is for them to determine the degree of probability which in fact exists in favour of the affirmative, and also for them to determine, as reasonable men, whether that degree of probability is sufficiently strong for them to feel justified in acting on the basis that the fact is established, having regard to the relative seriousness of the consequences which flow from the finding. This comes back very much to what Cussen J. said in *The King v. Parker*.⁵⁰

Moreover, it is suggested that some such approach is necessary to reconcile the standard of proof required to warrant a finding of fact with the idea that the plaintiff is entitled to have his case left to the jury if the evidence is such that reasonable men might find a balance of probabilities in his favour. An analysis of some of the cases in which members of the High Court have disagreed as to whether there was a case to go to the jury does seem to suggest that the difference of opinion is not really due to a different view of the facts or the probabilities, but to a different approach to the standard required, even though the terms in which the standard is stated by majority and minority may be the same or very similar.

In *Davis v. Bunn*⁵¹ the defendant's van had swerved suddenly to the right and struck the plaintiff who was standing beside his motor car,

⁴⁹ Sec n. 42 *supra*.

⁵⁰ [1912] V.L.R. 152.

⁵¹ (1936) 56 C.L.R. 246.

which was stationary on its correct side of the road. The question in the case was primarily one of misdirection, and this aspect does not concern us here, but the following extracts from the judgment of Dixon J. relate to the problem of drawing inferences from unexplained facts:

But such unavoidable events are sufficiently unusual to raise a probability that the erratic course of the vehicle is to be accounted for by some failure in due care, whether in its management on the roadway or in the maintenance of its mechanical efficiency. In the absence of all explanation, the probability would be high enough to justify an inference in the plaintiff's favour. The legal burden of proof would not be thrown over to the defendant's side. No more than a presumption of fact would arise and its strength would be a matter for the jury to estimate, in whose province it would be to draw or refuse to draw the inference. But if facts appear which reasonably explain the accident in a manner involving no negligence for which the defendant is responsible, the foundation for the inference is excluded. . . . The facts proved in evidence being open to these opposing interpretations, the question necessarily arises whether the jury is at liberty to choose between them. Is there material upon which it could hold that there is a preponderance of probability in favour of the first explanation or hypothesis so that the second may be rejected? The legal burden of disproving negligence does not lie on the defendant. The legal burden of proving that the second hypothesis is the correct explanation cannot, in my opinion, be thrust upon him. If, in the end, the jury finds itself quite unable to say whether the accident is attributable to a series of events which involve no negligence or to another series which justifies a finding of negligence, the plaintiff must fail.

But the probability which one or other of the two possible explanations possesses is a matter about which it is peculiarly for the jury to judge. They cannot base a conclusion on nothing. Slight circumstances may nevertheless be enough.⁵²

With these observations may be contrasted the statement of Starke J.:

The plaintiff may give prima facie evidence of an allegation, but the defendant may contradict the plaintiff's evidence or prove other facts. The conflict thus raised may create real doubt in the tribunal whether the plaintiff has established his allegation. "The burden of proof lies upon the plaintiff, and if the defendant has been able by the additional facts which he has adduced to bring the minds of the whole of the jury to a real state of doubt, the plaintiff has failed to satisfy the burden of proof which lies upon him" (*Abrath v. North Eastern Railway Co.*⁵³).⁵⁴

If the expression 'real doubt' is equivalent to 'unable to say that there is a sufficiently high probability to justify an inference' there is

⁵² *Ibid.* 260-262.

⁵³ (1883) 11 Q.B.D. 440, 452-453.

⁵⁴ (1936) 56 C.L.R. 246, 254-255.

no conflict between the two statements. But if it includes a doubt entertained concurrently with a belief that there is a high probability of the truth of the plaintiff's allegations it is, it is submitted, establishing a higher standard than that indicated by Dixon J. in the passage cited.

In the case of *Bradshaw v. McEwans Pty Ltd*⁵⁵ a unanimous judgment of Dixon, Williams, Webb, Fullagar and Kitto JJ. contains the following:

Of course as far as logical consistency goes many hypotheses may be put which the evidence does not exclude positively. But this is a civil and not a criminal case. We are concerned with probabilities, not with possibilities. The difference between the criminal standard of proof in its application to circumstantial evidence and the civil is that in the former the facts must be such as to exclude reasonable hypotheses consistent with innocence, while in the latter you need only circumstances raising a more probable inference in favour of what is alleged. In questions of this sort, where direct proof is not available, it is enough if the circumstances appearing in evidence give rise to a reasonable and definite inference: they must do more than give rise to conflicting inferences of equal degrees of probability⁵⁶ so that the choice between them is a mere matter of conjecture: see *per* Lord Robson *Richard Evans and Co. Ltd v. Astley*.⁵⁷ But if circumstances are proved in which it is reasonable to find a balance of probabilities in favour of the conclusion sought then, though the conclusion may fall short of certainty, it is not to be regarded as a mere conjecture or surmise: *cf. per* Lord Loreburn.⁵⁸

All that is necessary is that according to the course of common experience the more probable inference from the circumstances that sufficiently appear by evidence or admission, left unexplained, should

⁵⁵ 27 April 1951, unreported. The passage quoted is to be found, partly in *Luxton v. Vines* (1952) 85 C.L.R. 352, 358 and partly in *Holloway v. McFeeters* (1956) 94 C.L.R. 470, 480, 481.

⁵⁶ The expressions 'conflicting inferences of equal degrees of probability' and 'more probable inference' create some difficulty. Where inductive processes are concerned to infer is to select from competing hypotheses on the ground of probability. It is true that an inference will not normally be made unless the probability in favour of a particular hypothesis is sufficiently high to be significant. In scientific research arbitrary standards are chosen, and ordinarily odds of 100 to 1 against the results being due to chance are required before the results will be treated as 'statistically significant'. (J. B. Rhine, *The Reach of the Mind* (1954) 32.) No one, of course, would expect the same degree of probability in civil litigation as a research scientist would require, but at least one cannot reach the stage of inference until a selection has been made from the conflicting hypotheses. The word 'inference' in the expressions quoted must therefore be used proleptically, as equivalent to 'possible inference'. The use of the word 'inference' however, may suggest that something more is required than a 'more probable hypothesis', namely a probability high enough to justify a conclusion that the hypothesis is true. But the sense of the whole quotation, and especially of the final paragraph, is that a jury is entitled to find on a balance of probabilities even though the probability in favour of the plaintiff is insufficient to justify an inference as to the truth of the hypothesis. It is submitted, therefore, that the expressions 'conflicting inferences' and 'more probable inference' should be read as equivalent to 'conflicting hypotheses' and 'more probable hypothesis' respectively.

⁵⁷ [1911] A.C. 674, 687.

⁵⁸ *Ibid.* 678.

be that the injury arose from the defendant's negligence. By more probable is meant no more than that upon a balance of probabilities such an inference might reasonably be considered to have some greater degree of likelihood.

Two subsequent cases have shown that this statement, although a unanimous judgment, is capable of producing a marked division of viewpoint between members of the High Court, of a kind which appears on the surface to represent no more than a difference in the way in which they regarded the facts, but which on analysis emerges as a fundamental difference as to the meaning of the passage.

In *Luxton v. Vines*⁵⁹ and in *Holloway v. McFeeters*⁶⁰ the defendant was the nominal defendant named by the Minister pursuant to the provisions of the Victorian Motor Car Acts, and the damage was alleged to have been caused by an unidentified motor vehicle. Owing in the first case to amnesia or unconsciousness, and in the second to the death of the pedestrian, there was no direct evidence of the circumstances in which the accident occurred. Indeed, in the first case, there was no specific evidence that a motor vehicle had been involved. In the second case tyre marks and other signs supplied specific evidence from which the involvement of a motor vehicle could be inferred. There were, of course, differences in detail in the evidence of surrounding circumstances, but the cases provide a useful contrast of differing approaches to the problem whether there was evidence on which the jury could find negligence.

In *Luxton v. Vines*, Dixon, Fullagar and Kitto JJ. (McTiernan and Webb JJ. dissenting) held that the circumstances were not sufficient to support a finding of negligence, whereas in *Holloway v. McFeeters* Williams, Webb and Taylor JJ., Dixon C.J. and Kitto J. dissenting, thought that it was reasonably open to the jury to find that the death was caused, wholly or in part, by the negligence of the driver.

In *Luxton v. Vines* the plaintiff's first task was to show that he was struck by a motor vehicle. All members of the Court held that there was sufficient evidence of this, the majority considering that once the medical evidence excluded any probability that the injuries were caused by a mere fall, the plaintiff could rely on the existence of a 'higher *a priori* probability that if something on a highway runs a man down it will be a motor vehicle and not some other form of traffic'.⁶¹

As to whether there was evidence of negligence the essence of the

⁵⁹ (1952) 85 C.L.R. 352.

⁶⁰ (1956) 94 C.L.R. 470.

⁶¹ (1952) 85 C.L.R. 352, 359. It will be noted that this conclusion was not based on any specific evidence, such as tyre-marks and the like, but solely on *a priori* probabilities, given the medical evidence that a fall could not possibly have caused the injuries. See below for a further discussion of this point.

majority view was that a number of conjectures was open, equally plausible, that there was no higher degree of probability on one side than the other, and that 'the circumstances give rise to nothing but conflicting conjectures of equal degrees of probability and no affirmative inference of fault on the part of a driver of a motor car can reasonably be made'.⁶²

In *Holloway v. McFeeters* the majority, in favour of the plaintiff, expressed the view that 'inferences sufficiently appear from the circumstances to which we have referred that make it at least more probable than not that the unidentified vehicle was being driven in a negligent manner at the time of the accident and that this was the cause of the accident',⁶³ and after discussing the facts of the case, quoted the statement of Kay L.J. 'that as long as we have trial by jury and juries are judges of the facts, it should be a very exceptional case in which the judge could so weigh the facts and say that their weight on the one side and the other was exactly equal'.⁶⁴

Dixon C.J., in his dissenting judgment, said that

the state of facts inferred itself leaves room for conflicting conjectures or hypotheses as to the cause of the accident. . . . Before the plaintiff can succeed in such a case as this the circumstances must lead to a satisfactory inference, even though resting on a balance of probabilities, that the accident was caused by some negligence on the part of the driver. In the present case the true cause of the accident is in truth unknown. The state of facts reached by inferences is itself compatible with a number of hypotheses, some of them implying fault on one side, some on the other, some on both sides. Hypotheses of this kind are not inferences. What is required is the basis for some positive inference involving negligence on the part of the driver as a cause of the deceased's death. The inference may be made only as the most probable deduction from the established facts, but it must at least be a deduction which may reasonably be drawn from them. It need not be an inference as to how precisely the accident occurred, but it must be a reasonable conclusion that the accident in one way or another occurred through the lack of due care on the part of the driver and not otherwise.⁶⁵

If the above passage means that there were no facts from which a jury could conclude that one hypothesis was more probable than another, it is suggested, with respect, that no further facts were neces-

⁶² *Ibid.* 360.

⁶³ (1956) 94 C.L.R. 470, 481.

⁶⁴ *Smith v. South Eastern Railway* [1896] 1 Q.B. 178, 188, approved by the House of Lords in *Jones v. Great Western Railway Company* (1930) 144 L.T. 194. In *Flaherty v. Piva, Ex parte Piva* [1960] Qd. R. 53 the magistrate had found for the complainant in a paternity case, although she admitted that there were two candidates, other than the defendant, who had fulfilled the necessary conditions during the relevant period. In this case it might have been said to be 2 to 1 against the complainant's contention, and if there had been only two candidates it might properly, in the absence of other evidence, have been said that the probabilities were exactly equal.

⁶⁵ (1956) 94 C.L.R. 470, 476-477.

sary. The jury were entitled to draw on their knowledge of everyday affairs and to ask themselves whether it was more probable than not that negligence of the driver was responsible, and, if need be, whether they thought this hypothesis sufficiently highly probable to justify a finding against the defendant. But it seems more probable that when Dixon C.J. spoke of 'inferences' he was really importing into the discussion the concept that before a jury can act on the balance of probabilities it must consider that the probabilities are high enough to draw an inference from them as to the truth of the facts alleged, thus importing the element of satisfaction (or belief in the truth) to which he had referred in *Briginshaw v. Briginshaw*.⁶⁶ On this view, what he was really saying was that no reasonable jury could find that the probabilities in favour of the plaintiff were high enough for it to arrive at a state of satisfaction in the sense of a belief in the truth of the hypothesis that the defendant was negligent. It seems clear that Kitto J. based his judgment on this latter ground.⁶⁷

The same difference of viewpoint is to be found in *Jones v. Dunkel*.⁶⁸ In this case, Dixon C.J., after citing *Bradshaw v. McEwans Pty Ltd*⁶⁹ said:

But the law which this passage attempts to explain does not authorize a court to choose between guesses, where the possibilities are not unlimited, on the ground that one guess seems more likely than another or the others. The facts proved must form a reasonable basis for a definite conclusion affirmatively drawn of the truth of which the tribunal of fact may reasonably be satisfied.⁷⁰

Kitto J. in this case thought that the jury might legitimately have found facts from which an inference could properly be drawn that the defendant's vehicle was on its wrong side of the road. Taylor J. agreed with Dixon C.J. Menzies J. thought that the evidence made it 'more probable' that the defendant's vehicle was on its wrong side, and Windeyer J. thought that a jury, properly directed, might 'reasonably infer' that the defendant's vehicle was on its wrong side.⁷¹

It would seem, therefore, that there is a fundamental difference of principle underlying what on the surface merely appears to be a difference of opinion on the facts. Those members of the Court who have

⁶⁶ (1938) 60 C.L.R. 336.

⁶⁷ (1956) 94 C.L.R. 470, 488. See the passage already quoted from his judgment, *supra* n. 44.

⁶⁸ (1959) 101 C.L.R. 298.

⁶⁹ 27 April 1951, unreported. See *supra* n. 55.

⁷⁰ (1959) 101 C.L.R. 298, 305. It is submitted that either 'hypothesis' or 'conjecture' could be substituted for 'guess' without altering the sense.

⁷¹ *Ibid.* 319. Windeyer J. added: 'A jury could, in my view, properly think it more probable that this was so than that it was not.' He would appear, therefore, to have used the expression 'reasonably infer' as equivalent to 'accept as the more probable hypothesis'.

thought that there was evidence to go to the jury have done so because they regard a balance of probability as entitling a jury to act upon an assumption that the fact is as alleged by the plaintiff. Those who have thought that there was insufficient evidence have regarded a mere balance of probabilities as insufficient to justify a finding, holding that the probabilities must be high enough to warrant a definite inference that the allegations are true. This is not to say that they have taken the matter out of the jury's hands by substituting their own opinion. They have rather decided that in the circumstances as proved no reasonable man could have a belief in the truth of the allegation. This interpretation of *Bradshaw v. McEwans Pty Ltd* attaches critical importance to the words, adapted from Lord Robson: 'it is enough if the circumstances . . . give rise to a reasonable and definite inference', and little or none to the references to 'equal degrees of probability', 'balance of probabilities' and 'some greater degree of likelihood'. Having regard to the long course of authority in favour of the view that a jury may find the facts on a balance of probabilities, and the warning implied in the proposition that it should be a very exceptional case in which the judge could say that the probabilities were exactly equal, it is submitted that the passage which must be rejected is that requiring a 'reasonable and definite inference', if that phrase carries the implications derived from it in the judgments under discussion. It is further submitted that the majority judgment in *Holloway v. McFeeters*, reinforced as it is by the separate judgments of Menzies J. and Windeyer J. in *Jones v. Dunkel*, represents a clear balance of judicial opinion in the High Court in favour of this view.

If the case has been properly left to the jury with a suitable direction as to the standard of proof, can an appellate court order a new trial on the ground that the evidence showed so slight a preponderance in favour of the plaintiff that the jury could not have applied a standard of probability commensurate with the seriousness of the allegations made?

In cases where there is no conflict as to the primary facts, it would be anomalous for an appellate tribunal to say that although the jury were told that there was evidence on which they could make a finding, they should not, as reasonable men, have made it. There are, it is true, cases in which there is evidence fit to be left to the jury, but the verdict is so overwhelmingly against the weight of evidence that it will be set aside as perverse⁷² but these are usually cases in which

⁷² These questions were discussed in *Hocking v. Bell* (1945) 70 C.L.R. 430 and (1947) 75 C.L.R. 125 (Privy Council). See also *Mechanical and General Inventions Company Ltd v. Austin* [1935] A.C. 346, 375. It should be noted that *Hocking v. Bell* was a New South Wales case, and the observations in the judgments are not necessarily applicable in Victoria.

there is a conflict of evidence or in which uncontradicted evidence in support of the defendant's case has been perversely ignored by the jury. It can hardly be perverse for a jury to find for the plaintiff after it has been told that there is evidence on which it can so find, in a case in which the primary facts are not in dispute and the only question is one of inferences or probabilities. If we accept the position that the jury is the sole judge not only of the degree of probability to which the rival hypotheses are entitled, but also of the degree of probability which they ought to require of the plaintiff's proof, having regard to the nature of the issues involved,⁷³ it would seem to follow that where there are facts from which a jury can assess the probabilities in the light of their common knowledge and experience, the case cannot be taken away from them on the ground that reasonable men could not properly regard the degree of probability in favour of the plaintiff as high enough to justify a verdict in his favour, nor can an appellate court set aside the verdict and order a new trial on any such ground.

There is one aspect of this subject which is worthy of separate consideration. Some of the statements in the cases suggest that there must be some *specific* evidence of negligence (or whatever fact is in issue) and that conclusions cannot be drawn from *a priori* assumptions as to whether in a given situation negligence is more probable than not.

In *Jones v. Dunkel* it was said by Kitto J.:

I agree that no ground for an inference is to be found in general considerations as to the likelihood of negligent conduct occurring in the conditions which existed at the time and place of the collision. One does not pass from the realm of conjecture into the realm of inference until some fact is found which positively suggests, that is to say provides a reason, *special to the particular case under consideration*, for thinking it likely that in that actual case a specific event happened or a specific state of affairs existed.⁷⁴

A similar conception appears to be involved in the often-quoted statement of Lord Loreburn in *Richard Evans v. Astley*:⁷⁵

It is, of course, impossible to lay down in words any scale or standard by which you can measure the degree of proof which will suffice to support a particular conclusion of fact. The applicant must prove his case. This does not mean that he must demonstrate his case. If the more probable conclusion is that for which he contends, *and there is anything pointing to it*, then there is evidence for a Court to act upon. Any conclusion

⁷³ This latter proposition is in fact involved in the proposition that it is impossible to define the standard of probability in civil cases, and also presumably accords with the practice of juries, since, if the standard is not defined for them, they must consciously or unconsciously, fix their own.

⁷⁴ (1959) 101 C.L.R. 298, 305. Author's italics.

⁷⁵ [1911] A.C. 674, 678. Author's italics.

short of certainty may be miscalled conjecture or surmise, but Courts, like individuals, habitually act upon a balance of probabilities.

If there must be some specific evidence pointing to negligence, it would be possible to justify the dissenting judgments in *Holloway v. McFeeters* and the majority in *Luxton v. Vines* by saying that the facts did no more than prove a situation in which the jury could only find for the plaintiff by saying: 'Relying on our general knowledge of this type of situation we think that such an accident is more likely to be due to negligence on the part of the driver than to some other cause, although we can see nothing specifically pointing to negligence in this case.' Another way of putting it would be to say that the plaintiff must prove facts amounting to negligence and not merely a general situation suggesting negligence of one kind or another.

It is clear that reasoning from general probabilities can be used to prove a fact in issue. Indeed, this is the whole basis of circumstantial evidence and was the basis on which the Court in *Luxton v. Vines* inferred that the plaintiff had been struck by a car. So that the fact that a plaintiff has no direct evidence of a specific fact in issue, but merely evidence of a situation in which the fact in issue probably occurred, will not debar him. But can he prove an issue of a generalized character in the same way? The cases classified under the heading *res ipsa loquitur* show clearly that he can. If a plaintiff has no knowledge of the causes which led to a barrel falling on his head, he may sue the proprietor of the premises from which the barrel fell, without thereby undertaking to prove any specific act of negligence which brought about the accident.⁷⁶

It seems clear, therefore, that there is no foundation for any suggested rule that the evidence must point to a specific event having happened or a specific state of affairs having existed in the particular case. Of course, if the accident is of a kind in which common experience cannot be a guide, the case for the plaintiff cannot be based on an appeal to the jury's general knowledge of probabilities. It was for this reason that the majority of the High Court in *Mummery v. Irvings Pty Ltd* held that the plaintiff had not made a *prima facie* case of negligence against the defendant.⁷⁷ If the plaintiff had proved merely that he was struck by a piece of wood flying through the air, in a part of the building open to persons entering on business, he would have

⁷⁶ *Byrne v. Boadle* (1863) 2 H. & C. 722. Where the plaintiff has given particulars he may have to bring the case within the particulars, but this does not involve separate findings on each head of negligence: *Doonan v. Beacham* (1953) 87 C.L.R. 346. And if the defendant suggests, as an alternative hypothesis, an explanation involving negligent conduct on his part not alleged by the plaintiff, the judge ought, generally speaking, to allow any necessary amendment of pleadings or particulars. (Cf. *Mummery v. Irvings Pty Ltd* (1956) 96 C.L.R. 99, 110-112.)

⁷⁷ (1956) 96 C.L.R. 99, 117.

made a *prima facie* case, since such events do not usually occur unless someone has been negligent. But the evidence went further and raised a probability that the wood was thrown by a circular saw. The majority took the view that the behaviour of circular saws was not a subject in respect of which it could formulate conclusions as to the likelihood of negligence on the part of the operator.

The decision in *Mummery v. Irvings Pty Ltd* shows that cases of *res ipsa loquitur* are merely cases in which the plaintiff establishes a *prima facie* case of negligence on the part of the defendant, based on the type of accident involved and not depending on any specific allegation. The burden of proof does not shift and in deciding the case the jury are entitled to assess the probabilities for themselves. The defendant may secure a judgment in his favour in one of four ways:

- (a) Without calling evidence, by persuading the jury that they ought not to infer negligence from the facts proved;
- (b) By proving the cause of the accident in sufficient detail to show that it was not due to his negligence (for example, by showing that the accident was caused by the interference of a bystander for whom the defendant was not responsible);
- (c) By proving that, although he does not know what did cause the accident, he and his servants took reasonable care;⁷⁸
- (d) By proving further facts which neutralize the *a priori* probabilities, for example by narrowing the field of inquiry to a point at which the probabilities are no longer the subject of common knowledge, as in *Mummery v. Irvings Pty Ltd*.⁷⁹

As was pointed out in *Mummery v. Irvings Pty Ltd*⁸⁰ the term *res ipsa loquitur* is merely a heading under which to collect cases in which mere proof of an occurrence causing injury itself constitutes *prima facie* evidence of negligence, that is to say, in which the plaintiff can make a *prima facie* case without pointing to any specific act of negligence, relying on the relative improbability of the hypothesis that the defendant was not negligent in some way. The classical statement of the rule is that the accident must be 'such as in the ordinary course of things does not happen if those who have the management use proper care'.⁸¹ Restated in terms of probability, and in the light

⁷⁸ As in *Fitzpatrick v. Cooper* (1935) 54 C.L.R. 200.

⁷⁹ The question whether a jury could be permitted to use its knowledge of circular saws and their behaviour was discussed in the Full Court of Victoria in *Mummery's* case [1956] V.L.R. 659. The majority of the Full Court thought that this was a subject in respect of which evidence was necessary, and the High Court, as indicated above, thought so too. The question how far a jury may use their 'local' knowledge as opposed to 'common' knowledge would bear investigation. The Wangaratta jury in *Mummery's* case would probably have been more familiar with circular saws than with barrels of flour and warehouses.

⁸⁰ (1956) 96 C.L.R. 99, 114.

⁸¹ *Scott v. London and St. Katherine Docks Company* (1865) 3 H. & C. 596; cited in *Mummery's* case (1956) 96 C.L.R. 99, 114.

of our previous discussion of what constitutes a *prima facie* case, this could be reworded to read 'such that a jury, as reasonable men, might conclude that it is more probable than not that those who had the management did not use proper care'. In other words, if the thesis of this discussion is correct, it is not a question whether the judge thinks that such an accident is unlikely to happen unless there is negligence. It is a question whether a jury could reasonably so find, using 'unlikely' as a reference to the appropriate standard of proof. The 'accident' need not be of any particular kind so long as the evidence discloses a situation in which jurors, using such knowledge as they are permitted to use, could be expected to form a judgment of the probabilities for or against negligence.⁸²

It would follow from this conclusion that such cases as *Holloway v. McFeeters* are really cases of *res ipsa loquitur*, although the phrase does not appear in the judgments. If the rival view were accepted, that in cases of *res ipsa loquitur* the burden of proof is shifted, then the classification of an accident as being of a kind which invokes the maxim depends not merely on the case being one in which the jury might properly find that negligence was more probable than not, but upon the case being one in which the judge can say that negligence is so highly probable that the defendant should bear the onus. On this view *Holloway v. McFeeters* would not be a case of *res ipsa loquitur*.

It must be emphasized that the reference in the judgments to the 'balance of probabilities', and the use of the expression 'more probable than not' do not imply that a mere balance of probabilities in his favour (51 *per centum*) will entitle the plaintiff to a verdict. As indicated above, a jury may be told that it can act on a balance of probabilities, but it should also be told that it should take into account the seriousness of the findings it is asked to make and set its standard of proof accordingly. The criterion of whether there is evidence to be left to the jury is whether they could as reasonable men think it 'more probable than not' that the plaintiff's allegations are correct. If they could, it must be left to them, but with an

⁸² Baker, 'Res Ipsa Loquitur—The Last Word?' (1957) 30 *Australian Law Journal* 563 has discussed the view of *res ipsa loquitur* expounded by the majority judgment in *Mummery's* case with reference to English and New Zealand authorities. He suggests *inter alia*, that 'the maxim was intended by the nineteenth century courts which developed it to provide a means of doing justice in cases where injured persons were unable to show how the injury happened because the facts were peculiarly within the knowledge of the defendant, the thing responsible for the harm being under his management and control'. Baker, *op. cit.* 564. A perusal of *Byrne v. Boadle* and *Scott v. London and St. Katherine Docks Company* does not reveal that the judges who decided those cases had any such purpose. They were concerned with the question whether there are certain kinds of accidents which in themselves, unless otherwise explained, afford sufficient *prima facie* evidence of negligence and it seems clear, as the High Court judgment suggests, that the judges were not conscious of laying down any new principle.

appropriate direction as to standards. But if proper directions have been given, and there is nothing to suggest perversity, it is submitted that a court cannot interfere with the finding on the ground that, for example, the allegations made were serious and that reasonable men could not have considered the probabilities in the plaintiff's favour to be high enough to meet the requisite standard.

The standard of proof in divorce has been the subject of much discussion in recent years. The decision in *Briginshaw v. Briginshaw*⁸³ that the criminal standard of proof 'beyond reasonable doubt' does not apply has been followed and applied by the High Court on a number of occasions,⁸⁴ notwithstanding the English decisions in favour of 'proof beyond reasonable doubt' in such cases as *Ginesi v. Ginesi*⁸⁵ and *Galler v. Galler*.⁸⁶

In *Briginshaw v. Briginshaw*, Latham C.J. thought that the ordinary civil standard applied, subject only to the rule of prudence that a tribunal should act with much care and caution before finding that a serious allegation such as that of adultery was established. Rich J. thought that the statute required the satisfaction of a just and prudent mind, and used the phrase 'comfortable satisfaction'. Starke J. thought that if the proof brought no 'strength of conviction' to the mind of the tribunal, or 'what is much the same thing, does not satisfy the tribunal beyond reasonable doubt of the truth of the fact alleged' the provisions of the statute were not satisfied. Dixon J. said that upon an issue of adultery in a matrimonial cause 'the importance and gravity of the question make it impossible to be reasonably satisfied of the truth of the allegation without the exercise of caution and unless the proofs survive a careful scrutiny and appear precise and not loose and inexact'; that 'circumstantial evidence cannot satisfy a sound judgment of a state of facts if it is susceptible of some other not improbable explanation'; but that 'if the proofs adduced, when subjected to these tests, satisfy the tribunal of fact that the adultery alleged was committed, it should so find'.⁸⁷ McTiernan J.

⁸³ (1938) 60 C.L.R. 336.

⁸⁴ For example: *Wright v. Wright* (1948) 77 C.L.R. 191; *Watts v. Watts* (1953) 89 C.L.R. 200; *Locke v. Locke* (1956) 95 C.L.R. 165; *Mann v. Mann* (1957) 97 C.L.R. 433; *Murray v. Murray* (1960) A.L.J.R. 521. In *Locke's case* (1956) 95 C.L.R. 165, 168 the Court used the expression 'comfortable satisfaction'.

⁸⁵ [1948] P. 179.

⁸⁶ [1954] P. 252. During the period in which this question was being debated in England, several judges expressed the view that there was no real difference between the civil and criminal standards: *Bater v. Bater* [1951] P. 35, 37; *Hornal v. Neuberger Products Ltd* [1957] 1 Q.B. 247, 262; *Reg. v. Hepworth and Fearnley* [1955] 2 Q.B. 600, 603; cf. *Briginshaw v. Briginshaw* (1938) 60 C.L.R. 336, 353 per Starke J. In *Preston-Jones v. Preston-Jones* [1951] A.C. 391, 417 Lord MacDermott said that he was unable to subscribe to the view that the word 'satisfied' was capable of connoting something less than proof beyond reasonable doubt but the question was not in issue in that case. In *Fairman v. Fairman* [1949] P. 341 it was said that the criminal rules as to evidence of accomplices should be applied where an 'accomplice' gives evidence of adultery.

⁸⁷ (1938) 60 C.L.R. 336, 368-369.

said that it was impossible to say that the judge ought to have felt that degree of satisfaction which the law requires the tribunal to have before finding a spouse guilty of adultery, while he was oppressed with a reasonable doubt. Despite these differences of verbiage, this case has since been treated as establishing that in matrimonial causes the civil standard of proof applies, subject to the requirement that the seriousness of the allegation must be taken into account.⁸⁸ But the civil standard referred to appears to be that elaborated by Dixon J. in *Briginshaw's* case, and involves a belief or persuasion that the allegation is true.

Whether the civil standard does involve such a belief or persuasion has been discussed above. But even if it does not, it does not follow that the standard in divorce does not require belief or persuasion. Both the English and the Australian decisions depend on the interpretation of the relevant words of the appropriate statutory provisions. Thus, in *Briginshaw's* case, the relevant words were 'satisfied that the case of the petitioner is established' and in *Wright v. Wright*⁸⁹ the expression was 'satisfied as to the existence of any ground'. The Matrimonial Causes Act 1959 (Commonwealth) section 96 provides that 'a matter of fact shall be taken to be proved if it is established to the reasonable satisfaction of the Court'. Whether this formula will be considered as laying down the same standard as its predecessors remains to be seen. It may be noted that in *Peek's Ltd v. Adelaide Oil Exploration Coy Ltd*⁹⁰ the Full Court of the Supreme Court of South Australia had to consider the expression 'satisfied' in the Mortgagee's Relief Act 1931. Murray C.J., after pointing out that, considered without regard to the context, the word connoted something stronger than the bare preponderance of probability, and that its dictionary meanings import 'conviction', concluded that in the context the expression 'if the Court is satisfied' meant 'if the Court is convinced that it is more probable than not'. Richards J. said that what the Court had to be satisfied or convinced about was 'whether the evidence provides the requisite degree of proof; and the requisite degree of proof is proof on the balance of probabilities'.

There is one exceptional case in which the majority of the Supreme Court of Victoria, and some members of the High Court, appear to have recognized a different approach to the problem of proof from either the criminal or the civil standard. In *The King v. Jenkins; Ex*

⁸⁸ *Murray v. Murray* (1960) 33 A.L.J.R. 521, 524-525 *per* Dixon C.J., 526 *per* Taylor J. and Menzies J. It is to be noted that while Dixon C.J. said that the civil standard required satisfaction, Menzies J. said that although the standard was 'the civil standard of proof on the balance of probabilities' the proof of such a serious charge 'requires evidence that carries conviction to a mind sensible of the gravity of the finding'.

⁸⁹ (1948) 77 C.L.R. 191.

⁹⁰ [1937] S.A.S.R. 154, 157, 160.

*parte Morrison*⁹¹ the claimants sought the custody of a girl who had been brought up as the child of other parents. The basis of their claim was that there had been a confusion of two babies at the hospital at which they were born. Barry J. found this allegation proved, after having said that he should reach his conclusions 'not, as I think upon a bare balance of probabilities, but as the result of a thorough conviction of my mind, founded upon a careful and patient attention to all the evidence in the case'.⁹² He decided to award the custody of the child to the claimants. His decision was reversed by the Full Court of Victoria. A reason for the decision concurred in by all three members of the Full Court was that no order altering the custody should be made in such a case unless it were established 'as a matter of practical certainty' that the child was the child of the claimants. Fullagar J., then a judge of the Supreme Court, said that this was not merely a matter of high standard of proof but of the exercise of discretion, and continued 'If there is even the slightest room for doubt, no order, in my opinion, ought to be made. And I consider it quite impossible to say that there is not considerable room for doubt.'⁹³

On appeal to the High Court, Latham C.J. commented that these were standards of proof which, so far as he was aware, had never been applied by courts of law, and was for restoring the decision of the trial judge. Rich J. thought that the custody of the child should not be altered at this stage, and said that it was a factor to be taken into consideration that there was real doubt whether the claimants were the parents. Dixon J. thought that an order changing the custody should not be made 'unless the proofs exclude all real doubt and risk of error in the conclusion', and expressed his agreement with the judgment of Fullagar J. McTiernan J. would have restored the decision of the trial judge. Webb J. thought that Barry J. was in error as the evidence was insufficient to exclude the possibility that either of two other children born shortly before the *Morrison*'s child had been confused with their baby; on this basis the evidence would not have justified a finding that the child brought up by the *Jenkins* family was the child of the claimants. The judgment of the Full Court, reversing the decision of Barry J. was therefore affirmed.

It will be seen that this case presents two unusual features. The Full Court of the Supreme Court of Victoria not only adopted a standard of proof higher than that required in a criminal case of the most serious character, but they reversed the decision of the trial judge, not because he had any doubts about the issue of fact, (the standard he

⁹¹ [1949] V.L.R. 277, affirmed on appeal to the High Court (1950) 80 C.L.R. 626.

⁹² Quoted by Barry J. from *Morris v. Davies* (1837) 5 Cl. & F. 163, 221, 222 *per* Lord Lyndhurst.

⁹³ [1949] V.L.R. 277, 304, 305.

had set himself makes it clear that he had none), but because the possibility of doubt and the risk of error as they presented themselves to the appellate tribunal were thought to justify a reversal of the decision.

In the assessment of damages for prospective loss probabilities have a different function from that which they exercise in the ascertainment of existing or past facts. In the proof of existing or past facts the probabilities are used to arrive at a conclusion as to whether the allegations of the plaintiff are established. Once this has been determined, the facts so found are accepted as absolutely true, even though based on less than 100 *per centum* probability. But in the assessment of damages for the future, the assessment may take into account the degree of probability attaching to the various possibilities. Thus, if medical experts say that it is 90 *per centum* probable that the plaintiff will require an operation within the next year, it will be proper to allow 90 *per centum* of the cost of the operation.⁹⁴ In the same way, evidence of the average expectation of life of a person of a given age may be relevant to the assessment of damages.⁹⁵ What is not permissible is for the jury to allow a doubt about the existing or past facts, relevant either to liability or to damages, to modify the assessment of damages, as Philp J. thought had been done by the trial judge in *Richards v. Shuttlewood*.⁹⁶

We can now return to our original questions. To the first question, 'Is there evidence on which a jury could find in favour of A?' we can answer that, if A proves more than one toss, there is evidence on which a jury can find that at least one head turned up, since the probability of at least one head in two tosses is .75, and it will increase with each toss.

To the second question, 'How many tosses must be proved to justify a finding in A's favour?' differing answers must be given according to the type of case in which the question arises.

In a criminal case, the answer must be that A must prove enough

⁹⁴ *Callaghan v. William C. Lynch Pty Ltd* (1961) 79 W.N. (N.S.W.) 830. In that case there was a possibility that the plaintiff would require a further operation, but the medical evidence did not support a probability higher than 50 *per centum*. The trial judge in effect directed the jury not to take the possibility into account as it was not shown to be probable. It was held by the Full Court that this was a misdirection.

⁹⁵ *Rowley v. London and North Western Railway Company* (1873) L.R. 8 Ex. 721, 726, where it was said the average and probable duration of a life could not be better shown than by proving the practice of life insurance companies, who learn it by experience. The question how far statistical or expert evidence can be given to instruct the jury on the probabilities relevant to an issue as to existing or past facts has not been dealt with in this article. To have done so would have added considerably to its bulk, but the subject has been excluded with some regret, as there appear to be some unsolved problems.

⁹⁶ [1949] S.R. Qd. 152, 156. The other members of the Full Court did not interpret the judgment of the trial judge in the same way.

tosses to satisfy the jury beyond reasonable doubt that at least one toss resulted in a head.

In a civil case, if the argument of this article is correct, the answer is that the number must be high enough to enable the jury to feel justified in making the finding, having regard to the seriousness of the allegation made against the defendant and the consequences involved in the finding; but that it need not be so high as to 'satisfy' or 'convince' the jury that a head did in fact turn up, unless the standard set by the jury for itself (assuming it has been properly directed) is such as to require so high a degree of probability.

If a similar question arose in a matrimonial cause, the answer would be given in terms of section 96 of the Matrimonial Causes Act 1959; that is to say, that enough tosses must be proved to establish the fact to the reasonable satisfaction of the judge. If it arose in a case similar to *R. v. Jenkins; Ex parte Morrison* the answer would presumably be the same as in a civil case, but having found the fact, the judge would still have to consider the possibility of error as a factor relevant to the exercise of his discretion. Questions of custody may also arise under the Matrimonial Causes Act 1959, in which case section 96 would be applicable.

Two further comments must be made. First, in a criminal case where the Crown case is weak, a judge frequently advises a jury that it would be unsafe to convict, although there is evidence on which they could find the accused guilty. But if the judge does not take this course, and leaves the matter to the jury, the verdict will not be set aside on appeal merely because the case against the accused is weak⁹⁷ but it will be set aside if the appellate court thinks that no reasonable jury could properly convict on the evidence given. The power of the Victorian Full Court is to set aside the verdict 'on the ground that it is unreasonable or cannot be supported having regard to the evidence'.⁹⁸ This power has been exercised in cases in which there was evidence which, if believed, would support a verdict, but in which the Court of Criminal Appeal thought the jury had acted unreasonably in accepting it.⁹⁹

Secondly, the conclusions expressed in this article as to the function of the jury in a civil case may seem to leave a jury free to find against a defendant on a degree of probability so slight that few people would be prepared to act upon it in their own serious affairs. This is true, and one has to trust the good sense of juries to carry out the directions of the trial judge as to their duty. But it is not necessarily true that

⁹⁷ *Halsbury's Laws of England* (3rd ed. 1953) x, 536, para. 986. Cf. *Ross v. The King* (1922) 30 C.L.R. 246, 255, 256.

⁹⁸ Crimes Act 1958 s. 568, adopting s. 4 of the Criminal Appeal Act (1907) 7 Edw. VII c. 23.

⁹⁹ E.g. *Rex v. Dent* [1943] 2 All E.R. 596.

a jury in an ordinary civil case would be acting wrongly in finding for the plaintiff on a mere 51 *per centum* probability. If in their own affairs they were forced to make a decision which depended on the existence or non-existence of some fact about which they had no information, they would have to do their best. Presumably they would decide whether the fact was more likely to exist than not, and act accordingly, taking due account of the seriousness of the consequences. If the consequences of either alternative were equally serious, they would act on 51 *per centum*. Where a jury has to decide between an injured plaintiff and a defendant who can afford to pay, it is not unreasonable for the law to permit them to act in the same way. Sometimes, no doubt, they will guess, just as they would in their own affairs, if they had no material on which to base a decision, and knew that none could be forthcoming. The law requires that they should have some material on which to base their decision, but leaves it to them to decide what use they make of it. No doubt juries sometimes set the standard too low, but it is probable that the uncertainty which has existed about the civil standard of proof has often resulted in judges setting it too high.