

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and
Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)

Part I

Stages in the history of the idea of probability

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and
Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)

I

From rhetoric to science

Sollicite cura te ipsum probabile exhibere Deo. (Vulgate)
 Studie to shewe thy selfe approved unto God. (Authorized Version)

2 Timothy 2: 15

... et probabilis in conspectu omnium virorum.

Liber filii Jesu Sirach

A primary sense of *probabilis* in Latin is *worthy of approbation or approval*, in an evaluative, even a moral sense. Samuel Parr, reputedly among England's greatest classicists in the late eighteenth century, discovered how many of the Latinists of his day had forgotten this meaning of *probabilis* when he was chosen to write Samuel Johnson's epitaph. Although a veteran in the genre, Dr. Parr at first balked at the assignment; persuaded by Malone and Sir William Scott, however, he composed an inscription that began:

SAMUELI JOHNSON
 GRAMMATICO ET CRITICO
 SCRIPTORUM ANGLICORUM LITERATE PERITO
 POETAE PROBILI

Parr chose the adjective *probabilis*, he says in a letter, "in conformity to the rule I had laid down for avoiding all rhetorical phraseology," that is, to avoid overblown praise; he recounts the term's critical reception: "In arms were all the Johnsonians: Malone, Steevens, Sir W. Scott, Windham and even Fox, all in arms ... They do not understand it." To explain his usage, Parr sent Fox a list of illustrative passages from Cicero, Quintilian, and others. Parr's critics debated the lukewarmness of the epithet; at last, Parr himself suggested a revision that the Johnsonians approved:

POETAE LUMINIBUS SENTENTIARUM
 ET PONDERIBUS VERBORUM ADMIRABILI

Parr confided to a friend that this new formula filled him with a "secret and invincible loathing," but the classicist, painfully aware of the possibilities of modern misreading, must have enjoyed the heavy touch of his second line.¹

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)*History of the idea of probability*

English use of *probable* long retained the Latin evaluative sense. In *Roxana* (1724), Defoe's heroine reflects on the new establishment her first catch has provided her:

This was the first View I had of living comfortably indeed, and it was a very probable Way, I must confess; seeing we had very good Conveniences, six Rooms on a Floor, and three Stories high.

Here *probable*, like *likely* in expressions still in use (“a likely lad”), means worthiness not of belief but approval.²

More often the English word carries the familiar sense of worthiness of belief or credit. Until the Renaissance, however, the grounds of such credit were most commonly understood to be authoritative testimony – so much so that for many, *probability* itself simply meant backing by authority. As we shall see, the Renaissance paradigm for explaining probability comes from rhetoric, and more directly from the “place” of “external” or “inartificial” proofs, that is, proofs which come from the testimony of more or less authoritative (and hence *probable*) witnesses. It is in this sense that so many generations of moral theologians understood a “probable opinion” to be one held by some “probable doctor” of the Church.³ Witnesses whose testimony was formally admissible in court were “probable witnesses,” and apt requests were “probable demands”; for Richard Hooker, the authority of the *vox populi* was society's “probable voice”:

So that of peace and quietness there is not any way possible, unlesse the probable voice of everie intier societie or bodie politique over-rule all private of like nature in the same bodie.⁴

(1) PROBABILITY AND THE TESTIMONY OF AUTHORITY

And let them know that I am Machevil,
And weigh not men, and therefore not men's words.

Marlowe, *The Jew of Malta* (1589–90)

Renaissance use of *probable* reflects a millennium of philosophic doctrine. A selective reading of Aristotle common in the Middle Ages found in the *Prior Analytics* that “A probability is a generally approved proposition,” and in the *Topics* that “opinions are ‘generally accepted’ which are accepted by every one or by the majority or by the philosophers – i.e., by all, or by the majority, or by the most notable and illustrious of them.”⁵ This interpretation of probability remains central through the seventeenth century:

Cambridge University Press
 978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and
 Literary Practice in the Augustan Age
 Douglas Lane Patey
 Excerpt
[More information](#)

From rhetoric to science

Probable logic is concerned with propositions which, to all or to many men, or at least to the wise, seem to be valid . . . A proposition is probable if it seems so to a person of good judgment . . .

John of Salisbury, *Metalogicon* (1159)

Probabilia autem dicuntur, quae sunt magis nota vel sapientibus vel pluribus.

Aquinas, Commentary on *Posterior Analytics* (c. 1270)

Second, whenever he is dealing with the subject he brings in the testimony of the ancients, which is the way of one who is out, not to demonstrate, but to recommend according to probabilities [*probabiliter persuadentis*].

Aquinas, *Summa theologiae* (1265–73)

But a topical syllogism is from probable premises. And probable premises are those which appear to be true to all or to the majority or to the wisest; and this description is to be understood thus, that probable premises are those which are true and necessary but not known *per se* and not syllogistically demonstrable from premises known *per se*, and which, further, are not evidently known through experience, nor demonstrable from such – but which, on account of their truth, appear to be true to all or to the majority or to the wisest.

Ockham, *Summa totia logicae* (c. 1320)

Things probable according to *Aristotle*, are these that seeme true to all men, or to the most part of men, or to all wise men, or to the moste parte of wise men, or els to the most approved wise men: whereby it appeareth that things probable may be said five manner of waies.

Thomas Blundeville, *The Art of Logike* (1599)

That Axiome is probable which seemes so to all, to many, or them that are wise . . .

Thomas Spencer, *The Art of Logick* (1628)

All tradition and history, everything in short that concerns the past, whether it be true or false, good or evil, possesses for us only probability, since it depends on the authority of the narrator.

Herbert of Cherbury, *De Veritate* (1624)⁶

The doctrine of the logicians inevitably informs less technical uses of the word. Hooker, whose *Laws of Ecclesiastical Polity* has been called “an extended essay on probabilities,” frequently finds need, in his attempt to steer clear of both Puritan and Catholic excesses, for distinctions between probable and demonstrative knowledge; his probabilities rest clearly on authority:

For the publike approbation given by the body of this whole Church unto those things which are established, doth but make it probable that they are good. . .

Howbeit in defect of prooffe infallible, because the minde doth rather follow probable perswasions, then approve the things that in them have no likelihood of truth at all; surely if a question concerning matter of doctrine were proposed, and on the one side no kinde of prooffe appearing, there should on the other side be alleaged and shewed that so a number of the learnedest divines in the world

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and
Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)*History of the idea of probability*

have ever thought; although it did not appear what reason or what scripture led them to be of that judgment somewhat a reasonable man would attribute, notwithstanding the common imbecilities which are incident into our nature.⁷

So may the adverb *probably* mean “with authority,” as in Sir Thomas Browne’s *Pseudodoxia Epidemica* (1646), a work intended to explain the causes of error and so the proper grounds of belief:

So [with caution] are we to read the leaves of Basil and Ambrose, in their books entitled *Hexameron*, or *The description of the Creation*; Wherein delivering particular accounts of all the Creatures, they have left us relations suitable to those of Aelian, Plinie and other naturall Writers; whose authorities herein they followed, and from whom most probably they desumed their narrations.⁸

“Authority” in this discussion carries the old sense of *auctoritas* – origination (authoring), just as *auctoro* could mean “stand surety to”; authorities are the sources of testimony, so that mediaeval disputants habitually called the authorities whose testimony they cited *auctoritates*; the term by extension could refer to the testimonies themselves.⁹ What is most important for our purposes is to recognize that ancient rhetoricians and lawyers (often the same people) attempted to lay down rules by which the proper weight to be given to the testimony of any authority (or witness) might be judged; because the probability of opinions was usually measured by reference to the authority that backed them, these rules continued into the Renaissance to be the most common, and sometimes the only explicit canons in terms of which the probability of any claim might be judged.

That this should have been so can be seen by examining those contexts in which we should most expect other, more modern canons of probability to have arisen. In jurisprudence, for instance, we would expect there to have been a continuous effort to formulate canons for judging the credibility of testimony; many modern legal historians have argued, however, that this was not the case, and indeed that more often in question was not the credibility of testimony but of witnesses themselves. As Theodore Waldman has shown in his study of the “Origins of the Legal Doctrine of Reasonable Doubt,” it was not until the mid eighteenth century that English jurists worked out what we would now recognize as a system of rules of evidence. What rules had earlier been accepted, and which came in the Augustan period to be scrutinized and reduced to method, were those of the logicians and rhetoricians. It is significant that Baron Geoffrey Gilbert, in the first English work on the subject, his posthumous *Law of Evidence* (1753), borrows his canons from John Locke. (In 1752 had appeared Gilbert’s *Abstract of Mr Locke’s Essay on Human Understanding*.) Gilbert pillages especially Locke’s

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)*From rhetoric to science*

discussions in book IV of “Probability” and of the “Degrees of Assent” (chapters 15 and 16); as we shall find, Locke’s own attempt to give a general philosophic account of the degrees of probability amounts to little more than a repetition of older canons for judging the reliability of witnesses.

Sir William Holdsworth explains the late development in England of rules of evidence by reference to the gradual change between about 1500 and 1700 in the composition of English juries. Earlier juries contained members chosen because they could be expected to have most previous knowledge of the case being heard; later ones, members without such prior knowledge.

The change in the character of the jury, which made the presence of . . . witnesses necessary, had an effect upon the law of evidence as profound as it had upon the law of pleading. Now that the verdict was based, not upon their own knowledge, but on the evidence produced to them in court, some law about this evidence became necessary.¹⁰

As Sir John Fortescue had put it in 1460, in rebutting the charge that English courts defied the Biblical injunction that no man be convicted on the testimony of a single witness, there are always in the jury twelve more witnesses to the case.¹¹

In Europe, where most criminal cases were tried not before juries but by magistrates (who, lacking prior knowledge of cases, had to call witnesses), there developed in the Roman-canon legal tradition a complex quasi-mathematical system for evaluating testimony. Various kinds of testimony were given numerical values according to the degree of probability with which they incriminated the defendant; in some versions, a total of three points justified a verdict of “guilty” (and mere appearance before the court was presumptive evidence of guilt worth half a point).¹² This system grew from Biblical, Roman, and mediaeval practice; it is largely a system for evaluating witnesses and their authority rather than evidence. More witnesses would be required to secure conviction of a noble than a commoner; greater number of witnesses constituted weightier proof; and for centuries, the mere taking of an oath put the substance of a witness’ testimony beyond dispute. One English judge stated in 1632, “A judge is bound ever to give sentence *secundum probata*, not *probabilia*.”¹³

The survivals in France of this system were to appall Voltaire, who made a special study of the rules of evidence: in the *Dictionnaire philosophique* he deplores the view that legal guilt can be established as can a theorem in geometry, and in his later *Essai sur les probabilités en fait de justice* (1772), he attempts an analysis of what we recognize as the probability of evidence.

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)*History of the idea of probability*

Presque toute la vie humaine roule sur des probabilités. . . Cependant il faut prendre un parti, et il ne faut pas le prendre au hasard. Il est donc nécessaire à notre nature faible, aveugle, toujours sujette à l'erreur, d'étudier les probabilités avec autant de soin que nous apprenons l'arithmétique et la géométrie.

Cette étude des probabilités est la science des juges: science aussi respectable que leur autorité même, puisqu'elle est le fondement de leurs décisions.

Un juge passe sa vie à peser des probabilités les unes contre les autres, à les calculer, à évaluer leur force. (496–97)

Previous simple additive methods avoided the real work of *weighing* probabilities (instead of counting authorities); also, they took into account only marks of guilt, not of innocence. “Il se peut que vingt apparences contre lui soient balancées par une seule en sa faveur.” Making wry reference to the disreputable school of moral theology called “probabilism,” which was supposed to have held that a “probable opinion” backed by only a single authority (however many might be cited to the contrary) may properly be taken as a maxim for action, Voltaire continues, “C’est là le cas, et le seul cas, de la doctrine de probabilisme.” (J. H. Wigmore has noted that the Code Napoléon was designed to wean juries away from the view that more witnesses and oaths means more probability and evidence.)¹⁴

In England, Matthew Hale can speak in his *History of the Pleas of the Crown* (posthumously published in 1736) of the “probability or improbability, credibility or incredibility of the witness and his testimony”; as Barbara Shapiro has noted, the paired terms are not synonymous, for Hale is distinguishing “legal” witnesses (those whose testimony is formally admissible) from those who can be believed.¹⁵ As late as 1751, in *Amelia*, Henry Fielding protests the legal confusion of the admissible with the believable:

In truth this matter was no less than what the law calls forgery, and was just then made capital by an act of Parliament. From this offence, indeed, the attorney was acquitted, by not admitting the proof of the party, who was to avoid his own deed by his evidence, and therefore no witness, according to those excellent rules called the law of evidence; a law very excellently calculated for the preservation of the lives of his Majesty’s roguish subjects, and most notably used for that purpose. (VII, 256)

(2) PROBABILITY, OPINION, AND KNOWLEDGE

A demonstrative syllogism is one that produces scientific knowledge on the basis of necessary premisses and the most certain reasons for the conclusion. A dialectical syllogism, however, is one that produces opinion on the basis of probable premisses. Finally, a sophistical syllogism is one that either syllogizes on the basis of seemingly probable premisses or seemingly syllogizes on the

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and
Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)*From rhetoric to science*

basis of probable premisses; in either case it is strictly aimed at glory or victory.

William of Sherwood, *Introductiones in logicam* (1235–50)¹⁶

William's tripartite division comes directly from Aristotle and is typical of logical works through the seventeenth century. Aristotle's distinction between opinion (*endoxa*), the realm of the probable, and the scientific certainty of *episteme*, or knowledge in its fullest sense, remains standard philosophical usage even through the Augustan period (though the boundaries of each may vary), as Locke and his follower Isaac Watts testify:

Probability is likeliness to be true. . . The entertainment the Mind gives this sort of Propositions, is called *Belief, Assent, or Opinion*, which is the admitting or receiving any Proposition for true, upon Arguments that are found to persuade us to receive it as true, without any certain Knowledge that it is so.

Uncertain or dubious Propositions, that is *Opinions*, are distinguished into *probable, or improbable*.¹⁷

Scholastic writers could use *probabilia* to mean simply the opinions of the authors they cited.¹⁸

It hardly required a Locke or a Butler, then, to point out that, in the words of John of Salisbury's *Metalogicon*, "probabilities" – opinions – "comprise most of human knowledge" (201). In the central Western tradition from late antiquity to the Augustans, the ideal of knowledge – *scientia*, "science" in its pre-nineteenth-century sense – was demonstrative knowledge, especially of the causes of things. *Scire est cognoscere per causas* runs the familiar tag: true knowledge is of necessary connections, demonstrative arguments linking causes to effects with certainty. By definition, *scientia* excluded all nondeductive, nondemonstrative proofs – all probability – locating these in the subordinate fields of dialectic and rhetoric. After dividing logic into "demonstration, probable proof, and sophistry" (again following Aristotle's division of the *Organon* into *Analytics*, *Topics*, and *On Sophistical Refutations*), John of Salisbury says of demonstration that "it rejoices in necessity. It does not pay attention to what various people may think about a given proposition," for what people may think is probability, whose sphere is "dialectic and rhetoric." "Demonstration does not calculate to elicit assent" (*probabilitatem non habet demonstratio*) (79–80). Containing no concept of evidence short of the deductive, *scientia* excludes probability: in science confirmation is always complete. As Aquinas notes, it excludes most of what we "know"; most of the time we must be satisfied with rhetoric: "In human affairs it is not possible to have demonstration

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and
Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)*History of the idea of probability*

and infallible proof; but it suffices to have some conjectural probability such as the rhetor uses to persuade.”¹⁹

The proper form of demonstration is the demonstrative syllogism, distinguished from other sorts of syllogisms less in its form than in the demands placed upon its premisses. These must be either the conclusions of other demonstrative (“scientific”) syllogisms, or be first principles arrived at by demonstrative induction (a process different from the problematic induction of modern science).²⁰ Such premisses must of course be true; they must moreover be necessary (*de omni*), essential (*per se*), commensurately universal (*qua ipsum*), prior to and better known than the conclusion, and most signally (at least in the minds of Aristotle’s commentators), they must be causes, since “to have reasoned knowledge of a conclusion is to know it through its cause.”²¹

The demand that demonstrative premisses be necessary means that they must be always and in every case true; that they be essential, that they state a connection between universals. “Knowledge is of the necessary, opinion of the contingent,” or, as Thomas Spencer put it in his *Art of Logick*, “A true axiom is Contingent, when it is such sort true, that it may also at some time be false. This is called opinion” (157). Strictly then, knowledge and opinion are not just different degrees of certainty with respect to the same information, but actually have different objects. The *Metalogicon* explains, science can answer the question “What is whiteness?” but cannot through a connection of universals tell whether a given object is white; to answer this question, “one is compelled to digress to corporeal things” (159). There is thus no science of the contingent, either in the sense of the particular, or of propositions sometimes true, sometimes false – no science of “changeable things”:

no attribute can be demonstrated nor known by strictly scientific knowledge to inhere in perishable things. The proof can only be accidental, because the attribute’s connection with the perishable subject is not commensurately universal but temporary and special. . . the conclusion can only be that a fact is true at the moment – not commensurably and universally.²²

The senses, then, give only opinion, not knowledge.²³ Of Grossesteste’s acceptance of these demands on demonstrative premisses A. C. Crombie remarks, “From this it followed that ‘chance or luck’ were not subjects for science.”²⁴

The demand that demonstrative premisses be causes means both that premisses in a demonstrative syllogism refer to the causes in nature of the effects mentioned in the conclusion, and that the premisses themselves be causes of their conclusion. In this way, for instance, Thomas Spencer can define “cause” as “a proposition,

Cambridge University Press

978-0-521-12872-8 - Probability and Literary Form: Philosophic Theory and
Literary Practice in the Augustan Age

Douglas Lane Patey

Excerpt

[More information](#)*From rhetoric to science*

whereof another doth follow” (280). The middle term in demonstration is in particular to be the cause of the conclusion. Following the model of Greek mathematics, wherein properties of a geometrical figure are explained by showing that they follow from the definition of the figure, scientific explanation was to show that effects to be explained follow from the nature of the objects which change. When we have a sufficiently good definition of a thing, we have as well the explanatory grounds – the necessary and sufficient causes – of changes in it; causation and definition are opposite sides of a single coin. “It is all one . . . to know the nature of a thing, and to know the cause of the nature” (*Art of Logick*, p. 280). Demonstration thus requires all the knowledge needed to explain natural phenomena deductively.

Such is the “knowledge” from which probable “opinion” is for centuries distinguished. In the Middle Ages and Renaissance, only what might be called the “high” sciences were agreed truly to embody knowledge: the list changes, but theology, metaphysics, and mathematics are nearly always on it, astronomy, optics, and physics usually, and a host of others sometimes, when a given writer wishes to defend his discipline or to make a polemical point. The “low” sciences – medicine, mineralogy, meteorology, alchemy, astrology – consisted only of “opinion.” Representatives of the low sciences frequently held views unorthodox both philosophically and theologically, and so contributed to the bad odor surrounding the word *opinion* in the sixteenth and seventeenth centuries. *Opinion* bore connotations of singularity, faction, and even heresy:

These times are dangerous for men to write, much more to write opinions.

Learned without opinion, and strange without heresy.

Where most power of the gospel, most prodigies of heresies and opinion.

A heretic, said Bossuet, is a man who has an opinion; according to Malebranche, “Les devots ne sont donc pas opiniâtres.”²⁵ English usage followed French, so that stubborn adherence to opinion is *opiniatrety*, as it is to Locke:

What in them was Science, is in us but Opiniatrety, whilst we give up our Assent only to reverend Names, and do not, as they did, employ our own Reason to understand those Truths, which gave them reputation;

“’tis time,” announces *The Vanity of Dogmatizing*, “for the opinionative world, to lay down their proud pretensions.”²⁶

The survival of *scientia* even into the Augustan age has never been sufficiently attended to by literary scholars. When Pope, for instance, writes in the *Essay on Man*, “Why has not Man a micro-