

Probabilitas

Rudolf Schuessler

The School of Salamanca
A Dictionary of its Juridical-Political Language

Editors:

Duve, Thomas

Lutz-Bachmann, Matthias

Birr, Christiane

Schweighöfer, Stefan

Akademie der Wissenschaften und der Literatur, Mainz
Max-Planck-Institut für Rechtsgeschichte und Rechtstheorie
Goethe-Universität Frankfurt

Electronic publication, 2026-03-10
<https://id.salamanca.school/lemmata/L0132>
<https://www.salamanca.school>

Technical editors:

König, Florian
Rico Carmona, Cindy
Zimmermann, Janina

Proposed citation:

Schuessler: Probabilitas, in: The School of Salamanca. A Dictionary of its
Juridical-Political Language. DOI: [..]
<<https://id.salamanca.school/lemmata/L0132>>

Probabilitas

Contents

1 Definition and context

1.1 Word field

1.2 Related lemmas

2 “Probabilitas” in the School of Salamanca and Iberian Scholasticism

2.1 Background and context

2.2 Developments in the sixteenth century

2.3 Intrinsic and extrinsic probability

2.4 Probabilism

2.5 Probability and probabilism in Iberian colonial scholasticism

2.6 Frequentist probability

2.7 Expected Value

3. Final remark

Literature

Sources

Research literature

1 Definition and context

1 In the scholastic tradition, including its early modern Iberian branch, “probabilitas” is primarily a quality of propositions, meaning that sufficient reasons or authoritative voices support the truth of a proposition, thereby justifying its acceptance as true (Medina 1578, q. 19, art. 6, p. 309; Deman 1933; Franklin 2001; Kantola 1994; Schuessler 2019, 2023). In another important sense, “probabilitas” is attributed to propositions that are true or events that occur “most of the time” (ut frequenter; Franklin 2001; Schuessler 2023). Only the latter notion of probability is related to modern mathematical definitions of probability. Scholastic probability is generally contrasted with certainty—that is, the probable is not certain, and what can be asserted as true with absolute certainty is more than merely probable.

1.1 Word field

2 probabilitas, probabilis, probabilismus, opinio, verisimilis, credibilis, conscientia, probabilism, casus conscientiae, casuista

1.2 Related lemmas

3 alea, assecuratio, auctoritas, conscientia, dubium, ignorantia

2 “Probabilitas” in the School of Salamanca and Iberian Scholasticism

4 Usage and meaning of probability-related terms (probabilis, verisimilis, probabilitas) in early modern scholasticism changed significantly in the period c. 1550–1700. Probability became the basis for moral guidance in alternative systems for the guidance of consciences (systema moralis), whereas before, its use in the confessional had been less closely associated with specific systems. Members of the School of Salamanca played a leading role in these developments. To understand this, it is necessary to briefly look back at the medieval roots of scholastic concepts of probability and their uses.

2.1 Background and context

5 The propositions primarily called “probable” in the medieval scholastic tradition were “opinions” (opiniones), defined as propositions held to be true while acknowledging that their truth was not certain and that the possibility of error existed (Franklin 2013). In many fields of scholastic inquiry, propositions advanced by experts or authorities were recognized as mere opinions and as potentially, or actually, controversial. Following the Aristotelian concept of reputable or plausible opinion (endoxon; Haskins 2004; Von Moos 1991), such opinions were deemed probable because they were held by well-trained, competent scholars or masters of an art whose voices carried authority. In endoxon-based definitions of probable opinion, it was often assumed that such opinions

were held by all or most people, or alternatively by the wisest. However, the persons in question were implicitly understood to be competent in the relevant subject matter, whereas a consensus of illiterate people did not qualify an opinion as probable.

- 6 'Illiterate,' i.e., uneducated, persons who were not themselves competent to judge the truth in a field of inquiry were encouraged to follow the probable opinions of authoritative experts rather than rely on their own opinions (Schuessler 2019). Since opinions could differ and be held by scholars with authority on opposite sides of a debate, both sides in a scholarly dispute were often backed by probable opinions. Thus, a proposition and its negation could both be deemed probable.
- 7 In such cases, it was standardly considered legitimate to follow the probable (i.e., authority-backed) opinion that the principal and better part (*maior et sanior pars*) of authorities held to be true, or the one a person regarded as more probable (*probabilior*) than competing opinions. This element of subjective judgment played a role early on in scholastic thought, given that it was often controversial which side in a debate was supported by the principal and better voices among scholars or experts. Alternatively, the followers of probable opinions could also legitimately choose to follow the opinion that was recognizably safer (*tutior*) for their eternal life, even if it was not the most probable one (Franklin 2001; Schuessler 2019). Following a safer opinion was mandatory only in fields of action where there was a risk of particularly serious harm, such as matters of right religious faith or grave bodily harm (outside the context of war).
- 8 The differentiated scholastic meaning and usage of probability-related terms cannot be satisfactorily gleaned from authoritative statements about probability alone. Given the close connection between opinions and probability in the scholastic tradition, the meaning of "probable" was often explicated in handbook entries under the word "opinion" ([Vio 1525, v. opinione uti, fol. 181v](#); [Nebrija 1559, v. opinio, p. 389](#)). Many links to probability can also be found in entries or analyses of ignorance ([Vio 1525, v. ignorantia, fol. 140r](#); [Nebrija 1559, v. ignorantia, p. 265](#); Toledo 1600, lib. 1, cap. 7, fol. 14v) and presumption ([Vio 1525, v. presumptio, fol. 194r](#); [Nebrija 1559, v. praesumptio, p. 428](#)).
- 9 The rules and principles for adopting probable (i.e., sufficiently authoritative) opinions governed a vast and highly differentiated field of applied moral theology. In the scholastic tradition, these issues were addressed in handbooks for confessors, commentaries on Peter Lombard's "Book of Sentences" or Aquinas's "Summa theologiae", and specialized treatises on practical matters such as justice, contracts, marriage, or just war (Boyle 1982; Quantin 2016; Reinhardt 2016; Schwartz 2019). The choice of probable opinions for ordinary Christians was typically guided by confessors, who could consult moral theological treatises and handbooks to navigate the intricate scholastic debates on the correct solution for applied cases of practical morality (Biller/Minnis, eds., 2013; Boyle 1982). This focus on cases of conscience led to the rise of the discipline of casuistry in early modern theology, in which such cases received particularly systematic treatment (Jonsen/Toulmin 1988; Schuessler 2022; Turrini 1991).

2.2 Developments in the sixteenth century

- 10 Early modern Iberian scholastics (c. 1500–c. 1770; Braun/De Bom, eds., 2022; White 1997), including members of the “School of Salamanca” (Belda Plans 2000; Duve et al., eds., 2020), built upon the medieval scholastic usage of the terms “probabilism” and “probabilitas” outlined above. In the first half of the sixteenth century, they mainly adopted definitions rooted in the Aristotelian concept of reputable opinion. They did so, often with reference to works such as Angelo de Clavasio’s “Summa Angelica”, a famous handbook for confessors: “What appears true to the majority and especially to the wisest is said to be probable” (Dicitur autem probabile quod pluribus et maxime sapientibus apparet verum; Clavasio 1534, v. opinio, fol. 336r).
- 11 The highly influential Tommaso de Vio, Cardinal Cayetan, defined opinions that were not only probable but more probable than others as follows: “The more probable part, however, is said to be that which rests on better reasons, or which is expressly affirmed by more learned and pious men” (Vio 1525, v. opinione uti, fol. 181v). Contemporary Iberian usage of probability-related terms initially did not deviate significantly from such, often non-Iberian, precedents. Martín de Azpilcueta (Navarrus) created an exemplary guideline for acting responsibly on the basis of merely probable opinions (Azpilcueta 1556, cap. 27, no. 283, p. 795). Antonio de Córdoba offered another influential guideline, explicitly distinguishing between the contrariety of more probable, merely probable, and equally probable opinions (Córdoba 1569, lib. 2, q. 3, prop. 1 and 3, p. 11). This reflects the practice of making rank-order comparisons among greater, equal, or lesser probability at a time when quantification of probability as a number in the zero-to-one interval had not yet been introduced (Franklin 2001; Schuessler 2016). That step, leading to modern conceptions of probability, was only taken in the mid-seventeenth century (Daston 1988; Hacking 2006; Hald 2003).
- 12 In the second half of the sixteenth century, the understanding of probability associated with Aristotelian probable opinion was transformed by placing increased emphasis on strong reasons as a basis for probability, alongside authoritative endorsement by competent reasoners (“the wise”). This second probability-conveying aspect of opinion formation may already have been implicitly accepted in the Middle Ages, but it now became an explicit element in definitions of probable opinion (Maryks 2008; Schuessler 2019; Tutino 2018). Bartolomé de Medina, a Dominican professor at the University of Salamanca, wrote: “That opinion is probable which is upheld by wise men and supported by the best arguments” (ea opinio probabilis est, quam asserunt viri sapientes, et confirmant optima argumenta; Medina 1578, q. 19, art. 6, p. 309). This double-pronged conception of probability, which relies both on arguments and reasons and on the authority of competent individuals, subsequently became standard in the scholastic discourse on probability. It can already be found widely in the writings of Iberian scholastics shortly after Medina’s characterization, regardless of the religious order to which they belonged. Virtually all authors who later became prominent authorities of reference within their respective orders adopted the conception of probability quoted above (Salón 1591, q. 63, a. 4, contr. 2, p. 1083 – an Augustinian monk; Azor 1602, vol. 1, lib. 2, cap. 16, p. 110; Vázquez 1606, vol. 1, q. 19, disp. 62, cap. 1, no. 2, p. 425; Salas

1607, tract. 8, disp. 1, sect. 5, no. 43, p. 1194; Suárez 1856, tract. 3, disp. 12, sect. 6, p. 450 – all Jesuits). Not least through the influence of these authors, the idea of basing probability explicitly on either reasons or authority was further refined (see Section 2.3). Corresponding definitions can be found in many works of moral theology and moral casuistry in the seventeenth century, in which Salamanca and, more generally, Iberian authors continued to play a central role (e.g., Arriaga 1644, disp. 24, sect. 3, no. 11, p. 256; Escobar y Mendoza 1652, vol. 1, lib. 2, sect. 1, cap. 2, § 2, no. 12, p. 32; Castro Palao 1700, tract. 1, disp. 2, punct. 1, p. 5).

- 13 Scholastic authors relied on argumentation with probable opinions in a wide array of thematic fields and textual genres. Typical examples are writings on economic issues, such as treatises on contracts or ‘Justice and Law’ (*De iustitia et iure*). Probable reasoning, for instance, is used to explain when foregone gains (*lucrum cessans*) justify the taking of interest and protect traders against accusations of usury (Luis Lopez 1589, lib. 1, cap. 23, p. 74), or when *bona fide* possession justifies consumption (Castro Palao 1651, tract. 31, disp. unica, punct. 24, § 7, no. 9, p. 120). Other uses are associated with tax payment (Medina 1553, q. 14, fol. 48v), the plurality of legal opinions (Mercado 1569, cap. 5, fol. 15r), or inculpable ignorance in contexts of justice (Zapata y Sandoval 1609, pars 3, cap. 2, no. 11, p. 410). More generally, treatises on ‘Justice and Law’ extensively refer to alternative views on the issues discussed, along with assessments of their probability (Molina 1593; Bañez 1594; Lessius 1605; Castro Palao 1651).
- 14 Probable argumentation is also widespread in political contexts, for example, when the Christianization of newly encountered infidels was at issue (Vitoria 1557, *De indis prior*, no. 39, p. 341), when advising a prince (Mariana 1599, lib. 2, cap. 8, p. 187), or when justifying the beginning of a war (Freitas 1625, cap. 9, no. 6, fol. 95r).
- 15 A third thematic field is the practice of priests in the confessional, who were instructed to follow the most probable or safest among alternative opinions on what should be done, or were permitted to condone any probable opinion they considered appropriate for their client (Vitoria 1561, fol. 133v; Medina 1553, *De poenitentia*, q. 5, fol. 16v).
- 16 In some of these contexts, a moral-theological perspective prevailed; in others, argumentation proceeded from a juridical point of view. Juridical uses of probability in the scholastic tradition have their own rules and paradigms. For instance, the testimony of a single reliable witness could render an accusation probable, but more witnesses were required to transform mere probability of guilt into a forensic proof of guilt (Díaz de Luco, *v. denunciatio*, cap. 2, p. 17). Books by lawyers and in juridical genres often contain as much probability-based argumentation as writings on moral theology or casuistical manuals. Typical problems in which principles of probable reasoning were key to a solution include possession despite unclear ownership (Vazquez de Menchaca 1572, cap. 74, no. 8, fol. 180r), irregularities in marriage (Covarrubias 1571, cap. 6, § 8, no. 12, p. 90), the duties of judges (Carrasco 1620, cap. 3, no. 12, fol. 20r; Vacca 1645, tit. 18, l. 19, p. 141), or the permissibility of begging (Quesada 1675, cap. 16, no. 10, fol. 63v).

2.3 Intrinsic and extrinsic probability

- 17 The double-pronged definition of opinion probability—as based on both reasons and the truth-related authority of competent reasoners—gave rise to a distinction between intrinsic and extrinsic probability (*probabilitas intrinseca* and *extrinseca*; Deman 1933; Maryks 2008; Schuessler 2019). The intrinsic probability of an opinion arose from the strength and number of reasons known in support of its truth. The extrinsic probability of an opinion, by contrast, depended on the support it received from the assent given to it by other competent reasoners—that is, members of a community of competent or expert evaluators. Thus, extrinsic probability reflected the contribution that social epistemology made to the assertibility of an opinion (Schuessler 2014, 2019). Reasonable persons would assess an opinion on both counts, with its overall probability understood as a combination of intrinsic and extrinsic aspects.
- 18 In scholastic sources, extrinsic probability was often understood in terms of “external principles” (*principia extrinseca*) that justified the acceptance of an opinion. The link to social epistemology is particularly clear in sources that identify such extrinsic principles of probability with the authority of scholars. Jesuit authors from the late sixteenth and early seventeenth century set the pace in this respect (Vázquez 1606, vol. 1, q. 19, disp. 62, cap. 4, no. 14, p. 418 ; Azor 1602, vol. 1, lib. 2, cap. 8, p. 103 ; Salas 1607, tract. 8, disp. 1, sect. 6, no. 61, p. 1201 ; Sánchez 1614, lib. 1, cap. 9, no. 12, p. 32). Later authors followed their precedent (e.g., Arriaga 1644, disp. 24, sect. 3, no. 11, p. 256 ; Izquierdo 1659, lib. 1, disp. 6, p. 147).

2.4 Probabilism

- 19 The development of scholastic conceptions of probability in the early modern era was profoundly influenced by the rise of a new doctrine for the guidance of Christian consciences. This doctrine, called “probabilism”, was first formulated in its canonical form by Bartolomé de Medina, O.P. (1527–1580), a professor at the University of Salamanca (Deman 1936; Franklin 2001; Schuessler 2019, 2022; Schwartz 2014, 2019; Tutino 2018). Medina wrote: “If an opinion is probable, it may be followed, even if the opposite opinion is more probable” (*Si est opinio probabilis, licitum est eam sequi, licet opposita probabilior sit*; Medina 1578, q. 19, a. 6, p. 309).
- 20 As the quotation from Medina shows, probabilism characteristically grants a *prima facie* license to act on probable opinions in moral matters, even against more probable alternatives. Probabilism presupposes that two contrary opinions can both be probable in the sense of being supported by strong reasons or authorities, even if one is deemed better supported and thus more probable than the other. The judgment that one opinion is better supported does not necessarily reduce the opposite opinion’s support to the point where it is no longer probable or assertible by prudent reasoners.
- 21 Probabilism was a general doctrine of social epistemology concerning the use of opinions in the guidance of action—and thus more than a mere rule for resolving cases of conscience (Schuessler 2014, 2019). It allowed agents to act upon any opinion that

was sufficiently supported by reasons or authority to be adopted by a reasonable person, even if the agent or their reference group of experts considered the opinion less likely to be true than its negation. This condition became practically relevant, for instance, in contexts involving group decision-making, where holders of an opinion *o* may be considered as reasonable and competent by opponents who nevertheless reject *o* in favour of a contrary opinion *w*. As a matter of compromise, it could then be legitimate to jointly follow *o*, even against one's own judgment that *w* is more justified, provided *o* is at least reasonably tenable (i.e., not unreasonable).

- 22 To articulate the conditions under which an opinion could be considered less probably true than an alternative, yet still reasonably assertible by competent judges (a situation today referred to as reasonable disagreement; Christensen/Lackey, eds., 2016; Feldman/Warfield, eds., 2010), the scholastic concept of probability was refined until assertibility by a reasonable person became an explicit precondition for attributing probability to an opinion (see Schuessler 2014, 2019).
- 23 It is against this background that scholastic probabilism should be understood as a specific doctrine within moral theology and casuistry, concerned with the legitimate and reasonable adoption of opinions as guides for action. By contrast, moral considerations and solutions for cases of conscience in scholastic theology are often labelled probabilistic today simply because they are based on probable reasoning. The scope of such reasoning—grounded in scholastic notions of “the probable”—was vast, encompassing most of the discourse of applied moral theology since the thirteenth century. Probabilism, as a distinct doctrine for the guidance of consciences, entered this discourse relatively late and did not encompass all forms of probabilistic reasoning.
- 24 The general license of probabilism was, in principle, not limited by subject matter but could be overridden in cases involving great risk to body or soul. Naturally, such risks were *prima facie* greater in some domains than in others (e.g., matters of faith, but also medical treatment or just causes for war). Nonetheless, Medina offered an alternative to the long-standing norm that only the most probable or safest of competing opinions could legitimately be chosen (Schuessler 2019, 2022). A preference for safety, or the minimizing of spiritual risk, was only required in special cases.
- 25 Medina's probabilism was rapidly accepted by most Catholic scholastic theologians, across religious orders, though the Jesuits stood out for their significant contributions to its further development (Maryks 2008; Schuessler 2019; Schwartz 2019; Tutino 2018). By the mid-seventeenth century, almost all Iberian scholastics had become probabilists, subscribing to Medina's formula fully or with some qualifications (Azor 1602, vol. 1, lib. 2, cap. 16, p. 110; Vázquez 1606, vol. 1, q. 19, disp. 62, cap. 4, no. 14, p. 428; Suárez 1856, tract. 3, disp. 12, sect. 6, p. 450; Salas 1611, disp. 13, sect. 1, no. 5, p. 291). This was, however, not an Iberian peculiarity but reflected the wide acceptance of probabilism in Catholic moral theology.
- 26 Very few Catholic moral theologians, including a few Iberians, rejected probabilism during the first half of the seventeenth century (e.g., Rebello 1608; Hurtado 1637, tract. De iudicio, disp. 1, diff. 19, fol. 292v). By contrast, probabilism was almost uniformly rejected by Protestant theologians, with Georg Calixt as a rare exception

(Calixt 1662, p. 27). Opposition to probabilism began to grow from the 1640s onward and became a strong current in the 1660s. This movement, called antiprobabilism, included a significant number of Iberian scholastics, the most prominent being the Jesuit general Tirso González (González 1694), who had taught in Salamanca. The conflict between probabilists and antiprobabilists led to a polarization of Catholic moral theology into mutually hostile camps that endorsed rival moral systems for the guidance of consciences and the regulation of behaviour. This split continued throughout the eighteenth century.

2.5 Probability and probabilism in Iberian colonial scholasticism

- 27 Probability-related terms were also prolifically used in Iberian colonial scholasticism, that is, in scholastic works published or written by authors active in non-European Christian centers, colonies, and viceroyalties (Hofmeister Pich/Culleton, eds., 2016; Tellkamp, ed., 2020). The same holds true for the doctrine of probabilism, with the important caveat that the purposes for which probabilism was employed could be specific to the colonial context. It has been shown that colonial cases were among the moral problems whose attempted solutions helped prepare the way for probabilism (Egío García 2022; Mercado 1569, cap. 5, fol. 15r). This was part of a broader trend toward a more benign or flexible approach to the guidance of consciences that had begun in the fifteenth century and facilitated the rise of probabilism (Schuessler 2019). Nevertheless, the traditional view of Medina as the “inventor” of probabilism remains valid when we speak of probabilism as a general doctrine with a canonical formulation—one whose principles became the subject of intense debate only after Medina’s seminal articulation of the doctrine.
- 28 It is significant that colonial scholastics relied on probabilism to justify colonial rule or to resolve administrative problems. Jesuits in Japan sent practical problems of morality (cases of conscience) to the eminent Jesuit theologian Gabriel Vazquez for comment and solution (Gay 1960). In Peru, Juan de Solórzano Pereira (Solórzano Pereira 1648, vol. 1, lib. 2, cap. 15, sect. 26, p. 435) used probabilism to justify the continued Spanish presence in the Americas. Diego de Avendaño discussed the legitimacy of Black African slavery on the basis of probabilistic argumentation (Avendaño 1668, vol. 1, tit. 9, cap. 12, § 8, p. 324), without offering a clear answer. Avendaño also developed extensive theoretical arguments concerning the foundations of probabilism, documenting the feasibility of contributing to the ongoing debate on this doctrine from Lima (Avendaño 1675, vol. 3, pars 1, sect. 1, Appendix; Avendaño 1675, vol. 3, pars 1, sect. 11, Additions to the Appendix; Avendaño 1675, vol. 4, pars 5). Questions concerning the extent to which the doctrine of probabilism, and more broadly the scholastic discourse of probability, was instrumental in legitimating Iberian colonial rule in the seventeenth and eighteenth centuries are therefore justified.

2.6 Frequentist probability

- 29 An understanding of probability derived from Aristotle’s concept of reputable or plausible opinion (*endoxon*) was the primary usage of the term in early modern moral theology, whether Catholic or Protestant. However, another understanding also existed—likewise rooted in Aristotle and with a history of use in the medieval period (Franklin 2001; Judson 1991; Knebel 2000; Winter 1997). According to this second understanding, something was probable if it occurred most of the time (*ut frequenter*). It is easy to recognize in this the ancestor of modern frequentist notions of probability, which regard the relative frequency of a type of event e in a sequence of events as the basis of e ’s probability (Gillies 2000). The Aristotelian *ut-frequenter* conception was not yet properly frequentist, as it did not quantify probability as a ratio of event types. Instead, it treated regularities as probable if exceptions were rare, without a clear numerical measure of rarity.
- 30 Nevertheless, in the early modern era, a transition from *ut-frequenter* probability to quantified frequentist probability began to take place in scholastic writings—with a notable contribution by Iberian authors (Knebel 2000; Schuessler 2019), although not all scholastics who advanced frequentist conceptions of probability were Iberian.
- 31 Antonio Pérez regarded the frequency of the connection between one thing and another (*frequentia connexionis alicuius rei cum alia*; Pérez 1668, tract. 1, disp. 4, cap. 2, no. 24, p. 70) as a criterion of probability. If the connected things were independent of the opinion holder, the probability was considered objective; if the connection involved dispositions of the opinion holder and the truth of a conclusion, the cause of probability was described as subjective by Pérez.
- 32 Pérez and Juan de Lugo, both of whom had studied and taught at the University of Salamanca, initiated important investigations into different approaches to probability—some of which anticipated modern developments—at the Jesuit Collegio Romano in the first half of the seventeenth century. Later, Martín de Esparza (a probabilist) and Miguel de Elizalde (an anti-probabilist), also both for some time professors at Salamanca, carried on this line of inquiry with detailed analyses of Aristotelian *ut-frequenter* probability (Esparza 1669, appendix de uso licito opinionis probabilis, pars 2, art. 89, p. 79; Elizalde 1670, pars 1, lib. 2, q. 16, p. 112). A notable endorsement of a proto-frequentist conception of probability is also found in Juan Palanco (Palanco 1694, q. 22, no. 3, p. 191).

2.7 Expected Value

- 33 Another step toward modern probability was taken by early modern scholastics through the move toward the mathematization of expected value for the outcomes of risky decisions. The expected value of an action’s outcome is the product $p \cdot u$ where u is the value of the outcome and p is the probability of its occurrence. In the historiography of probability, expected value is commonly assumed to have been discovered as a result of the mathematical analysis of games of chance. It was formally defined after 1654 in

the famous correspondence between Pascal and Fermat, and in the work of Christiaan Huygens (Hacking 2006; Hald 2003).

- 34 However, already in the first half of the seventeenth century, a second route to the concept of expected value existed via scholastic discussions of justice in so-called aleatory contracts—contracts involving the intentional trading of risk, with insurance being the most prominent example (Decock 2013). The fairness of economic exchanges involving risk was a long-standing concern in scholastic treatments of justice in exchange (*iustitia commutativa*). Insurance contracts, which had existed since the fourteenth century as arrangements involving the buying or selling of risk (Ceccarelli 2001; Franklin 2001), were only considered fair if the insurance price fell within the range of a just price for the risk transferred.
- 35 The mathematization of this balance was gradual. The modern understanding of expected value—as the product of an event’s value and the probability of its occurrence—appears to have entered scholastic discussions of fairness in aleatory contracts in the first half of the seventeenth century. Juan de Lugo y Quiroga, for example, insisted that in insurance contracts the premium should reflect the level of risk assumed by the insurer (Lugo y Quiroga 1642, disp. 31, § 4, no. 46, p. 427). Pedro de Oñate, who was largely active in Paraguay and Peru, took the mathematization a step further by specifying that the premium should double if the risk doubles, explicitly requiring proportionality between risk and premium—thus effectively arriving at the $p \cdot v$ concept of expected value (Oñate 1646, vol. 3, pars 2, tract. 36, disp. 131, sect. 1, no. 16, p. 377).

3. Final remark

- 36 Reasoning based on the scholastic concept of probability was a mainstay of scholastic philosophy and theology from the thirteenth century through to the end of the original scholastic tradition in the late eighteenth century. Scholastics recognized that in many areas of their intellectual endeavours, consensus and certainty could not be achieved by argument alone. In the early modern period, members of the School of Salamanca played a leading role in advancing the scholastic discourse on probability. Although important contributions also came from outside the Iberian Peninsula, particularly before 1520 and after 1600, the Iberian tradition was central in shaping the early modern development of scholastic thought on probability and in driving the debate over probabilism.
- 37 Döllinger/Reusch 1889, Deman 1933, and Deman 1936 are older works with lasting value for a deeper understanding of early modern uses of the term “probabilis” and its cognates, as well as for the debate on moral probabilism. Jonsen/Toulmin 1988 sparked renewed interest in casuistry and its history and revived its application in modern applied ethics. Early modern casuistry and its practice are also the subject of Turrini 1991, Leites, ed., 1988, Braun/Vallance, eds., 2004, Reinhardt 2016, Schuessler 2022, and Schwartz 2019. Scholastic conceptions of probability have become a focus of research in more recent works, such as Kantola 1994, Knebel 2000, Franklin 2001, Schuessler 2019, and Schuessler 2023. At the same time, interest in the scholastic use of probable opinions for the moral guidance of consciences, the regulation of disagreement

Probabilitas

between authorities, and, more generally, the relation between belief and action has grown in recent decades. New publications on moral probabilism as a system of moral guidance, particularly in the early modern Catholic sphere, include Schwartz 2014, 2019, Tutino 2018, and Schuessler 2019. Maryks 2008, Gay 2012 address the use of and debate on probabilism specifically within the Jesuit order. There is no book devoted specifically to probability or probabilism in the School of Salamanca.

Literature

Sources

Aquinas, Thomas: *Sancti Thomae Aquinatis opera omnia*. Romae, Typographia de Propaganda Fide, 1891.

Arriaga, Rodrigo: *Disputationes theologicae in Primam Secundae D. Thomae*, Tom. 3. Antverpiae, Moretus, 1644.

Avendaño, Diego de: *Thesaurus Indicus* (2019 [1668]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0001>>

Azor, Juan: *Institutiones morales* (in prep. [1602]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0024>>

Azpilcueta, Martín de: *Manual de confesores y penitentes* (2019 [1556]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0002>>

Báñez, Domingo: *De Iure et Iustitia Decisiones* (2019-07-04 [1594]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0003>>

Calixt, Georg: *Epitome theologiae moralis*. Helmestadii, Henning Müller, 1662.

Carrasco del Saz, Francisco: *Interpretatio Ad Aliquas Leges Recopilationis Regni Castellae*. (2025-05-23 [1620]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0032>>

Castro Palao, Fernando de: *De Ivstitia Et Ivre* (2025-08-04 [1651]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0038>>

Castro Palao, Fernando de: *Opus morale de virtutibus et vitiis*, Tom. 1. Lugduni, Anisson & Posuel, 1700.

Clavasio, Angelo de: *Summa angelica de casibus conscientiae* (2024 [1534]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0039>>

Covarrubias y Leyva, Diego de: *Opera Omnia* (2021-09-13 [1571]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0006>>

Córdoba, Antonio: *Quaestionarium theologicum* (in prep. [1569]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0040>>

Díaz de Luco, Juan Bernardo: *Practica criminalis canonica* (2021-09-29 [1554]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0041>>

The School of Salamanca. A Dictionary of its Juridical-Political Language.

Elizalde, Miguel de: *De recta doctrina morum*. Lugduni, Petri Chevalier, 1670.

Escobar y Mendoza, Antonio de: *Universa theologia moralis* (2024 [1652]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0043>>

Esparza, Martin de: *Cursus theologicus, Appendix de usu licito opinionis probabilis*. Romae, Camera Apostolica, 1669.

Freitas, Serafim de: *De Iusto Imperio Lusitanorum Asiatico* (2020-11-13 [1625]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0046>>

González, Tirso: *Fundamentum theologiae moralis, id est tractatus theologicus de recto usu opinionum probabilium*. Romae, Jacob Komarek, 1694.

Hurtado, Gaspar: *De iustitia et iure* (in prep. [1637]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0055>>

Izquierdo, Sebastian: *Pharus scientiarum*, Tom. 1. Lugduni, C. Bourgeat & M. Lietard, 1659.

Lessius, Leonardus: *De Iustitia Et Ivre caeterisque Virtutibus Cardinalibus Libri IV* (2025-10-28 [1605]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0062>>

López, Luis: *Instructorium negotiantium: in duobus contentum libris*. (2025-02-05 [1589]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0065>>

Lugo y Quiroga, Juan de: *De iustitia et iure*, Tom. 2 (in prep. [1642]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0066>>

Mariana, Juan de: *De rege et regis institutione libri III* (2025-05-15 [1599]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0067>>

Medina, Bartolomé de: *Expositio in primam secundae angelici doctoris D. Thomae Aquinatis* (in prep. [1578]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0072>>

Medina, Juan de: *In titulum de poenitentia eiusque partibus commentarii*. (2024-09-24 [1553]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0074>>

Medina, Juan de: *Restitutione et Contractibus Tractatus* (2024-10-08 [1553]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0073>>

Mercado, Tomás de: *Tratos y Contratos* (2019-03-15 [1569]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0007>>

Probabilitas

Molina, Luis de: *De Iustitia et Iure* (2025 [1593]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0008>>

Nebrija, Elio Antonio de: *Vocabularium utriusque iuris* (2025 [1559]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0079>>

Oñate, Pedro de: *De contractibus*, Tom. 3 (in prep. [1646]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0080>>

Palanco, Francisco: *Tractatus de conscientia humana*. Salamanca, G. O. Gallardo, 1694.

Pérez, Antonio: *De iustitia et iure*. Romae, Varesi, 1668.

Petrus Lombardus: *Sententiae in Quatuor Libros Distinctae*. Grottaferrata, Collegii S. Bonaventurae ad Aquas Claras, 1971-1981.

Quesada, Antonio: *Diversarum quaestionum iuris liber*. (2024-08-28 [1573]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0089>>

Rebello, Ferdinando: *De obligationibus iustitiae, religionis et charitatis*. Lugduni, H. Cardon, 1608.

Salas, Juan de: *Disputationes in Primam Secundae Divi Thomae*, Tom. 1, q. 1–48. Barcelona, Graells & Dotil, 1607.

Salas, Juan de: *Tractatus de legibus in Primam Secundae Divi Thomae* (2024 [1611]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0092>>

Salón, Miguel: *Commentariorum in disputationem de iustitia* (in prep. [1591]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0094>>

Sánchez, Tomás: *Opus morale in praecepta decalogi*. Antverpiae, Nuti & Meursius, 1614.

Solórzano Pereira, Juan de: *Politica Indiana sacada en lengua castellana* (2021 [1648]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0096>>

Suárez, Francisco: *Opera omnia*, Tom. 4. Parisiis, Vivès, 1856.

Toledo, Francisco de: *Summa casuum conscientiae* (in prep. [1600]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0099>>

Vacca, Antonius: *Expositiones locorum obscuriorum et Paratitulum in Pandectas*. (2020-05-06 [1554]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0103>>

The School of Salamanca. A Dictionary of its Juridical-Political Language.

Vázquez, Gabriel: *Disputationes in Primam Secundae S. Thomae* (in prep. [1606]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0105>>

Vázquez de Menchaca, Fernando: *Controversiarum illustrium aliarumque usu frequentium* (2022-05-10 [1572]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0106>>

Vio, Thomas de: *Summula Caietani* (2024 [1525]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0114>>

Vitoria, Francisco de: *Relectiones Theologicae XII* (2018 [1557]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0013>>

Vitoria, Francisco de: *Summa Sacramentorum* (2018-12-19 [1561]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0014>>

Zapata y Sandoval, Juan: *De Iustitia distributiva et acceptatione personarum ei opposita*. (2025-06-30 [1609]), in: *The School of Salamanca. A Digital Collection of Sources*. <<https://id.salamanca.school/texts/W0116>>

Research literature

Belda Plans, Juan: *La escuela de Salamanca*. Madrid, Biblioteca De Autores Cristianos, 2000.

Biller, Peter/Minnis, Alastair (eds.): *Handling Sin: Confession in the Middle Ages*. York, York Medieval Press, 2013.

Boyle, Leonard: *Summae confessorum*, in: Robert Bultot (ed.), *Les genres littéraires dans les sources théologiques et philosophiques médiévales*. Louvain-la-Neuve, U.C.L., 1982, 227-237.

Braun, Harald/De Bom, Erik (eds.): *Companion to the Spanish Scholastics*. Leiden, Brill, 2022.

Braun, Harald/Edward Vallance (eds.): *Contexts of Conscience in Early Modern Europe 1500-1700*. Houndmills, Palgrave-Macmillan, 2004.

Ceccarelli, Giovanni: *Risky Business. Theological and Canonical Thought on Insurance from the Thirteenth to the Seventeenth Centuries*, in: *Journal of Medieval and Early Modern Studies* 31 (2001), 607-658.

Christensen, David/Lackey, Jennifer (eds.): *The Epistemology of Disagreement*. Oxford, Oxford University Press, 2016.

Daston, Lorraine: *Classical Probability in the Enlightenment*. Princeton, Princeton University Press, 1988.

Decock, Wim: *Theologians and Contract Law. The Moral Transformation of the Ius Commune (ca. 1500-1650)*. Leiden, Nijhoff, 2013.

Probabilitas

- Deman, Thomas: *Probabilis*, in: *Revue des sciences philosophiques et théologiques* 22 (1933), 260-290.
- Deman, Thomas: *Probabilisme*, in: Alfred Vacant/Eugène Mangenot (eds.), *Dictionnaire de théologie catholique*, Vol. 3/1. Paris, Letouzey et Ané, 1936, 417-619.
- Döllinger, Ignaz/Reusch, Franz: *Geschichte der Moralstreitigkeiten in der römisch-katholischen Kirche seit dem 16. Jahrhundert*. Nördlingen, C.H. Beck, 1889.
- Duve, Thomas/Egío García, José Luis/Birr, Christiane (eds.): *The School of Salamanca. A Case of Global Knowledge Production*. Leiden, Brill, 2020.
- Egío García, José Luis: *The Global Origins of Probabilism*, in: *Studia historica. Ha. Moderna* 44 (2022), 115-151.
- Feldman, Richard/Warfield, Ted (eds.): *Disagreement*. Oxford, Oxford University Press, 2010.
- Franklin, James: *The Science of Conjecture*. Baltimore, Johns Hopkins University Press, 2001.
- Franklin, James: *Probable Opinion*, in: Peter Anstey (ed.), *Oxford Handbook of British Philosophy in the Seventeenth Century*. Oxford, Oxford University Press, 2013, 349-371.
- Gay, Jesus Lopez: *Un documento inedito de P. G. Vazquez (1549-1604) sobre los problemas morales del Japan*, in: *Monumenta Nipponica* 16 (1960), 118-160.
- Gay, Jean-Pascal: *Jesuit Civil Wars. Theology, Politics and Government under Tirso González (1687-1705)*. Farnham, Ashgate, 2012.
- Gillies, Donald: *Philosophical Theories of Probability*. London, Routledge, 2000.
- Hacking, Ian: *The Emergence of Probability*. Revised ed. Cambridge, Cambridge University Press, 2006.
- Hald, Anders: *A History of Probability and Statistics and Their Applications before 1750*. New York, Wiley, 2003.
- Haskins, Ekaterina: *Endoxa, Epistemological Optimism, and Aristotle's Rhetorical Project*, in: *Philosophy and Rhetoric* 37 (2004), 1-20.
- Hofmeister Pich, Roberto/Culleton, Alberto (eds.): *Scholastica colonialis. Reception and Development of Baroque Scholasticism in Latin America, 16th-18th Centuries*. Barcelona, Brepols, 2016.
- Jonsen, Albert/Toulmin, Stephen: *The Abuse of Casuistry*. Berkeley, University of California Press, 1988.
- Judson, Lindsay: *Chance and 'Always or For the Most Part' in Aristotle*, in: Lindsay Judson (ed.), *Aristotle's Physics. A Collection of Essays*. Oxford, Clarendon, 1991, 73-79.
- Kantola, Ilkka: *Probability and Moral Uncertainty in Late Medieval and Early Modern Times*. Helsinki, Luther-Agricola-Society, 1994.

The School of Salamanca. A Dictionary of its Juridical-Political Language.

- Knebel, Sven: *Wille, Würfel und Wahrscheinlichkeit*. Hamburg, Meiner, 2000.
- Leites, Edmund(ed.): *Conscience and Casuistry in Early Modern Europe*. Cambridge, Cambridge University Press, 1988.
- Maryks, Robert: *Saint Cicero and the Jesuits. The Influence of the Liberal Arts on the Adoption of Moral Probabilism*. Aldershot, Ashgate, 2008.
- Quantin, Jean-Louis: *Catholic Moral Theology 1550–1800*, in: Ulrich L. Lehner/Richard A. Muller/A. G. Roeber (eds.), *The Oxford Handbook of Early Modern Theology, 1600–1800*. Oxford, Oxford University Press, 2016, 119-134.
- Reinhardt, Nicole: *Voices of Conscience. Royal Confessors and Political Counsel in Seventeenth-Century Spain and France*. Oxford, Oxford University Press, 2016.
- Schuessler, Rudolf: *Scholastic Probability as Rational Assertability – The Rise of Theories of Reasonable Disagreement*, in: *Archiv für Geschichte der Philosophie* 96 (2014), 202-231.
- Schuessler, Rudolf: *Equi-Probability Prior to 1650*, in: *Early Science and Medicine* 21 (2016), 54-74.
- Schuessler, Rudolf: *The Debate on Probable Opinions in the Scholastic Tradition*. Leiden, Brill, 2019.
- Schuessler, Rudolf: *Casuistry and Probabilism*, in: Harald Braun/Erik de Bom (eds.), *A Companion to the Spanish Scholastics*. Leiden, Brill, 2022, 334-360.
- Schuessler, Rudolf: *Probability in Medieval and Renaissance Philosophy* (2023), in: Edward Zalta/Uri Nodelman (eds.), *Stanford Encyclopedia of Philosophy*. <<https://plato.stanford.edu/entries/probability-medieval-renaissance/>>
- Schwartz, Daniel: *Probabilism Reconsidered: Deference to Experts, Types of Uncertainty, and Medicines*, in: *Journal of the History of Ideas* 75 (2014), 373-393.
- Schwartz, Daniel: *The Political Morality of the Late Scholastics*. Cambridge, Cambridge University Press, 2019.
- Tellkamp, Jörg (ed.): *A Companion to Early Modern Spanish Imperial Political and Social Thought*. Leiden, Brill, 2020.
- Turrini, Miriam: *La coscienza e le leggi*. Bologna, Il Mulino, 1991.
- Tutino, Stefania: *Uncertainty in Post-Reformation Catholicism. A History of Probabilism*. Oxford, Oxford University Press, 2018.
- Von Moos, Peter: 'Was allen oder den meisten oder den Sachkundigen richtig scheint.' Über das Fortleben des endoxon im Mittelalter, in: Bernhard Mojsich/Olaf Pluta (eds.), *Historia Philosophiae Medii Aevi*. Amsterdam, Grüner, 1991, 711-743.
- White, Kevin: *Hispanic Philosophy in the Age of Discovery*. Washington DC, The Catholic University Press of America, 1997.
- Winter, Michael: *Aristotle, hos epi to polu Relations, and a Demonstrative Science of Ethics*, in: *Phronesis* 42 (1997), 163-189.