Argumentation (2017) 31:555–572
DOI 10.1007/s10503-016-9417-3

The Nature and the Place of Presumptions in Law and Legal Argumentation

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Published online: 24 November 2016

Abstract This paper explores two persistent questions in the literature on presumptions: the place and the nature of presumptions in law and legal argumentation. These questions were originally raised by James Bradley Thayer, one of the masters of the Law of Evidence and the author of the classic chapter devoted this subject in *A preliminary treatise on Evidence* (1898). Like Thayer, I believe that these questions deserve attention. First the paper shows that the connection between presumptions and argumentation is a constant feature in the literature on presumptions, since its foundation in the Middle Ages to modern times. James Bradley Thayer was probably the last jurist who clearly saw that presumptions belong to argumentation. Second, the paper examines two sources of controversy in the language of presumptions. First, "presumption" is an ambiguous word in the legal discourse. As a result, it is almost impossible to provide a clear and succinct answer to the question "What is a presumption?". Second, there are at least four reconstructions of the concept of presumption whose merits and shortcomings are relevant to explore. The analysis presented here may be of interest for legal and non-legal scholars and, hopefully, it may help to shed light on the possibilities and limits of an interdisciplinary dialogue about presumptions.

An earlier version of this paper was presented at the UT-ITAM conference held at the University of Texas at Austin and at the Tequila Seminar in Mexico. This paper was presented at the conference "Presumptions, Presumptive Inference and Burden of Proof" held at the University of Granada on April 26–28, 2016. I am grateful to participants at those events for their thoughtful comments. I am also thankful to the reviewers for their comments and insightful criticism that significantly improved the quality of this work.

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Keywords Presumption · Burden of proof · Legal argumentation · Richard Whately · James Bradley Thayer

1 Introduction

The use of presumptions is extended across different legal cultures.[1] Their ubiquity is uncontested in the Common Law and the Civil Law traditions.[2] They have been used by legislatures and courts in different branches of the law and for a variety of purposes. The presumption of paternity, the presumption of innocence, the presumption of constitutionality and the presumption of death are just some of the most typical examples. Not surprisingly, it is a subject that has received great attention from legal scholars at different times and places.

But the fascination for presumptions is not exclusive to legal writers. Philosophers, argumentation theorists and researchers from a variety of disciplines are also attracted to presumptions and to the related concept of burden of proof.[3] As a result, presumptions have been subject of much study and debate in contexts as apparently different as law, argumentation, artificial intelligence, epistemology and philosophy.

Despite the studies dedicated to this subject, scholars from all these disciplines have raised similar questions about this topic. What are presumptions? What is the relationship between presumption rules and permissible inferences? Are all presumptions rebuttable and what does it take for a presumption to be rebuttable? Do all presumptions shift the burden of proof to the opponent? What is the strength of a presumption and how does this force affect the burden of proof?[4] These and other questions are often met with a combination of fascination and puzzlement.

However, as Ronald Allen remarks regarding the use of burdens of proof in law, AI, and argumentation: "[a]s is often the case with disciplines reaching across boundaries, it is not at all clear that the term means the same thing" (Allen 2014). Thus, the fact that the same term is used in several disciplines does not imply that it has the same meaning in all of them. It is then possible that we are using the same term, but our conceptions and practices are entirely different between each other. Allen illustrates this point by comparing Richard Gaskins (1993) conception of

[1] On the use of presumptions in the Talmud see Edna Ulmann-Margalit (1983a, 467 ff.) and Franklin (2015, p. 96). On presumptions in Roman Law see Ferrini (1929), Donatuti (1976a, b), Reggi (1986), Hohmann (2001, 2002) and Franklin (2015). For a comparative historical view see Helmholz and David Sellar (2009).

[2] It would be impossible to cite even a small portion of the legal literature on presumptions. The following references are provided here for illustrative purposes only. In the Civil Law see Ramponi (1890), Andrioli (1966), Decottignies (1950), Serra (1963) and Taruffo (1991). For an overview of the literature of presumptions in American law see the works cited in Ladd (1977), Allen (1980) and Allen and Callen (2003). In the British law see Denning (1945), Bridge (1949) and Dennis (2013).

[3] For example, see Rescher (1977, 2006), Edna Ullman-Margalit (1983b), Gaskins (1993), Kauffeld (1998, 2003), Hansen (2003), Freeman (2005), Prakken and Sartor (2006). For an overview of the literature of presumptions in argumentation theory see Godden and Walton (2007).

[4] The persistence of these questions is shown in the works of James Bradley Thayer (1898), Ladd (1977), Edna Ullman-Margalit (1983b) and Godden and Walton (2007).

burden of proof with the traditional understanding of this subject in legal discourse. In his view, Gaskins successfully borrowed this legal term, but he failed to present an accurate explanation of the operation of presumptions in the law (Allen 1994).

Allen goes on to say that the legal understanding of these notions is highly culture specific in the sense that burden of proof rules structure the process of proof, and as such they are relative to a particular theory of dispute resolution, which in turn is associated to a specific theory of government (Allen 2014). For these reasons, he is pessimistic about the possibility of comparative analysis, since it requires such a high command of the complexities and peculiarities of the legal systems that are being compared (Allen 2015).

Similar concerns have been raised in argumentation theory. Gaskins himself, Kauffeld and other authors have questioned the reliance on judicial models on presumptions and burdens of proof (Gaskins 1993; Kauffeld 1998; Hahn and Oaksford 2007). These authors have illustrated the danger of making hasty transferences of legal concepts to other areas of argumentation. In particular, these voices point out the differences between legal and ordinary argumentation: the former as an institutionalized, formal and authoritative context in which presumptions are subject to rules and are laid down by judicial decision; the latter in contrast as a non-institutionalized and non-authoritative context in which probative duties and presumptions are neither fixed nor standardized as in the law.[5]

This paper joins these voices acknowledging the risk of making hasty generalizations and superficial comparisons between the use of presumptions and burdens of proof in legal and ordinary argumentation. At the same time, it argues that all these concerns do not exclude the possibility of an interdisciplinary dialogue about presumptions.

As H. L. A. Hart observed many years ago, the use of a word is frequently "open" in the sense that its application is not forbidden to other instances in which only some characteristics are present (Hart 1994, 15). He also remarked that the use of the same word in different instances "may be linked by different relationships to a central element" or unifying principles. What these elements or unifying principles are and which relationships they have clearly deserve attention. Hart's illuminating reflections suggest that it may worth to explore the connections, proximities and differences in the use of presumptions in different legal cultures and even in different disciplines.

The purpose of this paper is more modest. It explores two recurrent questions in the literature of presumptions: the place and the nature of presumptions in law and legal argumentation. These questions were originally raised by James Bradley Thayer, one of the masters of the Law of Evidence and the author of the classic chapter devoted to this subject in *A Preliminary Treatise on Evidence* (Thayer

[5] As Kauffeld observes: "the application of legal models of probative responsibility to deliberation is limited by deep differences in the considerations which govern argumentation in these spheres of discourse" (Kauffeld 1998, 246). Hans Hansen (2003) remarked that early criticism on this subject goes back to Alfred Sidgwick's assessment of the legal model presented by Whately. See additionally Freeman (2005, 22–23): "concepts analogous to the procedural rules of evidence in courts cannot find clear purchase in the messy world of ordinary deliberation".

1898).[6] Like Thayer, I believe that these questions deserve attention. Section 2 of this paper is devoted to the analysis of the place of presumptions. I shall argue that the connection between presumptions and argumentation is a common feature in the doctrine of presumptions, since its foundations in the Middle Ages to Modern times. In Sect. 3 I shall argue that the analysis of the nature of presumptions in legal discourse is problematic for at least two reasons. First, "presumption" is an ambiguous word. It is a term that is used in many different senses and for a variety of purposes by legislators, courts, lawyers and commentators. Second, there are at least four conceptions of presumptions. Each of these conceptions offers a distinctive approach to the question "What is a presumption?". The analysis presented here may be of interest for legal and non-legal scholars and, hopefully, it may help to shed light on the possibilities and limits of a comparative analysis of presumptions.

2 The Place of Presumptions in Legal Argumentation

Richard Whately is traditionally credited for being the first to introduce the notions of presumptions and burdens of proof into the field of argumentation, and doing so by exporting them from the law. As Nicholas Rescher cogently observed:

> Transposition of various devices of legal argumentation to debate in rhetoric was already clear with the ancients (e.g., in Aristotle's *Topics* and *Rhetoric*, and in Cicero's *De inventione*). But it was not until 1828 that Richard Whately took a crucial further step in his *Elements of Rhetoric*. Though part of the law of evidence since antiquity, and though tacitly present throughout as a governing factor in disputing practice, the ideas of *burden of proof* and of *presumptions* were first introduced explicitly into the theoretical analysis of *extralegal* argumentation in Whately's treatment of rhetoric. And from that time on the present day they have figured prominently in the theoretical discussions of college debating textbooks (1977, 2).

Thus, according to Rescher, Whately inaugurated the use of these notions in the field of argumentation, exporting them from the law. If this interpretation is correct, Whately could be considered as a forerunner of the jurisprudential analogy that was later championed by Toulmin, and for anticipating his well-known dictum: "How many legal terms find a natural extension here!" (2003, 16).

However, Hanns Hohmann has recently questioned this interpretation. In particular he claims that (i) "the supposedly 'legal' conception" is wrongly associated with Whately, (ii) that Whately does not present an adequate account of the work of presumptions in the law, and (iii) that there is a far older connection between presumptions in legal and non-legal argumentation (Hohmann 2001, 2002).

[6] As Thayer puts it at the beginning of his essay: "Without entering now upon any detailed considerations of the mass of legal presumptions, an unprofitable and monstrous task, it may be possible to point out the nature and the place of this topic, and by this means to relieve the subject of much of its obscurity" (Thayer 1890, 313).

Regarding the first point, Hohmann follows Sproule (1976) in suggesting that Whately's theory of presumption developed from a legal to a psychological conception centered on the role of the audience. Regarding the second point I would only make a slight observation. In my view, Whately did not pretend to provide an account of legal presumptions. It is true that he drew a parallel between the use of presumptions and burdens of proof in law and argumentation in order to propose that just as these notions structure the legal process of proof, they could also be used to structure the process of argumentation by showing who has the benefit of a presumption and correspondingly who has the burden of proof.

As a matter of fact, Whately's description of the legal discourse on presumptions is very limited. He only cited two legal presumptions—namely the presumption of innocence and the presumption of property from possession—and he questionably took them as paradigmatic of the work of presumptions in law. This is problematic. First, many legal writers argue that the presumption of innocence is not an authentic presumption "since it does not arise from the introduction of basic facts" (Ladd 1977, 278).[7] Second, the presumption of property from possession is just one creature in the fauna of presumptions. However, it is difficult to expect that he would have made a suitable account of presumptions in law when the legal doctrine of his time was far for being as complete and sophisticated as it is now.

Notwithstanding this, Whately believed that some of the recurrent themes in the legal literature of presumptions could be transferred to the general field of argumentation. Namely, the controversy about the inferential or the normative nature of presumptions,[8] the correlation between the notions of presumptions and burdens of proof,[9] the strength of presumptions[10] and their corresponding effect upon the burden of proof, the rebuttal, and the topic of conflicting presumptions.[11]

To sum up, it is very likely that Whately exported a model without exploring in depth the legal operation of presumptions. Yet his analysis was limited by the state of the art of the legal doctrine of presumptions. On balance, he still has the merit of calling attention to the pivotal role of presumptions and burdens of proof in argumentation.

Hohmann's third thesis deserves further comment. He contends that Whately was not the first to explore the relationship between presumptions in legal and non-legal argumentation, suggesting a far older connection between presumptions and rhetoric

[7] Additionally see McCormick (2013), § 342: "In some instances, however, these substantive rules are incorrectly referred to as presumptions. The most glaring example of this mislabeling is the 'presumption of innocence' as the phrase is used in criminal cases".

[8] Whately observed that "the most correct use of the term" is the use of 'presumption' to express a proposition that "stands good till some sufficient reason is adduced against it", rejecting the use of this word to express "a preponderance of probability" (1990, 342).

[9] According to Whately "having a presumption" means "that the Burden of proof lies on the side of him who would dispute it"(1990, 342). As shown in the second section of this paper, this definition corresponds to the use of "presumption" as a rule that allocates the burden of persuasion on the opponent.

[10] See Whately (1990, 346): "A presumption evidently admits of various degrees of strength, from the very faintest, up to a complete and confident acquiescence".

[11] As to the conflict of presumptions see Whately (1990, 351): "it is to be observed, that a Presumption may be rebutted by an opposite Presumption, so as to shift the Burden of proof to the other side."

in the second edition of Pilius of Medicina's *Libelus Pylei Disputatorius,* written in the second half of the twelfth century. According to Hohmann, Pilius characterized presumption as a kind of incomplete proof that operates in a context of doubt and uncertainty, resembling Cicero's definition of the concept of argument: "a presumption—says Hohmann—is a kind of argument whose distinguishing characteristic is that it takes as its starting point an extrinsic sign for a matter which cannot be established more directly, particularly by means of witnesses" (Hohmann 2001, 2002).

Hohmann's argument could be taken further. The influence of rhetoric was not only present in Pilius' treatment of this subject, but was a common trend in the literature of presumptions of the Middle Ages. As we will see, both the traditional conception and the well-known classification of presumptions were built on rhetorical categories. Civilians clearly saw that illumination for the treatment of this topic should be found in rhetoric, not in the law, since presumptions belong to the provinces of rhetoric and argumentation.

The aforementioned tradition could be traced back to Pilius' immediate predecessor, the canonist Tancredi of Bologna who, like Pilius, was an author of a treatise on legal procedure (*ordo iudiciarius*) written between 1214 and 1216 (Tancredi 1842). In this work, Tancredi started the section dedicated to the subject of presumptions with the following definition: "*Praesumptio est argumentum ad credendum unum factum surgens ex probatione alterius facti*" (Tancredi 1842, 257).[12]

Following Pilius' characterization, Tancredi described "presumption" as a form of indirect and conjectural reasoning that operates in situations where direct evidence (e.g. testimony) is missing. A fact is thus established as a result of a process of reasoning that goes from the assertion of one fact or group of facts, to the assumption of the existence of another fact (Campitelli 1986, p. 261; Giuliani 2009, p. 24).

Tancredi's definition synthesized the concept of presumption that emerged from the *ius commune*. This concept was close to the rhetorical notion of argument (*argumenta*), one of the species of the rhetorical category of artificial proofs. As Adolfo Giuliani observes:

> How deeply rhetorical speculation affected the doctrine of presumptions becomes clear from an examination of artificial proofs, namely the rhetorical category corresponding to the juridical notion of presumption (Giuliani 2009, 39).

But there is more. In addition to the definition of "presumption" Tancredi distinguished four types of presumptions: (i) rash presumption (*praesumptio temeraria*); (ii) probable presumption (*praesumptio probabilis*) or judicial presumption (*praesumptio iudice*); (iii) violent presumption (*violenta praesumptio*) or presumption of law *(praesumptio iuris*); (iv) and necessary presumption (*necessaria praesumptio*) or irrebutable presumption (*praesumptio iuris et de iure*) (Tancredi 1842, 258; Campitelli 1986, 262; Fiori 2009, 78–79).

[12] This idea is developed in detail Gama (2015).

As Antonia Fiori remarks, this typology combined classifications previously elaborated by the glossators[13] and canonists. On the one hand, two distinctions elaborated by the glossators between (1) *praesumptio hominis* and *praesumptio legitima* or *iuris* and (2) between *praesumptio iuris* (*tantum*) and *praesumptio iuris et de irue*. On the other hand, the distinction elaborated by the canonists between three types of presumptions: *temeraria*, *probabilis*, and *violenta* (Fiori 2009, 79). The canonist distinction slowly disappeared in the following centuries. In contrast, the civilian distinction continued in the traditional classification of presumptions in three groups: *iuris et de iure* (conclusive presumptions), *iuris tantum* (rebuttable presumptions), and *facti* (presumptions of fact).

The classification of presumptions was also based on rhetorical categories. In particular, the rhetorical theory of signs provided the grounds for the classification of presumptions. *Praesumptiones iuris et de iure* (conclusive presumptions) were associated with the necessary sign (*tekmerion*). In this case, the connection between a known fact and an unknown fact was believed to be so strong that the law established that a known fact is conclusive proof of the existence of the latter, excluding any possibility of rebuttal. *Praesumptiones iuris tantum* (rebuttable presumptions) were associated with the probable sign (*eikos*). In this case, the presumption was also legally established, but since the connection between two facts was only probable it was open to rebuttal. Finally, presumptions of fact (*praesumptiones facti vel hominis*) were also based on a probable connection between a known fact and an unknown fact, but they were not legally established (Giuliani 2009, 46; Fiori 2009, 80).

Jurists of the following centuries were fully aware of the influence of rhetoric in the legal doctrine of presumptions. As the founder of the French school Andrea Alciato wrote at the beginning of this *Tractatus de praesumptionibus* in the 16th century:

> The subject we are about to tackle is very useful and of a daily usage, but confused, almost inextricable: it is common both to jurists and to legal rhetoricians.[14]

In 1845 William Best opened up his treatise on presumptions with these words of Alciatus and they were later emphasized at the beginning of James Bradley Thayer's

[13] In the twelfth century Piacentino introduced the distinction between "*praesumptio legitima*", which could not be overcome by evidence, and "*praesumptio facti*", that could be overcome by evidence. Under the head of *praesumptio iuris* Pillius of Medicina distinguished between presumptions established by the law that admit evidence to the contrary and conclusive presumptions. This distinction gave rise to the classification of *praesumptio iuris tantum* and *praesumptio iuris et de iure.* See further references in Fiori (2009, 82).

[14] The translation is taken from Adolfo Giuliani (Giuliani 2009, 38, n. 73): "*Materia quam aggressuri sumus, valde utilis est et quotidiana in practica, sed confusa, inextricabilis fere: communisque est et jurisconsultoribus et rhetoribus in genere iudiciali*". Cujas, a pupil of Alciatus, endorsed this view in the sixteenth century: "Presumptions are only conjectures, arguments (…) the burden of proof shifts to the person against whom the presumption is made. Presumptions prevail unless there is counter proof (…) Little has come to us about presumptions. However, whatever can be said about presumptions should be said by 'rhetores', not by the jurists: for they are factual in nature". See this translation in Shain (1944, 95).

chapter devoted to this subject. In dealing with the question about the place of presumptions in the law, Thayer rejected the traditional view that regarded them as belonging to the law of evidence. He argued that presumptions belong to legal reasoning and, more generally, to the field of argumentation:

> Presumption, assumption, taking for granted, are simply so many names for an act or process which aids and shortens inquiry and argument. These terms relate to the whole field of argument, whenever and by whomsoever conducted; and also to the whole field of the law, in so far as it has been shaped or is being shaped by processes of reasoning (Thayer 1898, 315).

Thayer was probably the last jurist who clearly saw that presumptions belong to argumentation. However, Thayer's view on the place of presumptions has not been followed by contemporary legal writers. Anglo-American legal writers hold that presumptions belong to the law of evidence, while continental legal scholars debate on whether presumptions belong to substantive or procedural law. In both cases legal scholars have been largely unaware of the connection between presumptions in legal and non-legal argumentation. As has been shown in this section there is a long-standing tradition that recognizes the influence of rhetoric and argumentation in the doctrine of presumptions. In contrast, scholars from other disciplines are fully aware that this subject goes beyond the legal domain, encompassing different disciplines. With Rescher, they endorse the view that the practice of presumption "represents a region where lawyers, debaters and philosopher can all find some common ground" (2006, xi).

3 Unraveling the Nature of Presumptions

The legal concept of presumption is surrounded by many confusions and controversies. It has been considered "the slipperiest member of the family of legal terms, except its first cousin, 'burden of proof'" (McCormick 2013, § 342).

The analysis of the nature of presumptions is problematic for at least two reasons. First, "presumption" is an ambiguous term. It is a word that has been used in many different senses and for a variety of purposes by legislators, courts, lawyers and commentators. As a result, many different things are called presumptions: rules of substantive law, *prima facie* rules, rules of pleading, rules of procedure, principles of reasoning, statements about the natural probability, and so on. As James Bradley Thayer argued:

> the numberless propositions figuring in our cases under the name of presumptions, are quite too heterogeneous and non-comparable in kind, and quite too loosely conceived of and expressed, to be used or reasoned about without much circumspection (Thayer 1898, 351).

One hundred years later the ambiguity of "presumption" still persists. Scholars agree that the term is frequently used in the following situations:

1. "Presumption" is sometimes used to designate an authoritative principle of legal reasoning, e.g., the presumption that people act honestly or the presumption of sanity.[15]
2. "Presumption" is also used to formulate a statement about the connection between two facts. Upon proof of the existence of one fact, another fact may also be presumed to exist by an ordinary process of reasoning. In the Civil law tradition these presumptions are known as "presumptions of fact" or "judicial presumptions" (Taruffo 2001). In the United States these presumptions are called "permissible inferences". In British law these presumptions are called "provisional presumptions" (Allen and Callen 2003; Dennis 2013). As Edmund Morgan explains, this presumption "involves no rule, either procedural or substantive, peculiar to the legal process of determining the existence or non-existence of facts" (1943, 246).
3. "Presumption" also describes an irrebuttable rule of substantive law formulated in presumptive terms. For example, upon proof by X-ray or other clinical evidence that a coal miner has pneumoconiosis, the law conclusively presumes that the miner is totally disabled and hence is entitled to compensation, and the mine owner is not allowed to dispute this at all (Allen, Kuhns et al 2011, 736). Both in the Common Law and the Civil Law these presumptions are called "conclusive" or "irrebuttable".
4. Additionally, "presumption" designates a rule that indicates the party upon whom the burden of persuasion is placed. In other terms, the presumption expresses that the burden of persuasion is assigned to the opponent. A paradigmatic example is the presumption of innocence. As Laughlin points out "presumption is another way of saying that the burden is upon the prosecution to persuade the jury of the guilt of the defendant" (1953, 199).
5. "Presumption" also indicates a rule of law that shifts the burden of production to the opponent. This rule requires that a fact must be established upon evidence of another fact in the absence of sufficient evidence to the non-existence of the presumed fact. An example of this presumption is the mailbox rule: "A letter properly addressed, stamped and mailed is presumed to have been duly delivered to the addressee" (McCormick 2013, § 343). If one party establishes that a letter was properly mailed, then, there must be a finding that the defendant received the letter, unless the party upon whom the presumption operate introduces evidence that the letter was not received. In American law this presumption is called "bursting bubble presumption", following Thayer's argument that the presumption disappears upon the production of sufficient evidence, or "mandatory rebuttable presumption that shifts the burden of production". In British law this presumption is called "evidential presumption" (Allen, Kuhns et al 2011, 737; Dennis 2013, 420).
6. Furthermore "presumption" designates a rebuttable presumption of law that shifts the burden of persuasion to the opponent. These presumptions are called

[15] This first sense is equivalent to Perelman and Tyteca's conception of presumptions as one of the types of starting points of argumentation regarded as valid for a universal audience (Perelman and Tyteca 1969, 70).

"persuasive presumptions" in British law and "presumptions allocating the burden of persuasion" in American Law. As Dennis observes, these presumptions "denote a conclusion which *must* be drawn by the factfinder on proof of the basic fact of the presumption unless and until the conclusion is disproved by the party disputing it" (Dennis 2013, 421). For example, the presumption of legitimacy establishes that a child born during the validity of the marriage is the child of the husband. This presumption places the burden of persuasion on the father who denies the paternity of a child born or conceived during marriage.

The list does not purport to be exhaustive and there could be some overlapping.[16] My purpose here is to show that as a result of this ambiguity it is almost impossible to provide a clear and succinct answer to the question "What is a presumption"?

But the ambiguity of the term "presumption" is not the only cause of controversy. Many controversies are produced because there are different conceptions of presumptions.

In particular, there are at least four conceptions of presumptions in legal discourse: (1) the traditional conception of presumptions; (2) the normative conception of presumptions; (3) a pluralistic conception of presumptions; and (4) a functionalist conception of presumptions.

I will briefly describe these conceptions in the following paragraphs. As we will see, each of these conceptions offers a distinctive approach to the question "What is a presumption?". Several writers have usually faced this question as a request for a definition. As we will also see, the main definitional problems have been whether the notion of presumption denotes an inferential relationship between two facts, a basic fact and a presumed fact, or whether it should be limited to describe a rule of law; whether all presumptions have a conditional structure conformed by a basic fact and a presumed fact and whether all presumptions are rebuttable.

1. The traditional conception of presumption was inherited from the doctrine elaborated in the Middle Ages. This conception holds that presumptions are inferences from the existence of one fact (a basic fact) to the existence of another fact that is presumed to be true (presumed fact). The relationship between the basic fact and the presumed fact may be established by a rule of law, or it may be left to the discretion of the judge. In the former case, the presumption is called "mandatory" or "legal presumption" or "presumption of law" since the law requires an assumption of the existence of a fact to be made upon the establishment of another fact. In the second case the presumption is called "presumption of fact" or "permissive inference" since it is not legally established. Mandatory presumptions are further subdivided into two groups: "rebuttable presumptions" and "irrebuttable" or "conclusive presumptions".

[16] It is possible to point out some similarities and differences. The meanings of "presumption" identified with numbers 3 through 6 refer to presumptions that are subject of a rule of law. The first meaning of "presumption" does not designate a rule but a principle or maxim that has general acceptance in the law. The second meaning refers to a factual statement. On the other hand, it is possible to distinguish between irrebuttable presumptions of law (meaning 3) and rebuttable presumptions of law (meanings 5 and 6). Further differences and similarities will be seen in the analysis of the different conceptions of presumptions.

> Rebuttable presumptions could be defeated if certain conditions are met. Conclusive presumptions in contrast cannot be rebutted.

This conception is still dominant in the Civil law tradition. Presumptions are defined as inferences or mental operations of the legislator or the court by which an unknown fact is inferred from a known fact (Ramponi 1890; Serra 1963; Italia 1999). In the Common law tradition, the English treatises on evidence written in the first half of the nineteenth century were strongly influenced by the continental doctrine of presumptions. The term "presumption" was understood as a synonym of "inference" almost in the same sense that civilians did.[17]

2. The normative conception of presumptions was developed in the Anglo-American tradition in reaction to the standard treatment of this subject in the early treatises on evidence. Following the civilians, presumptions were understood as inferences that are either created by a rule of law or elaborated by the ordinary process of reasoning

This trend continued in James Fitzjames Stephen's definition of presumptions in his *Digest of Evidence* as "a rule of law that courts and judges shall draw a particular inference from a particular fact or from particular evidence, unless and until the truth of such inference is proved" (Stephen 1876, 4).

In response to this definition, James Bradley Thayer urged legal scholars to discriminate between presumption rules and permissible inferences. As Thayer remarked:

> A rule of presumption does not merely say that such and such a thing is a permissible and usable inference from other facts, but it goes on to say that this significance shall always, in the absence from other facts, be imputed to them (1898, 317).

After Thayer, Wigmore warned legal operators against the confusion between the use of presumptions as rules and the use of presumptions as inferences.[18] While the traditional conception of presumption attempts to present a general notion applicable to the different types of presumptions, the normative conception narrows down the concept of presumption to presumptions that are subject of a rule of law. According to Wigmore: "there is in truth but one kind of a presumption; and the term 'presumption of fact' should be discarded as useless and confusing" (Wigmore 1940 § 2491).

[17] The definition of presumptions as inferences that go from the existence of one fact to the existence to another fact was included in the early treatises on evidence of the nineteenth century. According to Best: "Presumptions or, as they are sometimes called, intendments of law, and by the civilians *praesumptiones seu positions iuris*, are inferences or positions established for the most part by the common but occasionally by statute law, and are obligatory alike on judges and juries". He then went on to argue that legal presumptions differ from presumptions in fact in that "the law peremptorily requires a certain inference to be made" (Best 1845, 33).

[18] See Wigmore (1937 § 6, n.1): "The distinction between 'presumption' in the sense of a mere circumstantial inference and in the sense of a rule of procedure affecting the duty of proof has in modern times led to confusion. The term is often met with in the sense of 'inference', as applied to the probative value of ordinary circumstantial evidence" (Wigmore 1937, § 6 n. 1). See additionally Kaiser (1955).

The solution presented by Thayer and Wigmore has been widely accepted in the American doctrine of presumptions. Nearly all American evidence scholars agree to reserve the term "presumption" for a mandatory rule, while using the terms "inference" or "circumstantial evidence" to designate the mental process of reasoning from facts.[19] On the other hand, according to this conception "true presumptions" are not only mandatory but also rebuttable. As a result, conclusive presumptions are not considered genuine presumptions but rules of substantive law.[20] Thus, according to the normative conception, the notion of presumption only applies to mandatory and rebuttable presumptions of law that either shift the burden of production or the burden of persuasion (meanings 5 and 6 of the list).

3. The pluralistic conception of presumptions could also be interpreted as a reaction to the traditional conception of presumptions. In particular the supporters of this conception argue that despite its long history, the traditional conception is based in the false assumption that all the different phenomena identified with the name of "presumption" could fit in a single category. As observed by Michele Taruffo (1991), the traditional conception rests on a "conceptual confusion" that results from assimilating two situations that are conceptually different. On the one hand, the definition of presumption as the consequences drawn from the existence of one fact to the ascertainment of another fact is suitable for the inferences elaborated by the judge, as in judicial presumptions or presumptions of fact. In these cases, the establishment of a fact operates as a ground for inferring the existence of another fact. On the other hand, presumptions of law are not inferences and do not produce consequences for the ascertainment of facts. Presumptions of law could better be described as rules that require holding certain proposition as true until the presumption is rebutted. Under this view, the concept of presumption as inference is thus completely inadequate for presumptions of law. However, rather than saving the term "presumption" to describe a particular type of presumption, the proponents of this conception argue that the appropriate way to analyze the concept of presumption is through the examination of the paradigmatic types of presumption used in legal language. As a result of this operation, there would be not a single concept of presumption, but a variety of concepts of presumptions. Thus, the question "What is a presumption?" does not admit a single response in this conception, but as many as suggested by the specific instances in which the word "presumption" is applied.

[19] See Morgan (1931), 257: "Thayer, Wigmore, and their disciples use presumption in a more restricted sense. Given the existence of A, the existence of B must be assumed. A is the basic fact, B the presumed fact". Despite the efforts of these scholars, courts and legislators often use the term "presumption" to describe factual assumptions that are not subject of a rule of law.

[20] Having agreed upon this, scholars have largely discussed the effect of presumptions on the burden of proof (whether presumptions shift the burden of production or evidential burden or the burden of persuasion). It is worth to mention an important contrast between English and American writers on this matter. As Peter Murphy puts it: "English writers have generally started with the proposition that there are different kinds of presumption, which have different effects on the burden of proof. American writers have sought (largely in vain) a principle applicable universally to all presumptions, but have found themselves unable to agree on what principle it should be". See Glover (2013), 78.

4. Finally, the functional conception holds that the attempts to harmonize the different treatments of presumptions are misdirected, since they are based on the optimistic idea that there is something special about presumptions that is reflected on their different applications. Several American legal writers suggested the backbone of this theory (Bohlen 1920; Cleary 1959; Laughlin 1953), but it has been Ronald Allen who has developed this idea in detail (Allen 1980, 1994; Allen and Callen 2003 and Allen 2014).

Allen argues that "the dispute over the meaning of the term 'presumption' is pointless" and that confusion and controversies concerning this word "are simply by-products of conceptual confusion" (Allen 2014, 14). In his view, "presumption" does not have an independent meaning. It is simply a label that has been attached to a disparate set of evidentiary decisions resolved for a variety of reasons. In all these cases the use of the word "presumption" could be completely eliminated. For this reason he proposes that "[r]ather than engaging in the futile task of attempting to reconcile the many usages of the word 'presumption' efforts would be better spent by analyzing the evidentiary problems that underlie the use of this label" (Allen 1980, 845).

He proposes to demonstrate this view by examining the different uses of presumptions showing that in each case an evidentiary problem is solved for a variety of reasons and then the term "presumption" is applied without adding any significance to the solution of the problem. In particular, he distinguishes four basic uses of presumptions: to resolve a procedural impasse, to allocate the burden of persuasion, to allocate the burden of production and to instruct the jury regarding the relationship between facts. In each of these cases, "presumption" simply works as an isomorphism of other evidentiary devices. In the first case, "presumption" is an isomorph of a rule of decision. For example, the presumption of survivorship is intended to resolve a problem of impasse. In this case, he explains that the presumption is merely a rule of decision established for reasons of justice and policy, not for something special in the nature of presumptions. In the second case, the presumption is an isomorph of affirmative evidence. An example of this second use of presumption is the presumption of legitimacy: "To say, however, that there is a 'presumption of legitimacy that allocates or shifts the burden of persuasion' to the defendant and that there is an 'affirmative defense of illegitimacy' that requires the defendant to prove the facts is to make functionally identical statements" (Allen 1980, 850). In the third case, a presumption allocating the burden of production is an isomorph of a directed verdict or a "specialized judgment as a matter of a rule of law". Finally, presumptions that establish a "special" relationship between two facts, but make this relationship permissible rather than mandatory (as in permissible inferences or weak presumptions), are standardized comments on the special weight of certain evidence. The paradigmatic example is the doctrine of *res ipsa loquitur*.[21]

[21] Allen, Kuhns et al (2011, 742) provide a succinct definition that could help to clarify this doctrine: "If the plaintiff proves that the plaintiff was injured by an act that would normally not occur without negligence (fact A1), that the defendant was in exclusive control of the instrumentality that caused the act (fact A2), and that the plaintiff was not contributorily negligent (fact A3), the fact finder may (but is not required to) find that the defendant negligently caused the defendant's injury (fact B)".

Up to this point, I have presented a picture of the different conceptions of presumptions. The picture suggests that there are at least four different reconstructions of the concept of presumption. It is not possible to provide here a full assessment of these reconstructions. But a couple of points need to be made. First, despite the criticisms towards the traditional conception of presumptions it expresses a partial truth. When we speak of presumptions in both legal and non-legal contexts we usually refer to an inferential relationship between two facts, a basic fact and a presumed fact, according to which the existence of the former gives rise to the assumption of the existence of the latter.[22] As we have seen, the view that presumptions are inferences has remained present throughout the centuries and is likely to continue long after us.

However, the traditional conception of presumptions faces some difficulties. As the normative and the pluralistic conceptions of presumptions rightly observe, it is odd to define legal presumptions (or presumptions of law) as inferences since, as Thayer pointed out: "[t]he law has no mandamus on the logical faculty; it orders nobody to draw inferences" (Thayer 1898, 314). Legal presumptions are not inferences but rules of law.

But the traditional conception faces another difficulty. It proposes to explain what is a presumption by a definition *per genus et differentiam*. At the core of this conception lies the idea that all presumptions belong to a single class. The different types of presumptions are then classified according to their differences within each class. Yet, as Herbert Hart argued, the success of this form of definition depends on certain conditions that are not often met (Hart 1994, 15). First, there should be a wider family or *genus* of which the different things to be defined are *species*. The traditional conception holds that presumptions are inferences but as we have seen the association between presumptions and inferences tends to be confusing. The normative and the pluralistic conception remark that this association obscures the normative character of legal presumptions, since they are not inferences but rules.

Second, this method of definition rests on the assumption that all the different presumptions have certain common characteristics, at the cost of ignoring "border line cases" that share some of these elements but not all of them. In this sense, it is customary to say that presumptions exhibit a conditional structure conformed by a basic fact and a presumed fact and are built on probability grounds. While this is true in several cases, many presumptions do not have a conditional structure and are not based upon probability grounds, but on a variety of reasons: fairness, policy reasons, procedural reasons, value-related considerations, and so forth.

The presumption of innocence is a paradigmatic example of a "border line case". On the one hand, the presumption of innocence is not dependent on the proof of a basic fact. It states that a person is presumed to be innocent until proven guilty, placing the burden of persuasion on the prosecution. On the other hand the presumption of innocence is not based on probabilistic considerations, but on policy and value-related considerations.

[22] The idea that presumptions are inferences is also present in argumentation theory. See Kauffeld (2003), Hansen (2003) and Godden and Walton (2007).

The normative conception attempts to eliminate the confusion between presumptions and inferences by reducing the concept of presumption to mandatory and rebuttable presumptions. By doing so, this conception provides an account of the normative dimension of legal presumptions as rules that attach legal and procedural consequences to a given fact or set of facts. This conception is well established in American scholarship. Notwithstanding this, the normative conception is open to some criticism. It argues that presumptions are genuine as long as they have a conditional structure and are rebuttable, excluding therefore the presumption of innocence and conclusive presumptions. But as we have seen, the assumption that presumptions should have certain characteristics is dogmatic.

In contrast, the pluralistic conception represents a truly anti-essentialist approach to the concept of presumption. This conception rejects the assumption that there is a single and genuine concept of presumption. In fact, it operates from the opposite assumption, namely that there are a variety of concepts of presumptions. Applying Herbert Hart's insights into the analysis of the concept of law, the pluralistic conception could be interpreted as saying that the use of the word "presumption" is open in the sense that "it does not forbid the extension of the term to cases where only some of the normally concomitant characteristics are present" (Hart 1991, 15).

Finally, the functionalist conception of presumption correctly observes that "presumption" is a label that could be replaced by the practical things that are done in each case. Thus, instead of asking, "What is a presumption?" this conception argues that one should ask: What is done in this case in which the label "presumption" is used. This conception is useful to eliminate much of the confusion in the use of this word in legal discourse and to address directly the evidentiary problems that underlie in the use of presumptions. But unlike Ronald Allen's view, this does not necessarily lead to the conclusion that presumption is an empty concept. Quite the contrary, it may worth to explore the different concepts of presumptions and to examine what is done in each case.[23]

4 Conclusive Remarks

In this paper I have attempted to contribute to an interdisciplinary dialogue about presumptions in two ways. First, I argued that the connection between presumptions and argumentation is a characteristic feature in the literature of presumptions since its foundations in the Middle Ages to modern times. James Bradley Thayer was probably the last jurist who clearly saw that presumptions belong to argumentation. In contrast, the connection between presumptions in legal and non-legal contexts is clearly appreciated outside the law. Scholars from other disciplines are fully aware that this subject goes beyond the legal domain, encompassing different disciplines.

Second, this paper examined two sources of controversy in the doctrine of presumptions. On the one hand, "presumption" is an ambiguous word in legal

[23] Under this view the pluralistic and the functionalist conceptions could be seen as compatible. These conceptions could work together to clarify the different uses of presumptions and to explore their relationships.

discourse. As a result of this ambiguity it is almost impossible to provide a clear and succinct answer to the question "What is a presumption"? Argumentation scholars that rely on legal models of presumption should be aware of the persistent ambiguity in the use of the word "presumption". On the other hand, there are at least four different reconstructions of the concept of presumption: the traditional, the normative, the pluralistic and the functionalist conception of presumptions. Each conception has its merits and shortcomings. My own view is closer to the pluralistic conception of presumption since it recognizes that there are different concepts of presumptions that may be linked by different types of relationships. At the same time I favor a functionalist approach since it attempts to explore what is done in each case in which the term "presumption" is used. Both the ambiguity in the use of this word in legal discourse and the different conceptions of presumptions should remind us to be aware of the dangers of making hasty generalizations and transferences to other contexts and disciplines. However this should not lead to the conclusion that the term has lost its usefulness nor that the concept of presumption is empty. Quite the contrary, with due caution, presumption seems to be a good candidate of a concept that travels well not only across different legal cultures but also across different disciplines.[24]

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[24] This thesis has to be developed at length elsewhere. On the idea of "traveling well" see Twining (2005, 2009, 44). As Twining explains, "travel well" is a metaphor associated with wine. He uses this metaphor to refer to the "transferability of concepts and terms across different contexts".

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