

Northwestern University School of Law
Public Law and Legal Theory Papers

Year 2003

Paper 24

The Juridical Management of Factual
Uncertainty

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Abstract

Civil presumption doctrine in the United States is unnecessarily complex and essentially unnecessary. Evidence law affords a number of evidentiary devices for managing uncertainty, which civil presumptions, at best, merely replicate, but in a different vocabulary with the attendant unnecessary complexity. We survey the critical similarities of evidentiary devices, which can save time and expense, but seldom affect the final outcome of litigation, and demonstrate the manner in which civil presumptions are mere substitutes for other well known evidentiary devices. We further show the unnecessary complexity introduced by instructions on presumptions. The potential that presumption instructions have for harmful effects on jurors, and the effort required to master the intricate formalities of presumptions, suggest that the main reason for their continued existence is distrust of jurors, and perhaps appellate court distrust of trial courts, and that an appreciation of the extent to which presumptions duplicate other evidentiary devices can be the key to sorely needed reform.

The juridical management of factual uncertainty

By Ronald J. Allen* and Craig R. Callen**

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Abstract. Civil presumption doctrine in the United States is unnecessarily complex and essentially unnecessary. Evidence law affords a number of evidentiary devices for managing uncertainty, which civil presumptions, at best, merely replicate, but in a different vocabulary with the attendant unnecessary complexity. We survey the critical similarities of evidentiary devices, which can save time and expense, but seldom affect the final outcome of litigation, and demonstrate the manner in which civil presumptions are mere substitutes for other well known evidentiary devices. We further show the unnecessary complexity introduced by instructions on presumptions. The potential that presumption instructions have for harmful effects on jurors, and the effort required to master the intricate formalities of presumptions, suggest that the main reason for their continued existence is distrust of jurors, and perhaps appellate court distrust of trial courts, and that an appreciation of the extent to which presumptions duplicate other evidentiary devices can be the key to sorely needed reform.

Legislatures and the judiciary in the United States have together created a large number of devices to regulate uncertainty at civil trials.¹ Chief among these are burdens of production and persuasion, judicial notice, summary of and comment on the evidence, presumptions, and various preclusive motions that bring an issue or an entire litigation to an end, such as directed

* Professor Allen's work on this article was supported by the Northwestern University School of Law Summer Faculty Research Program.

** Professor Callen's work on this article was supported in part by a research grant from Michigan State University–Detroit College of Law. Richard Marcus and Charles Ten Brink made valuable suggestions. Erin O'Leary and Joshua Turner provided exceptional research assistance.

1 Criminal trials raise all the same issues, compounded by the implications of proof beyond reasonable doubt. We deal here only with civil actions.

verdicts and summary judgment. Conventional analyses tend to treat most of these devices as relatively independent, straightforward, and unproblematic. Presumptions, on the other hand, have seemed dramatically more troublesome. Dean Morgan, for example, expressed his frustration vividly. ‘Behold, all is vanity and vexation of spirit. That which is crooked cannot be made straight.’² ‘Every writer of sufficient intelligence to appreciate the difficulties of the subject-matter has approached the topic of presumptions with a sense of helplessness and has left it with a feeling of despair.’³

We seek to demonstrate in this article that, with all due respect to Morgan, the lamentable state of presumption doctrine is largely a result of a failure to recognise the degree to which civil presumptions simply replicate other procedural strategies for managing uncertainty.⁴ All of these devices have certain critical similarities, and courts, commentators and legislators have unnecessarily complicated the law of presumptions to the extent that they make theoretical distinctions unjustified by any practical differences. One significant reason for the continuing existence of evidentiary devices is distrust of American civil juries’ decision-making, yet those devices (and, in particular, presumptions) are unlikely to have any substantial positive effect on jurors’ inferential processes. Jurors who understood the implications of evidentiary devices correctly would be affected by them primarily in the very rare cases in which evidence was in equipoise. If, as seems likely, the instructions or comments that the devices require sometimes mislead jurors, the net result of the devices is an increase in the complexity of the task we impose on jurors, with very little return for the jurors’ increased effort. Or at least so we attempt to demonstrate.

We pursue two strategies here. First, we will try to show that each of the other evidentiary devices effectuates an implication of the burden of persuasion, a manipulation of it, or both. The rules governing presumptions are more complex than those for other evidentiary devices because they rest on conceptual distinctions that have arisen without regard to practical effect. We will further show that much of the confusion surrounding presumptions results from their being isomorphs of some other evidentiary devices. ‘Isomorphs’ refer to problems ‘whose underlying structures and solutions are all the same, but whose context can be quite different’.⁵ For example, two word problems are isomorphic if, despite

2 E. M. Morgan, ‘Instructing the Jury upon Presumptions and the Burden of Proof’, 47 Harv L Rev 59 at 59 (1933).

3 E. M. Morgan, ‘Presumptions’, 12 Wash L Rev 255 at 255 (1937).

4 See below nn. 58–101 and accompanying text.

5 M. T. H. Chi and R. Glaser, ‘Problem-Solving Ability’ in R. J. Sternberg (ed.), *Human Abilities: An Information-Processing Approach* (1985) 227 at 243; H. A. Simon and J. R. Hayes, ‘The Understanding Process: Problem Isomorphs’ in H. A. Simon (ed.), *Models of Thought*, vol. 1 (1979) 477 at 477–8.

differences in their wording, they can be solved with identical logical processes.⁶ The term 'presumption' in evidence law refers to rules that require fact-finders to conclude P (known as the presumed fact) from proof of B (the basic fact), in the absence of substantial evidence that P is false.⁷ Presumptions in civil cases are essentially of two sorts. One type of civil presumption, a presumption that allocates the burden of persuasion, is an isomorph of an affirmative defence.⁸ Civil

6 Simon and Hayes, above n. 5 at 478.

7 Or, as one commentator put it, true presumptions are 'mandatory and rebuttable'. P. R. Rice, *Evidence: Common Law and Federal Rules of Evidence* (2000) §10.01[A][3] at 1310. Courts and commentators do use the term presumption in a number of other ways, a few of which have implications for evidence law. One example is the occasional use of the term to refer to a permissible inference, which chiefly has the effect of recognising that a jury might reasonably find fact B from fact A, although it need not do so. In other words, this sort of so-called presumption simply reminds the court and the parties that A is sufficient to support a finding of B, sometimes accompanied by a comment to the jury that, given A, it may but need not find B. Judicial notice in criminal cases has essentially the effect of a presumption that only establishes a permissive inference (see Fed R Evid 201(g)), and in civil cases in a few states. For example, Connecticut Code of Evidence §2-01(e) and Pennsylvania R Evid 201(g) have essentially the same requirement: that a court taking judicial notice instruct the jury that it 'may, but is not required to' accept the noticed fact as conclusive.

Conclusive presumptions typically require that jurors find one or more elements of a claim to exist if some antecedent fact is shown to exist. Accordingly, they are legal fictions or rules of substantive law drafted in an unorthodox fashion. *Usery v Turner Elkhorn Mining Co.* recognised as much when it held that, if Congress could constitutionally require compensation for former miners on proof of certain facts, it could draft a statute that conclusively presumed the former miners were disabled and entitled to compensation on proof of those same facts: 428 US 1 at 22-24 (1976). While Congress's use of the concept of conclusive or irrebuttable presumptions was certainly inelegant, use of conclusive presumptions to modify substantive law or the effect of stare decisis is centuries old. See, e.g., *United States v Klein*, 80 US (13 Wall) 128 (1872) (holding unconstitutional a statute that created a conclusive presumption partially negating effect of presidential pardon, on proof of acceptance of presidential pardon). See additionally, J. B. Thayer, *A Preliminary Treatise on Evidence at the Common Law* (1898) 509-10; L. Fuller, 'Legal Fictions', 25 Ill L Rev 363 at 523, 877 (1930-31).

Although the British law of presumptions is not identical with American law, Professor Dennis's taxonomy suggests that the main types of presumptions extant in the United States have close British analogues. See I. H. Dennis, *The Law of Evidence*, 2nd edn (2002) 420-1. What he calls 'provisional presumptions' would correspond to American permissible inferences. His 'evidential presumptions' correspond to American presumptions allocating the burden of production, as in Fed R Evid 301, and 'persuasive presumptions' correspond to American presumptions allocating the burden of persuasion. Conclusive presumptions seem to have essentially the same effect in each jurisdiction. See also below n. 23.

8 See below n. 64 and accompanying text. We use the term 'isomorph', rather than 'problem isomorph' to avoid a possible confusion. A rigid interpretation of the concept of problem isomorphism might hold that problem isomorphism could not exist unless we specified factual contexts in which each device could be applicable. So, e.g., presumptions allocating production burdens could not be *problem* isomorphs of directed verdict standards, since each device delineates a solution process for a whole category of unspecified problems. Presumptions can, however, be isomorphs of other evidentiary devices to the extent that the effects of a presumption are in one-to-one correspondence with those of the other device. See, e.g., K. J. Holyoak and P. Thagard, *Mental Leaps: Analogy in Creative Thought* (1996, paperback edition) 29-30 (isomorphism in cognitive psychology); *Categoricity* in R. J. Audi (ed.), *The Cambridge Dictionary of Philosophy* (1995) 107. Accordingly, we will only use the term 'problem isomorphs' when analysing relatively specific problems, and 'isomorphism' when discussing the degree to which abstract structures and solutions are the same.

presumptions that allocate the burden of production, on the other hand, are largely problem isomorphs of directed verdict or judgment as a matter of law standards.⁹ The degree to which the practical effects of presumptions are the same as those of other means for managing uncertainty underpins a fundamental irony of civil presumption doctrine. That similarity can make it very easy for judges and lawyers to understand the fundamental operation of each sort of presumption. At the same time, the degree to which civil presumptions simply replicate other evidentiary devices, and their bewildering and pointless complexity when they fail to do so, suggest that extensive revision may be overdue. Societal inertia may not allow revision that would make Morgan's 'crooked' completely 'straight', but the crooked can, at the least, be more easily navigable.

Management of uncertainty with evidentiary devices

Jurors and judges are often obliged to find facts in litigation when they retain at least some doubt about the historical truth of the parties' contentions. They are saddled with the responsibility of resolving issues that arose in contexts with which they are unfamiliar, based only on a sample of data available when critical events occurred. Anglo-American systems constrain fact-finders, and particularly jurors, in one more important way—forcing them to be relatively passive, in comparison to decision-making behaviour in ordinary life. They cannot gather information on their own, or require others to do so on their behalf. Nor can they refuse to resolve the issues until further information is available.¹⁰ Burdens of production and persuasion, affirmative defences, summary and comment on the evidence, judgments as a matter of law, and presumptions are evidentiary or procedural devices that have evolved to help the court, and ostensibly the fact-finder, manage the development of information and deal with uncertainty about issues of fact. Each is related to the others to some degree. The burden of persuasion, the risk of failure to persuade the jury of a given fact to the requisite degree, is the pivotal concept—each of the other evidentiary devices exemplifies some aspect of it. As evidentiary devices, each was designed to simplify the fact-finders' task. Optimists might regard some or all of the efforts to simplify as indicative of confidence that jurors would follow the correct path to a solution, and a desire to eliminate issues with obvious outcomes. Pessimists might regard them as symptoms of a belief that jurors are irrational and need to be tightly constrained.

9 See below nn. 60–63 and accompanying text.

10 Fact-finders can, of course, find in favour of the party who does not bear the risk of non-persuasion when the parties have failed to produce evidence that is sufficiently complete. See below nn. 18–22 and accompanying text. Such a decision would not, however, be a postponement pending further evidence.

1 Burdens of persuasion

The 'burden of persuasion' and its synonym the 'risk of non-persuasion' refer straightforwardly to the consequences of rules that allocate the risk of failing to persuade a fact-finder to a predetermined level of the truth of some set of fact matters. The standard burden of persuasion in civil cases of proof by a preponderance of the evidence is typically imposed upon the plaintiff, although there are exceptions. Courts and rule makers may deviate from the usual allocation of the burden of proof with respect to a claim or defence for any of a number of reasons. Most are implications of applicable substantive law. To the extent one can synthesise relevant trans-substantive concerns that affect allocation of the burden of persuasion, they often conflict or overlap—there is no unified theory. Among the considerations bearing on the assignment of the burden of persuasion with respect to a claim or defence on party *P* are (a) that contentions of the sort *P* raises seem unlikely to be true; (b) that other things being equal, social utility weighs in favour of judgment for parties typically opposing claims such as *P*'s; or (c) that *P* is more likely than its opponent to have access to relevant information.¹¹

To the extent those concerns lead to reallocation of the burden of persuasion, the effects are seldom dramatic. Placing the standard burden of persuasion in civil cases on one party instead of the other should result in different outcomes only in the rare cases in which evidence is in equipoise, or in which at least one party has no substantial evidence in its own favour.¹² Social policies are not likely

11 E. W. Cleary, 'Presuming and Pleading: An Exercise in Juristic Immaturity', 12 *Stan L Rev* 5 at 8–14 (1959). Another common argument is that the risk of non-persuasion on an issue should be allocated to the party with the burden of pleading on that issue. See Cleary, above at 14–16, 24–7. There are no authoritative standards for allocating the burden of pleading on particular issues. Accordingly, that argument would make the allocation of both burdens circular.

12 R. James Simon and L. Mahan, 'Quantifying Burdens of Proof', 5 *Law and Society Review* 319 at 325–6 (1971) found that jurors modelling the preponderance standard with statistical probability interpreted it a preponderance as .75. This might indicate that allocation of the civil burden of persuasion had more significance than the text suggests. On the other hand, it may simply indicate that jurors were less conversant with statistical theory than were judges, who tended to regard the preponderance standard as equivalent to a probability just greater than .5. Jurors might well be as good as or better than judges in employing non-statistical means of dispute resolution to reach good decisions. 'Standard statistical models, and standard theories of rationality, aim to be as general as possible, so they make as broad and as few assumptions as possible about the data to which they will be applied. But the way information is structured in real-world environments often does not follow convenient simplifying assumptions.' G. Gigerenzer and P. M. Todd, 'Fast and Frugal Heuristics: The Adaptive Toolbox' in G. Gigerenzer *et al.* (eds), *Simple Heuristics That Make Us Smart* (1999) 3, 19. Professor Clermont argues that there are only seven broad categories of uncertainty in legal proceedings, one of which is equipoise: K. M. Clermont, 'Procedure's Magical Number Three: Psychological Bases for Standards of Decision', 72 *Cornell L Rev* 1115 at 1143 (1987). Accordingly, regardless of statistical theory, any effort to establish precise quantitative standards for questions of fact (or to adhere to them) might well be futile and counter-productive.

to be much advanced by the reversal of outcomes in a few, isolated cases. The effect of reallocation of the burden is particularly insignificant when compared with the consequences of changes in underlying substantive rules—such as addition, deletion or modification of an element.¹³ Although the placement of the standard burden of persuasion of proof by a preponderance may not affect the outcome of many cases, modifying that standard may, and here some of the policies previously articulated may come into play. Lowering or raising a standard or proof, such as requiring proof of fraud by clear and convincing evidence, may have decided effects on outcomes, making cases of fraud considerably more difficult to prosecute. As for access to evidence, modern discovery systems allow one party access to its opponent's evidence. On the other hand, deliberate failure to disclose (or even document shredding) is not unknown, and limitations on discovery mechanisms may constrain parties' ability to overcome information deficits. Accordingly, it is unclear whether any but a simple and unadorned rule concerning allocation of the burden of persuasion is useful or merely unnecessarily redundant of modern discovery systems.

Dean Wigmore and Professor Cleary spurned an additional, traditional argument: that the risk of persuasion should not be allocated to force a party to prove a negative. They noted that any proposition can be phrased in positive or negative form,¹⁴ so that the phrasing is often insignificant.¹⁵ Insofar as a distinction between negative and positive propositions is concerned, Wigmore and Cleary were right. Another related distinction, however, seems to be more useful for allocation of the burden of proof. Suppose that the question is whether X and Y entered into an agreement. The party arguing that they did so would only be obliged to prove one specific occurrence; its opponent, to be successful, could be obliged to prove that they failed to do so on a number of occasions. So, rather than arguing about proof of negatives, courts and rule makers may allocate the risk of persuasion on an issue to the party whose position would be entailed by a single instance or limited set of instances, rather than a more general proposition.¹⁶ Other things being equal, then, it seems more sensible to allocate the risk of persuasion to the party whose prospects would be advanced if the jury believed the parties entered into an agreement, rather than to its opponent.¹⁷

13 Studies indicate that jurors assess the evidence in favour of the party bearing the burden of persuasion, in part, by asking whether the story or stories that the evidence suggests instantiate all the elements of that party's claim. See below nn. 18–22 and accompanying text.

14 Cleary, above n. 11, at 14–15.

15 J. H. Wigmore, *Wigmore on Evidence*, vol. 9 (J. H. Chadbourn (ed.) revised edn 1981) §2486 at 288.

16 See K. Saunders, 'The Mythic Difficulty in Proving a Negative', 15 *Seton Hall L Rev* 276 at 279, 287 (1985).

17 Allocation of the burden of persuasion normally entails allocation of the initial burden of production as a check on the adequacy of the evidence to warrant further proceedings. See below n. 27.

That principle, as other evidentiary norms for allocation of the burden of persuasion, is defeasible. Indeed, allocating that burden without regard to the social utility at stake in particular substantive issues would be formalism for its own sake. Courts might allocate the burden of persuasion on accord and satisfaction in a tort dispute to the party asserting the accord, in part because the defendant relying on the accord would only need to show one occurrence to secure its position. Where another sort of alternative dispute resolution is concerned, such as mandatory arbitration in a medical malpractice case, courts might require the plaintiff to show both that it pursued arbitration, and that that form of alternative dispute resolution resulted in an erroneous outcome. Settlement and arbitration are both forms of alternative dispute resolution. The difference in allocation of the persuasion burden with respect to differing substantive issues could be a function of the high utility courts or legislatures placed on efficient resolution of malpractice disputes, and the relatively low probability they attached to allegations of fact by parties unsuccessful in a prior arbitration proceeding.

Whatever the merits of reallocation of the burden of persuasion in that special case, it is a special case. In civil cases, the party asking for judicial alteration of the status quo typically bears the burden of persuasion. Courts and parties rarely, if ever, develop new affirmative defences in litigation. Certainly, they would never accord significant weight to such vague principles as allocation of the burden to the party with better access to evidence to create affirmative defences, as opposed to concerns such as substantive utility or comprehensibility of substantive rules.

The notion of probability that burdens of persuasion employ is not necessarily statistical. Indeed, it is unlikely that jurors' inferential behaviour does, or can, rigorously adhere to the statistical theory of probability.¹⁸ Empirical research on juror behaviour indicates that jurors organise and evaluate evidence with regard to the likelihood of stories they form based on their evaluation of the evidence, rather than employing the excessively formal approach that legal folk wisdom seems to assume. In other words, they employ inferential strategies from their experience to evaluate evidence rather than asking themselves whether a list of formal elements of claims or defences have been proven to the requisite degree.¹⁹ So jurors may well understand the preponderance standard, for example, to require a decision in favour of the plaintiff²⁰ who offers proof (a) of 'an episode

18 For example, C. R. Callen, 'Adjudication and the Appearance of Statistical Evidence', 65 *Tulane L Rev* 457 at 472 (1991).

19 For example, N. Pennington and R. Hastie, 'A Cognitive Theory of Juror Decision Making: The Story Model', 13 *Cardozo L Rev* 519 at 521-33 (1991).

20 Assuming for simplicity that the plaintiff bears the burden of persuasion, or, alternatively, the risk of non-persuasion.

that instantiates the formal elements of the substantive law', (b) that is more plausible on any point that the defendant contests than the defendant's evidence and arguments on that point²¹ and (c) is sufficiently complete to warrant affirmative intervention in the plaintiff's favour rather than 'leaving well enough alone' and ruling for the defendant.²²

2 The burden of production, directed verdicts, summary judgment

Dean Wigmore delineated the relationship between the burden of persuasion and the burden of production in terms of chronology and of the power of judge and jury. He conceived of the burden of production as a party's duty to show the judge that the party has produced admissible evidence sufficient to justify a jury verdict finding in its favour. The burden of persuasion, in turn, is the risk of failure to persuade the jury of a given fact to the requisite degree.²³ As that distinction suggests, the initial burden of production typically falls on the party bearing the burden of persuasion, although that is not a logical necessity.²⁴ Once the party bearing the production burden offers evidence that satisfies that burden on the requisite issues, its opponent may find itself bearing a burden of production, or at least confronting the possibility of an adverse judgment as a matter of law if it fails to produce evidence in response.²⁵ For example, once an Age Discrimination in Employment Act plaintiff establishes that he belonged to the protected class, was qualified for the position he held, was discharged and replaced by someone younger, the employer bears the burden of production to show a legitimate reason for the discharge, or the preference for another employee.²⁶ To the extent that courts or rule makers develop general standards for the allocation of the burden of production after the party initially bearing

21 R. J. Allen, 'The Nature of Juridical Proof', 13 *Cardozo L Rev* 373 at 409 (1991).

22 C. R. Callen, 'Adjudication and the Appearance of Statistical Evidence', 65 *Tulane L Rev* 457 at 479-91 (1991).

23 Wigmore, above n. 15, §2487 at 293. The American terms 'burden of production' and 'burden of persuasion' refer to what we understand British law to refer to with 'the evidential burden' and 'the persuasive burden', respectively. See, e.g., C. Tapper, *Cross and Tapper on Evidence*, 9th edn (1999) 108-9; I. H. Dennis, *The Law of Evidence*, 2nd edn (2002) at 371.

24 Wigmore, above n. 15, §2487 at 293.

25 Justice Scalia, writing for the Court in *St Mary's Honor Center v Hicks*, 509 US 502 at 510-11 n. 3 (1993) pointed out that:

... As a practical matter, however, and in the real-life sequence of a trial, the defendant feels the 'burden' of production] not when the plaintiff's prima facie case is proved, but as soon as evidence of it is introduced. The defendant then knows that its failure to introduce evidence of a nondiscriminatory reason will cause judgment to go against it unless the plaintiff's prima facie case is held to be inadequate in law or fails to convince the factfinder. It is this practical coercion which causes the *McDonnell Douglas* presumption to function as a means of 'arranging the presentation of evidence', *Watson v Fort Worth Bank & Trust*, 487 US 977, 986, 108 S Ct 2777, 2784, 101 L Ed. 2d. 826 (1988).

26 *Reeves v Sanderson Plumbing Products, Inc.*, 530 US 133 at 142 (2000).

the burden satisfies it, their reasons are similar to those that bear on allocation of the burden of persuasion.²⁷

Analytically, as Professor McNaughton demonstrated long ago, the question of whether the party bearing the burden of production has successfully borne it—that is, produced evidence sufficient to support a finding in its favour—is intimately bound up with the burden of persuasion, which sets the standard for a finding in its favour. A burden of production is satisfied if but only if the fact-finder could find in favour of the party with the burden, but that, in turn, is determined by the burden of persuasion.²⁸

Judgments as a matter of law²⁹ are the principal means for enforcement of the burden of production at trial in civil cases.³⁰ The text of Federal Rule 50(a) authorises judgment as a matter of law on an issue when there is ‘no legally sufficient evidentiary basis for a reasonable jury to find for’ the party opposing the motion.³¹ Summary judgment motions may raise that same question in advance of trial. *Celotex*³² and *Liberty Lobby* say that the standard for granting summary judgment ‘mirrors the standard for a directed verdict’, now known as a judgment as a matter of law, under Federal Rule 50(a).³³ Use of the direct verdict/judgment as a matter of law standard to resolve summary judgment motions resulted in a striking, controversial increase in summary judgments,³⁴ in the process increasing the practical significance of the burden of production.

27 The initial allocation of the burden of production is normally on the moving party as a way of requiring it to show that it has a basis for its contention adequate to warrant further proceedings on the issue. See R. A. Posner, ‘An Economic Approach to the Law of Evidence’, 51 *Stan L Rev* 1477 at 1502–4 (1999) (economic justification of such an initial allocation of burden of production).

28 J. T. McNaughton, ‘Burden of Producing Evidence: A Function of a Burden of Persuasion’, 68 *Harv L Rev* 1382 (1955).

29 While the conventional wisdom is that trial courts may not direct a verdict of guilt in a criminal case (or, alternatively, grant a judgment of guilt as a matter of law), the court may refuse to instruct on a particular defence, which can be tantamount to a partial judgment of guilt as a matter of law: R. J. Allen, ‘Structuring Jury Decision-making in Criminal Cases: A Unified Constitutional Approach to Evidentiary Devices’, 94 *Harv L Rev* 321 at 329 (1980).

30 *Reeves v Sanderson Plumbing Products, Inc.*, 530 US 133, 149–51 (2000) teaches that, in deciding whether there is a ‘reasonably sufficient evidentiary basis to find for’ a party opposing a motion for judgment as a matter of law, as Fed R Civ P 50(a) requires, the trial court should review all the evidence and consider (1) the evidence favourable to the non-moving party; (2) reasonable inferences favourable to the non-moving party; and (3) evidence favourable to the moving party ‘that is uncontradicted or unimpeached, at least to the extent that the evidence comes from disinterested witnesses’. It should not, however, consider evidence ‘favourable to the moving party that the jury is not required to believe’, or otherwise ‘make credibility determinations or weigh the evidence’.

31 Fed R Civ P 50(a).

32 *Celotex Corp. v Catrett*, 477 US 317 at 323 (1986) quoting *Anderson v Liberty Lobby, Inc.*, 477 US 242 at 250 (1986).

33 *Anderson v Liberty Lobby, Inc.*, 477 US 242 at 250 (1986).

34 See, e.g., S. Issacharoff and G. Loewenstein, ‘Second Thoughts about Summary Judgment’, 100 *Yale Lj* 73 at 84–9 (1990).

3 Judicial notice

The theoretical basis of judicial notice has proved somewhat troublesome, although we think needlessly so. In order to oblige the trial court to take judicial notice of an adjudicatory fact, a party must show that the fact is 'not subject to reasonable dispute' because it is 'either (1) generally known within the territorial jurisdiction of the trial court or (2) capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned'.³⁵ Federal Rule 201(e) affords the party opposing judicial notice an opportunity to be heard in opposition, which means that the opponent may offer information on the truth of the fact in question or the reliability of the source on which the proponent seeks to rely. To the extent that one believes judicial notice rests on an implicit belief in objective, unanswerable uncertainty, it rests on shifting sand. Federal Rule 201(e)'s hearing requirement itself suggests that such certainty is problematic. There is certainly irony in taking evidence on whether a proposition is subject to reasonable dispute.

If, however, one views the propriety of judicial notice of a fact as a function of the materials offered in support of the fact, judicial notice need not rest on the assumption that objective certainty is possible. Thayer said that the capacity to assume things that have not been proved 'with competent judgment and efficiency is imputed to judges and juries as part of their necessary mental outfit'.³⁶ Stanley Fish, no friend of objectivity, argued that, regardless of whether one believes in absolute objectivity, the effort to determine whether something is true should involve:

archives, exemplary achievements, revered authorities, official bodies of evidence, relevant analogies, suggestive metaphors—all available to all persons independently of their philosophical convictions, or of the fact that they do or do not have any.³⁷

Judicial notice, then, may be justified in terms of reliance on sources that are authoritative in the culture in which the dispute occurs rather than by the belief that its subjects are objectively indisputable. To the extent that judicial notice precludes disputes when jurors would necessarily rely on generally accepted assumptions to resolve them, it avoids waste of time and resources better spent

35 Fed R Evid 201(b). Fed R Evid 201(g) requires the court to instruct a civil jury 'to accept as conclusive any fact judicially noticed'. In criminal cases, the trial court should 'instruct the jury that it may, but is not required to, accept as conclusive any fact judicially noticed'.

36 Thayer, above n. 7 at 279–80.

37 S. Fish, 'Postmodern Warfare: The Ignorance of Our Warrior Intellectuals', *Harper's Magazine*, July 2002, 33, 34.

for some other purpose. Whenever trial courts take judicial notice of critical facts sufficiently early in a case, they can not only limit trial time, but also curtail discovery costs. For example, California Code of Civil Procedure §430.30(a) allows parties to use a demurrer to the pleading to raise an objection to a pleading based on judicial notice,³⁸ a practice with roots seven centuries old.³⁹ Hearings on the propriety of judicial notice are not without cost, but Federal Rule 201 and its state analogues limit judicial notice to generally accepted propositions, or to information in sources that are practically certain—a limitation that seems likely to restrict most of those hearings to the epistemic credentials of the basis for judicial notice.

Still, having said all that, the question remains as to precisely when judicial notice should be taken, and the answer is obvious: when reasonable people could not disagree about a fact, given the burden of persuasion. In the standard case, if reasonable people must agree that some fact X is true by a preponderance of the 'evidence', given X's general acceptance or practical certainty, then further litigation about X would be pointless. Thus, again the burden of persuasion acts as a unifying thread through the doctrine.⁴⁰

Judges in civil trials typically inform jurors that they are to accept judicially noticed facts as conclusive.⁴¹ In fact, even where state law ostensibly prohibits judges from charging the jury or commenting with respect to facts,⁴² trial judges routinely inform jurors of the effect that judicial notice requires them to give to specific evidence or facts. Some states that prohibit comment on evidence, such as Delaware, nevertheless make judicial notice conclusive on a jury, at least in civil cases.⁴³ Washington reconciles judicial notice with a general restriction on comment by leaving the effect of judicial notice to the judge, while Nevada's evidence statutes omit any discussion of the effect of judicial notice.⁴⁴ Many states follow the Federal Rules in providing that judicial notice is not conclusive in criminal cases—rather they require that the court instruct jurors that they may, but need not, accept the fact judicially noticed.⁴⁵ At least two states accord that

38 Cal Civ Procedure Code §430.30 (West 2002).

39 Thayer, above n. 7 at 282–6.

40 The relationship of judicial notice and the burden of persuasion is even more clear in criminal cases, in which, given the reasonable doubt standard, judges cannot require jurors to find judicially noticed facts, but must instead instruct them that they 'may, but [are not] required to, accept as conclusive any fact judicially noticed': Fed R Evid 201(g).

41 For example, Fed R Evid 201(g).

42 For example, Art. IV, §19 of the Delaware Constitution; Art. IV, §16 of the Washington Constitution.

43 Del R Evid 201(g).

44 Wash R Evid 201, comment 201(g).

45 Fed R Evid 201(g); Ala R Evid 201(g); Idaho R Evid 201(g); LA Code Evid art. 201(G).

permissive, non-binding effect to judicial notice in civil cases.⁴⁶ Each of these forms of communication about the effect of judicial notice is essentially a comment on the evidence, an evidentiary device by which the judge makes a specific (if sometimes standardised) reference to the effect jurors might accord evidence. It is to that device which we now turn.

4 Summary and comment on the evidence

Burdens of persuasion and production, judgments as a matter of law and summary judgment establish and enforce standards for management of uncertainty. Summary and comment on the evidence are essentially suggestions or reminders about evidence in a particular case. The Federal Rules, as originally proposed, authorised both summary and comment on evidence.⁴⁷ Federal judges retained the power of summary and comment even though Congress refused to adopt the proposed rule.⁴⁸ Acceptance of summary and comment in state law is mixed, with comment the less popular of the two.⁴⁹

Summary of the evidence, that is, a relatively systematic judicial precis of the evidence for the assistance of the jury, may often be helpful to juries. If, however, a summary focuses disproportionately on one portion of the evidence, or on one

46 Although they have no constitutional restriction on comment on the evidence, Connecticut and Pennsylvania treat judicially noticed facts essentially as permissible inferences, in reliance on their common law. Connecticut Code of Evidence §2-01(e) and Pennsylvania R Evid 201(g) have essentially the same requirement: that a court taking judicial notice instruct the jury that it 'may, but is not required to' accept the noticed fact as conclusive.

47 Rule 1-05 of the Preliminary Draft of Proposed Rules of Evidence for United States Courts and Magistrates, 46 FRD 161, 191 (1969) provided:

After the close of the evidence and arguments of counsel, the judge may sum up the evidence and comment to the jury upon the weight of the evidence and the credibility of the witnesses, if he also instructs the jury that they are to determine for themselves the weight of the evidence and the credit to be given to the witnesses and that they are not bound by the judge's summation and comment.

48 For example, J. B. Weinstein and M. A. Berger, *Weinstein's Evidence Manual*, 5th student edn (2001) §2.07[1]–[3].

49 For example, Art. IV, §19 of the Delaware Constitution ('Judges shall not charge juries with respect to matters of fact . . .') NC Gen. Stat §15A-1222 ('The judge may not express during any stage of the trial any opinion in the presence of the jury on any question of fact to be decided by the jury.') See M. M. Martin *et al.*, *New York Evidence Handbook* (1997) §1.8 (New York law prohibits comment but permits courts to 'marshal' or summarise evidence).

The most recent historical survey of state limitations of summary of the evidence, or comment on the evidence, is R. L. Lerner, 'The Transformation of the American Civil Trial: The Silent Judge', 42 *Wm and Mary L Rev* 195 (2000). Comment on the evidence was generally accepted within a few years after the American Revolution. Comment was, though, subject to increasing restrictions as the nineteenth century passed as a result of Jacksonian populism (*ibid.* at 220-5), a legal culture in the South and West both hostile to authority and fond of emotional oratory (*ibid.* at 228-39), a politically powerful bar that sought to constrain judicial influence over juries (*ibid.* at 239-57), creation of a hierarchical of judicial officers after states abandoned the *nisi prius* system (*ibid.* at 263) and the degree to which stenography permitted a full record of the trial judge's comments (*ibid.* at 263).

party's evidence, it may mislead or unduly influence the jury.⁵⁰ Or, if the summary explicitly refers to the obvious,⁵¹ or fails to mention evidence that jurors consider important,⁵² jurors may understand it to carry implicit messages about the significance of evidence, even if told that the summary does not bind them.

While summary of the evidence is less problematic than comment, comments or specific references to evidence are probably more frequent than summaries. While the distinction between the two is not a bright line, comment, in general, refers to judicial expressions of views about the weight or implications of some part of the evidence, intended to assist the jury, accompanied by an admonition that the jury is not bound by those views. The black letter American limitation on comment on the evidence is that the trial judge 'may not assume the role of a witness. He may analyze and dissect the evidence, but he may not either distort it or add to it.'⁵³ Like summary, comment raises the possibility of undue judicial influence on the jury. Jurors may be inclined to defer to what they perceive to be the judge's opinion because of his or her authority and seeming impartiality. The judge's view to which they defer may be a function of his or her relatively elite (or relatively homogeneous) background. In any event, insertion of the judge's views into the proceedings may not be consistent with adversarial presentation. At least insofar as discussion of the evidence is concerned, in jurisdictions that permit summary and comment, trial judges who exercise that power have the last word.

Dangers of undue judicial influence on the jury are somewhat elevated with comments, however, because comments are more direct characterisations of the utility of specific items of evidence. In particular, comment on the evidence affects the degree to which parties must produce evidence to secure a verdict in their favour—the relative burden of persuasion. For example, assume two cases, in each of which the plaintiff bears the risk of non-persuasion, and has initially produced evidence that, taken alone, is fairly persuasive:

1. In case A, the trial judge makes no comment on the evidence. The jury assigns probability of liability of .6. Verdict in favour of the plaintiff.
2. In case B, on the same facts, the judge has the power to make a comment

50 For example, *Pullman v Hall*, 46 F2d 399 at 404 (4th Cir 1931); *Bentley v Stromberg-Carlson Corp.*, 638 F2d 9 at 10 (2nd Cir 1981).

51 See D. Sperber and D. Wilson, *Relevance: Communication and Cognition*, 2nd edn (1995) 149–50 (arguing that the audience of a statement would only regard it as a mere reminder if the speaker could reasonably think that reminding the audience would make a material difference in their ease of recalling its subject).

52 Weinstein and Berger, above n. 48 at §2.07[2], 2–62.

53 *Quercia v United States*, 289 US 466 at 469 (1933).

on the evidence in the defendant's favour. If the judge made that comment, it is likely that the jury would say that the probability of liability is only .4, less than the preponderance (more likely than not) standard.

If the parties do not anticipate this comment, and the case ends at this point, the comment will have converted a plaintiff's verdict into a defendant's verdict, obviously changing the relative position of the parties through a modification of the relative burden of persuasion. The same effect is observed if, in anticipation of that, the plaintiff produces more compelling evidence of liability in case B than in case A, in an effort to secure a verdict in the plaintiff's favour, possibly even to raise the jury's assignment of probability of liability to .6 again.

Civil presumptions, evidentiary devices and Ockham's Razor

Thayer argued that legally recognised presumptions of one fact from another are merely instances of a form of act or process that:

aids and shortens inquiry and argument. These terms relate to the whole field of argument, whenever and by whosoever 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. That is to say, the subject now in hand is one of universal application in the law, both as regards the subjects to which it relates and the persons who apply it.⁵⁴

Were Thayer a modern cognitive scientist, his argument would be that presumptions are simply a legally recognised subset of the inferential strategies we use for default reasoning of any sort.⁵⁵ Experience and training are the source of strategies that identify critical facts, and suggest a decision-making process when those facts seem to be the case, assuming no other information available would trigger conflicting strategies.⁵⁶ Those strategies help us to allocate our decision-making resources efficiently in three ways. First, they simplify inferences about the empirical world that we must draw from information at hand by focusing our attention on critical points—the conditions that trigger a result, and those that might undermine an otherwise applicable strategy. Secondly, given

⁵⁴ Thayer, above n. 7 at 315.

⁵⁵ Psychologists may conceive of specific strategies as 'schemata' (see Chi and Glaser, above n. 5 at 239–40), 'scripts' (see R. C. Schank and R. Abelson, *Scripts, Plans, Goals and Understanding* (1977) 36–68), 'heuristics' (see H. A. Simon *et al.*, 'The Processes of Creative Thinking' in *Models of Thought*, vol. 1 (1986) 144, 152–62) or 'frames with defaults' (M. Minsky, *The Society of Mind* (1986) 243–52). There is no difference among these conceptions relevant for this discussion.

⁵⁶ Chi and Glaser, above n. 5 at 239–40.

a particular state of knowledge, they help us decide whether additional information is important, and to limit our search for that information in our memory or in the world. Thirdly, given our inferences and information about the empirical world, and about the possible costs and benefits of various actions, they help us decide which actions to take.⁵⁷

Presumptions that allocate the burdens of production or persuasion formalise one small aspect of that ordinary reasoning process. To some extent, they simply reflect inferential processes that jurors would be very likely to use. Using formal rules to do so, particularly in a system in which both court and jurors have responsibility for the fact-finding process, results in distortions that may have undesirable effects. Burden-allocating presumptions are quite similar to familiar evidentiary devices. That similarity suggests a technique that can be used to convey the essential operation of presumptions very efficiently. That same similarity suggests, however, that civil presumptions as currently conceived may be largely redundant at best, and quite possibly misleading to those jurors who attend to the judicial advice that presumptions require.

1 Civil presumptions, problem isomorphs and learning

There are essentially two views of the effect that presumptions (those with mandatory but not conclusive effect) should have on the allocation of burdens of proof in civil cases.⁵⁸ Suppose that we are considering the presumption of receipt of a letter duly mailed. Although Federal Rule 301 could have been more clearly drafted, it requires that presumptions 'not otherwise provided for' impose a burden of production with respect to the presumed fact, receipt, on the party opposing the presumption when the proponent has proved mailing, the basic fact. Uniform Rule 302⁵⁹ and the laws of several states follow Professor Morgan's alternative view of presumptions. They require that, on proof of mailing, the opponent of the presumption should bear the risk of non-persuasion on the question of receipt of the letter. In order to show (a) the effect of each type of presumption and (b) the degree to which each replicates another evidentiary device, we will employ two analogies. The first is a comparison of the effects of

57 An idealist might regard these strategies as embarrassing implicit acknowledgements of human contrivances that only developed to meet the limitations of weak and fallible humans. Such heuristics, however, seem to be necessary for decision-makers with greater computational power. Deep Blue, the chess computer that 'defeated' Kasparov (with the help of programmers), had an impressive amount of computing power, but could not have been victorious without employing strategies that its programmers used to limit the number of possible outcomes, i.e. the amount of evidence, it would evaluate before making a move: D. Hillis, *The Pattern on the Stone: The Simple Ideas That Make Computers Work* (1998) 83–7.

58 See the discussion of other sorts of civil presumptions above n. 7.

59 Presumptions that operate in accord with Uniform R Evid 302 are analogous to what Professor Dennis calls 'persuasive presumptions'. Dennis, above n. 7 at 421.

presumptions governed by Federal Rule 301 and judgments as a matter of law. The second is a comparison of the effects of presumptions governed by Uniform Rule 302 with the allocation of burdens associated with affirmative defences.

(a) Federal Rule 301 presumptions and judgments as a matter of law

The easiest illustration of the similarities between these two devices involves a comparison of two hypothetical jurisdictions, with respect to a relatively common issue. Suppose that the plaintiff must prove that the defendant received a letter in order to recover against the defendant. Jurisdiction 1 has a rule providing that the plaintiff should be entitled to a peremptory instruction that the defendant received the letter—essentially a partial summary judgment⁶⁰ or judgment as a matter of law—if the plaintiff establishes proper mailing of the letter and the defendant does not adduce sufficient evidence to believe by a preponderance that the letter was not received. Assume that the plaintiff in the instant case has rested after offering evidence that she properly mailed the letter, and that her proof was such that a reasonable juror could only agree. The following matrix depicts the effect of the special rule in possible states of proof at the close of all the evidence. The columns refer to the defendant’s possible evidence on receipt of the letter, the rows to the defendant’s evidence on mailing, and the italicised text in cells to the effects of the special rule.

	Defendant has offered no evidence ⁶¹ to disprove receipt.	Defendant has offered evidence that he did not receive the letter.
Defendant has offered no evidence to disprove mailing.	<i>Peremptory instruction on receipt in plaintiff’s favour.</i>	<i>Plaintiff would have burden of persuasion to show receipt. (Court might have power to summarise or comment on evidence.)</i>
Defendant has offered evidence that letter was not mailed.	<i>Plaintiff would have burden of persuasion to show receipt. (Court might have power to summarise or comment on evidence.)</i>	<i>Plaintiff would have burden of persuasion to show receipt. (Court might have power to summarise or comment on evidence.)</i>

⁶⁰ Fed R Civ P. 56(d). These presumptions are analogous to what Professor Dennis calls ‘evidentiary presumptions’. Dennis, above n. 7 at 420–1.

In Jurisdiction 2 there is a presumption that, if a letter is mailed (sometimes called the ‘basic fact’ in presumption analysis), it was received (the ‘presumed fact’). Assume further that the plaintiff has offered evidence that the letter was mailed and offered no other evidence of receipt before she rested. Further, at the time she rested, a reasonable juror could only have found that she mailed the letter. In this second jurisdiction, the presumption shifts the burden of production to the defendant.⁶² The matrix illustrates the effect of the presumption in possible situations after the parties have rested:

	Defendant has offered no evidence to disprove receipt.	Defendant has offered evidence that he did not receive the letter.
Defendant has offered no evidence to disprove mailing.	<i>Peremptory instruction to find receipt in plaintiff's favour.</i>	<i>Plaintiff would have burden of persuasion to show receipt. (Court might have power to summarise or comment on evidence.)</i>
Defendant has offered evidence to disprove the basic fact.	<i>Jury should be instructed to find receipt if plaintiff has proved mailing.</i>	<i>Plaintiff has burden of persuasion to show receipt. (Court might have power to summarise or comment on evidence.)</i>

Three of the cells in each chart (the top left and right and the bottom right cells) are virtually identical.⁶³ The bottom left cells only differ in that Federal Rule 301

61 Technically, this caption might better be put as ‘defendant offers no, or insufficient evidence ...’ and its counterpart, ‘defendant offers sufficient evidence ...’, but, for the sake of simplicity and brevity, the matrices distinguish between situations with ‘no evidence’ and with ‘evidence’.

62 With respect to the quantum of evidence of falsity of the presumed fact necessary to rebut a presumption under Federal Rule 301, *St Mary's Honor Center v Hicks*, 509 US 502 at 511, 113; S Ct 2742 at 2749–50; 125 L Ed 2d 407 at 418–19 (1993) suggests that evidence sufficient to support a finding is sufficient to rebut the presumption even if disbelieved:

But the Court of Appeals' holding that rejection of the defendant's proffered reasons compels judgment for the plaintiff disregards the fundamental principle of Rule 301 that a presumption does not shift the burden of proof, and ignores our repeated admonition that the Title VII plaintiff at all times bears the 'ultimate burden of persuasion'. [Citations omitted.]

63 The House and Senate Conference Report on Federal Rule 301 says that, if the opponent of a Rule 301 presumption ‘does offer evidence contradicting the presumed fact, the court cannot instruct the jury that it may *presume* the existence of the presumed fact from the basic fact. The court

and state presumption rules that follow it require trial judges to give jurors a conditional imperative instruction. A jurisdiction that employed a judgment as a matter of law standard in lieu of a presumption would be unlikely to have a related requirement for a conditional imperative in the situation illustrated by the bottom left cell in the first matrix. Even so, it might permit or encourage trial judges to tell jurors that they might, but need not, find receipt if they find that the plaintiff mailed the letter. Hence, the power that federal trial judges, and some of their state colleagues, have to comment on evidence—to give non-binding mandatory advice about the possible significance of evidence—only increases the correspondence between judgment as a matter of law standards and Federal Rule 301 presumptions.

There are two lessons to be drawn from this. First, ‘presumptions’ in this context are epiphenomenal on the underlying burdens of proof; they simply replicate them using different terminology. Secondly, very few cases would come out differently regardless of whether either of the approaches above was adopted. The only cases that would come out differently are those in which proof of mailing otherwise would be insufficient to find receipt, and defendants have no substantial evidence of either failure to mail or lack of receipt. While it is an empirical question, it is a bit hard to believe that such cases proliferate. Moreover, whatever is gained by either approach has costs. In the first case, the cost is judicial instead of jury fact-finding; in the second, there is the additional cost of the intrusion of another strange cognitive device into the jury process.

(b) Affirmative defences and presumptions allocating the burden of persuasion

Comparing affirmative defences with presumptions allocating the burden of persuasion requires some slight changes in the facts. Like Jurisdiction 2, Jurisdiction 3 employs a presumption that a letter properly mailed would be received. But Jurisdiction 3 adheres to the Uniform Rules of Evidence, and requires that the defendant bear the risk of non-persuasion on whether he received the letter if the plaintiff proves that she properly mailed it. The plaintiff rested after offering evidence of mailing such that a reasonable juror could only find that she mailed the letter. The presumption would have the following effects at the close of all the evidence:

may, however, instruct the jury that it may infer the existence of the presumed fact from the basic fact.’ HR, Federal Rules of Evidence, Conf Report No. 1597 at 5 (1974); reprinted in 1974 US CCAN 7098, 7099. Given that the House and Senate gave their endorsement to that instruction (or comment) in the Rule 301 context, courts may be somewhat less likely to tell juries that they may, but need not, find fact B when applicable law only provides for judgment as a matter of law as to B with proof of fact A and an absence of evidence that B is false.

	Defendant has offered no evidence to disprove receipt.	Defendant has offered evidence that he did not receive the letter.
Defendant has offered no evidence to disprove mailing.	<i>Partial judgment as a matter of law, or peremptory instruction, that defendant received the letter.</i>	<i>Jury should be instructed to find that defendant received the letter unless defendant has proved otherwise.</i>
Defendant has offered evidence to disprove mailing.	<i>Jury should be instructed to find that defendant received the letter if plaintiff has proved mailing.</i>	<i>Jury should be instructed that, if plaintiff has proven she mailed the letter, they should find that defendant received the letter, unless defendant has proved otherwise.</i>

Jurisdiction 4 does not treat receipt as an element of the plaintiff's claim. Mailing is still an element of the plaintiff's claim. The defendant has admitted all elements of the plaintiff's claim other than mailing, denied mailing, and asserted lack of receipt, an affirmative defence in Jurisdiction 4. The plaintiff has rested and, before she did so, introduced evidence of mailing such that a reasonable juror could only find that she mailed the letter. The effects of the affirmative defence after both parties rested would be:

	Defendant has offered no evidence to disprove receipt.	Defendant has offered evidence that he did not receive the letter.
Defendant has offered no evidence to disprove mailing.	<i>Partial judgment as a matter of law, or peremptory instruction, that defendant received the letter.</i>	<i>Jury should be instructed to find that defendant received the letter unless defendant has proved otherwise.</i>
Defendant has offered evidence to disprove mailing.	<i>Jury should be instructed to find that defendant received the letter if plaintiff has proven mailing.</i>	<i>Jury should be instructed that, if plaintiff has proven mailing, they should find that defendant received the letter, unless defendant has proved otherwise.</i>

Thus, with respect to allocation of the burdens of persuasion and production, when the proponent seeks to prove receipt with evidence of mailing, a presumption that allocates the burden of persuasion is a problem isomorph of an affirmative defence.

We see here the exact same lessons learned above. First, the 'presumptions' that shift burdens of persuasion are epiphenomenal on the underlying burdens of proof, and secondly, that very few cases will come out differently if this regime is imposed. Here the only cases that would come out differently are those in which the evidence of mailing would not be sufficient to establish receipt and the defendant lacks evidence of non-receipt, and those cases in which evidence on receipt is in equipoise.

The matrices above illustrate the similarities among presumptions, judgments as a matter of law, affirmative defences and comments.⁶⁴ That makes presumptions more comprehensible, but also suggests a difficult question: whether the similarities or isomorphisms manifest necessary redundancy, or pointless and possibly misleading complexity. If the practical effects of presumptions differ little if at all from those of other devices for management of uncertainty, civil presumptions may not be worth the trouble.

2 Presumptions and Ockham's Razor

The old presumption of receipt from proof of proper mailing and its contemporary descendants illustrates virtually all of the questionable complexities of civil presumption doctrine. Courts seem to be prepared to extend that presumption from 'snail mail' or hard copy to e-mail, faxes,⁶⁵ and any other form of

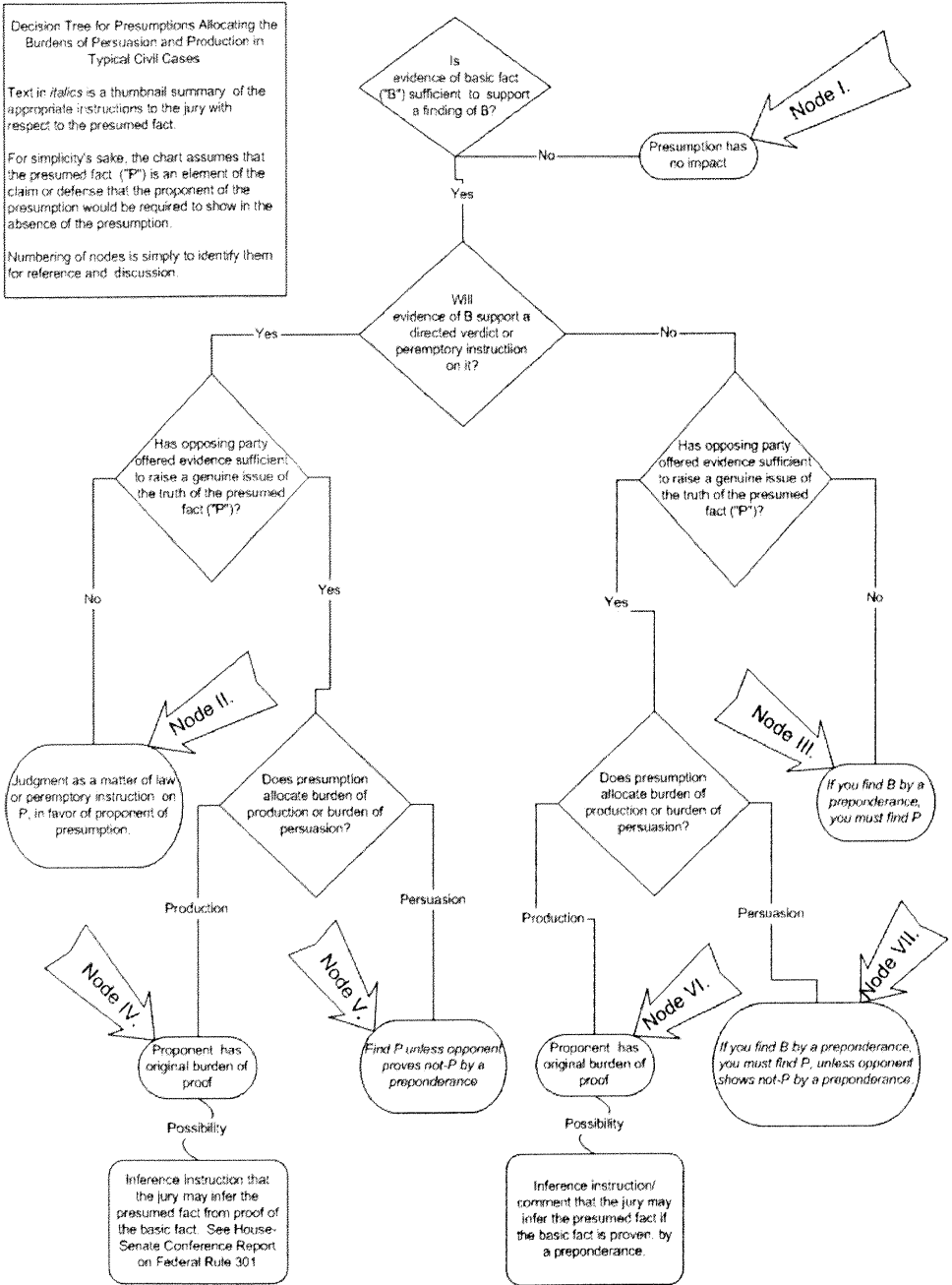
64 Empirical research and anecdotal experience suggest that they are very effective teaching devices. Studies of students' use of analogies to solve problems found that students who have been presented with multiple problems that require them to apply analogous principles will tend not only to learn the solutions to those problems, but also to develop a superior understanding of the structure underlying all the analogues. That understanding, in turn, better enables them to deal with novel problems. See, e.g., Holyoak and Thagard, above n. 8 at 134-7.

The common aspects of the analogs—which may be patterns of higher-order relations—can be abstracted to form a schema representing the new category. The differences between the two analogs, which involve domain-specific details that were not crucial for achieving the analogous solutions, can be deemphasized. The resulting schema will therefore lay bare the structure of the analogs, stripping away the specifics of the individual examples. Once a schema has been learned and stored in a person's semantic network, interrelated with other concepts, it will be relatively easy to access it and apply it to novel problems.

Ibid. at 134. Working through the analogies with students (whether the student is a judge, lawyer, or law student) employing a worksheet with matrices or blackboard illustrations also exploits knowledge of concepts that are bread and butter to legal training: burdens of production and persuasion, judgments as a matter of law, and affirmative defences. That conserves time, and also affords an opportunity to underscore the interrelations of evidence, procedure and substantive law.

65 For example, M. H. Graham, *Evidence: An Introductory Problem Approach* (2002) 587.

Figure 1:



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 Available at www.vathek.com/ijep/sample.shtml

communication, in the words of one court, 'accepted as generally reliable',⁶⁶ which might include pagers and other high-tech gadgets. The presumption is essentially one of receipt of a message (the 'presumed fact') from proof of transmission (the 'basic fact'). Figure 1 uses a decision tree to depict the process needed to determine the effect of burden-allocating presumptions in a case in which (1) the proponent would bear the burden of persuasion of the presumed fact in the absence of the presumption, and (2) as is frequently the case, the trial court does not accord the same effect to all presumptions.⁶⁷

If transmission is the basic fact, and receipt is the presumed fact, then several outcomes (the oval shapes) are the same whether the presumption is a bursting bubble presumption or one that allocates the burden of persuasion. If there is no proof of transmission sufficient to support a finding, then the presumptions have no effect. That is Node I. If evidence of transmission is so strong as to leave no genuine issue, and the opposing party offers no evidence of non-receipt, the proponent will usually be entitled to judgment as a matter of law or a peremptory instruction. That is Node II. If transmission of the message is a genuine issue, but the opponent has not otherwise questioned receipt, the court will typically instruct the jury that, if it finds transmission by a preponderance, it must find receipt. That is Node III. All of these common outcomes would be the same with allocation of the burdens of production or persuasion. Presumption doctrine adds nothing special in each of those cases, unless confusion in particular jurisdictions leaves judges in doubt as to proper allocation of burdens of production in the absence of presumptions.⁶⁸

(a) Civil presumptions and comments

Accordingly, if presumptions perform any beneficial service in addition to clarification by redundancy, it must be in cases in which the opponent has disputed receipt or some other presumed fact.⁶⁹ If Federal Rule 301 or a similar

66 *Kennell v Gates*, 215 F3d 825 at 829 (8th Cir 2000).

67 Rules that seek to establish a uniform standard within a jurisdiction may be ineffective. For example, R. J. Allen, R. B. Kuhns and E. Swift, *Evidence, Text Problems and Cases*, 3rd edn (2002) 886–7. Some states simply leave the effect of presumptions in civil cases to common law adjudication, e.g. Connecticut Code of Evid §3-1; Iowa R Evid 301. Most, if not all, jurisdictions have exceptions to uniformity requirements to deal with vertical or horizontal conflicts problems. For example, Fed R Evid 302 provides that, where state law supplies the rule of decision in federal court, presumptions respecting facts that are elements of claims or defences are governed by state law, rather than Federal Rule 301.

68 Cf. J. Campbell, *Grammatical Man: Information, Entropy, Language and Life* (1982) 73 (redundancy enables system of conveying information to succeed even if one part of the system fails).

69 This focus on bursting bubble and Uniform Rule or Morgan presumptions may seem to give short shrift to other American theories. See, e.g., C. B. Mueller and L. C. Kirkpatrick, *Evidence* (1999) §3.8, at 137–8 (discussing and rejecting argument that Federal Rule 301 requires the party opposing presumption to offer evidence that the presumed fact is as likely to be false as true). The Federal Rule/bursting bubble model and Morgan's burden of persuasion shifting approach are the two primary models. In any event, each of the alternative models is subject to most of the text's criticisms of the two chief models.

rule governs the presumption of receipt from transmission, admission of sufficient evidence to support a finding of non-receipt negates any formal effect of the presumption, i.e. 'bursts the bubble' in the jargon of presumptions. Even so, the Senate Report on Rule 301, and the House-Senate Conference committee report, say that the court may instruct the jurors that they may infer receipt from transmission. In terms of Figure 1, the reports approve of the possible instruction at Node IV and, taken with federal judges' power to comment, strongly suggest the one at Node VI.⁷⁰ The rules of at least one state, North Carolina, require an inference instruction, at least at Node IV.⁷¹ Instructions such as those to which the Conference Committee and the North Carolina rule refer are, in effect, comments.⁷² They are, from one point of view, designed to assist the jury without adding to or distorting the evidence—the standard for permissible comments. The effect of those instructions on jurors may not, however, be limited to repetition.

Parties may rely on presumptions to establish facts that do not entail the existence of an element of a claim or defence—such as proof that a defendant received notice of a risk, which would not require a finding that the defendant was negligent. Indeed, Professor Cleary argued that proponents of the presumption of receipt from mailing typically rely on it to establish historical facts rather than elements of a claim.⁷³ If the defendant in such a case offered

70 *Townsend v Lumbermens Mut. Cas. Co.*, 294 F3d 1232 at 1236–7 (10th Cir 2002) requires an analogous instruction.

71 NC R Evid 301.

72 Dean McCormick understood statutory prohibitions on comments to refer only to judicial expression of individual views, rather than of the effect of 'legal rules'. C. T. McCormick, 'Charges on Presumptions and Burden of Proof', 5 NC L Rev 291 at 299–300 (1927) (hereinafter McCormick, *Charges*).

Nevertheless, C. T. McCormick, 'What Shall the Trial Judge Tell the Jury about Presumptions?' 13 Wash L Rev 185 at 188 (1937) (hereinafter McCormick, *What Shall*) noted that inference instructions required by presumption doctrine have the virtue of avoiding general prohibitions on comment. He also argued that trial judges should have broad discretion to include or omit instructions reminding jurors of permissible inferences in general. McCormick, *Charges*, above at 305. Taking those three points together, it seems he sought to carve out a very broad field for ostensibly standardised comments.

Even assuming McCormick's narrow construction of comment prohibitions was correct, inference instructions that essentially emphasise settled, relatively common, inferences can easily confuse the jury by conveying the impression that the court regards those inferences as critical. See above n. 50 and accompanying text, R. J. Allen and C. R. Callen, 'Teaching "Bloody Instructions": Civil Presumptions and the Lessons of Isomorphism', *Quinnipiac Law Review* forthcoming. McCormick himself was aware that references in instructions could have significant effects on jurors—he favoured references to presumptions as such in instructions to convey that the inferences in question had legal recognition. McCormick, *What Shall*, above at 194.

73 Cleary, above n. 11 at 26. Fed R Evid 302 could easily be read to imply that the effect of tactical presumptions is governed by federal law, as distinguished from presumptions 'respecting a fact which is an element of a claim or defence', as to which state law applies when it otherwise provides the rule of decision. In practice, courts seem to be hesitant to rely on Rule 302 to apply federal law to presumptions in diversity cases, possibly because doing so can raise a difficult *Erie* problem. See, e.g., J. W. Strong *et al.*, *McCormick on Evidence*, 5th edn (1999) §349, at 539 ('[N]o reported case has specifically made the distinction contemplated in the rule, . . .'); Mueller and

evidence sufficient to support a finding that the plaintiff did not transmit the message properly, but no other evidence of non-receipt, then the court would typically instruct the jury that, if it found the message was mailed, or e-mailed, it must find that the message was received. In other words, the case would be one of many cases that would fit Node III in Figure 1. The only conceivable purpose for an instruction at Node III would be as an aid to the jury. Yet, it is easy to see that the instruction could confuse or distract the jury by causing it to think that the presumed fact had a significance that it did not have. Jurors would be fairly likely to make the natural assumption that the court would not refer to one fact, or a limited number of facts, unless those facts were important.⁷⁴ Hence, the Node III instruction (essentially a comment about the significance of evidence of transmission) could result in distortion of evidence in violation of the general restriction on comment.⁷⁵ And it is a comment that seems to be required whether tactical presumptions are governed by Federal Rule 301, or by the Uniform Rules.

Courts may not limit their comments on the effect of evidence of transmission to merely pointing out that it suggests receipt. The simple fact that a presumption is in play in a trial may lead judges to make confusing or cryptic references to the presumption.⁷⁶ For example, a state judge might tell the jurors that, if the proponent has proved she sent an e-mail message, they must rely on a presumption that the message was received in the absence of evidence to the contrary. This would be a variation on the inference instruction at Node VI in Figure 1. The difficulty with use of the term 'presumption' in such an instruction is related to common criticisms of the old notion that presumptions were evidence.⁷⁷ The idea that a presumption could count as evidence never made much sense. If dispatch of a fax made receipt very likely, would describing a presumption of receipt from proof of the fax be intended to tell jurors to regard receipt as more likely than they otherwise might? If a presumption were to count as evidence, how much would it count? If, alternatively, reference to the presumption's acting as evidence was meant to add nothing to the weight that the jury would give to proof of the basic fact, it would not even be intended to accomplish anything very useful—a good recipe for a problematic inferential strategy.⁷⁸ Setting aside

Kirkpatrick, above n. 69, §3.10, at 143–4 (application of federal presumption rule when federal jurisdiction is only based on diversity of citizenship may give 'less recognition to state law' than *Eric Railroad v Tompkins*, 304 U.S. 64 (1938) seems to require).

⁷⁴ See Sperber and Wilson, above n. 51 at 157–9.

⁷⁵ See above n. 53 and accompanying text.

⁷⁶ See, e.g., R. J. Allen, R. B. Kuhns and E. Swift, *Evidence: Text, Cases and Problems*, 2nd edn (1997) 866–7.

⁷⁷ Although the concept of a presumption as evidence is rare nowadays, the House of Representatives at one point favoured a federal rule that incorporated it. HR Rep 93–650 at 7 (1973) reprinted in 1974 US CCAN 7080–1.

⁷⁸ R. J. Allen, 'Presumptions in Civil Actions Reconsidered', 66 Iowa L Rev 843 at 856–7 (1981); E. M. Morgan, 'Instructing the Jury upon Presumptions and Burdens of Proof', 47 Harv L Rev 59 at 73–7 (1933).

the problems with the concept of presumptions as evidence, if the inference from a presumption's basic fact to its presumed fact is fairly obvious, such as the inference from transmission to receipt, a reference to the inference as a presumption at best accomplishes nothing. At worst, it confuses jurors by introducing the undefined notion of a presumption, which may lead them to attach artificial significance to the inference of receipt from mailing.⁷⁹

(b) The burden of persuasion and civil presumptions

If, on the other hand, the Uniform Rules or Morgan view of presumptions applied to a dispute about receipt of a letter, the presumption would allocate the burden of persuasion as to the presumed fact—receipt. Typical jurors know that mailing tends to result in receipt—the assumption underlying the presumption of receipt from mailing. They also know that the fact that the putative addressee did not receive a letter makes it unlikely that the letter was properly mailed.⁸⁰ Indeed, where the issue is simply whether a letter was mailed, there are a number of cases holding that proof of non-receipt is sufficient to support a finding that the letter was never mailed.⁸¹ And cynicism in some contexts about assurances that a cheque is in the mail reflects broad knowledge that non-receipt suggests non-mailing. One might then expect, if the proponent testified that she mailed an ordinary letter, and her opponent denied receipt, that the Uniform Rules/Morgan approach would regard the situation as one in which both basic and presumed facts were disputed—Node VII on the chart. Nevertheless, '[u]nder Morgan's view of presumptions, the introduction of evidence to disprove the presumed fact [receipt here] would have no effect on the presumption. Such evidence would only serve to satisfy the burden of persuasion that shifted to the opposing party by the presumption's creation.'⁸² Courts applying the Uniform Rules/Morgan approach rigorously, then, would treat the issue of mailing as settled in the proponent's favour, and allocate the burden of persuasion of non-receipt to the opponent of the presumption—even though evidence of lack of receipt could strongly suggest lack of mailing.

Even if a trial judge applying the Uniform Rules/Morgan approach thought that mailing and receipt were each in dispute, so that the appropriate allocation of evidentiary burdens would be the one at Node VII, the instruction would rest on

⁷⁹ Again, Dean McCormick favoured instructions that referred to presumptions as such, because the instructions indicated legal recognition of the inferences on which they were based. McCormick, *What Shall*, above n. 72 at 194.

⁸⁰ See above nn. 18–22, and accompanying text, discussing juror's use of stories to evaluate evidence, as opposed to sequential consideration of elements.

⁸¹ Wigmore, above n. 15, §2519, at 567. At least one court has gone so far as to say that proof of non-receipt raises a presumption of non-mailing: *Burkitt v Broyles*, 317 SW2d 762 at 767–8 (Tex Civ App 1958).

⁸² Rice, above n. 7, §10.01[A][6][c] at 1319.

a mistaken view of human inference. Jurors' ordinary decision-making processes, unconstrained by an instruction suggesting that receipt and mailing were separate questions, would involve formation of a story, considering related items of evidence such as testimony about receipt and mailing simultaneously, as they would issues about any combination of basic and presumed facts with a similar relationship.⁸³ Given that mailing and receipt are highly correlated, jurors' intuitive process seems much more likely to be accurate than the inferential process that Uniform Rules/Morgan presumptions seem to presume. The best one can hope for is that the jurors would ignore an instruction attempting to separate mailing from receipt; at worst, they might take the reference to a presumption of receipt to be a hint from the judge that they should probably find receipt.

Of course, substantive law may suggest good reasons for allocating the burden of persuasion with respect to a fact to those who deny it,⁸⁴ as in Node VII, even if use of a presumption to do so might be inelegant. But presumptions such as receipt from transmission, or continuation of a status or condition once shown to exist,⁸⁵ are trans-substantive. There is, then, no particular substantive reason to use them to allocate the burden of persuasion.⁸⁶ McCormick and others suggested that jurors are inclined to discount excessively the effect of circumstantial evidence, and that use of presumptions offsets jurors' scepticism.⁸⁷ Reallocation of the burden of persuasion is an odd way to do that, however. First, as a practical matter, presumptions usually refer to correlations generally known to occur, such as mailing and receipt, or continuation of a status once existing, and are relatively set in stone. Adjusting scepticism about generally known matters seems unnecessary. Moreover, to the extent courts may be reluctant to extend presumptions to cover additional inferences, they cannot effect any systematic or precise adjustment of scepticism.

Suppose, though, that the question is whether to extend the mailing presumption to cover a phenomenon with which jurors may have little experience. E-mail is an example, at least for those who have little interest or ability to use computers. Certainly, reallocation of the burden of persuasion to the party denying receipt

83 See above nn. 19–22 and accompanying text.

84 See above nn. 11–17 and accompanying text.

85 For example, *Jund v Town of Hempstead*, 941 F2d 1271 at 1288 (2nd Cir 1991).

86 One might surmise that the presumption of receipt from transmission might follow from some over-arching policy such as encouraging reliance on the mail, or on reliable methods of transmission in general. But suppose one issue in *P v D* is whether D knew that its accounting methods were flawed. P offers evidence that an unrelated third person, T, sent a message to an e-mail list for accountants at a relevant time, generally questioning the accounting technique at issue. If that evidence is offered to show that D's chief accountant, who received some messages from the list, received the message in question, the question of applicability of a presumption does not seem to have any significant implications for anyone's future reliance on e-mail.

87 For example, McCormick, *What Shall*, above n. 72 at 188.

of an e-mail is an indirect way of telling jurors that an e-mail once sent is likely to be received. But, without more information about how likely receipt is, an instruction allocating the burden of persuasion might well leave scepticism about receipt unaltered. If, and to the extent that, the presumption is intended to offset scepticism about new sorts of evidence then, it might do some good, but judicial notice, expert testimony, or summary and comment seem much more likely to get the job done.

Use of presumptions to establish facts that are not elements is sufficiently problematic under the Federal Rules,⁸⁸ but the Uniform Rules or Morgan approach can only compound the difficulties. Assuming evidence of a basic fact such as transmission sufficient to support a finding of its truth, the trial court in a Uniform Rules jurisdiction must instruct the jury that the opponent has the burden of persuasion on the presumed fact, receipt, even though receipt may not be an element of a claim or defence—this is not likely to make jurors' understanding of the claims and defences any clearer.⁸⁹

(c) Conflicting presumptions

Formalisation of default reasoning creates a final problem of its own, whether the presumptions in question allocate the burden of production or persuasion—seeming conflict of presumptions. For example, W may prove that she married her husband in 1996, in order to claim a share of property, giving rise to presumption of validity of marriage. E, her adversary, might then prove that W married another man in 1991, triggering the presumption that a status once in existence continues to exist, and specifically that the marriage remained in force in 1996. Courts and commentators quite often attempt to use abstract presumption doctrine to resolve the apparent inconsistency. Dean McCormick argued, as the Uniform Rules currently provide, that the weightier presumption (the validity of the second marriage) should govern in case of conflict. Alternatively, he said, a court confronted with the problem should create a new presumption of termination of the earlier marriage from proof of the subsequent marriage.⁹⁰ Wigmore believed that presumptions should only allocate the burden of production, so he would regard the two presumptions as simply successive allocations of burdens of production, and not logically in conflict.⁹¹ In fact, though, each of the alternatives simply amounts to selection or formulation of a rule of decision; there is nothing in the doctrine of presumptions to help us

88 See above nn. 73–75 and accompanying text.

89 This situation is similar to those in Nodes V and VII in Figure 1, but by hypothesis does not involve a presumed fact that is an element of a claim or defence.

90 See Strong *et al.*, *McCormick on Evidence*, above n. 73, §344, at 524.

91 Wigmore, above n. 15, §2493, at 308.

decide which course of action constitutes a better way of resolving issues about the validity of marriage.⁹²

(d) *Epistemic conservatism and reform*

Ockham's Razor holds that entities should not be multiplied needlessly, or that the simplest explanation of a phenomenon is preferable.⁹³ Professor Franklin's new book on notions of evidence and probability prior to Pascal⁹⁴ joins the general consensus that the concept of a presumption in legal fact-finding evolved to legitimise the use of default reasoning to reach conclusions under uncertainty, or alternatively, to explain how fact-finders rely on default reasoning.⁹⁵ There is no doubt that the concept pre-dated efforts to control Anglo-American juries.⁹⁶ Scholars and judges began to observe the distinction between the burden of persuasion and the burden of production in the nineteenth century.⁹⁷ Given the degree of isomorphism between presumptions allocating burdens on the one hand, and judgments as a matter of law and affirmative defences on the other, the reasons for the continued existence of civil presumptions are of two sorts. The first is the sheer longevity of the concept of a presumption in civil litigation, and the acceptance longevity seems to carry with it, even if based on a poor understanding of the concept accepted. The second reason for continued existence of civil presumption doctrine is that it often affords courts an opportunity to make non-mandatory statements about the possible significance of evidence, essentially comments, in jurisdictions that prohibit comment on the evidence.⁹⁸

Taking the second reason first, presumptions are poorly designed to provide information about possible approaches to factual questions that jurors have not confronted in their ordinary lives. For example, telling jurors that, given A, they should infer B unless the defendant has shown that B is more likely than not

92 See Allen, Kuhns and Swift, above n. 67 at 884-5.

93 For example, *Ockham's Razor* in R. J. Audi (ed.), *The Cambridge Dictionary of Philosophy* (1995) 545.

94 For example, J. Franklin, *The Science of Conjecture: Evidence and Probability before Pascal* (2001) 17-24.

95 See, e.g., Thayer, above n. 7 at 314-15; Wigmore, above n. 15, §2491, at 305-7.

96 Franklin, above n. 94 at 9 (significance of presumptions in early Jewish law).

97 The distinction began to develop in the nineteenth century. Thayer, above n. 7 at 353-89. Thayer seems to be the first to delineate it clearly, at least in terms modern lawyers would find familiar. See A. Abbott, 'Two Burdens of Proof', 6 Harv L Rev 125 (1892).

98 McCormick, *What Shall*, above n. 72 at 188, noted that inference instructions required by presumption doctrine have the virtue of avoiding general prohibitions on comment. Washington affords a good illustration of the use of formalised inferences to avoid restrictions on comment. Washington's constitution seemingly forbids comment, yet case law appears to allow a permissive inference instruction in *res ipsa loquitur* cases, where the opposing party has offered evidence of non-negligence: *Chase v Beard*, 55 Wash 2d 58, 346 P2d 315 (1959). Judge Posner's comments, during a workshop in which we discussed the ideas herein, suggested that even federal judges, who ostensibly have a relatively broad power to comment, may tend to confine their comments to 'safe' situations where there are pre-existing presumptions—resulting in a pattern of comments that might seem to lay jurors to suggest a number of implicit messages, or simply to be arbitrary. See above nn. 50-53 and accompanying text.

false gives them very little help in deciding whether B is false. When jurors would have no idea whether B would be likely to occur, or how A might be related to B, and the defendant offered any significant reason to doubt B, the instruction would leave the jurors at sea. In any event, presumptions cover relatively few inferences, and the inferences that presumptions cover tend to be relatively commonplace. Accordingly, while a presumption-mandated instruction or comment might occasionally remind jurors of evidence or an inference they might otherwise forget, it is doubtful such instructions are otherwise of much assistance in resolution of factual issues as such.

Stare decisis is important, and redundancy in procedural mechanisms might provide useful back-ups when courts or parties might not correctly employ one step in a decision-making process.⁹⁹ Civil presumption doctrine is not, however, an innocuous redundancy or back-up mechanism. It encourages, if not requires, instructions or comments that may confuse, mislead or distract jurors. Even if we were to make a somewhat dubious assumption favourable to presumption doctrine that fact-finders understand and follow instructions correctly, presumptions would still only matter where parties lack proof, or evidence is in equipoise. Moreover, civil presumption doctrine is extremely complex—merely tracing the effect of Morgan’s theory of presumptions on a situation as common as mailing a letter requires considerable intellectual effort.¹⁰⁰ It is true that some state judges’ power to grant judgments as a matter of law or to advise the jury on complex issues of fact may be unduly restricted, and that other judges may be reluctant to exercise their power to comment, or otherwise to assist jurors with difficult questions. As Professor Sunstein said in defending *stare decisis*, we cannot ‘build the world again’¹⁰¹ whenever new concepts such as the burden of production arise. Thayer, however, developed the concept of the burden of production, or the burden of going forward, over a century ago. Once he did so, all the necessary building blocks for a coherent systematic approach to allocation of fact-finding responsibility were available. The time may have come for the law of evidence to do better than the current doctrine relating to civil presumptions.

Conclusion

The concept of problem isomorphism is a simple but extremely powerful intellectual tool for analysis of problem-solving processes, and particularly for examination of the roles of judges and jurors in civil fact-finding. One might well say that the complexity of American civil presumption doctrine is the result of (1) courts’ and commentators’ failure to appreciate the degree to which the

99 See above n. 58 and accompanying text.

100 See above nn. 64 and 80–89 and accompanying text.

101 C. R. Sunstein, *Legal Reasoning and Political Conflict* (1996) 40.

practical effect of civil presumptions replicates those of other evidentiary devices for management of uncertainty, and (2) their assumption that presumptions could sensibly be applied without reference to other evidentiary devices. In any event, once Thayer developed the concept of the burden of going forward, analysts of evidence law had all the tools they needed to show that, if it were not for *stare decisis*, the conceptual edifice that is presumption doctrine should collapse of its own weight. Dissection of the doctrine with an eye to the degree to which it parallels other procedural mechanisms can relatively quickly cut civil presumptions down to size.