

# A Theory of Presumption for Everyday Argumentation\*

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**ABSTRACT:** The paper considers contemporary models of presumption in terms of their ability to contribute to a working theory of presumption for argumentation. Beginning with the Whatelian model, we consider its contemporary developments and alternatives, as proposed by Sidgwick, Kauffeld, Cronkhite, Rescher, Walton, Freeman, Ullmann-Margalit, and Hansen. Based on these accounts, we present a picture of presumptions characterized by their nature, function, foundation and force. On our account, presumption is a modal status that is attached to a claim and has the effect of shifting, in a dialogue, a burden of proof set at a local level. Presumptions can be analysed and evaluated inferentially as components of rule-based structures. Presumptions are defeasible, and the force of a presumption is a function of its normative foundation. This picture seeks to provide a framework to guide the development of specific theories of presumption.

**KEY WORDS:** argument; burden of proof; evidence; evidential burden; presumption; speech acts; dialogue model; argumentation scheme

## 1. INTRODUCTION

Many contemporary theorists of argument agree that presumption plays an important role in argument, and that, because of this, the idea of presumption must factor into our theories of argument in a way that reflects its importance. At the moment though, argumentation theory lacks a unified, robust account of the nature of presumption, and a theory of its operation in argument.

Accounts of presumption tend to begin with Whately (1846), and contemporary theories tend to take up their place in relation to Whately's model. There are several common points of agreement. For instance, theorists seem to agree that presumptions are

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different from assertions and assumptions.<sup>1</sup> Similarly, presumptions are involved in special, presumptive inferences. As to whether the presumption acts as a premise, conclusion or warrant in such inferences, though, there is some difference. Perhaps the most central point of agreement is that the idea of presumption is linked, more-or-less strongly, to the idea of burden of proof. But exactly what this link is, and how it can be operationalized in a theory of argument, has yet to be determined. Further, and perhaps more importantly, since presumption somehow affects burden of proof, and burden of proof affects the standards of acceptability against which arguments are evaluated (Walton 1988), questions concerning the justificatory bases of presumptions are important theoretical issues for the study of argument. Another feature commonly attributed to presumptions is that they are somehow defeasible. Yet a robust theory of presumption ought to be able to supply those standards according to which presumptions are properly rebutted. On matters such as these, there is no consensus among argumentation theorists, nor can it really be said that there is a prevailing view.

This paper addresses the question of whether existing models of presumption are useful for providing a more unified theory of presumption for ordinary conversational argumentation. We determine this by looking at the following four aspects of presumptions: (i) their nature; (ii) their function; (iii) their foundation; and (iv) their force. Regarding *nature* we consider questions such as: How are presumptions to be identified? How do they differ from other speech acts (or more complex argumentative devices)? How should presumptions best be modelled in a theory of argument? And finally, what is their relation to burden of proof? Related to this last question is the issue of *function*: What are the argumentative effects of presumptions? Clearly, the function of presumptions will be connected to their *foundation*. What are the justificatory foundations on which presumptions are properly built? Lastly, there is the issue of *force*: In view of the function and foundation of presumptions, what standard of rebuttal is appropriate to refuting or defeating presumptions?

We conclude by proposing a notion of presumption analyzed according to the four aspects mentioned above. We don't claim to be in a position to provide a complete, robust, and operationalized theory of presumptions in ordinary argumentation; instead, we propose a framework in which specific theories of presumption might be usefully conceived. In doing this, we hope to draw together many of the insights of the other theories we consider into a more unified account of presumption. On the account presented in this paper, a presumption is defined as a modal status (or property) of a claim (or proposition) indicating that the burden of proof with respect to that claim rests with anyone who would reject it.<sup>2</sup> In this respect, presumptions are inherently dialectical in nature in that they function as a device for shifting a burden of proof, set at a local level,<sup>3</sup> from one side to the other at a particular point in an argumentative dialogue. The

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<sup>1</sup> The broad points of agreement listed here can generally be found in the accounts of Blair (1999), Cronkhite (1966), Hansen (2003), Kauffeld (1995; 2003), Llewelyn (1962), Ullmann-Margalit (1983), and Walton (1992a; 1993).

<sup>2</sup> In this we roughly follow Pinto's (2001: 3-4) and Freeman's (2005: 29-30) concept of challenger presumption.

<sup>3</sup> By a local burden of proof we mean the burden of proof attached to a particular claim at issue. This can be contrasted with a global burden of proof which pertains to the overall case to be made in some argumentative exchange.

presumptive status of a claim can arise in a variety of ways (whether inferentially or from a source) and can have qualitatively different types of grounding (from epistemic, to moral, to procedural). The argumentative force of a presumption will be a function its foundation and the bearing of those foundational considerations to the argumentative situation. Initially, the force of a presumption derives from its applicability to an argumentative circumstance. Among applicable presumptions, the appropriate standard of rebuttal will depend on the foundational grounding of the presumption itself. In general, though, since presumptions are inherently defeasible, the standard of rebuttal should normally fall short of conclusively proving the opposite of the presumed claim.

## 2. WHATELY'S DEFERENTIAL THEORY OF PRESUMPTION

Standardly, contemporary discussions of presumption in argumentation take Archbishop Whately's (1787-1863) account presented in *The Elements of Rhetoric* (1846) as an initial basis (Sproule 1976: 116 fn). Also the association of legal models of presumption with argumentative accounts is commonly traced to Whately. For these reasons, it is worthwhile to consider Whately's theory, in the hope that some light can be thereby shed on the unanswered questions raised at the outset of the paper.

Whately gives several examples of those things that he considers to be presumptions, including the presumption of innocence (Whately [1846] 1963: 112),<sup>4</sup> the presumption of a right to the property possessed by an individual (p. 113), the "Presumption in favour of every *existing* institution" (p. 114), as well as the presumption "against any thing *paradoxical*, i.e., contrary to the prevailing opinion" (p. 115). Going by these examples, a presumption for Whately does not seem to be either a proposition or claim, an inference, or even a rule, so much as an attitude one ought to take towards certain claims. As Hansen (2003: 2) has noted, this attitude seems to be one of social and epistemic conservatism.<sup>5</sup> Yet Whately is not exactly clear as to *why* one ought to adopt this conservative attitude. As to the effect of a presumption, though, Whately is clear. On his view, a presumption has the effect of placing – not shifting<sup>6</sup> – the burden of proof on its objectors.<sup>7</sup> That is, it is because of some initial presumption that the burden of proof is initially placed at the outset of an argument. The party who bears the burden of proof in an argument bears the responsibility of having to provide reasons in support of her position, and of surrendering that position should those reasons turn out to be insufficient or otherwise unsatisfactory. Having the burden of proof in an argument, then, is a considerable disadvantage, and, seen in this way, presumptions are remarkably powerful argumentative devices. Having a presumption in one's favour means that the default position is favourable. This observation might prompt one to consider seriously the justificatory foundations of the presumptions involved in creating these burdens.

Yet, as authors such as Kauffeld (2003: 135-140) have observed, Whately does

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<sup>4</sup> All Whately citations in this paper are from Whately ([1846] 1963).

<sup>5</sup> Perhaps given Whately's views regarding the justification of presumptions as discussed below, the attitude might better be described as one of doxastic conservatism.

<sup>6</sup> Whately does talk of presumptions as transferring, or shifting, the burden of proof, but he does this only in the situation where one presumption is used as a counter-presumption to rebut another presumption (pp. 124-125).

<sup>7</sup> For this reason, Hansen describes the Whatelian view by saying that "being a presumption is a relational property of a proposition" (2003: 1).

not address the justificatory foundations of presumptions. Kauffeld notes that Whately mentions several kinds of grounds that can justify presumptions (2003: 138), but argues that since these same grounds can also provide the warrant for non-presumptive inferences, Whately's account does not provide any clear criteria for the identification or justification of an inference as presumptive (*ibid.*). Indeed it would seem that, for Whately, the presumptive nature of a claim is not tied to its justification in any epistemic sense whatsoever. On this point Whately writes:

According to the most correct use of the term, a 'Presumption' in favour of any supposition, means, not (as has been sometimes erroneously imagined) a preponderance of probability in its favour, but, such a *pre-occupation* of the ground, as implies that it must stand good till some sufficient reason is adduced against it; in short, that the *Burden of proof* lies on the side of him who would dispute it (p. 112).

Whately does not give an epistemological account of the foundation of presumptions, or of the presumptive status of certain claims. Instead, his explanation of the presumptive status of a claim seems to rely merely on the 'establishment' of the claim presumed. It is perhaps for this reason that Whately gives a theoretically weak, and seemingly subjective account of how presumptions are to be identified. He asserts that presumptions can be ascertained by common sense, writing that "[a] moderate portion of common-sense will enable any one to perceive, and to show, on which side the Presumption lies, when once his attention is called to the question" (p. 113). This deficit in Whately's account of the identification and foundations of presumptions also affects his account of their rebuttal.

An important feature of Whately's account of presumptions is that they are defeasible; they are subject to refutation or rebuttal. Indeed Whately discusses only one, very specific way in which presumptions are rebutted, perhaps indicating that he thought this to be the only way by which presumptions are subject to defeat. According to Whately, presumptions are rebutted by other presumptions, called "counter-presumptions". Whately writes, "[a] presumption may be *rebutted* by an opposite Presumption, so as to shift the Burden of proof to the other side" (p. 124). To illustrate, he discusses an example of a person who, in advising the removal of some existing restriction, is called upon to meet a burden of proof flowing from the "Presumption against every Change" (p. 124). Against this, Whately suggests that such a person might reply as follows:

True, but there is another Presumption which rebuts the former; every *Restriction* is in itself an evil; and therefore there is a Presumption in favour of its removal, unless it can be shown necessary for the prevention of some greater evil: I am not bound to allege any *specific* inconvenience; if the restriction is *unnecessary*, that is reason enough for its abolition; its defenders are therefore fairly called on to prove its necessity (pp. 124-125).

So, that Whatelian presumptions are subject to rebuttal is an important feature of them, and that this rebuttal (necessarily?) involves the use of some other presumption is also interesting. This feature of presumptions – that some can trump others – yields the additional observation that Whatelian presumptions admit of "various degrees of strength" (p. 118; see also p. 127). But beyond this Whately's account of the standard according to which a presumption can be rebutted is not very informative. Not only does

Whately rely on common-sense to identify presumptions, but, since the ultimate foundations of presumptions are either subjective or unexplained, arguers have only the standard of common-sense when trying to determine of two presumptions, which trumps the other. In these respects, Whately's account of presumption leaves more questions without an answer than those which it answers.

Perhaps the most interesting feature of Whately's theory of presumption is that it is closely tied to the idea of expertise and epistemic authority in a particular discipline or area of knowledge. (This recourse to expertise might be the way in which Whately ultimately hopes to provide an epistemic basis for presumptions.) According to Whately,

The person, Body, or book, in favour of whose decisions there is a certain Presumption, is said to have, so far, 'Authority'; in the strict sense of the word.

And a recognition of this kind of Authority, – an *habitual* Presumption in favour of such a one's decisions or opinions, – is called 'Deference' (p. 118).

So, part of what is involved in taking a presumptive attitude towards a claim is to recognize that there is an authority in the field in question, and to form one's own views in deference to the opinion of those expert authorities which are presumed to be correct.

If correct, Whately's point here could shed some light on the workings of arguments from authority. According to Whately, "there is ... a presumption, (and a fair one,) in respect of each question, in favour of the most eminent men in the department it pertains to" (p. 128). That is, an appeal to an authority creates a presumption in favour of the opinion or judgement of that authority, even though this opinion might be wrong. The presumption itself is subject to defeat in the face of some other presumption, or perhaps on some other grounds.<sup>8</sup> This yields the interesting observation that, on Whately's model, appeals to authority are a form of presumptive or defeasible argument (though Whately himself would not have used these terms).

As a final point, it is worthwhile to notice that, while Whately recognizes the argumentative power of presumptions, he claims that there is often an advantage in bearing the burden of proof (p. 129). Whately considers the example of a man having been brought up in a Christian country where there is a presumption in favour of his Christian beliefs. Such a man, Whately speculates, might have taken his Christian beliefs for granted and adopted an attitude (commended by his neighbours) of "*uninquiring* assent" towards them (p. 130). Such a man may not seek out the reasons justifying his belief until he finds it challenged. At this point, the man might set about to try to answer all of these challenges, thinking that he is unjustified in his belief unless he can answer the challenge.

Despite its prevalence as a starting place for contemporary discussions, Whately's account of presumption is not remarkably robust in either a theoretical or methodological sense. While Whately explains the function of presumptions in terms of burden of proof, often he resorts to intuition and common-sense when describing how presumptions are to be identified, justified and refuted.

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<sup>8</sup> With characteristically caustic wit, Whately qualifies his claim that people ought to defer to the experts, stating that presumptions in favour of the opinions of experts are countered by presumptions regarding the experts' own "bias in favour of every thing that gives the most palpable *superiority* to themselves over the uninitiated" (p. 129). As a result, Whately claims that "[o]n the whole, accordingly, I think that each of these two opposite presumptions, the counter-presumption [of an expert's bias] has often as much weight as the other, and sometimes more" (*ibid.*).

Nor is this the only drawback of Whately's model. Whately was often credited with an approach that bases principles of argument on principles of law and jurisprudence. Ehninger, for instance, wrote that the ideas of presumption and burden of proof were "concepts which Whately was the first to transfer from the law of evidence to the general field of non-legal argumentation" (Ehninger 1963: xix). Yet, we tend to agree with Hohmann that "the supposedly 'legal' conception which traditional textbook treatments of presumptions have associated with Whately is not only questionably attributed to that author, but that it is not even an adequate representation of the way presumptions operate in the law" (2001: §4). Indeed, Ehninger has written that Whately's *Elements* is predominantly an ecclesiastical rhetoric" (1963: ix), which "as a whole is more concerned with practical than with theoretical matters" (p. xvi) and in which "epistemological questions ... go unmentioned" (*ibid.*). Similarly, Cronkhite claimed that Whately's theory of presumption, as explained by the idea of deference, is primarily psychological, whereby "presumption[s] reside, somehow, in the minds of the audience" (1966: p. 270). Sproule also described the development of Whately's deferential theory in the *Rhetoric*<sup>9</sup> as a "shift from a chiefly legal to an essentially psychological theory of presumption" (1976: 122). It would seem, then, that Whately's approach is more psychologically-based than legally, and this will detract from any methodological or epistemological value it might have in a normative theory of argumentation.

### 3 SIDGWICK'S MARKET-BASED MODEL

Other authors, having identified Whately's approach as legally-based, have argued that legal models of presumption are unsuitable for application in a general theory of presumption for everyday argumentation. One of the first objectors to Whately's accounts of presumption as based on the legal model was Alfred Sidgwick (1850-1943). Sidgwick's concern with the study of argumentation in everyday discourse (Nielsen 2001; Walton 2000) prompted him to question the applicability of Whately's legal model of presumption to this less institutionalized field (Hansen 2003).

Sidgwick accepted the common notion of presumption as related to burden of proof, which persists to this day. In his *Fallacies* (1884) he gave the following description of presumptions:

[W]here there exists a 'fair presumption' in favour of a belief, or where a belief is in harmony with prevailing opinion, the assertor is not 'bound' to produce evidence, but that whoever doubts the assertion is bound to show cause why it should *not* be believed (p. 159).

Yet, perhaps even better than Whately himself, Sidgwick recognized the rule-based nature of presumptions, and that this rule-based nature requires an institutionalized authority to stand behind these rules (*ibid.*). Yet, in the marketplace of everyday argument, Sidgwick found that institutionally-based models did not have any purchase.

Convenient, however, as such a plan may be where there is an authority competent to frame the rules, it is obvious that outside certain artificial institutions, existing for some special purposes, no such authority exists.

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<sup>9</sup> Ehninger (1963: xvii) informs us that the topics of presumption and burden of proof were not introduced until the third edition of the *Elements* (1830), and that the explanatory notion of deference was not introduced until the seventh edition in 1846.

Argument in general cannot undertake to be bound by what this man or the other, or any body of men, may happen to consider a ‘fair presumption’ (pp. 159-160).

So, where there is no such authoritative institution, or where there are several competing institutions whose positions differ, the Whatelian model seems to fail (Sidgwick 1884: 155; Hansen 2003). Indeed, Sidgwick remarked that in the marketplace of day-to-day argument Whately’s presumption in favour of existing policies, beliefs and institutions might amount to nothing more than an *ad populum* appeal (pp. 160-161).

Further, Sidgwick saw this problem as extending to the issue of burden of proof as well. Without some type of institutional authority, Sidgwick felt that “[n]o penalty follows the misplacement of the burden of proof ... except the natural consequence that the assertion remains untested, and the audience therefore (if inquiring) unconvinced” (p. 163). In Sidgwick’s view, this has profound effects on the argumentative force behind the claim that one’s argumentative opponent has the burden of proof. In cases of day-to-day argumentation Sidgwick felt that,

To lay the burden on another, therefore, is not to demand Proof at the point of the sword, but rather to request it as a favour. There is no ‘obligation’ on any one to prove an assertion, – other than any wish he may feel to set an inquiring mind at rest, or avoid the imputation of empty boasting (*ibid.*).

While this type of challenge does not conclusively establish that notions of presumption and burden of proof have no application in everyday argument, or even that legal models of them are inapplicable in such circumstances, it does prompt theorists to provide some set of rules which apply to, and are binding upon, everyday arguers. If nothing else, this type of objection invites pragmatic accounts of such rules, perhaps of the sort offered by Pragma-Dialectics (van Eemeren and Grootendorst 2004), or other pragmatic models of the sort discussed below.

Sidgwick himself concluded that Whately’s account of presumption is inapplicable to the study of everyday argumentation, because in the marketplace of everyday argument Whatelian presumptions lack the normative force which would enable them to perform any useful role. When making judgements and evaluating everyday argumentation, Sidgwick seems to suggest that, instead of proceeding on the basis of ill-founded presumptions, we ought to proceed on the basis of the “natural law” that unsupported assertions can be either true or false (p. 163). From this law, Sidgwick draws two corollaries: first, that “the more intelligent the audience the less easy it will be to pass off upon them a bare assertion under the pretence that they are in any way ‘bound’ to disprove it or explain it away” (pp. 163-164), and second that “the absence of a reason is no conclusive condemnation of the assertion made” (p. 165). In addition, Sidgwick provides some general considerations – “the likelihood of mistake, the likelihood of falsification, and the importance of the assertion made” (p. 165) – which, as a general rule, indicate the degree of proof required of any assertion.

#### 4. KAUFFELD’S ‘EXPECTATION-BASED’ ACCOUNT OF PRESUMPTION

Other objections to Whatelian accounts of presumption are based on different considerations. Kauffeld (1995; 1998; 2003), for instance, accepts the notion of presumption as playing a significant role in everyday argumentation, but claims that

Whatelian-based accounts cannot model this role. Kauffeld argues that Whatelian conceptions of presumption (i) “are neither necessary nor sufficient to *presumption* in its plain sense” (2003: 135) and (ii) “do not satisfactorily identify what warrants presumptive inference” (*ibid.*). On the latter point we agree with Kauffeld, and have already noted that Whately’s account of the justification of presumptive inferences is lacking. We proceed, then, to consider his arguments on the first point.

On the Whatelian view, a presumption stands good until rebutted and so reverses the normal burden of proof attached to claims introduced as commitments.<sup>10</sup> Yet, Kauffeld objects, “[i]t is not hard to find ordinary presumptions which do not have this strength, and it is also possible to find inferences which do have this strength but are not presumptions” (2003: 136).

On the second point, Kauffeld writes that “persons commonly incur burdens of proof in the absence of any clear presumption favouring a contrary or contradictory proposition” (2003: 137). On this point, we also agree with Kauffeld, but note that this does not require a significant revision of a Whatelian-based theory. Rather, it merely requires the concession that presumptions are not the *only* argumentative rules or devices involved in the allocation of burden of proof. This is not a concession that comes at a high price. For example, van Eemeren and Houtlosser (2002; 2003) and Walton (1988: 240, 246-247) describe a variety of considerations which come into play in the initial distribution and placement of burdens of proof at the outset of an argumentative discussion. Moreover, it is not at all clear that general principles of argument such as *arguers bear the burden of proof for assertions made in an argument, and must be prepared to support those assertions with reasons*<sup>11</sup> arise from presumptions *per se*. Instead, the burden of proof attached to assertions might be better explained pragmatically, for instance by analysing the speech act of asserting. Such an account might be supplemented by a consideration of the basic features constitutive of the rational nature of argumentative discussions and from procedural considerations as to how such rational discussions are to be conducted. Indeed, Kauffeld (1998) offers an account of just this sort as an explanation of how and why the speech acts of accusing and proposing also come with burdens of proof attached. What this shows, then, is that we cannot explain the notion of burden of proof, or apply it to the study of argument, merely by recourse to the notion of presumption.

On the first point, Kauffeld argues that there are many normal and legitimate uses of presumption in argumentation in which no change in burden of proof arises. As an example of this, Kauffeld discusses the presumption of veracity (2003: 136-137).<sup>12</sup> In an effort to try to incorporate such cases into our account of presumption, Kauffeld proposes an alternative model on which presumption is akin to expecting.

The theoretical approach adopted by Kauffeld in providing this model is in the same tradition as Llewelyn’s (1962) account of presupposition, and works by employing

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<sup>10</sup> Kauffeld accepts this characterization of Whately, writing: “At their core Whatelian conceptions define presumptions in relationship to the burden of proof: a presumption, the conclusion draw[n] in an inferential act of presuming, stands good until rebutted by parties who undertake an obligation to provide substantiated objection to its acceptance” (2003: 134; see also p. 136).

<sup>11</sup> Cf. the *obligation to defend rule* of Pragma-dialectics (van Eemeren and Grootendorst 2004: 191) or Walton’s notion of a *substantive* commitment (1996: 26).

<sup>12</sup> Van Eemeren and Houtlosser (2003: 126-128) provide an account on which a presumption of veracity might be based on Gricean conversational maxims.



Gricean-based principles in analysing the conceptual and pragmatic features of the normal, everyday usage of specific linguistic expressions. On such a model, according to Kauffeld,

Ordinary presumptive inferences have a definite form. In the plain sense of the term, *to presume that p is to take that p on the grounds that someone will have made that the case rather than risk criticism, painful regret, reprobation, loss of esteem or even punishment for failing to do so.* (2003: 140; cf. 1995: 510)

That is, presumptions are based not only on substantive, but also on social grounds (Kauffeld 1995: 509). Kauffeld sees this as fitting with our normal use of presumption since “we regard *presumptions* as suppositions ‘we are entitled to’ because it is incumbent upon someone else to make them true” (2003: 142; cf. 1995: 511).

Several important features of Kauffeld’s model can be noted. First, this account preserves a distinction between presumption and assumption.<sup>13</sup> Further, this explanation allows for the point that the *presumptive* nature of presumptions is not based on any epistemic feature of the claim, so much as in the normative aspects of its situational features. That is, our entitlement to make a presumption is not explained in terms of the probability of the truth of the claim, or in terms of its widespread acceptance. Rather, it is explained in terms of another person’s responsibility to bring about what is presumed, or suffer some social or punitive consequence. In this respect, Kauffeld explains presumptions as having “a basis in responsibilities and rights” (2003: 136), a point which he sees his account as having in common with other models including the Whatelian one (2003: 135). Finally, Kauffeld denies that the ordinary use of presumption, which he sees his model as representing, “decouples” presumption from burden of proof (2003: 143). Instead, he thinks that whatever link there is between presumption and burden of proof is best explained on this sort of model (2003: 143-144).

The most prominent feature of Kauffeld’s model, though, is that it presents presumptions as very similar to, if not co-extensive with, expectations. Indeed, Kauffeld himself explicitly describes presumption in the language of expectation, when he writes:

Presumptions comprise a large class of inferences generating many of the expectations and suppositions we form about the conduct of persons. ... In other situations we mark out presumptions with expressions that identify our expectation that a person would not be willing to bear this guilt or that anxiety (2003: 141).

Here, the predictive force of the expectation is grounded in its normative force, namely in the fact that it is grounded in some rule of social conduct which, if it is not followed, brings some punitive ill-effect upon the violator. Like expectations, Kauffeld’s presumptions are based primarily on social rather than substantive (epistemological or methodological) grounds. Because of this similarity with expectations, we call Kauffeld’s account an ‘expectation-based’ model of presumption.

#### 4.1 *Comments on Kauffeld’s model*

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<sup>13</sup> Kauffeld describes this distinction as follows: “In presuming, a conclusion is taken on the supposition that so and so would see to the truth of the inferred proposition rather than risk resentment for failing to do so. Assumptions, on the other hand, are inferred on the supposition that in the circumstances at hand no relevant party of fact is likely to trouble the inferred conclusion” (2003: 142).

While Kauffeld's model contributes to an understanding of our everyday sense of presumption, it is not without its limitations. In the first place, although Kauffeld claims that his expectation-based model does not decouple the ideas of presumption and burden of proof, it is not clear that an expectation-based model retains a picture of presumption where the effects are explained in terms of burden of proof. Rather, they seem to be explained in terms of obligations and entitlements. So, if there are any argumentative devices that function to reverse a burden of proof this will require a good theory of these things, and the expectation-based account cannot provide it.

A second problem with the expectation-based account is that, on such models, presumptions do not seem to retain the property of defeasibility. Like expectations, Kauffeld's presumptions have both a normative (or social) and an epistemic (or predictive) component. On an expectation-based model, our entitlement to presume that  $p$  is grounded in another person's obligation to bring it about that  $p$ . Further, the justification for a presumption is rooted in – indeed it is a consequence of – this entitlement. For instance, Kauffeld writes that “*Presuming* necessitates *taking* that which is presumed, as is shown by the anomalous character of such utterances as ‘I presume that he speaks the truth, but I do not take it that he does’ ...” (1995: 509). Yet, such a model seems to confuse the social and the predictive components of presumption. Being entitled is not always co-extensive with being justified or having some good reason.

Consider the case where it is a soldier's duty to raise the flag at dawn, but he is very unreliable and tends to sleep in. Consider now our presumption (as Kauffeld would have us talk of it) that  $p$ : the soldier will raise the flag at dawn. In one sense, the presumption that  $p$  does not disappear in the face of evidence that the social bonds obliging the soldier to bring it about that  $p$  will not be met. We are still entitled to presume (in the normative sense) that  $p$ , even though it is not likely to happen. In such a circumstance, it is quite sensible to say that while I still presume that  $p$ , I do not take it to be so. (In a similar way, I could say that I still expect something of the soldier, even though I do not have any expectation about the state of the flag at dawn.) So, while we might be *entitled* to presume, we would no longer be *justified* in doing so.

Yet, it is this epistemic sense of presumption that is most important to a theory of argument. After all, we want to know whether the presumption is justified. Yet, on Kauffeld's model, unjustified presumptions retain their presumptive status. The fact that a person is not likely to do something, does not change the fact that he ought to. And since it is these obligations that underwrite Kauffeld's presumptions, they do not disappear in the face of empirical evidence against their being fulfilled – indeed, they do not even seem to be responsive to contrary evidence of this sort. Because they are based primarily in social obligations, expectation-based presumptions are not defeasible in the right sorts of ways.

## 5 CRONKHITE'S COUNTERPART MODEL

Kauffeld's is not the only model to be proposed in the post-Whatelian era. An early contributor to the contemporary theory of presumption was Cronkhite (1966), who sought to base his model not only on everyday argumentative discourse, but also on structured, formal debate. On Cronkhite's model, presumption is nothing more than the counterpart to the burden of proof. Cronkhite claims that “the purpose of assessing presumption is to

determine which side has the burden of proof, i.e., which side has to establish a *prima facie* case before the opposition is required to respond” (p. 271). Presumptions are identified not by recourse to the status quo, but in relation to which position is asserted. Cronkhite writes that

the *onus probandi* accrues to the party who initiates a dispute, and that party, in initiating the dispute, automatically awards the presumption to the position which he assails. The *defining* characteristic of the position awarded the presumption, then, is that it must be that position initially attacked (p. 273).

Similarly, the content of a presumption consists in “the right of any opponent of a stated proposition to refrain from argument in the absence of a *prima facie* case supporting that proposition” (p. 274). Roughly, then, Cronkhite’s theory of presumption derives from the rule “he who asserts must prove,” automatically allocating a presumption to the view opposed or attacked by a newly asserted standpoint (p.276).

The problem with Cronkhite’s model is that, while it retains the link between presumption and burden of proof, it deprives the notion of presumption of any useful job in the theory of argument. Because the nature of presumption is completely explained in terms of burden of proof, presumptions are without any unique function, foundation or force. If presumption is *only* the counterpart to burden of proof, then there is no need for a separate concept, and theoretical questions concerning presumption are answered simply by the theory of burden of proof.

## 6 RESCHER’S DIALECTICAL THEORY OF PRESUMPTION

While others had conceived of presumption as related to burden of proof, Rescher (1977) is perhaps the first to develop a detailed account of presumption in an explicitly dialectical framework. In explaining presumption and burden of proof, Rescher drew not only upon formal disputation, but also on the legal origins of these concepts. Rescher (p. 25) wrote that the idea of burden of proof is a legal notion that functions in the context of an adversary proceeding where one party is trying to establish a charge while the other is trying to rebut it before a neutral tribunal. According to Rescher (p. 25), the very phrase *onus probandi* derives from Roman law, where it was used as a device to divide the labor of argumentation between the plaintiff and the defendant. According to his account, (pp. 25-26), in Roman law the burden of proof lay with the side active in making the allegation in a dispute. This principle still holds in modern Anglo-American law, where the so-called default rule prescribes that the party who makes a claim in a trial is taken to have the burden of proving it.

Rescher drew a distinction (p. 27) between two different conceptions of burden of proof. According to the probative burden of an initiating assertion, whichever side initiates the assertion of a thesis in a dialectical situation has the burden of supporting that thesis with argument. According to what Rescher (p. 27) calls “the evidential burden of further reply in the face of contrary considerations”, whenever evidence that is suitably weighty has been produced by one side, this argument may be taken as standing provisionally until a sufficient reply has been made against it by the other side. He calls this second type of burden one of coming forward with the evidence, noting that it may shift from side to side as a controversy proceeds. This account roughly parallels the two legal notions of burden of proof discussed earlier.

This distinction leads us on to Rescher's notion of presumption, closely related to his notion of burden of proof. A *prima facie* case is one that succeeds in shifting the burden of proof by inclining the balance of favorable judgment to its side until the opponent produces an adequate reply or rebuttal to the claim (p. 28). This notion is connected with the argument from ignorance. The making of a *prima facie* case for one's claim means that in the absence of countervailing evidence, a reasonable presumption is established in favor of the claim. Rescher's notion of presumption is a device that guides the balance of reasons in the shifting of this burden. A presumption, according to his definition, "indicates that in the absence of specific counterindications we are to accept how things 'as a rule' are taken as standing" (p.30). According to Rescher, therefore, the presumption places the burden of proof on the opponent's side as long as there is some general rule favoring the argument on the proponent's side. For example, he cites the standing presumption in favor of the usual, normal, or customary course of things (p. 31). Like Ullmann-Margalit (1983), it seems that Rescher holds a presumption to be established by a kind of general, presumptive rule that is defeasible and can be overturned by countervailing considerations, but nonetheless provisionally places a burden of proof on one side until it is rebutted by the other side.

On Rescher's theory (p. 37), the notion of plausibility serves as the crucial determinant of where presumption resides. He specifically states (p. 38) that presumption favors the most plausible among a set of rival alternatives, such that one particular alternative will always stand unless set aside by another that is shown to be more plausible. However, he argues that plausibility is not the only criterion for evaluating presumptions (p. 38). In a formal disputation, presumptions can be set by negotiated agreement. He also notes (p. 39) that the standing of an authoritative source is an important criterion of plausibility. Indeed, Rescher (1988: 49-50) later distinguishes two qualitatively different types of justification: discursive and presumptive. While discursive justification seems to function inferentially on the basis of grounds given as evidence, presumptive justification "does not proceed through the mediation of previously justified grounds, but directly and immediately through the force of 'presumption'". On such an account, presumptions need not arise as the result of any inference, or the making of a *prima facie* case, but rather have the form of *standing presumptions* which are "the epistemic analogue of 'innocent until proven guilty'" (*ibid.*). This point is an important factor in Freeman's theory (2005: 19-20), to be discussed below.

## 7. WALTON'S SPEECH ACT MODEL OF PRESUMPTION

Other models of presumption have sought a middle ground between the marketplace of everyday argumentation and the dialogue of formal debate. Walton (1992a; 1992b; 1993) has adopted a dialogue-based approach that explains presumption as a kind of speech act that is stronger than a pure assumption, in respect to how it affects commitment in dialogue, but weaker than assertion. An assertion has a burden of proof attached to it, meaning that its proponent must either bring forward evidence to support it, or retract it. A pure assumption (supposition) does not have such a burden of proof. Presumption is like assertion, except that the roles of the proponent and the respondent are reversed. A presumption is a commitment request put to a respondent by a proponent in dialogue,

such that if he fails to reject it, and give a reason for his rejection, it will be taken as a commitment of both parties in the subsequent dialogue.<sup>14</sup> So described, presumption has the pragmatic function in a dialogue of enabling one side to put an argument forward for tentative acceptance or rejection even if the premises cannot definitely be proved or disproved at the present state of knowledge. The respondent has the choice of rejecting it, but if he does not, the proposition is immediately inserted into the commitment sets of both participants, subject to rebuttal.

In conversational argumentation, presumptions often take the form of principles of social cooperation and politeness that facilitate orderly collaboration in social activities, like moving a discussion forward even if not everything can be proved. So conceived, presumptive reasoning has a negative logic and is linked to lack-of-evidence reasoning. Even if there is no hard evidence showing that a proposition can be proved true, it can be presumed (tentatively) true, subject to later rejection if new evidence proves it false.

The key characteristic of presumption as a speech act in dialogue on this theory is that it reverses a burden of proof by switching the roles of the two participants in the dialogue. Normally, the burden of proof is on the proponent asserting a proposition, but in the case of a presumption, a burden of disproof falls onto the respondent, once it has been accepted as a commitment in the dialogue. This reversal feature is modeled in Walton's analysis (below), where the point where the presumption is first brought forward in a dialogue is called "move *x*", while the point where it may be rebutted is called "move *y*".

#### Speech Act Conditions for Presumption (Walton 1992a: 60-61)

##### I. Preparatory Conditions

- A. A context of dialogue involves two participants, a proponent and a respondent.
- B. The dialogue provides a context within which a sequence of reasoning can go forward with a proposition *A* as a useful assumption in the sequence.

##### II. Placement Conditions

- A. At some point *x* in the sequence of dialogue, *A* is brought forward by the proponent, either as a proposition the respondent is asked explicitly to accept for the sake of argument, or as a nonexplicit assumption that is part of the proponent's sequence of reasoning.
- B. The respondent has an opportunity at *x* to reject *A*.
- C. If the respondent fails to reject *A* at *x*, then *A* becomes a commitment of both parties during the subsequent sequence of dialogue.

##### III. Retraction Conditions

- A. If, at some subsequent point *y* in the dialogue ( $x < y$ ), any party wants to rebut *A* as a presumption, then that party can do so provided good reason for doing so can be given. Giving a good reason means showing that the circumstances of the particular case are exceptional or that new evidence has come in that falsifies the presumption.
- B. Having accepted *A* at *x*, however, the respondent is obliged to let the presumption *A* stay in place during the dialogue for a time sufficient to allow the proponent to use it for his argumentation (unless a good reason for rebuttal under clause III. A. can be

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<sup>14</sup> Presumption and presupposition are taken to have different functions in argumentation. Presupposition refers to past moves in a dialogue while presumption is directed to future moves in a dialogue.

given).

#### IV. Burden Conditions

A. Generally, at point  $x$ , the burden of showing that  $A$  has some practical value in a sequence of argumentation is on the proponent.

B. Past point  $x$  in the dialogue, once  $A$  is in place as a working presumption (either explicitly or implicitly) the burden of proof falls to the respondent should he or she choose to rebut the presumption.

This account of presumption enables a dialogue to move forward, say, on a topic in ethics or law, where much needs to be discussed that cannot yet be proved or disproved conclusively. In such a dialogue, accepting a presumption gives the argumentation a provisional basis for moving ahead, even in the absence of firm premises, even though commitment to it may not be very firm. How firm such commitment should be in a given case is held to depend on the type of dialogue and other global factors like the burden of proof, as well as local requirements like the argumentation scheme.

#### 7.1 *Comments on Walton's account*

While the Walton theory is one of the more developed models presently available, certain issues require clarifications that will need to be worked out in future case studies and the development of a more refined theory. For instance, presumptions are described as being like assumptions with a practical value. The preparatory conditions indicate that a presumption must be useful to the dialogue to be introduced. But there is an ambiguity here, since utility is an instrumental value for both the participants of the dialogue, while the dialogue itself has independent goals (Walton 1993: 132). At times, Walton describes the utility of presumptions in relation to the dialogue itself (“a presumption secures provisional commitment ... so that a dialogue can move forward towards its goal” (1992a: 59)), while at other times this utility is described in relation to the goals of individual arguers (“the proponent brings forward a proposition as an assumption that is useful for her argument” (1992a: 58)).<sup>15</sup> A second, related, ambiguity occurs in the placement conditions where the respondent is given an opportunity to reject the presumption. What is meant by ‘reject’ here? Is a presumption like an assumption in that a respondent can simply decline to accept it at this stage?<sup>16</sup> On the other hand, if no reasons are given in support of the presumption, why should a respondent have to provide reasons for declining to accept it?<sup>17</sup>

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<sup>15</sup> Yet, because presumptions come with a reversed burden of proof, it will *always* be useful to a proponent to presume any premises to which the respondent is not already committed. Asserting them comes at a price: a proponent must defend them if challenged. Assuming bears no cost, but has no force: an opponent can reject the assumption whenever it begins to harm his position. Yet with a presumption, the costs are the same as assuming, and the benefits are the same as asserting. So a strategic move is to presume as many premises as possible: it lowers the cost of asserting without decreasing any benefits. An astute opponent, realising this, ought to refuse any presumption purely on these grounds. As such, until this ambiguity is resolved, the strategic manoeuvring involving presumptions would likely limit, if not curtail, their usage.

<sup>16</sup> If so, given the observations of the previous note, what strategic reason would a respondent ever have to accept a presumption?

<sup>17</sup> Yet, at times, Walton seems to suggest that some kinds of reasons are required even at this stage, as for instance with the claim “when a presumption is brought forward by a proponent, the burden is on the

A final question for Walton's model concerns the retraction conditions. Once a presumption is in place in a dialogue, the model prescribes that "a burden of disproof falls onto the side of the respondent" (1992a: 60). Sometimes this 'reverse burden of proof' is described as a "burden of rebuttal" (1993: 140). The question, though, is: how strong should this burden of rebuttal be? Here, Walton's model is not clear. At times, it is suggested that the level of strength of commitment to a presumption is set by global and contextual factors of the dialogue itself (1992a: 61). At other times the burden of rebuttal is described as having to show that "new evidence has come in that falsifies the presumption" (1992a: 61). This seems to imply that in order to rebut a presumption, an arguer must show that the presumption is false. (Normally this would require a standard sufficient to get the negation of the presumption entered as a commitment in the dialogue.) Yet, considering that, by hypothesis, the presumption itself was introduced only on practical – or at most *prima facie* – grounds, this standard of rebuttal seems inordinately high.

## 8. FREEMAN'S SOURCE-BASED THEORY OF PRESUMPTION

Freeman's (2005) theory, which appears to be inspired by Rescher (1977: Chapter 2), employs the notion of presumption to explain the acceptability of basic premises in arguments. Roughly, a basic premise (one not supported by other reasons) is acceptable when there is a presumption in its favor, and there is a presumption in favor of a claim just when it is properly vouched for by a suitable source (2005: ix-x, 32). The main reason why presumptions can effectively establish basic premises is that they place a burden of rebuttal on anyone who wishes to reject them; thus presumptions themselves do not inherently stand in need of any supporting reasons.

According to Freeman (p. 23) there is a fundamental difference between the legal concepts of presumption and burden of proof on the one hand, and the ordinary concepts of presumption and burden of proof appropriate for conversational argumentation, on the other. While both are similar in that they place the burden of proof on an objector (versus the assertor), they differ in that ordinary presumptions are not laid down by judicial fiat as are legal presumptions (pp. 22-23). In contrast, if presumptions of the kind in conversational reasoning outside of law are to be normative, they must not be merely a matter of fiat or stipulation. Freeman also argues (p. 24) that Whately's notion of presumption is psychological in nature, and therefore cannot do the normative work necessary for a proper analysis of presumption in logic.

Instead of looking to legal accounts for explanations of presumption in everyday argumentation, Freeman seeks to develop a notion of presumptive acceptability which he (p. 21) bases on Cohen's (1992: 4) notion that a presumption is what may be taken for granted in the absence of reasons against doing so. Freeman defines two types of presumption, matching two perspectives in a dialectical exchange – challenger presumption and proponent presumption – and claims that the notion of challenger presumption best provides a normative foundation for acceptability (pp. 29-30). Freeman's (pp. 29-30) concept of challenger presumption is based on Pinto's (2001: 3-4) definition:

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respondent to refute it, or otherwise it goes into place as a commitment" (1993: 138; cf. 1996: 29; 1999: 118).

A proposition or statement has the status of a presumption at a given juncture of an interchange if and only if at that juncture any party who refuses to concede it is obliged to present an argument against it – that is to say, is obliged either to concede it or to make a case against it.

Ultimately, the normative foundation of presumptions on Freeman’s account, and the attendant obligation to accept them, arises from their source. Freeman (p. 40) surveyed several categories of what he called “presumption-making principles” that can serve as bases for presumptions. One is a presumption in favor of common knowledge. There is also a presumption in favor of senses and memory – first recognized by Rescher (1977: 3). Rescher expanded this category of presumption to include senses assisted by cognitive aids and instruments like telescopes, calculating machines and reference works. Freeman acknowledges that Whately recognized the presumption for common knowledge when he wrote of a presumption against paradox. Perelman and Olbrechts-Tyteca (1969: 73) identified another basis of presumption, trust. Rescher (1977: 39) also identified inductive considerations that support presumption. For example, the more simple or uniform the hypothesis, the more likely it is to count as plausible as an investigation proceeds. Rescher (1988: 53) also cited presumptions for epistemic utility, analogy, and fit. Something has epistemic utility if it would, once accepted, explain something. Something could be adopted as a presumption if it is analogous to something that has proved acceptable in other contexts. According to Rescher’s account, analogy and fit are ways of identifying what is normal or standard. This observation is very pertinent to the unifying theory we present below.

According to Freeman (p. 41), the various principles of presumption can be classified into three categories according to their source. Presumptions for common knowledge, expert opinion, and trust concern what Freeman calls “external or interpersonal sources” that serve to support a claim. For example, if I consult an expert I am consulting someone else. In contrast, senses and memory are “personal belief-generating mechanisms” derived from my own cognitive faculties. The third category has to do with presumptions that deal with plausibility. These include presumptions in favor of the normal, simplicity, uniformity, specificity, or other inductive considerations, according to Freeman (p. 41).

## 9. ULLMANN-MARGALIT’S PRESUMPTION OPERATOR

While recognizing a difference between presumptions in ordinary reasoning and argument and presumptions as they occur in the law, Ullmann-Margalit (1983) suggests that basing our notions of ordinary presumption on the relatively well-worked out theories of legal presumption provides a valuable starting place.

Ullmann-Margalit proposes that presumption be treated as a modal operator for a claim, which is introduced through the application of presumption rules. On her analysis, there are *presumption formulas* (Pres (P,Q)), which are can be invoked in the presence of *presumption-raising facts* (P), and which *sanction the practical passage to presumed facts* (1983: 147-149). Thus, the logical structure of presumptive inferences is as follows:

P1. Pres (P,Q)

P2. P



### C. Therefore, Pres Q

Importantly, presumptive rules are practical rather than theoretical in nature, and are “concerned not so much with *ascertaining* the facts as with *proceeding* on them” (p. 147). Thus, the conclusion of a presumptive inference is “to the effect that *a certain fact is presumed* ... [rather than] *to the presumed fact*” (p. 149). The force of the presumption operator, then, is to shift the burden of proof to anyone who would reject the claim being presumed as fact.

For Ullmann-Margalit presumptions have a special niche in reasoning. They are meant to serve as guides for practical deliberation in cases where (i) an absence of information, or conflicting information, impedes the formation of a rational judgement, and where (ii) nevertheless some determination of a matter of fact must be found in order that matters proceed (p. 152). Indeed, presumption rules have *subjects* in the sense that they are “directed to any person who is engaged in a process of practical deliberation whose resolution depends ... on an answer to the factual question of whether *q* [the presumed fact] is or is not the case” (p. 147). Other reasoners, not faced with the practical need of reaching a judgment, have the option of reserving their judgment, and thereby may not be bound by the presumptive rule. In this respect, presumptions are quite different from other sorts of defeasible reasoning, such as making a *prima facie* case for a claim.

Because presumption rules apply in cases where there is practical need to proceed, it might seem that they can be grounded in purely prudential considerations. Yet, as Ullmann-Margalit (p. 146) observes, the need to reach a determination concerning a matter at issue does not, on its own, provide any indication of what determination should be reached. So, the use of some particular presumption which prejudices the debate in some particular way requires an additional and independent justification, which can be epistemic, moral, or procedural (p. 157). It would seem that the strength of the grounds of a presumption determines the strength of the presumption itself on a case-by-case basis.

Finally, it is clear that Ullmann-Margalit’s presumption rules are defeasible in nature. A presumption rule always contains what she calls a “rebuttal clause”, meaning that it can be rebutted, overcome, overwritten, reversed, or defeated because it contains a clause specifying that it is subject to exceptions (p. 149). Thus, on her analysis, such a rule sanctions a practical passage from a premise to a conclusion while at the same time acknowledging the possible falsity of the conclusion. In more recent terminology, we would say that she associates the working of a presumption with a defeasible rule of inference that enables a conclusion to be drawn from a set of premises subject to qualifications that, if they turn out to be met in a particular case, can defeat the inference. Importantly (p. 152), it is only the acquisition of probative information that is capable of rebutting a presumption. Moreover (p. 154), the standard to be met by this rebutting evidence is set according to the strength of the initial presumption.

## 10. HANSEN’S RULE-BASED MODEL

Hansen (2003) proposes an account bearing a strong resemblance to that of Ullmann-Margalit (Houtlosser 2003). But, instead of placing its roots in legal theories of presumption, Hansen seeks to trace his account back to Whately. According to Hansen,

“the Whatelian view [is] that presumptive propositions are inferred from presumptive rules” (2003: 3). As such, the rule-based model is also an inferential model, whereby presumptions are the result of presumptive inferences which have the following structure: there is a presumption rule which, when combined with a premise asserting an antecedent fact, yields a presumptive conclusion. Hansen gives the following example (2003: 3):

**Major Premise:** Everyone accused of a crime is to be presumed innocent (until proven guilty). [*Presumption rule*]

**Minor Premise:** Olsen has been accused of a crime. [*Antecedent fact*]

**Conclusion:** There is a presumption that Olsen is innocent. [*Presumptive proposition*]

The inferential structure of presumptions contributes to our understanding of their nature and function in argument.

Hansen further describes the function of presumptions as being involved in setting the overall burden of proof within an argument. He writes:

[T]he function of presumptions and burdens is to give an initial structure to argumentation which favours the side supporting the presumption, giving it the advantage of not having the burden of giving arguments for its position unless and until good arguments are presented against its presumption (2003: 1).

In this respect, Hansen’s account resembles the view shared by Whately and Cronkhite that presumptions serve to initially place the burden of proof in an argument. Here, presumptions are simply the counterpart to the global burden of proof, applying to standpoints which are not initially encumbered with a burden of proof.

Yet, this model seems to open as many questions as it answers. First, in regards to the function of presumptions, the model does not contribute significantly to a theory of local shifts or changes in burden of proof that might occur over the course of an argumentative discussion. Further, regarding the foundation of presumptions, while allowing individual presumptive claims to be derived, the rule-based model does not contribute significantly to their justification. As Houtlosser observes, the justification of a presumptive claim will depend not only on the probative status of the presumptive rule, but also on “considerations that determine whether a certain presumption [rule] applies” (Houtlosser 2003: 2). Yet, it is not clear how such rules should be justified. Finally, until questions regarding the foundations of presumptions are settled, questions concerning their argumentative force, and standards appropriate to their rebuttal, will remain unanswered.

A final problem for Hansen’s account is that it is not entirely clear that the model he proposes is properly attributable to Whately. While Hansen identifies the various examples of presumptions given by Whately as “presumption-conferring rules” (2003: 2), it is not at all clear that this is consistent with Whately’s ‘deferential’ explanation of presumption, which seems to be more psychologically based (Sproule 1976: 117 and *passim*). In the end, it would seem that a presumption, on the Whatelian model, is not a rule or a claim but an attitude which applies to both rules and (sometimes derivatively) to claims.

## 11. CONCLUSIONS

The perceived failings of the Whatelian model of presumptions have prompted many theorists to adopt alternative approaches. Viewed together, these models contribute significantly to the development of a theory of presumption in argument.

Yet, even with these advances, there remain several unanswered problems with the heterogeneous picture of presumptions that exists in argumentation theory today. For instance, are presumptions involved in setting the global burden of proof for an argument, or are they devices that produce a local shift in the burden of proof, in regards to some claim that is presumed?<sup>18</sup> Further, what gives rise to presumptions? What types of considerations should contribute to an explanation of their normative foundations? Whately's intuitive and psychological account does not seem adequate for a mature theory, yet neither can the foundations of presumptions be explained purely in terms of utility or rights and responsibilities. Should presumptions arise from the making of a *prima facie* case, or by proposing a defeasible argument as suggested by Rescher and Walton, or are other practical considerations also required as argued by Ullmann-Margalit? Finally, and perhaps most importantly, what standard of rebuttal is appropriate to presumptions employed in argument? Are presumptions really not defeasible as suggested by Kauffeld's expectation-based account? Can they only be rebutted by counter-presumptions as indicated by Whately? Does a rebuttal really require a proof of the negation of the presumption as Walton has suggested?

In what follows, we attempt to draw together the workable insights that have accrued over the last half-century of theoretical advancement, and further propose answers to some of the theoretical questions which remain. In doing this, we seek to specify a notion of presumption according to its nature, function, foundation and force. We do not propose a complete and operationalized theory of presumption, but instead offer a framework in which individual theories of presumption might fruitfully be conceived and developed.

### 11.1 *The nature and function of presumption*

In general, the nature of presumptions can be explained functionally in terms of burden of proof. So, while there may be other factors or argumentative devices affecting the burden of proof, presumptions are explained in terms of their effect on the burden of proof. Presumptions are most usefully represented as modal operators modifying the status of a claim in an argument – indicating that the burden of proof lies with anyone who would reject the claim. The idea that presumption is a speech act can be accommodated by saying that the speech act of presumption occurs when a claim of this modal type is asserted.

The presumptive status of a claim falls short of conclusively establishing it;<sup>19</sup> so,

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<sup>18</sup> Importantly, even if we allow that presumptions are (also) general argumentative devices involved in the global placement of burden of proof, we still require a theory of devices that have the effect of shifting, or reversing the burden of proof at a local level, and the idea of presumption seems to provide a serviceable explanatory rubric.

<sup>19</sup> If presumptions required conclusively establishing a claim, then the whole idea of presumption could be dispensed with and replaced with the idea of certainty, or conclusive demonstration. We recognize that the law does speak of 'irrebuttable' presumptions, though these are not presumptions in the normal legal sense

presumptions are inherently defeasible. Thus, the presumptive status of a claim can change over the course of a dialogue depending on whether it has been established, defeated, or reinstated. As with presumptions in law, defeating the presumptive status of a claim does not defeat the claim itself. This is important in two respects. First, the standard of rebuttal for presumptions will normally fall short of conclusively establishing the contradictory of the presumed claim. In legal terminology, the reverse-burden created by a presumption is normally a burden of production rather than a burden of persuasion. Second, once a presumption is defeated the claim returns to the arena of plausibilistic argumentation where its overall acceptability is to be determined on balance of considerations, or on whatever other standard of evidence is appropriate to the argumentative situation. Defeating a presumption merely affects, indeed resets, the burden of proof attached to the claim, and need not occasion the retraction of the claim itself.

An additional issue concerning the nature and function presumptions deals with whether they are inherently tied to the practical need of an agent to make a determination regarding the presumed fact. What is at issue here is whether making a defeasible case in support of a claim ought to count as creating a presumption in its favour. Clearly, making a cogent but defeasible case for a claim may succeed in shifting the burden of proof with respect to that claim, and may justify as prudent the acceptance of that claim. Need presumption be anything more than this? The practical dimension of presumptive reasoning has been stressed by a number of authors, but there remains a well-established usage of “presumption” which connotes it with the twin ideas of entitlement to proceed on the basis of, and reverse burden of proof. On the other hand, should the presumptive status of a claim include, or be operationally equated to, defeasibly establishing a claim as acceptable? We suggest that the established usage of “presumption” as defeasible acceptability be honoured, but that a special class of presumptions which derive some of their force from practical considerations suggested by authors such as Ullmann-Margalit and Walton be acknowledged. The recognition of such a class of presumptions should be easily achieved on the rule-based account we propose below.

### 11.2 *Analysing presumptions as components of inferences*

We turn now to the question of the normative foundations of presumptions, which will in turn shed further light on how they are best represented in theories of argument. The thesis that a presumption is a modal status of a claim takes no view on how such presumptions arise. Several accounts of how presumptions are established have been considered. Since our interest is in a normative account of presumption, we disregard purely descriptive, rhetorical, sociological, and psychological accounts. Such accounts might explain why a population treats a claim presumptively, but they cannot justify that behaviour as rational. We are left, as we see it, with accounts that explain presumptions variously as: the result of social norms which create obligations on agents, the result of presumptive inferences (which would include making a *prima facie* case for a claim), and the result of a claim being vouched for by a particular source.

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of rules in the law of evidence. On our view, ‘irrebuttable’ presumptions are best understood as argumentative devices that work to set the global burden of poof, which does not change or shift over the course an argumentative dialogue.

Our view is that presumptions are best represented as components of inferences. The primary obstacle for this approach is Freeman's recognition that presumptions can explain the acceptability of basic premises which are not supported inferentially. It is just as important to recognize, though, that no claim *inherently* has a presumptive status. Presumptions are relational properties of claims, holding for individuals at points in an argumentative discussion. Further, the presumptive status of a claim is the result of the obtaining of some other set of conditions which can be specified, *and* the failure-to-obtain of another set of defeating conditions which can also be specified. Thus even if the presumptive status of a claim does not *arise* inferentially, it is *explained*, and can be *analysed*, and, ultimately, will have to be *evaluated* inferentially. Thus, we propose that the best model for representing presumptions in argument is an inferential one.

To appreciate this point, consider the situation where a respondent does not recognize his obligation to accept some presumption in an argument. If the presumption is genuinely basic or primitive, then the dialogue simply becomes stuck. In order for the discussion to proceed, the nature and source of the respondent's obligation will have to be explained to him; ultimately he will have not only to understand, but to accept, the conditions which give rise to his obligation. Further, the respondent may raise objections to the asserted presumptive status of a claim, or to the obligations which are asserted to attach thereto, as opposed to objecting to the presumed claim itself. The legitimacy of such objections will have to be determined argumentatively, and doing so will require treating presumptions as occurring as components of inferential structures.

In the end, in terms of any actual instance of argumentation, those claims (or types of claims) which will be recognized as presumptions (e.g., first-person testimonial reports), and those rules which will be allowed as presumption-rules, will have to be agreed to by the parties involved in the argumentative discussion at an opening stage. Should issues arise as to which types of claims, or which rules, will be granted presumptive status, these matters will have to be resolved in a meta-dialogue (Walton, forthcoming) in which reasons will be exchanged and evaluated. Thus, even if some presumptions derive their presumptive status from a source rather than through a presumptive inference, it must be possible to make explicit the rational structure and foundation of the presumption.

The idea that presumptions can be represented inferentially, in the context of rule structures, allows us to conceive of presumption rules as default rules (Prakken and Sartor 2006). This allows not only for the specification of antecedent, presumption-raising conditions, but also of rebutting, presumption-defeating, conditions. These conditions can be explicitly incorporated into the rule itself, thereby constituting part of the very nature of the presumption. The types of conditions that count as presumption-raising might vary from one type of presumption to another. In the case of a rule-based presumption, the antecedent condition might be the obtaining of a number of presumption-raising facts. Such a picture also allows for the inclusion of defeasible arguments as presumption-raising by representing their warrant as a presumption rule. For example, all schematic arguments (Walton 1992b; 1996) can be represented as presumption-raising on our model simply by treating the warrants operative in the different argument schemes as presumption rules. In presumptions where the practical component of needing to make a judgement on the matter of the presumed fact is operative in creating the presumption, this can be included as one of the antecedent

conditions, thereby exempting anyone who is not bound by this condition from being subject to the rule. In the case of source-based presumptions, the presumption-raising condition might simply be that a statement is of a certain sort (e.g., report of first-person testimony), since this linguistic fact can act as a sign of the presumptive status of the claim. Finally, in cases where the grounding for the presumption is some social condition which places an obligation on another to bring about the presumed fact, that social condition becomes the antecedent condition in a presumption rule. Similarly, conditions for defeating the presumptive status of a claim can be represented as defeating, or exempting, conditions which form part of the presumption rule. By explicitly incorporating the grounding and defeating conditions into the stated presumption rule, the argumentative force of any given presumption becomes part of its very nature. Presumptions wear their argumentative strength on their sleeve, as it were.

### 11.3 *The normative foundations of presumptions*

In proposing this rule-based picture of how presumptions can be represented in argument, we have come upon the matter of how presumptions are founded, and it is to this matter that we now return. We see no overwhelming need for a singular, hegemonic account of the foundations of presumptions to the exclusion of all others. Through our survey we have seen that presumptions can be based on foundations of qualitatively different types, and we do not see this as a fault. It has been variously proposed that presumptions can be based on practical, epistemic, moral, social, and prudential grounds, and each of these grounds befits a certain level of presumption. It is well beyond the scope of this paper to provide any detailed account of the relative strength of different types of presumptive grounds. On our view, the primary job of specific theories of presumption is to provide an account of the foundation of a certain class of presumptions, and to operationalize this class of presumptions so that they can be readily implemented in a theory of argument.

That said, two general observations can be made concerning foundations of presumptions in the framework we propose. First, an important similarity of all of the accounts surveyed is that the foundations of presumptions are normative. Whether these foundations are explained in terms of institution-specific rules, general epistemic principles, the illocutionary consequences of making utterances of a certain kind, or the social obligations that envelop our day-to-day activities, presumptions require a grounding in norms. What is more important than choosing *a priori* legitimate and illegitimate grounds, is that the force of a presumption be appropriately tied to its foundation. Presumptions that are based on very weak grounds should be easily overturned, while presumptions built on stronger foundations should stand even in the face of considerable evidence to the contrary (e.g., the presumption of innocence).

A second noteworthy feature is that the strength of a presumption is not only a function of its foundation, but is also a function of the *argumentative ground* in which that foundation must take hold. By this we mean that circumstantial conditions may well influence the types of presumptions that are properly applicable to, and which ought to have force in, a given argument. This can most easily be seen by considering the practical condition as an example. In argumentative circumstances where there is no practical need to reach a judgement on a matter of some presumed fact, presumptive rules which are significantly grounded in a practical condition of moving the discussion

forward need not apply. Similarly, in cases where legal conditions are not argumentatively relevant, presumptions whose grounding is founded in the law need not apply.

#### 11.4 *Force and conditions of rebuttal*

We have already noted that the force of a presumption will be a function of its foundation. Another way to approach the issue of the argumentative force of a presumption is to consider it from the perspective of the conditions of defeat attached to the presumption. A preliminary point here is that the standard of rebuttal appropriate to an individual presumption will depend on the grounding of the presumption itself, and the applicability of that presumption to the argumentative circumstances. In general, though, since presumptions are inherently defeasible, the standard of rebuttal should normally fall short of conclusively proving the opposite of the presumed claim.

By conceiving of presumptions as components of rule-based inference structures, it is possible to itemize those ways in which presumptions can be challenged or defeated. Following Hansen (2003: 3) it can be said that there are several ways in which a presumption may be defeated.

In the first place, the antecedent facts, or presumption raising conditions, can be rebutted. Since these claims work as assertions of fact in an argument, no special theory of how they are to be defeated is required here; the normal rules of the argument would apply. Importantly, challenging a presumption in this way does not saddle the challenger with the burden of proof. That the antecedent conditions are met is an assertion made by the proponent, in an attempt to invoke the presumption.<sup>20</sup> The burden of proof with respect to that assertion remains with its proponent.

Second, the presumption rule can be challenged. As we stated above, normally issues pertaining to the applicability and force of presumptive rules will have to be established in a meta-dialogue which best occurs in an opening stage of argumentation. Presumption rules can be challenged during the course of an argumentative dialogue, and such challenges can be modelled as opening a nested meta-dialogue concerning the fitness of the presumptive rule. As with the antecedent condition, the presumptive rule is being asserted by the proponent wishing to use it to invoke some consequent presumption. As such, in cases where the presumptive rule is disputed, the burden of proof concerning the acceptability of the rule rests with its proponent, not the respondent. Since the presumption has not yet been invoked, no shift in the burden of proof has occurred.

There are several ways in which the acceptability of the presumptive rule might be challenged. Roughly, the rules may be treated as defeasible generalizations, and Prakken (2004: 41-42) gives four ways that defeasible generalizations can be countered:

- (i) attacking the source of the generalization by rebutting the generalization by denying the grounds on which it is based;
- (ii) attacking the derivation of the generalization from the source by undercutting

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<sup>20</sup> In some cases, that the antecedent conditions are met will be manifest, as in the case of Freeman's source-based presumptions. Here, the antecedent condition might be represented as a linguistic fact about the type of claim asserted as a presumption. Again, this condition does not ground the presumption, but merely acts as a sign of it.

- the inference used to derive the generalization;
- (iii) attacking the application of the generalization in the given circumstances, by challenging the appropriateness of the grounding conditions to the type of argumentation;<sup>21</sup>
  - (iv) rebutting the generalization itself by providing a counter-argument to an opposing general claim.

The first two lines of objection are available before the presumption itself is actually established, and thus work before the burden of proof concerning the presumed claim has actually been presumptively set. The last two lines of challenge come into play only after the presumption has actually been set when the burden of proof with respect to the presumed claim now rests with the objector.

A third way that presumptions can be defeated is to challenge the link, established by the rule, between the antecedent fact and the presumed fact. Here the issue is whether any of the exempting or defeating conditions pertaining to the presumption rule obtain. Since presumptions are defeasible by nature, all presumptive rules will have some set of exempting conditions which, in cases where they obtain, cause the presumptive inference to fail. By the time objections of this sort can be raised, the presumption rule must already have been accepted by the challenger, and its application in some case (characterized by the antecedent conditions) must have been attempted. At this point the presumption will have been established, and the burden will be on the objector either to rebut the presumptive inference by producing undermining or overriding considerations, or to accept the presumptive conclusion. Further, undermining the presumptive inference by producing an exempting condition does not defeat the presumptive rule. Rather it only defeats some particular presumptive inference – the application of the rule in some case.

Finally, the presumption itself (the presumed fact) can be challenged. In this type of challenge, the burden rests with the objector. Hansen (2003: 3) distinguishes between challenging the presumptive status of the claim, and challenging the claim being presumed, saying that they mark different lines of criticism for a presumptive inference. We hold that directly rebutting the presumptive status of a claim normally involves a challenge to the acceptability of the claim being presumed. That is, while the foundation of a presumption may be cast in a pragmatic, moral, or procedural ground, what is at issue is the factuality of the matter being presumed. Thus, regardless of the ground on which the presumption is built, directly rebutting a presumption involves the introduction of negatively relevant evidence concerning the presumed fact.<sup>22</sup> Ullmann-Margalit (1983: 152) calls this the asymmetry of presumptions, observing that, while a presumption can be triggered by the absence of evidence concerning a matter of fact, the rebuttal of a presumption always involves the possession of evidence concerning that matter of fact.

As mentioned above, in all of the four methods of challenge, the result of a successful challenge is the defeat of the presumption, not of the claim being presumed. In

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<sup>21</sup> We have altered Prakken's third condition which, as stated by Prakken (2004: 42), involves undercutting the presumptive inference by finding an exception or a more specific generalization that applies to the case at issue. This is incorporated into our third line of challenge (challenging the link) below. We make this change because by the time this type of objection is raised, the presumption is already in force, and the burden of proof concerning the presumed claim has already shifted. With the other lines of attack listed by Prakken, the presumptive inference has not yet gone through, and the presumption has not yet been established. Prakken himself explicitly recognizes this point.

<sup>22</sup> An amendment of this sort could correct the error we observed with Kauffeld's theory.



the first two cases, the presumption is never established; in the latter two cases, the presumption is withdrawn or retracted. None of these attacks defeats the claim being presumed. Instead, the claim is no longer *presumptively* acceptable; its acceptability must instead be established on balance of considerations, or according to whatever standard of evidence holds in the argument. Also, the burden of proof concerning the presumed claim resets to normal following the defeat of its presumptive status.

A final point concerning the rebuttal of presumptions can be made. Any properly evidential considerations which contributed to the establishing of a presumption, and which are not directly defeated in the rebuttal of a presumption, retain their status as reasons following the defeat of the presumption. That is to say, on the defeat of a presumption, the *presumptive* weight of the antecedent conditions in the presumptive rule is lost; but their *probative* weight (if any) remains. To appreciate this point, consider an example of the following sort: Suppose that a set of defeasible reasons is offered in support of a claim, and on the basis of those reasons a presumption is established in favour of that claim. Suppose at a later stage of the argument that the respondent defeats the presumption by offering reasons that indicate the falsity of the presumed claim. At this point, on our theory, the bubble of presumption bursts and the presumptive inference fails. Yet, in our example, the reasons giving rise to the presumption are not thereby defeated (*ex hypothesi*). Our point is that, in cases like this, any undefeated reasons retain whatever strictly evidential force they might have, independently of the presumption rule. Following the defeat of a presumption, undefeated antecedent conditions lose their presumption-raising status, but they do not thereby lose whatever evidential status they might have.

### 11.5 Directions for further study

Having proposed a framework in which theories of presumption might fruitfully be conceived and developed, we suggest some directions for future work that look promising from our perspective. What directions ought to be taken in the further investigation of this crucial topic for argumentation theory? One is that more attention needs to be paid to the role of how defeasible argumentation schemes fit into our model. And, more generally, a more complete investigation into the relationship between presumption and defeasibility is needed. Also, if our proposal that presumptions are usefully modeled as components of inferences is accepted, then a detailed account of how standing and source-based presumptions fit this model needs to be articulated. Indeed, more work needs to be done on such specific standing presumptions as the presumption in favor of common knowledge, and also on presumptions in favor of senses and memory. Other kinds of presumptions mentioned by Freeman and Rescher that relate to argumentation schemes include argument from analogy and abductive reasoning. We feel that this direction of investigation is a research project of considerable scope, but one well worth pursuing.

The other direction that beckons for further research is the question of how the ordinary conversational notion of presumption is related to the legal one. A curious feature of the majority of the models considered here (except Ullmann-Margalit and Rescher) is that they seem to have turned away from a more robust legal account of presumption. The prevailing attitude seems to be that the failings of Whately's model are indicative of a general failure of the legal approach in informing a theory of presumption.

But, recent work of Hohmann (2001; 2002), Ullmann-Margalit (1983) and Prakken (2004; 2006) indicates that investigation of legal models of presumption can still be informative to a general theory of argumentation.

## REFERENCES

- Blair, J.A. 1999. "Presumptive reasoning/argument: An overlooked class". *Protosociology* 13: 46-60.
- Blair, J.A., Farr, D., Hansen, H.V., Johnson, R.H., and Tindale, C.W. (eds). 2003. *Informal Logic at 25: Proceedings of the Windsor Conference*. Windsor, ON: Ontario Society for the Study of Argumentation (OSSA).
- Cronkhite, G. 1966. "The locus of presumption". *Central States Speech Journal* 17: 270-276.
- Cohen, L.J. 1992. *An Essay on Belief and Acceptance*. Oxford: Clarendon Press.
- Eemeren, F.H. van and P. Houtlosser. 2002. "Strategic maneuvering with the burden of proof". In F.H. van Eemeren (ed), *Advances in Pragma-Dialectics*. Amsterdam: Sic Sat, 13-28.
- Eemeren, F.H. van and P. Houtlosser. 2003. "A pragmatic view of the burden of proof". In F.H. van Eemeren et al. (eds), 123-132.
- Eemeren, F.H. van and R. Grootendorst. 2004. *A Systematic Theory of Argumentation: The Pragma-Dialectical Approach*. Cambridge: Cambridge University Press.
- Eemeren, F.H. van, Blair, J.A., Willard, C.A., and Snoeck Henkemans, A.F. (eds). 2003. *Anyone Who Has a View: Theoretical Contributions to the Study of Argumentation*. Dordrecht: Kluwer.
- Ehninger, D. 1963. "Introduction". In R. Whately [1846] 1963, ix-xxx.
- Freeman, J.B. 2005. *Acceptable Premises*. Cambridge: Cambridge University Press.
- Hansen, H.V. 2003. "Theories of presumptions and burdens of proof". In J.A. Blair et al. (eds), *Informal Logic at 25: Proceedings of the Windsor Conference*. Windsor, ON: Ontario Society for the Study of Argumentation (OSSA).
- Hansen, H.V., Tindale, C.W, and Kirwin, C. (eds). 2001. *Proceedings of the Third OSSA Conference [1999]: Argumentation at the Century's Turn*. St. Catherines, ON: Ontario Society for the Study of Argumentation (OSSA).
- Hohmann, H. 2001. "Presumptions in legal argumentation: From antiquity to the Middle Ages". In H.V. Hansen et al. (eds), *Proceedings of the Third OSSA Conference [1999]: Argumentation at the Century's Turn*. St. Catherines, ON: Ontario Society for the Study of Argumentation (OSSA).
- Hohmann, H. 2002. "Presumptions in Roman legal argumentation". In H.V. Hansen, C.W. Tindale, J.A. Blair, R.H. Johnson, and R.C. Pinto (eds), *Argumentation and its Applications: Proceedings of the Fourth OSSA Conference [2001]*. Windsor, ON: Ontario Society for the Study of Argumentation (OSSA).
- Houtlosser, P. 2003. "Commentary on H.V. Hansen's 'Theories of presumption and burdens of proof'". In J.A. Blair et al. (eds), *Informal Logic at 25: Proceedings of the Windsor Conference*. Windsor, ON: Ontario Society for the Study of Argumentation (OSSA).
- Kauffeld, F. 1995. "On the difference between assumptions and presumptions". In S. Jackson (ed), *Argumentation and Values: Proceedings of the Ninth SCA/AFA*

- Conference on Argumentation*. Annandale, VA: Speech Communication Association, 509-514.
- Kauffeld, F. 1998. "Presumptions and the distribution of argumentative burdens in acts of proposing and accusing". *Argumentation* 12: 245-266.
- Kauffeld, F. 2003. "The ordinary practice of presuming and presumption with special attention to veracity and the burden of proof". In F.H. van Eemeren et al. (eds), 136-146.
- Kauffeld, F. and Fields, J.E. 2003. "The presumption of veracity in testimony and gossip". In J.A. Blair et al. (eds), *Informal Logic at 25: Proceedings of the Windsor Conference*. Windsor, ON: Ontario Society for the Study of Argumentation (OSSA).
- Llewelyn, J.E. 1962. "Presuppositions, assumptions and presumptions". *Theoria* 28: 157-172.
- Nielsen, F.S. 2001. "Alfred Sidgwick's rogative approach to argumentation". In H.V. Hansen et al. (eds), *Proceedings of the Third OSSA Conference [1999]: Argumentation at the Century's Turn*. St. Catherines, ON: Ontario Society for the Study of Argumentation (OSSA).
- Perelman, C. and Olbrechts-Tyteca, L. 1969. *The New Rhetoric: A Treatise on Argumentation*, 2<sup>nd</sup> ed. Trans. J. Wilkinson and P. Weaver. Notre Dame, IN: University of Notre Dame Press.
- Pinto, R.C. 2001. *Argument, Inference and Dialectic*. Dordrecht: Kluwer.
- Prakken, H. 2004. "Analysing reasoning about evidence with formal models of argumentation". *Law, Probability & Risk* 3: 33-50.
- Prakken, H. and Sartor, G. 2006. "Presumptions and burdens of proof". In T.M. van Engers (ed), *Legal Knowledge and Information Systems. JURIX 2006: The Nineteenth Annual Conference*. Amsterdam: IOS Press, 21-30.
- Rescher, N. 1977. *Dialectics: A Controversy-Oriented Approach to the Theory of Knowledge*. Albany, NY: State University of New York Press.
- Rescher, N. 1988. *Rationality*. Oxford: Clarendon Press.
- Sidgwick, A. 1884. *Fallacies: A View of Logic from the Practical Side*. New York: D. Appleton and Company.
- Sproule, J.M.. 1976. "The psychological burden of proof: On the evolutionary development of Richard Whately's theory of presumption". *Communication Monographs* 43: 115-129.
- Ullmann-Margalit, E. 1983. "On presumption". *Journal of Philosophy* 80: 143-163.
- Walton, D. 1988. "Burden of proof". *Argumentation* 2: 233-254.
- Walton, Douglas, 1992a. *The Place of Emotion in Argument*. University Park, PA: Pennsylvania State University Press.
- Walton, D. 1992b. *Plausible Argument in Everyday Conversation*. Albany, NY: State University of New York Press.
- Walton, D. 1993. "The speech act of presumption". *Pragmatics & Cognition* 1: 125-148.
- Walton, D. 1996. *Argumentation Schemes for Presumptive Reasoning*. Mahwah, NJ: Lawrence Erlbaum.
- Walton, D. 1999. *Appeal to Popular Opinion*. University Park, PA: Pennsylvania State University Press.
- Walton, D. 2000. "Alfred Sidgwick: A little-known precursor of informal logic and argumentation". *Argumentation* 14: 175-179.

- Walton, D. 2006. *Fundamentals of Critical Argumentation*. New York: Cambridge University Press.
- Walton, D. Forthcoming. "Metadialogues for resolving burden of proof disputes." *Argumentation*.
- Whatley, Richard. [1846] 1963. *Elements of Rhetoric*, 7<sup>th</sup> ed. Edited by D. Ehninger. Carbondale IL: Southern Illinois University Press.