ISSA Proceedings 1998 – Walton's Argumentation Schemes For Presumptive Reasoning: A Critique And Development

1. Introduction: Walton's account

In this paper I first sketch Douglas Walton's account of argument schemes for presumptive reasoning (Walton, 1996). Then I outline some of what I think is missing from the account as presented by Walton. Last, I propose ways of filling in some (not all) of those missing pieces. The sketch of Walton's account will occupy the rest of this introductory section. I should make it clear at the outset that what inspires this paper is admiration for Walton's project. Although I think his account is incomplete, and I disagree with some details, I believe that the study of argumentation schemes is important, and that Walton's approach is fruitful and suggestive. In the book under examination (Walton, 1996), Walton restricts his discussion to argument schemes found in presumptive reasoning. He takes presumptive reasoning to be typified by the pragmatic, "rough and ready generalizations," of practical reasoning (reasoning about what to do); it is the "plausible reasoning" for which Rescher provided a calculus in his *Plausible Reasoning* (1976). A model for presumptive reasoning is default or non-monotonic reasoning discussed in computer science.

Central to Walton's account is his analysis of *presumption.* He presents presumption as related to, but distinct from, burden of proof. On his analysis, it is that move in a dialogue which lies between assertion (which incurs the burden of proof) and assumption (which carries no burden whatever). A presumption so conceived has practical value by way of advancing the argumentation, and, in accepting something as a presumption, the interlocutor assumes the burden of rebutting it. Thus a presumption shifts the burden of proof, and this function is at the heart of Walton's analysis. Presumptions come into play in the absence of firm evidence or knowledge, which is why they are typically found in practical reasoning. Presumptive reasoning, in sum, "is neither deductive nor inductive in nature, but represents a third distinct type . . ., an inherently tentative kind of

reasoning subject to defeat by the special circumstances (not defined inductively or statistically) of a particular case" (Walton 1996, 43).
For Walton, argument schemes are structures or "forms" of argument which are "normatively binding kinds of reasoning" and are "best seen as moves, or speech acts" in dialogues (Walton 1996, 28). They are normatively binding in the sense that in accepting premises organized in a "genuine" scheme "appropriate" to the type of dialogue in process, one is bound (in some way) to accept the conclusion drawn from them, provided the "critical questions" that are "appropriate to" that scheme are answered satisfactorily (Walton 1996, 10).
Walton postulates that the validity of an argument scheme is contextual: a function of the context of dialogue in which it is used in a given case. Remember that the aim of argument in presumptive or plausible reasoning is to shift the burden of proof in a dialogue (not to prove a proposition with a given degree of probability or plausibility). Whether a scheme succeeds in shifting the burden of proof depends on whether the scheme is valid (for the occasion of its use) and on whether the members of a set of "critical questions" associated with it either have been answered affirmatively earlier in the dialogue or can be later if they are raised.

To this distinction between an argument scheme and its associated critical questions there corresponds, in Walton's theoretical structure, a distinction between two (of three) levels of argument criticism. At the "local" level the scheme itself may be invalid, or the argument may fail to conform to its scheme's requirements, or its premises may lack needed support. The critical questions associated with an argument scheme normally lead to further arguments, when and as their answers are provided and supported, so that the occurrence of a scheme in a dialogue effectively introduces a sequence of exchanges, which Walton labels an "argumentation theme." These argumentation themes form the backdrop for the second level of argument criticism: questioning the relevance of an argument at a given point in a dialogical exchange. The idea seems to be that what makes an argument relevant is the appropriateness of its placement in the sequences of questions and answers that constitute the argumentation theme of the dialogue at that point. (The third level of criticism is to question the appropriateness of the dialogue type being used.)
So a presumptive argument scheme is the pattern of a unit of local reasoning that is a move in an argumentative dialogue aiming to provide sufficient grounds to shift the burden of proof with respect to the assertion that is its conclusion.

In *Argument Schemes for Presumptive Reasoning* (1996), Walton describes and discusses about thirty such schemes. For each scheme he supplies a description, a formulation, a set of critical questions associated with it, at least one and often several "cases," which are actual or invented examples of the scheme in use, and a discussion of the scheme in which he typically draws attention to its salient properties, relates it to other schemes, discusses the fallacies associated with it, comments on its presumptive force, and mentions typical contexts of its use.

An example of one of the argument schemes Walton discusses will illustrate his treatment. Here is the scheme of the "argument from sign" (Walton 1996, 49):

1.

A is true in this situation. B is generally indicated as true when its sign, A, is true, in this kind of situation. Therefore, B is true in this situation.

Walton gives, among others, the following examples of arguments that instantiate the argument from sign scheme (Walton 1996, 47, 49):

2.

3.1 There are some bear tracks in the snow.
Therefore, a bear passed this way.
3.4 Bob is covered with red spots.
Therefore, Bob has the measles.
3.5 The barometer just dropped.
Therefore, we will have a storm.
3.6 Bob is biting his nails.
Therefore, Bob is worried about something.

Following Hastings (1962) Walton identifies the following two "critical questions" as associated with the scheme of the argument from sign (Walton 1996, 48):

3.

1. What is the strength of the correlation of the sign with the event signified?
2. Are there other events that would more reliably account for the sign?

Although Walton's account is rich in detail, I believe it leaves many theoretical questions and issues unanswered and unadressed. I will list and discuss these *lacunae* in the next section.

2. What is missing from Walton's account

A natural first question to ask is, "Where do argument schemes come from?" Are

they in the first instance descriptions of patterns to be found in (or, that can be abstracted from) actual argumentation as social events and products? If so, then their normative force requires an explanation, for from the fact that people's arguments happen to exhibit a particular pattern, it does not follow that the conclusions of such arguments are warranted by their premises. Or instead, are argument schemes in the first instance a priori prescriptions for cogent argumentation–patterns whose instantiations will be cogent arguments if they are used appropriately? In that case, on what principles are they formed? Where do they get their probative force? As far as I can discern, Walton does not address these questions in this book. In sum, we get the following set of questions.

Q-set 1: Are the schemes meant to be descriptive or prescriptive?
In either case, what gives them normative force?

Other questions concern the classification of the schemes. Walton's argument from sign scheme looks like a scheme for causal reasoning, yet he also includes as a distinct scheme what he calls "the argument from cause to effect." Does "the argument from sign" amount to "the argument from effect to cause"? And if so, are these two schemes species of a generic causal argument scheme? Or are they best classified as different types of reasoning? In any case, how is the matter to be decided?
Notice also that Walton has grouped somewhat different types of reasoning together under the label of argument from sign. The paw of a bear is necessary to make a bear track, but worry is not necessary in order to cause nail biting, nor is a storm necessary for the barometer to drop. Also, the connection between worry and nail biting is psychological, whereas that between a brewing storm and a falling barometer is physical. I do not mean to disagreeing with Walton that these four examples should be grouped as exemplifying one scheme, but it is fair to ask for an explanation of why these somewhat different contents of reasoning end up being classified as exhibiting a single argument scheme. Walton supplies no rationale for his selection of schemes, and the order in which he presents them seems to a large extent arbitrary.

Q-set 2: On what principles are schemes to be classified? How are schemes to be distinguished by type?

Perhaps related to the questions about classifications are questions about the level of generality a scheme should exhibit. It is easy to imagine schemes of

different generality for one and the same example of argumentation. For example, if I am fussing about my knee aching, and June says, among other things, “If your arthritis is bothering you, take some ibuprofen–it’s what your doctor prescribed,” which of the following is the correct, or the better, scheme for her argument?

4.
D prescribed treatment T for patient P’s medical condition C.
D is an authority with respect to treatments for C-type conditions and about P’s condition. So, it is presumptively reasonable for P to take T when in C.

5.
D prescribed action A to solve problem C. D is an authority with respect to dealing with C. So, it is presumptively reasonable to do A to solve C.

Clearly scheme (4) is less general or abstract than scheme (5), yet both seem exemplified in June’s argument. What is the correct, or best, level of abstraction, and why? This issue is discussed in Kienpointer’s *Alltagslogik* (1992), but Walton supplies no answers in his book.

Q-set 3: How general should an argument scheme be? How is the question of the correct level of generality to be properly decided?

Another topic that is not discussed by Walton is the connection between an argument scheme and its “associated” critical questions. He simply lists a set of critical questions for each scheme, but what motivates these questions? How is it to be decided which are the correct questions, and when a list of critical questions is complete?

Q-set 4: Which are the right kind, and number, of critical questions to ask with respect to any given scheme? How is that to be decided?

I have glossed over the fact that Walton talks sometimes of schemes exhibited in arguments and sometimes of schemes exhibited in reasoning. One wants to know how these are related. I have also followed Walton’s convention of focusing on schemes in presumptive reasoning/argumentation.

Q-set 5: Are there both argument schemes and reasoning schemes, or only one, and if the latter, which one? Or is there no distinction between arguments and reasoning?

As I have noted, in the book under consideration Walton devotes his attention to argument schemes for presumptive reasoning. Are there other types of schemes as well? Walton seems clearly to concede that possibility:

We analyze only what we call presumptive argumentation schemes, ... Therefore, we do not include, for example, inductive arguments, part-whole arguments, or genus-species arguments, presuming that (by and large, at any rate) these types of argumentation are not presumptive in nature. (1996, 3)
Certainly the problem remains of understanding how many of the most common of these [presumptive] argumentation schemes in everyday conversation are inherently different from the usual models of deductive and inductive reasoning . . . . (1996, 3)
If there are other kinds of argumentation schemes besides those for presumptive reasoning, then it seems that a general theory of argument schemes is needed to account for them all.

Q-set 6: How are presumptive argumentation schemes related to those for inductive or deductive reasoning? What is the correct general theory of argument schemes?

Finally, I would like to question some of the details of Walton's analyses of presumption and of argument schemes. In particular I question whether presumptive reasoning is "inherently tentative," "inconclusive" and "provisional" (Walton 1996, 42, ix, xi). I also would like at least to mention the possibility of questioning whether a context of dialogue is essential to the function of argument schemes, or presumptive or others.

Q-set 7: Are all the details of Walton's account of argumentation schemes for presumptive reasoning correct?

To sum up, among the tasks which a more complete theory of argument schemes than is provided by Walton would have to take on are the following, each task or set of tasks corresponding to one of the above seven question sets.

T1. Explain the descriptive and prescriptive functions of argument schemes and explain the ground of the normative force of prescriptive schemes. (Q-set 1)
T2. Identify the types of argument schemes and the principle(s) of classification for argument schemes. (Q-set 2) Among other things, determine whether there are inductive and deductive as well as presumptive argument schemes. If

possible, prove a general theory of argument schemes. (Q-set 6)
T3. Address the question of the correct or appropriate level of generality of argument schemes. (Q-set 3)
T4. Explain what motivates the critical questions attached to an argument scheme, and how the correct or appropriate number and formulation of these critical questions is to be established. (Q-set 4)
T5. Explain what it is that schemes are appropriately predicated of – arguments or reasoning, or both. (Q-set 5)
T6. Offer critiques of some of the details of the account. (Q-set 7)

In the next section I will address all of these tasks except T3, and, except for some comments in passing, T2. Both T2 and T3 have been discussed in detail by Kienpointner (1992), and it would take me beyond the focus on Walton's account to examine that of Kienpointner.

3. Further developments
Argumentation and reasoning
There is by now, thanks particularly to the work of van Eemeren and Grootendorst (1984, 1992), among others, general agreement among argumentation scholars that argumentation is a complex social, speech activity involving more than one party, with practical goals and subject to norms related to those goals. One cannot argue without at least an imaginary audience or interlocutor. Reasoning, on the other hand, whatever its social origins and functions, is a mental activity which can be performed privately. One can reason alone. Argumentation requires that its participants reason, so reasoning is necessary to argumentation; but one can reason without engaging in argumentation, so argumentation is not necessary to reasoning.
One type of reasoning is inferring–making the judgement that one proposition is implied by another or others (I use 'implied' broadly, to include "supported."). When Walton speaks of "presumptive reasoning," he is speaking of drawing presumptive inferences, or inferring presumptively. A person can infer without arguing (for example, you think to yourself, "I need to be alert tomorrow, so I'd better get to bed early tonight."), but inferring is necessary to arguing, in several respects. Inferences are being made constantly by interlocutors engaged in argumentation in order to ascertain the nature of their activity and to sustain it. (For example: "Do we disagree?" "Which moves are permitted and appropriate at this point?" "Which is the best move for me at this turn?" The interlocutors must

draw inferences to answer such questions.) At the heart of the activity of argumentation is the offering of and response to arguments in the more narrow sense of reasons offered in support of or against claims: the illative core of argumentation. Here the interlocutors draw inferences about what propositions imply other propositions and about what propositions the other person or the audience will likely deem to be implied by given propositions, and the arguments they offer to one another are in effect invitations to draw inferences (Pinto 1995, 276; Beardsley 1976, 5). These distinctions may be illustrated by describing selections of a generalization of a process of and argumentative dialogue.

6.

Proposition p implies proposition *q*. (Implication)
Person *A* judges that *p* implies *q*. (Reasoning)
A judges on the basis of facts (*a, b* and *c*) that interlocutor *B* accepts *p* and will accept that *p* implies *q*. (Reasoning.)
A invites *B* to accept *q*, on the grounds that *p* and that *p* implies *q*. (Argument)
B accepts *p*, but also accepts *r*, and judges that *p* and *r* imply *not-q*. (Reasoning.)
B invites *A* to accept *not-q*, on the ground that *r*, and that *p* and *r* imply *not-q*. (Argument)
A does not accept *t*, nor that *t* implies *not-r*, but believes on the basis of facts (*d, e* and *f*) that *B* accepts both. (Reasoning)
A invites *B* to accept *not-r*, on the ground that *t*, and that *t* implies *not-r*. (Argument)

Clearly, reasoning (that is, inferring) is integral to the use of arguments in argumentation, although as the last two moves listed above indicate, one can, in offering an argument, invite one's interlocutor to employ reasoning that one rejects oneself. So what are the schemes to which Walton refers schemes of? Are they schemes of reasoning or of arguments?
I think the answer must be: both, but inference is more basic. Whether or not the arguer draws the inference that he or she invites the interlocutor to draw, he or she recognizes the possibility of drawing that inference. Thus the presentation of an argument presupposes a possible inference, and hence the instantiation of some possible pattern of inference. Thus, an inference scheme is logically prior to its use in any argument. Moreover, schemes that are prescriptive function to license inferences, so that is another reason for identifying them with inferences. On the other hand, in uttering an argument that invites the interlocutor to draw

an inference, the arguer employs an instance of some pattern of argument, and so might be said to be employing an instance of an argument scheme. There is often no harm in shifting without notice from talk of inferences to talk of arguments, given the central role of inference in argument; but, given the difference between argument and inference, the two should not be conflated.

Walton's classification of schemes

Classifications are made with ends in view, and since there can be many compatible purposes for classifications, there are numerous possible compatible classifications. Walton is at pains to distinguish the schemes of presumptive reasoning from those of deductive logic and inductive reasoning. His principle of classification seems to be the strength of commitment to which the reasoner is entitled, given the premises, for each type of inference. When the premises deductively entail the conclusion, one is entitled to absolute confidence in the conclusion, given the premises. In contrast, Walton thinks, when the premises presumptively support the conclusion, one is entitled to have little confidence in the conclusion, given the premises–just enough confidence to shift the onus of refutation over to anyone who would still deny the conclusion. Walton has little to say about inductive reasoning.

Walton is on the right track, I believe, but he overstates the tentative character of presumptive reasoning. To be sure, some presumptions are supported only very weakly; but others are supported so strongly that it would be no less irrational to lack confidence in their conclusions than it would be to lack confidence in conclusions strongly supported by inductive reasoning. For example, if my doctor prescribes ibuprofen for pain in my arthritic knee, and he knows the condition of my knee, having examined it arthroscopically, and he is an expert on the deterioration of, and the onset of arthritis in, knee joints with damaged cartilage, and there's no reason to distrust his judgement in this case, and his prescription conforms with the standard medical judgement for such cases, and none of the contra indicators against taking ibuprofen apply to me at the moment, then his prescription generates an extremely strong presumption in favour of my taking ibuprofen for arthritic pain in my knee. Again, if Ann has promised to return Bob's book on Monday, and if other things are equal, then unquestionably Ann has an obligation to return Bob's book on Monday. There is nothing tentative or weak about these inferences.

So I would suggest a slightly different principle than degree of confidence for distinguishing these types of inference. I think the salient difference is whether

the conclusion is defeasible in principle, given the premises. In the case of deductive entailments, given the premises, the conclusion is not defeasible, in principle. In the case of inductive and presumptive reasoning, it is. The defeasibility criterion has the virtue of drawing the line sharply, while at the same time allowing that presumptive and inductive inferences can be extremely strongly supported, leaving no room for reasonable doubt or tentative commitments. Granted, this criterion fails to distinguish inductive from presumptive reasoning. I do not have a solution for that problem, but perhaps it is not a serious objection that they cannot be sharply distinguished.

The origin of schemes

Kienpointer (1992, 241) distinguishes between descriptive and normative schemata, but he is distinguishing between, respectively, schemes for arguments with descriptive premises and conclusions, and schemes for arguments with descriptive and normative premises and normative conclusions. That is not the distinction I mean to denote by the labels "descriptive" and "prescriptive." Instead, I have in mind the distinction between, on the one hand, a scheme that conveys the pattern of reasoning that someone actually used in a particular instance of reasoning or argument "on the hoof" (to use the useful expression attributed to John Woods), which entails no endorsement of that reasoning or argument, and, on the other hand, a scheme that portrays a supposedly valid or cogent pattern of inference or argument.

But where do schemes – descriptive or prescriptive – come from? Where do Walton and others get them? And where should they come from? In the literature on schemes many schemes seems to originate from discussion of schemes – in the literature! Thus, Kienpointner (1992) cites many mediaeval and classical sources for the schemes he describes. Walton does not explain the genesis of his list. He cites examples of actual argumentation for some, and provides invented examples for others. The assumption seems to be that the reader will find his invented examples plausible because they illustrate familiar patterns of reasoning or argument. But Walton also appears to take himself to be citing schemes well-known to his readers from the logical literature. Perelman and Olbrechts-Tyteca (1958) find in non-philosophical writing many of the schemes they describe.

To the extent that these authors provide descriptions of schemes in use, they are giving empirical reports of patterns found in actual or possible argumentation. To the extent that they are intended to be offering prescriptions for cogent reasoning

or argument, their schemes must meet an additional requirement than simply to have been used. The issue of whether there can be an *a priori* theory of all possible cogent inference or argument schemes is too large to be broached here. However, it will have to be enough to note for now that any such theory will have to accommodate our logical intuitions about particular cases, from which it follows that unless and until such a comprehensive theory is produced, there is no shame in generating normative schemes from particular arguments or types of arguments in actual use that seem to us to be probatively compelling.

The source of the probative force of prescriptive schemes in general

Describing the schemes that have been used, and determining their cogency, are obviously different tasks. Similarly, since people reason and argue both poorly and well, a catalogue of the schemes that have been used, and a list of cogent schemes available for use, will have only some, but not all, schemes in common. The philosophical interest in schemes relates to the grounds or source of their cogency. What is the source of the probative force of a "valid" inference or argument scheme? The short explanation, I take it, lies in the irrationality of accepting the premises but rejecting the conclusion of an inference or argument instantiating a valid scheme. Consider the three broad classes of arguments or reasoning that Walton mentions.

In the case of a deductively valid scheme, the scheme derives its normative force or cogency from the fact that the truth of the premises of such a scheme guarantees the truth of the conclusion. Thus, to accept the premises, and yet refuse to accept the conclusion, is irrational by virtue of being strongly inconsistent. In acknowledging that the scheme is deductively valid, one is committed to accepting the conclusion if one grants the premises, so in granting the premises and refusing to accept the conclusion, one contradicts oneself.

In the case of an inductively strong scheme, I take it that the scheme derives its normative force or cogency from the fact that to accept the premises and grant the inductive strength of the scheme, yet deny the probability of the conclusion, is irrational by virtue of a somewhat different kind of inconsistency. For reasoning using inductively strong schemes, given the evidence, the conclusion is more probable than any alternative; to acknowledge the inductive strength of the scheme is to admit as much, yet to deny the conclusion is to hold out for some less probable alternative. There is no self-contradiction here, since it is possible that the conclusion is false, given the evidence, for even the strongest inductive scheme. But unless the skeptic has some possible rebuttal in mind, he is holding

that the less probable is the more probable.
In the case of a presumptively cogent scheme, it is plausible to understand its probative force in a similar fashion. The scheme derives its cogency from the fact that to accept the premises and grant the validity of the scheme, yet deny the plausibility of the conclusion–without suggesting that any conditions of rebuttal exist–is pragmatically inconsistent. Given a strong presumption, to refuse to accept the conclusion without denying the evidence or finding a rebutting condition, implies believing that there is some rebutting condition or circumstance for which there is no evidence. The skeptic in such a case is holding that the less plausible is the more plausible. In all three cases, the probative force of the scheme derives from one or another type of inconsistency involved, given the scheme, in accepting the premises, yet refusing to accept the conclusion.

The motivation and justification of the "critical questions" of presumptive schemes

In this connection, by the way, we can understand what motivates the critical questions that Walton and others (for instance, Hastings, 1963; Schellens, 1987; van Eemeren and Kruiger, 1987) take to be associated with presumptively cogent inference or argument schemes, and how they play the normative role they do. Given that a presumptive scheme is in principle defeasible, someone who reasons according to such a scheme wants to know how likely it is that the inference will be defeated in the given case. The so-called "critical questions" are simply information-seeking questions that inquire about the conditions or circumstances that tend to rebut inferences using that scheme. The presumption is strengthened to the extent that the answers to these questions indicate the absence of defeating or overriding conditions. That is why presumptive schemes have critical questions associated with them, and it is the reason that the probative force of a presumptive scheme is partly a function the answers to the critical questions associated with the scheme.
The role of the critical questions also explains why in some cases presumptively-supported claims care so plausible that to doubt them would be completely unwarranted. If answering all the critical questions associated with a cogent scheme reveals that none of the rebutting conditions apply in a given case, then there is simply no reason whatever to deny the conclusion.

The source of the probative force of particular schemes But whence do particular prescriptive argumentation schemes derive their authority? What, for instance, is

the justification of the argument from authority, or the argument from analogy, or the argument from consequences? Why do we accept appeals to expertise, or to similar cases, or to good or bad outcomes, as cogent? The general account of the rationality of presumptive reasoning sketched above does not explain the cogency of these particular schemes, although it indicates what to look for–namely, some source of inconsistency, in that particular type of reasoning, attached to accepting the scheme and the evidence but denying the conclusion.

Consider the argument from authority, one form of which is the argument from expert opinion. Why may we rely on the authority of others? The answers lies in an analysis of authority or expertise. A necessary condition of authority is knowledge. If someone has knowledge in an area, then among other things they know a number of propositions belonging to it. But a proposition cannot be known unless it is true. So there is a connection between the expertise of an authority and the truth of at least some of the propositions for which the expert vouches. Although this account drastically oversimplifies the appeal to authority, I think it is *au fond* the connection between authority, knowledge and truth that authorizes inferences from what authorities or experts claim to be the case to the plausibility of those claims.

Consider another scheme, one of the many forms of the argument from analogy: the argument from *a priori* analogy (Govier, 1987). This is an argument for a normative claim based on the similarity of two cases and the treatment already afforded one of them. An example? "Officer, you should not give me a speeding ticket, because although I was driving faster than the speed limit, you did not give those other drivers speeding tickets, and they were going a lot faster than I was." Why may we appeal to such analogies? I suggest that the answer lies in the norm of justice or fairness. Fairness requires treating similar cases similarly. To the extent that fairness is a good, similar cases ought to be treated similarly. The argument from *a priori* analogy appeals to the similarity of other cases, presupposing the norm of fairness. (It follows that a complete justification of the scheme for *a priori* analogy would require a justification of fairness.) Unfortunately for the speeding driver, fairness is not the only value, nor always the highest ranking value, which is why the police officer is able validly to rebut this particular argument: "There is a relevant difference between you and those other speeders," he will say. "You are the one I caught."

In general, I take it that for each prescriptive scheme we must be able to provide, either a general account of why schemes of that type are valid, as in the case of deductively valid schemes, or else an account of why that particular scheme is

valid, as in the case of the schemes of presumptive reasoning, many groups of which are *sui generis*. In the latter kind of case, there must be some particular connection between the premise-set of the scheme and the conclusion which makes it in some way unreasonable in that kind of case to deny the conclusion while granting the premises, other things being equal.

4. Conclusion

It has been the aim of this paper to advance the theoretical discussion of the concept of argument or inference schemes, using the unsystematic approach of trying, first, to identify some unanswered questions that Douglas Walton's account of argument schemes in his book, *Argumentation Schemes for Presumptive Reasoning* (1996) gives rise to, and second, to make some preliminary and tentative suggestions as to how to some of those questions might be answered. In that book, Walton focuses particularly on the schemes of presumptive reasoning and argument, but even within the narrower scope of his treatment, he seems to have left a number of vexing questions unanswered. I have tried to clarify the relation between argument and reasoning, in order to explain how it is possible to shift between talk of schemes for reasoning and argumentation schemes. I proposed a revision to Walton's way of distinguishing deductive from presumptive schemes, in order to account for the fact that reasoning and arguments using presumptive schemes can be strongly compelling. Given that Walton's list of schemes seems to drop from out of the blue, and that he seems to take their cogency for granted, I sought to account for both the origin of schemes and their probative force, both in general and in particular cases In the process, I proposed a way of explaining the motivation and justification for the critical questions Walton associates with presumptive schemes. Needless to say, I think that a philosophically complete and satisfying theory of argument and inference schemes remains to be written, although I think Walton's book is an important step in that direction.

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