

ENTHYMEMES

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Ethymemes (*)

According to traditional logic texts and manuals, an *enthymeme* is a premiss tacitly assumed in an argument, but not actually stated.⁽¹⁾ The argument, 'All men are mortal, therefore Socrates is mortal', according to the traditional doctrine of enthymemes, tacitly assumes the additional premiss, 'Socrates is a man.' In this case, when you add the missing premiss, the argument comes out deductively valid in classical first-order logic.

The idea seems to be that if an argument is deductively invalid as it stands, but is "fairly close" to a deductively valid argument, then you can "plug the loop-hole" and make it into a valid argument. One problem with this, however, is that there may be different ways to plug the loop-hole. We could have put in 'Socrates is a man and Plato is a man' and the argument would also be rendered valid by that addition.

The doctrine of enthymemes would seem to suggest the rule: always add the weakest premiss needed to make the argument valid. This will not do, however. The proposition 'Socrates is mortal' is weaker than

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⁽¹⁾ The tradition stems from Aristotle. In *Analytica Priora*, Book II (70a 10), Aristotle defines an enthymeme as a syllogism that starts from a generally approved proposition, e.g. 'The beloved show affection.' In *Rhetorica* (1357a 18), Aristotle writes that an enthymeme is a shortened syllogism – if one of the premisses is a familiar fact, there is no need (for purposes of persuasion) to mention it. The rhetorical persuader, we are told, should avoid reasoning that is too hard to follow because of its length.

⁽²⁾ W. T. Parry, 'Ein Axiomensystem für eine neue Art von Implikation (Analytische Implikation)', *Ergebnisse eines Mathematischen Kolloquium*, 4, 1933, 5-6.

the proposition 'All men are mortal,' but if the argument given were 'Socrates is a man, therefore Socrates is mortal', the correct enthymeme would presumably be the former rather than the latter proposition.

It is not easy to say could be meant by 'weaker than' as a relation here. In classical logic 'Socrates is mortal' implies 'Socrates is mortal or all men are mortal'. But is the second proposition "weaker than" the first? Possibly something like Parry's notion of analytic implication could be useful.⁽²⁾

Even if we would bring to bear a satisfactory account of the 'weaker than' relation, two problems remain. First, the missing premiss wanted may not be the weakest proposition, but rather the "most plausible" one of the various ones that would be sufficient to make the argument valid. For example, the well-known *principle of charity*⁽³⁾ recommends adding the missing premisses that the arguer most plausibly had in mind from what we know of his position and the context of the argument. But how to select the "most plausible" proposition from the multitude of sufficient candidates available? I don't see any obviously correct general logical procedure for carrying out such a selection.

Charities have sometimes been criticized as a paternalistic second-best type of solution when one should really help the needy to help themselves. In this light, should we really be asking the enthymematic arguer what he means to say, or co-operatively him to "say it better" rather than just plugging in what we – the critics – think is the most plausible proposition? Some would call the two approaches of charity and the weakest loop-hole very dangerous from a strictly logical point of view. Strictly speaking, you should *never* assume that your opponent in argument, or one whose argument you are prepared to criticize, has made assumptions that she has not clearly stated.

Philosophers have sometimes warned us of the *enthymematic ploy*: you can always make a good argument from a bad one by filling in *some* missing premisses. But once you start fiddling with your argument, it is – strictly speaking – a different argument. You can try to defend your argument by replying to the discovery of a loop-hole:

⁽³⁾ This principle, I seem to recall, is attributed to Michael Scriven. I am not sure that I have stated it very well.

“Oh, well of course I meant to say that as well.” But did you? Simply calling the missing bit an “enthymeme” is too easy a way out to *always* allow. There is danger of logic becoming unstuck here, in a sea of fluctuating premisses.

There is also the danger of making every argument into a valid argument. For example, you can make inductive arguments into deductively valid arguments by adding *ceteris paribus* clauses or closure conditions to the premisses. But this strategy has often seemed specious. You may be really only adding a premiss that can only be applied by using or presupposing some inductive technique. The suspicion is that by rendering the argument deductively valid you have begged and obscured the questions of whether and why it is any good. Could it be that the whole doctrine of enthymemes is pernicious as a part of logic? It seems to make a certain amount of sense to just ask the arguer: “Is this missing premiss what you want to say?” If so, determining enthymemes is a matter of the psychology of belief, or a question of asking for additional information, not a matter of logic. But such an outright empirical approach is not quite fair to the traditional doctrine of enthymemes.⁽⁴⁾ For the idea behind the doctrine seemed to be that somebody’s argument might be *committed* to some unstated, but clearly necessary and relevant assumption, which therefore be counted in to the argument, even if disavowed, perhaps when later recognized as open to criticism.

The problem then is to get the requisite notion of commitment required to make some sense of this doctrine without (a) giving the defender of the argument complete autonomy to change his argument by filling in the loop-holes any way he decides to, during the course of the argument, or (b) giving the critic the paternalistic power to fill them in whenever he wants and however suits his needs for criticism. Possibly (b) is a worse danger than (a) in many cases. So a sensible and useful theory of enthymemes should avoid acquiescing in (b) too

⁽⁴⁾ It may be that Aristotle had something like an empirical approach in mind in *Rhetorica* (1357a 20) where he gives the following example of an enthymeme: “. . . to show that Doriaeus has been victor in a contest for which the prize is a crown, it is enough to say ‘For he has been victor in the Olympic games,’ without adding ‘And in the Olympic games the prize is a crown, a fact which everybody knows.’ Here “what everybody knows” could be cashed out as some empirical *datum*, perhaps.

heavily, yet without completely giving in to (a). It is a question of justice in what you can fairly or reasonably assume in an argument. This being the case, the framework of logical dialogue-games could be the best place to turn.

1. Hamblin Formal Dialogues

Hamblin (1970) argues that the best way to study fair and unfair moves of argument is to set up dialectical games (systems) that model discussions or dialogues, the natural environment and context of criticisms and fallacies as they have been traditionally conceived. As he sees it, dialectical systems can be pursued descriptively or formally. The descriptive study looks at rules and conventions of real discussions like parliamentary debates or legal cross-examinations. The formal approach involves the construction of simple but precise systems where moves are regulated by rules that can be clearly stated even if they may not necessarily be realistic. These formal systems will then have formal properties that can presumably be compared to interesting sequences of realistic discussions and thereby throw some light on the latter by modelling them.

Hamblin (1971) defines a dialogue as a set of locutions, L , and participants, P . By a *dialogue of length n* , he means a member of the set $(P \times L)^n$ of sequences of n locution-acts. A *locution-act* is a member of the set $P \times L$ of participant-locution pairs. Next, a set of rules is added which defines within a dialogue D a set of *legal dialogues* K . A system is a triple (P, L, K) . Hamblin's formal constructions are concerned with possible definitions and properties of K .

A Hamblin game of formal dialectic then must involve a set of "players" and "moves" made by these players. A third key ingredient is the *commitment-store* of each player. Commitments are not beliefs of the players, but operate approximately like the real beliefs of an arguer. However, psychology is not the purpose of constructing Hamblin games, and we are advised to think of a commitment-store, strictly speaking, more along the lines of a set of statements written down by each player on a slate that he possesses. As we will see, the

rules of a Hamblin game add to or subtract from the commitment-stores of the players, and how this modification of the stores takes place is the key to modelling the fallacies.

Hamblin considers the requirement that commitment-stores should always be internally consistent (p. 257) but rejects it, at least as a universal requirement on dialectical systems because it is an ideal of 'rational man' not always met with (p. 263). He is also inclined to reject deductive closure of commitment-stores as a universal requirement, but (p. 264) feels that "certain very immediate consequences" of a commitment may also be commitments. Both requirements are matters of "regulation in a given system" (p. 264).

Hamblin (1970, p. 265-8) has designed one particularly basic game we may call (H), with the purposes of realizing a concept of argument and modelling some of the traditional fallacies. There are two participants, White and Black, who take turns making moves. The types of moves allowed involve the asking and answering of questions. Hamblin (p. 265) formulates five rules that demarcate permissible locutions. Capital letters S, T, U, . . . are variables for statements.

- (i) 'Statements S' or, in certain special cases, 'Statements S, T,'.
- (ii) 'No commitment S, T, . . . X', for any number of statements S, T, . . . X (one or more).
- (iii) 'Question S, T, . . . X?', for any number of statements (one or more).
- (iv) 'Why S?', for any statement S other than a substitution-instance of an axiom.
- (v) 'Resolve S'.

The language of (H) is propositional calculus, or any other "suitable" system with a finite set of atomic statements. Each participant has a commitment-store, a set of commitments that contains the axioms for the language. There are two types of questions that a player can ask, (iii) or (iv). However Hamblin notes that two simpler games could be built by deleting one or the other of these rules and keeping the remaining four.

It is fairly clear how you can at least partly solve the problem of

enthymemes in a game like (H), or some similar set-up.⁽⁵⁾ You can rule that a proposition is a fair assumption to make as a missing premiss in a player's argument if that proposition is in that player's commitment-set. This does not uniquely define an enthymeme for a given argument, but it seems to narrow them down in the right way. At least it excludes the statements that an arguer has not accepted or is not committed to.

There does remain a problem, however. If I am constructing an argument against your argument, what am I allowed to assume as my "enthymemes," your commitments or mine? Or to be a proper enthymeme, must a proposition be in the intersection of your and my commitment-set? It seems hard to definitively rule on this question because it is not precisely formulated what counts as a *win* or *loss* of a Hamblin game if it comes down to a contestive dispute.

Hamblin writes (1971, p. 137) "that the purpose of the dialogue is the exchange of information among participants." What precisely counts as "exchange of information" is not defined, but Hamblin's general presumption that games of dialogue should be "information-oriented" (his term, p. 137), does affect how he designs (H), and that affects how arguments are analysed in (H). For example, Hamblin suggests that there is no point in asking a question if one is already committed to one of the answers (p. 137), and the rules of Hamblin games tend to reflect this information-oriented design of rules for questioning.

If the structure of formal dialogues are to reflect the practices of realistic dialogue-interchanges of proving and refuting arguments, some notion must be brought in of a participant adopting a strategy – a hypothetical sequences of moves – in order to fulfill his objective in the disputation. The answerer's objective, let us say, is to prove his thesis T_A to the questioner. In a dispute, the questioner's objective is to prove the opposite of T_A . Hence the answerer knows that the questioner is strongly committed to resist commitment of T_A . If the answerer tries to "prove" in one step, by taking a commitment of the questioner as premises, then one of two things will happen. If there is in fact such an S that is a commitment of the questioner and S implies

⁽⁵⁾ Though Hamblin has not tried to use games of dialogue specifically to tackle the question of enthymemes, as far as I know.

T_A , then the answerer wins the game if the questioner cannot retract any of his commitments. If the game allows retractions, the questioner is most likely to simply retract his commitment to S, providing he sees that T_A , the thesis of his opponent, is a direct consequence. Of course there may be no such S available in any event. Generally, if the particular game in question is to be of any practical interest, there will be no such S directly available to the answerer. What then is the answerer to do?

The answer is that he must adopt some sort of strategy. Typically in practice, the answerer will not know how strongly his opponent is committed to some of the statements in his commitment-store as opposed to others. But in order to adopt a working strategy to fulfill his objective, it would be useful if he could roughly order the statements he proposes to use as premisses according to how likely he thinks it to be that his opponent will accept them. He must ask himself "Which one of the two propositions is my opponent more likely to think plausible or at least congenial to his own position?" By asking himself a series of such questions, he may be able to organize all the statements he might eventually find useful as premisses into different levels of acceptability. Putting his proposition to be proved, say T_A , at the lower bound of the order, he should then proceed to construct a line of proof that starts as close to the upper bound of the order as possible and proceeds deductively towards the lower bound. That procedure is the general form of a best strategy for the answerer.

But the problem is that these linkages are loose, and one needs to know how the purpose of a game, its information-orientation, specifically affects the strategy of the players.

The Hintikka games of dialogue do not share this open-ended quality in win-loss determination. Quite to the contrary, the win-loss rule for a Hintikka game of logical dialogue is precisely defined. A player wins if, and only if, he deduces his own thesis by the rules of the game from his opponent's commitments. In this regard, a Hintikka game is precisely regulated. It is quite clear how the objective of each player is set. And therefore, in general outline it is possible for each player to plan a strategy to achieve that outcome within the rules of the game. Consequently, the overall direction and nature of play in a Hintikka game can be clearly understood.

2. Hintikka Logical Dialogues

In keeping with the spirit of Socratic dialogues, Hintikka (1979) adopts as a general feature a rough symmetry between the two players of a game of dialogue. Each player is set to prove his own thesis by means of premisses elicited from his opponent. There are two players A and B. Each of them puts forward an initial thesis T_A and T_B respectively. Then each speaker, by posing questions to the other, elicits additional theses from him. Through the course of the game, each player is allowed to use, as premisses to prove his own thesis, only the propositions he has elicited as theses of the other. Also, each player must defend all the responses he himself has made by way of reply to the other speaker's questions.

Hintikka views these games of dialogues less as a cooperative enterprise than as a competition. Each player is trying to reach his end before the other does. However, these two ends need not be incompatible. The special type of game where they are logically incompatible is called a *dispute* (Hintikka, 1979). In such a case, according to Hintikka, the task of proving one's thesis from the opponent's thesis turns out to be equivalent to the task of proving one's own thesis absolutely. For this task amounts to eliminating all the possibilities that are incompatible, with one's own thesis.

In a Hintikka dialogue-game there are two types of moves. A *deductive move* consists of a finite number of rules, e.g. rules for propositional calculus. An *interrogative move* is a question which must be given a full, direct answer by the other player. The presupposition of the question is added to the commitments of the questioner. If a player refuses to answer, the negation of the presupposition of the question is added to his store of commitments. The *win-loss* rule says that a player who deduces his own thesis from his opponents' commitments wins the game.

In this framework, the notion of an enthymeme seems fairly clear. For an attacker, a proposition may be assumed to be a premiss of his opponent's argument only if that proposition is in the opponent's commitment-set. For a defender of an argument, one may assume a proposition as an enthymeme only if it is in one's own commitment-set.

One problem with this approach is that it does not single out the

unique enthymeme. Suppose that the defender enunciates premisses one and two of the argument below. We also know, let's say that premisses three and four are contained in his commitment-set.

All tall men are mortal.
 All short men are mortal.
 Socrates is a tall man.
 Socrates is a short man.
 Therefore, Socrates is mortal.

Which premiss is the enthymeme? Three or four? one answer would be to select the disjunction of three or four (the weakest proposition needed to deduce the conclusion). Another is to note that in a Hintikka dispute, it really doesn't matter. One is as good as the other to prove the conclusion. And that, after all, is the whole point of the game.

This solution to the problem of enthymemes is not bad. But there are three reservations we should register. First, it seems to go too far in the direction of (a) just before section 1. It is exclusively up to the proponent of the argument whether or not a proposition is an enthymeme of his argument. This observation leads to another reservation.

Usually an enthymeme is some proposition that the person to whom an argument is directed *would* assume or *may be expected* to assume. It is not a proposition that he definitively or explicitly assumes or accepts. But in Hamblin and Hintikka games, the commitments are public statements. Whether a proposition is a commitment always admits of a clear yes-or-no answer. Simply check that player's commitment-set and see if the proposition in question is there or not. If so, it is a reasonable enthymeme. If not, it is not.

The Hamblin and Hintikka games presume that whether or not a proposition is a commitment of a player is transparently clear. But the doctrine of enthymemes is useful precisely when this presumption is not met, i.e. when all premisses are not *clearly stated*.

Hintikka games are *cumulative* ⁽⁶⁾ in the sense that they never allow retractions of commitments. But Hamblin games like (H) are non-cu-

⁽⁶⁾ See Woods and Walton (1982).

mulative, and do allow retractions. Consider again the argument above about Socrates, tall men and short men. In (H) the defending player could retract either premiss three or four. Consequently, which of this pair the attacking player chooses as his enthymeme may make a difference. For the defender may be less likely to retract one than the other. He may find one "more plausible" or "more central to his position" than the other.

Here then is our third reservation. The notion of 'reasonable enthymeme' is clear in the Hintikka game, but only because retraction is not allowed. In a more realistic setting, where retraction may be possible, the notion of enthymeme remains elusive. It seems to have to do with the yet undefined notion of what an arguer or audience would assume, rather than with the arguer or audience has in fact assumed or conceded.

3. *Veiled Commitment-Sets*

The doctrine of enthymemes is strategically useful in argumentation where it may be unnecessary and even an impediment to state all premisses needed for deductive closure of a conclusion. You can always come back and plug the loop-holes later provided they are propositions that your audience would accept, even if they are not explicitly aware of their acceptance. Hamblin required that the commitment-store of each player be a set of public statements, e.g. a number of statements on a slate, in full view of all participants. As a variation on Hamblin's theme, let us suggest a second slate for each participant, not on public view. Let's start with the extreme case where no player can see his own *dark commitment-set*, or that of any other player.

When we say that this "dark" slate is not known to the players, we do not intend some psychological interpretation of it as "lurking in the recesses of the player's mind" or some such thing. We agree fully with Hamblin that there is no place for this sort of psychologism in logical games of dialectic. The dark-side commitment-set is simply a set of statements, no more no less. The only difference between our approach and Hamblin's in this regard is that the "dark-side" set is not on public view to the players. Members of it only become known

to the players during play of the game, according to commitment-rules regulating the transfer of statements from the dark side to the light side of a player's set of commitments.

The following game, drawing some of its characteristics from the Hamblin game and some from the Hintikka game, differs from both in several ways. The most immediately notable difference is that of the player's dark-side commitment-stores.

The Game CBV

Locution Rules

- (i) *Statements*: Statement-letters, S, T, U, . . . , are permissible locutions, and truth-functional compounds of statement-letters.
- (ii) *Withdrawals*: 'No commitment S' is the locution for withdrawal (retraction) of a statement.
- (iii) *Questions*: The question 'S?' asks: Is it the case that S is true?
- (iv) *Challenges*: The challenge 'Why S?' requests some statement that can serve as a basis in proof for S.

Commitment Rules

- (i) After a player makes a statement, S, it is included in his commitment-store.
- (ii) After the withdrawal of S, the statement S is deleted from the speaker's commitment-store.
- (iii) 'Why S?' places S in the hearer's commitment-store unless it is already there or unless the hearer immediately retracts his commitment to S.
- (iv) Every statement that is shown by the speaker to be an immediate consequence of statements that are commitments of the hearer then becomes a commitment of the hearer's and is included in his commitment-store.
- (v) No commitment may be withdrawn by the hearer that is shown by the speaker to be an immediate consequence of statements that are previous commitments of the hearer.

(vi) If a player states 'No commitment S' and S is on the dark side of his commitment-store, then S is immediately transferred into the light side of his commitment-store.

Dialogue Rules

(i) Each speaker takes his turn to move by advancing one locution at each turn. A no-commitment locution, however, may accompany a why-locution as one turn.

(ii) A question 'S?' must be followed by (i) a statement 'S', (ii) a statement 'Not-S', or (iii) 'No commitment S'.

(iii) 'Why S?' must be followed by (i) 'No commitment S' or (ii) some statement 'T', where S is a consequence of T.

Strategic Rules

(i) Both players agree in advance that the game will terminate after some finite number of moves.

(ii) The first player to show that his own thesis is an immediate consequence of a set of commitments of the other player wins the game.

(iii) If nobody wins as in (ii) by the agreed termination point, the game is declared a draw.

Clearly the main aspect of CBV that makes it so distinctive as a logical dialogue-game is the addition of a dark-side commitment set for each player. How this innovation will affect play in CBV and enable us to model fallacies and arguments in a more revealing way are matters developed in Walton (1983). Before looking to the special problems posed by enthymemes, let us review the basic idea behind CBV once again.

The commitment-store of each player is divided into two sides. First, there is the usual set of commitments resulting from concessions made during the course of the game and containing also the initial commitments of the player. In addition, the commitment-slate of each player has a "dark-side" – a set of commitments not known to the player or his opponent. As each move is made in the game, a

proposition may come over from the dark side to the “light side” of the commitment-store.⁽⁸⁾ Prior to such a move, the players might not be completely ignorant of the possible contents of the dark side of their own or other players’ dark side. In some cases, a player might have a good idea that a certain proposition or its negation may be in his own or his opponent’s dark side commitment-set.

As the game progresses, more and more propositions tend to come over from the dark side to the light side if the game is progressing satisfactorily. It may be that at the end of a game, the dark side is empty, for one or both players, and the light side contains a large stock of commitments. In some cases it may be interesting to start a new game with a new set of dark side commitments, while preserving the light side commitment-sets that each player has collected in the previous game. A tournament, or series of such games, might build up rich stocks of light side commitments.

4. *Strategy and Plausibility*

The nature of strategy in CBV and related games can be indicated by the following sort of situation. The two players, Black and White, each have already made certain commitments.

BLACK'S COMMITMENTS	WHITE'S COMMITMENTS
1. $B \supset A$	$A \supset B$
2. $(A \wedge B) \supset C$	$(A \wedge B) \supset C$
3. D	$\neg D$

White's thesis is $\neg B$. Black's thesis to be proven is B . Each looks around for assumptions needed to yield deductive closure of his own thesis from his opponent's commitments by the following rules.

⁽⁷⁾ B is an immediate consequence of A if and only if B follows by a single application of one rule of the game from A . This notion is further explained in Hamblin (1971), Mackenzie (1981), and Walton (1983).

⁽⁸⁾ The notion of dark-side commitment-stores was first suggested by Max Cresswell in a discussion of a paper of mine in the Logic Seminar at Victoria University of Wellington in March, 1983.

- $S \supset T, S$, therefore T : Modus Ponens (MP)
 $S \supset T$, therefore $S \supset (S \wedge T)$ } Absorption (ABS.)
 $S \supset T$, therefore $S \supset (T \wedge S)$ }
 $S \supset T, T \supset U$, therefore $S \supset U$: Hypothetical Syllogism (HS)
 $S \supset T, \neg T$, therefore $\neg S$: Modus Tollens (MT)
 $S \vee T, \neg S$, therefore T : Disjunctive Syllogism (DS)

Black would win if he could get White to accept $\neg D \supset B$. White would win if he could get Black to accept $\neg D \supset \neg B$. But these would each be one-step strategies. Neither would accept these respective commitments if they are playing the game with even minimal skill. Strategic considerations suggest looking for a more "distant" premiss that one's opponent is not so likely to immediately reject. For example, Black could select $(A \supset C) \supset (D \vee B)$ as a premiss. Or White could select $D \supset \neg(B \wedge C)$. Then each would have a multi-step win-strategy as given below.

WHITE		BLACK	
1. $B \supset A$	Com	$A \supset B$	Com
2. $(A \wedge B) \supset C$	Com	$(A \wedge B) \supset C$	Com
3. D	Com	$\neg D$	Com
4. $D \supset \neg(B \wedge C)$	Com	$(A \supset C) \supset (D \vee B)$	Com
5. $\neg(B \wedge C)$	4, 3, MP	$A \supset (A \wedge B)$	1, Abs.
6. $B \supset (A \wedge B)$	1, Abs.	$A \supset C$	5, 2, HS
7. $B \supset C$	6, 2, HS	$D \vee B$	6, 4, MP
8. $B \supset (B \wedge C)$	7, Abs.	B	7, 3, DS
9. $\neg B$	8, 5, MT		

So the strategy of *distancing* involves linking single applications of a rule into longer sequences of applications of rules. Otherwise, a player is strategically set to reject any assumption he sees will *directly* imply his opponent's thesis. For that is the nature of the game.

But distancing is only one form of strategy in CBV. If a player needs a premiss he thinks might be in the dark-side store of his opponent, it would be good strategy to ask for it, even if it directly implies one's own thesis. Reason: by Commitment Rule (vi), if that premiss is in your opponent's dark-side store, you will get it into his light-side store

immediately, even if he replies 'No commitment'. For example, suppose $\neg D \supset B$ were in White's dark-side store. Then it would be good strategy for Black to ask White to accept $\neg D \supset B$, even though Black's thesis is a direct consequence of $\neg D \supset B$ and White's previous commitment, $\neg D$.

Hence some notion clearly emerges in CBV of what should constitute a strategic choice of premiss to leave open as a plausible premiss for one's opponent to accept. The selection is made partly by the attacking player, who wants to construct a deductively closed argument for his own purposes. Yet there are certain strategic constraints on what the defending player will accept as a concession. He will try to withdraw commitment from premisses that seem to him to permit the attacker good win-strategies. But the choice of loop-hole-closing concessions is also controlled by a third factor partly outside the control of both players, namely their dark-side commitment-sets.

5. *The Problem Resolved*

The game CBV thus permits a refined solution to the problem of saying what should fairly constitute an enthymeme in an argument. An enthymeme is not just a proposition that an arguer happens to be committed to. It is one he is prepared to be committed to. Enthymemes are best considered a question of what our trafficking in argument will bear.

What then is an enthymeme? Suppose I am arguing in order to convince you of a proposition C , my conclusion to be proved in the game of dialectic. I have a set of premisses P_1, \dots, P_i that are all commitments of yours, but there is another premiss P_j that would make the argument ' P_1, \dots, P_i , therefore C ' valid if added to the premisses. Then P_j is a good enthymeme just to the extent that P_j is a strategically sound loop-hole closer with respect to my strategy in CVB. This means that P_j should be a dark-side commitment of yours, or is a light-side commitment that you will accept and that leads to deductive closure of my thesis by some (preferably not too long or too short) finite applications of the set of rules of the game.

To put it in less dialectical and more rhetorical terms, an enthy-

meme is a premiss that the arguer is inclined to accept and that the arguer needs to get a valid argument for his conclusion.

A practically useful doctrine of enthymemes needs to have it that an enthymeme is a tacit premiss that your audience will accept.⁽⁹⁾ Certainly this much is guaranteed by defining it as a strategic commitment in CVB. But more than this is involved. An enthymeme is not any proposition your audience will accept, but one that fits into your own needs as rhetor to have as an argument that – when properly filled out – is deductively valid.

Our conception of enthymeme fills both bills, nicely meeting both conditions (a) and (b) preceding section 1 without being over-accomodating to either. Enthymemes can only be both practically and theoretically made useful and understood in the context of strategy in a game like CVB.

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⁽⁹⁾ Aristotle makes a distinction between rhetorical and dialectical enthymemes in *Rhetorica* (1358a 5). Strictly speaking, what I have defined should be called the dialectical enthymeme rather than the rhetorical enthymeme. The latter should perhaps be defined as a relationship between speaker and audience, but could be modelled along the dialectical lines set out by the structure of CVB or its extensions.