

University of Windsor

Scholarship at UWindor

OSSA Conference Archive

OSSA 11

May 18th, 9:00 AM - May 21st, 5:00 PM

On the Very Concept of an Enthymeme

G.C. Goddu

Follow this and additional works at: <https://scholar.uwindsor.ca/ossaarchive>



Part of the [Philosophy Commons](#)

Goddu, G.C., "On the Very Concept of an Enthymeme" (2016). *OSSA Conference Archive*. 84.
<https://scholar.uwindsor.ca/ossaarchive/OSSA11/papersandcommentaries/84>

This Paper is brought to you for free and open access by the Conferences and Conference Proceedings at Scholarship at UWindor. It has been accepted for inclusion in OSSA Conference Archive by an authorized conference organizer of Scholarship at UWindor. For more information, please contact scholarship@uwindsor.ca.

On the Very Concept of an Enthymeme

G. C. GODDU

Philosophy

University of Richmond

28 Westhampton Way, University of Richmond VA 23173

USA

ggoddu@richmond.edu

Abstract: An enthymeme is often defined as an argument with a missing component or an argument with an unexpressed component. Roy Sorensen, in “Are Enthymemes Arguments?”, argues against the possibility of enthymemes being arguments at all, but he assumes that arguments are abstract objects. I shall present and explore some more metaphysically neutral arguments against enthymemes as arguments and ultimately conclude that while not conclusive, the most viable option is Sorensen’s—enthymemes are not arguments.

Keywords: acts, argument, argument standard, enthymeme, expressions, propositions

1. Introduction

The first sentence of Michael Gilbert’s 1991 paper, “The Enthymeme Buster”, is, “Everyone agrees that an enthymeme is an argument” (p. 159). He stands by this claim throughout his paper. Interestingly enough, three years prior in “Are Enthymemes Arguments”, Roy Sorensen (1988) argues that enthymemes are not arguments. Well, are they arguments or not? shall argue that they are not, though the case is not as simple or as conclusive as Sorensen makes out, since Sorensen (1998) assumes that arguments are groups of propositions and argumentation theorists, such as Gilbert (1991) for example, do not all agree that arguments are groups of propositions.

In section 2, I will briefly parse out the concept of the enthymeme that is the focus of this paper. In section 3, I shall present Sorensen’s argument against enthymemes as arguments and point out that his diagnosis presupposes a contentious position in argumentation theory. In sections 4 and 5, I present several more metaphysically neutral arguments for the claim that enthymemes are not arguments and explore various options for avoiding their conclusion. In section 6, I briefly argue that the problems facing the notion of enthymemes as arguments brought forth by the arguments and by attempts to avoid the arguments can be solved, following Sorensen, by treating enthymemes as expressions of arguments rather than arguments themselves. I conclude in section 7, by presenting and responding to a challenge from Gilbert.

2. What is an enthymeme?

Many would say that it is an argument with at least one missing premise. For example, Solomon Simonson (1945) writes, “the enthymeme is defined as a syllogism with one (or more) premises missing” (p. 303). Wayne Grennan (1994) writes: “One common form of everyday argument is the enthymeme. ... Traditionally, logicians have conceived of enthymemes as having missing premises” (p. 185).

What of a missing conclusion? For example, consider the third paragraph of Descartes’ first meditation:

Surely whatever I had admitted until now as most true I received either from the senses or through the senses. However, I have noticed that the senses are sometimes deceptive; and it is a mark of prudence never to place our complete trust in those who have deceived us even once. (Descartes, 1993, p. 14)

Though unstated, Descartes (1993) surely wants us to conclude from the last two sentences that we should not put our complete trust in that received from or through the senses, and since, given the first sentence, that is everything, we cannot trust anything. Some definitions of enthymeme include missing conclusions. Douglas Walton and Chris Reed (2005) for example, define enthymemes as “arguments with missing (unstated) premises or conclusions” (p. 339). Later in the same paper, they call them “incomplete arguments” (Walton & Reed, 2005, p. 364). Rolf George (1972) writes: “Enthymemes were traditionally defined as incomplete or incompletely stated syllogisms” (p. 113).

What of some other potential missing part? For example, David Hitchcock’s (2009) definition of argument includes the illative as part of the argument and illatives, such as ‘hence’, or ‘therefore’, can certainly be left implicit. Others say an argument is a group of premises and a conclusion and a claim that the conclusion follows from the premises, (Miller, 1998, pp. 3-4) and again this inference claim is almost always implicit. Hence, if we accept generalized Walton and Reed (2005) or Rolf George (1972) definitions that make enthymemes ‘incomplete arguments’, then if illatives or inference claims are also part of arguments, then there are a lot more enthymemes than we thought. Granted, illatives or inference claims, being included as parts of an argument is much more controversial than the standard premises/conclusion and I know of no author who explicitly includes the possibility of a missing illative or inference claim within the scope of defining enthymeme.

Regardless, for ease of exposition I shall focus on enthymemes as arguments missing some part without trying to specify exactly what those parts might be. Also for ease of exposition I shall generally focus on missing premise or conclusion parts, though the arguments that follow will generalize to arguments with other potential parts. Note also, that I am not at all concerned with other possible notions of enthymeme extractable from Aristotle (see, for example, Braet, 1999) such as rhetorical syllogism or argument from signs or likelihoods and I am certainly not going to get into the historiographical debate concerning how many concepts of enthymeme are in Aristotle or which one is his intended one (see, for example, Madden, 1952). Here I am just going to focus on trying to make sense of the concept of an enthymeme as an argument with a missing part (and some of its close variants). I begin with Sorensen’s arguments against enthymemes being arguments.

3. Sorensen on enthymemes

If enthymemes are arguments with missing parts, then enthymemes are arguments. Sorensen (1988) argues that if enthymemes are arguments, then given standard properties such as ‘incomplete’ or ‘invalid’, there will be cases of arguments that are enthymemes iff they are not enthymemes. For example, he argues that:

- (A) 1. All arguments missing a premise are enthymemes.
- 2. This argument is an enthymeme.

is missing a premise and so is an enthymeme and so the conclusion follows. But enthymemes are supposed to be invalid in virtue of the missing premise (part of what it is to be an enthymeme on some views) and if (A) is an enthymeme, then it is not invalid (and so not an enthymeme). But if it is not an enthymeme, then it is invalid and missing a premise and so is an enthymeme.

Sorensen (1988) diagnoses the problems of (A) and the other examples he gives as follows: “The problems discussed above arise from a confusion between signs and their referents. Rather than being arguments, enthymemes are expressions of arguments” (p. 157). He ultimately defines an enthymeme as “an argument expression that is ambiguous because of its failure to express one of the components of the argument it signifies” (Sorensen, 1988, p. 157).

I am not here concerned with the adequacy of Sorensen’s examples, or his arguments with those examples, or even his definition. Notice, however, that Sorensen’s diagnosis presupposes that arguments are sets or groups of propositions. But it is not universally held that arguments are composed of propositions. Some might say that the arguments are just the expressions themselves, while others talk of arguments in terms of acts. So, is there a more metaphysically neutral argument against the notion that enthymemes are arguments with missing components?

4. Can enthymemes be arguments with missing components?

Here is one argument against the notion of an enthymeme as an argument with a missing component:

Argument 1: Regardless of whether you think arguments are sets of propositions or sets of expressions or sets of acts, the identity of sets is determined by the members. There are no sets with missing members—sets have exactly the members they have, no more, no less, and that is what makes them the set they are. Hence, if arguments are sets, then there are no arguments with missing constituents. Hence, either there are no enthymemes or enthymemes are not arguments.

Argument 1, (see Hitchcock, 1985, p. 94 for a similar argument), is unlikely to fully convince, since many argumentation theorists reject talk of sets in favour of groups or collections or complexes. Maybe arguments are just groups or collections or complexes of either propositions or expressions or acts and maybe groups or collections or complexes have looser identity conditions than sets.

Without a concrete proposal for what the identity of groups or collections or complexes is, the merits of this suggestion are hard to evaluate. But assuming that the constituents of arguments have at least some role in the individuation of arguments, here is another argument against the target concept of enthymeme.

Argument 2: If the constituents of arguments play any role in the individuation of arguments, then arguments with different constituents are different arguments. Consider two complete arguments, B and C, that differ solely in respect to some constituent X. Consider a particular enthymeme of C, E, which is missing just constituent X. C and E do not share the same constituents, so they are different arguments. B and E share the same constituents, but by hypothesis B is complete

and enthymemes such as E, are, by definition, missing a constituent. Hence, E is not the same arguments as B either. But there are no other possible arguments that E could be. Hence, either there are no enthymemes or enthymemes are not arguments.

Denying that an argument's constituents play any role in individuating arguments seems untenable. Argumentation theorists certainly act as if getting the constituents of an argument right matter for attributing the right argument to a particular author. We enjoin our students to extract arguments from texts correctly, i.e., get the premises and conclusions right—if they change a premise or change the conclusion they have given us the wrong argument. Even if we think a particular text is compatible with a particular range of arguments and there is no determinate answer which argument in the range actually is the author's argument, we still distinguish at least some of the arguments in the range in virtue of having different constituents.

But perhaps one can claim that even if constituents play some role in individuating arguments, having different constituents is not enough to guarantee different arguments. For example, losing skin cells and replacing them with new ones is not enough, most would say, for you to lose your identity even though your constituents have changed. Composite objects such as sports teams or college faculties survive the removal or addition of constituent members, even if those constituent members play at least some role in determining what the sports team or college faculty is.

Suppose one grants that the general claim that if the constituents of objects play any role in individuating objects, then objects with different constituents are different objects is false. So far, however, all the alleged counterexample cases involve surviving the addition/subtraction of new material parts over time and it is far from clear that anything analogous goes on with arguments. Abstract objects, such as propositions, or act or expression types, are not temporally dependent and are not subject to change. Acts themselves, while temporally extended entities, do not persist through time the way material objects do. Token expressions are at least physical objects and so can act like other material objects or composites of material objects, but the result would not save the concept of an enthymeme.

Consider this token expression at time t1:

W RD

Now if I add a vowel in the space I can make the expression at time t2¹:

WORD

Doesn't it look like the token expression was missing a vowel, just like a sentence can be missing a word or an argument can be missing a premise or a conclusion?

But we are assuming that there is one token here and it is changing through time—at one time the token had just three consonant constituents, but later it also had a vowel constituent. Was it missing a constituent at t1? No. At t1 it is composed of exactly three letters (and perhaps a space). Was it missing a constituent at t2? No. At t2 it is composed of exactly four letters and no space. But if it is never missing a constituent, then it is not analogous to an enthymeme.

¹ Pretend this is being done on a writing surface and the 'O' is literally being put into the empty space and not, as it has to be done here, via two different token expressions in different locations.

Suppose we consider the expression throughout its entire existence, which we might represent as follows:

W: {<W RD, t1>, <WORD, t2>}

Is W missing any components? No. But then the expression considered throughout its entire history is not analogous to an enthymeme either.

These examples generalize for sentences and groups of sentences (and to groups of propositions and groups of acts) as well. For example, consider:

Z: { <{P1/C}, t1>, <{P1, P2/C}, t2> }

The actual metaphysical makeup of P1 or P2 or C is irrelevant—they could be propositions (though how to literally add a proposition to a group of propositions or how to collect propositions into a group in the first place is beyond me) or acts or expressions. The argument is Z. It is one way at t1 and a different way at t2. Is it an enthymeme? Well, at no time is it missing a constituent. Z is the argument it is in virtue of the way it is at each particular time. Hence, trying to model expressions (or groups of expressions or propositions or acts) changing through time as a way to avoid differing constituents mandating different objects, will not save the concept of an enthymeme, since such objects are still not missing any constituents.

But surely there is a perfectly coherent sense in which we can say W RD is missing a letter. Granted, but that way has nothing to do with objects changing through time. How then can we say that W RD is missing something? Well, relative to t2, the expression at t1 is missing a constituent. Granted, but relative to t1, t2 has an extra constituent. What makes t2 complete and t1 incomplete as opposed to saying that t1 is complete while t2 contains a superfluous constituent? Presumably the answer is that the t2 expression is the standard way of expressing the concept or meaning of WORD, while the t1 expression is not. Hence, some sort of external standard is required against which missing or superfluous can be determined. Word expressions can be missing letters because there is an accepted standard of word spelling. You can be missing skin on your elbow after a scrape because it is normal for human beings to have skin covering their elbows.

Applied to arguments then, we cannot simply say that an enthymeme is an argument missing a part, but rather we would have to say that an enthymeme is an argument that, relative to some standard S, is missing a part. The argument itself is missing nothing—it is the argument it is, at least in part, in virtue of its constituents. It is only relative to some standard of what constituents it ought to have that we can say that a particular argument is missing something.

But unlike standardized word spellings or normal states of human bodies, there are no general standards or norms of being a complete argument. There are certainly standards for certain subclasses of arguments. Aristotelian syllogisms have a certain structure and a fixed range of possible instances. Hence, relative to being an Aristotelian syllogism many arguments will be missing components. Of course, many of those same arguments, relative to being, say a one-premise argument, will be complete arguments. One might point to argument schemes as an external standard against which to measure the completeness or incompleteness of arguments. But either, like Aristotelian syllogisms, arguments satisfying argument schemes are merely a subset of all the possible arguments, or there is ultimately a scheme for every argument, in which case there is no argument that is not a complete version of some scheme.

There are then no enthymemes simpliciter. Change the standard and you can change whether one and the same argument is an enthymeme. Against the standard of ‘million premise argument’, I suspect all actually made arguments are enthymemes. Against the standard, ‘having a premise or a conclusion’ no arguments are enthymemes. Against the standard of ‘valid’, all invalid arguments are enthymemes, which, most say, lets in too many candidates as enthymemes. You could try to refine the class by making the standard ‘valid or a non-sequitur’. To fail to meet this standard is to be invalid and not a non-sequitur. But even this does not capture enthymemes, since on the one hand many argumentation theorists accept the existence of complete, good, and yet invalid arguments and on the other hand, the Sorensen examples show that standards involving validity are prone to counterexamples that meet the standard if and only if they do not.

Can enthymemes be arguments with a missing part? Yes, but not in themselves and not absolutely—there just is no general notion of a ‘normal’ argument. Perhaps for particular contexts standards of ‘normalcy’ can be determined and justified, but the mere fact that this step of specifying and justifying ‘normalcy’ standards is required for this particular concept of an enthymeme to do any meaningful work is reason to at least explore the possibility of a more manageable concept.

5. Can enthymemes be incompletely expressed arguments?

Suppose the prospect of specifying and justifying an even local standard makes one doubt the utility of the concept of ‘enthymeme’ as an argument with a missing component? Is there an alternative way to conceive of enthymemes as arguments? Another standard way of defining enthymeme is as an argument that has something that is not expressed. For example, Hitchcock (1998) writes: “The word ‘enthymeme’ is a quasi-technical term which has been stipulated to mean ‘argument with an unstated premise’” (p. 17). Alvin Goldman (2003) writes: “Enthymemes, by which I mean an argument with unexpressed premises” (p. 60). Want unexpressed conclusions? “The enthymeme, we are informed, is a syllogism with either of the premises or the conclusion unexpressed” (Madden, 1952, p. 368). Want something even more general? “An enthymeme is an argument in which something essential to its evaluation is not explicitly mentioned in its formulation” (Paglieri & Woods, 2011, p. 468). Also, as we saw in section II, Walton and Reed (2005), and George (1972) allowed for the option of unstated or unexpressed. (For an interesting variant on ‘unstated or unexpressed’ see Gough & Tindale, 1985, who use “hidden”.)

On any of these proposals, enthymemes are still arguments, but it is the expression of them that is missing something, not the argument itself. One does not need to compare an argument against some particular standard of ‘normal’ argument, since the argument itself is whole. Still, since we often do not (never?) have access to the target argument independent of the expression of it, we have the problem of determining whether the expression is really incompletely expressing one argument or completely expressing a different argument. We may judge that it is ‘incompletely’ expressing one argument rather than completely expressing another by appeal to what we think the author’s argument ought to be. For example, if we are in a context that requires arguments to meet the evaluative standard of validity and a particular argument expression, as it is, expresses an invalid argument, we might, in the name of some kind of charity, suspect the author’s actual argument is valid and so judge the expression as incomplete. So even if we do not need to specify and justify what counts as a normal argument in

the context we may still need to appeal to what counts as a good argument in the context to justify the claim that the expression is incomplete.

The shift from arguments with missing components to arguments whose expressions have missing components does come with some metaphysical consequences. Arguments are now distinct from the expressions of them, and so, given that arguments are not expressions of other expressions, arguments are not expressions. For advocates of arguments as sentences or other types of expressions, this definition of enthymeme is problematic.

There is, however, a more significant problem. Suppose Abel utters: “Socrates is a human and all humans are mortal, so Socrates is mortal.” Baker utters “Socrates is human, so Socrates is mortal” and Charlie utters “All humans are mortal, so Socrates is mortal”. If they are all expressing the same argument, then there is one argument here. Since an argument is an enthymeme iff it has an unexpressed part, we seem to be committed to the argument being an enthymeme because of the incomplete expressions of Baker and Charlie, and not an enthymeme because of the complete expression of Abel. That is a *reductio*.

We could relativize the concept and say the argument is an enthymeme for Baker and Charlie, but not an enthymeme for Abel. Such a move drastically reduces (if not completely eliminates) the utility of the concept of an enthymeme. At the same time, it gives no answer to what the status of the argument is for us, the hearers of all the utterances—is it both and enthymeme and not an enthymeme for us? If one, but not the other—what could possibly justify choosing ‘yes’ over ‘no’ for us or vice versa?

We could take the extreme step and deny that there is one argument here. If arguments are acts, then each utterance being performed by a different person is a different act. Abel’s argument might then not be an enthymeme, while Baker’s and Charlie’s arguments are enthymemes. But in what sense are Baker’s and Charlie’s expressions incomplete relative to the act that is the uttering of those sentences? There is no mismatch between the expressions and Baker’s and Charlie’s speech acts, so we should not say that Baker’s and Charlie’s arguments are enthymemes. Of course there is an act type relative to which not only are their expressions incomplete, but their overt acts are incomplete as well—namely the act type that Abel’s act is an instance of. But if it is by comparison to the act type that Baker’s and Charlie’s expressions (or acts) are being judged incomplete, then the act type is the argument and we are right back to one argument that both is and is not an enthymeme. Notice also that if there is one argument here, Baker and Charlie expressed the same enthymeme—after all it is the argument that is an enthymeme not, on the current account, the expressions themselves.

Finally, we standardly think that we can take an incomplete expression and turn it into a complete expression of the same argument. Isn’t that part of what we teach our students to do in critical thinking or logic classes? If two different expressions given at two different times can express the same argument, then the argument has to be repeatable and I have argued elsewhere (Goddu, 2015) that if arguments are, as most argumentation theorists seem to assume, repeatable, then arguments have to be some kind of abstract object such as sets of propositions or act types. But if there is one argument that is sometimes expressed completely and sometimes expressed incompletely (and sometimes both at the same time by different people), we are once again faced with the puzzle of justifying why that one argument is not both an enthymeme and not an enthymeme.

Can an enthymeme be an argument with an incomplete expression? Not coherently, unless a principled justification can be given for avoiding the problem that at least some arguments will be both an enthymeme and not an enthymeme simultaneously.

6. What if enthymemes are not arguments?

Of course, there is a simple way to avoid the problems brought up in the previous two sections. Distinguish the argument from the expression or enactment of the argument and let the expression or the enactment be the enthymeme and not the argument. Abel's expression (or utterance) is not an enthymeme—it completely expresses or enacts Abel's argument. Baker's and Charlie's expressions (or utterances) are incomplete expressions (or enactments) of their arguments and so are enthymemes. But they are incomplete in different ways and so are what they appear to be, different enthymemes. Nowhere do we need to stipulate or justify a standard of 'normal' argument—we merely need to have some idea what the range of possibilities are for an incomplete expression becoming complete, i.e., the range of possibilities for the argument in question relative to which the original expression is incomplete.

This last is no easy task, and in fact, moving from saying enthymemes are arguments, either incomplete or with incomplete expressions, to saying that enthymemes are incomplete expressions of arguments, does almost nothing to solve the genuine problems that bedevil argumentation theorists concerning argument extraction or missing premises. We still have to find reasons to justify thinking an argumentative expression is incomplete and we still need to determine what, if any, principles can be used to legitimately expand the expression and justify that we have accurately represented the target argument.

Nor does the change mitigate any of Hitchcock's (1998) arguments that perhaps there are far fewer enthymemes than we thought (though I am not sure how his general strategy fares with missing conclusion expressions.) Hitchcock's arguments will go through just as well against there being widespread incomplete expressions of arguments as against there being widespread use of arguments with incomplete expressions. Hitchcock would just maintain that there are far fewer enthymematic expressions than we thought.

The change does have metaphysical consequences. If enthymemes are incomplete expressions or enactments of arguments, but not themselves arguments, then the most natural position is that arguments are neither expressions nor acts. Given that abstract objects, expressions, or acts have been the only metaphysical candidates put forward for arguments, the natural consequence is that arguments are abstract objects. Many argumentation theorists, for various reasons, prefer to avoid the consequence that arguments are abstract objects. But short of giving up on enthymemes altogether, the paths available to those who reject arguments as abstract objects are limited. One such path was to provide, for each potential context of use, a notion of a 'normal' argument against which used arguments could be compared. But if one is willing to give up repeatability (and so the notion that we can fill out the incomplete expression of an argument and still be talking about the same argument) one might be able to keep even the notion of an enthymeme as either an incomplete expression of an argument or an incomplete enactment of an argument. The former would require coming up with a way in which arguments are acts and the expressions are somehow incomplete; the latter a way in which arguments are expressions and the enactment of them is somehow incomplete. None of these options seems at all promising to me, so perhaps the most promising path available, at least for those who reject arguments as abstract objects, is to abandon the concept of an enthymeme.

Is the notion of an enthymeme as an incomplete expression of an argument useful? I do not know, though if what I have argued above is correct, then it is easier to use than either the *arguments with missing components* or the *arguments with incomplete expressions* notions and avoids the problems and sometimes outright incoherencies that plague those notions. If

Hitchcock is correct, then while my notion is at least coherent, it (along with the other notions) does not have much, if any, application. I conclude, however, by returning to Michael Gilbert, and what I take to be his challenge to the utility of the concept of an enthymeme.

7. Conclusion

I started by using Gilbert (1991) as a foil with his claim that everyone agrees enthymemes are arguments. Well, I disagree. I see no viable and coherent path for the two standard notions of enthymemes as arguments. But I also said he was not interested in arguments as groups of propositions. Gilbert's focus is on the activity of arguing, especially as a dialogic activity between arguers, yet Gilbert explicitly eschews comparing incomplete argumentative discourses with some paradigmatic argument. He writes: "The supposition that there is some place, the protagonist's mind or some mysterious ontological realm where the enthymeme exists whole and pure is wrong" (Gilbert, 1991, p. 166). But then, given what I have argued above, Gilbert should generally reject the utility of not only the traditional takes on enthymeme, but also the notion of an enthymeme as some incomplete enactment of some abstract object argument. And this is exactly what I think Gilbert does.

For Gilbert (1991) the object is to move the argumentative dialogue forward—"the goal should be the production and continuation of useful argumentation, not the location of a particular premise which can be brandished in some way or other" (p. 166). Hence, when considering the activity of arguing the task of identifying missing components "seems to me beside the point as far as natural argumentation is concerned" (Gilbert, 1991, p. 166). My read on Gilbert then, is that he is ultimately interested in unfinished (as in still in progress) arguments that the arguers are endeavouring to fill out to their mutual benefit. Fair enough. But in the spirit of "examin[ing] and open[ing] the position our dispute partner holds" (Gilbert, 1991, p. 166), I wonder if the back and forth filling out of argumentative discourse is really not at all aided or guided by the arguers, at least sometimes, appealing to the abstract objects that they think the other arguer is trying to express.

References

- Braet, A. (1999). The enthymeme in Aristotle's *Rhetoric*: From argumentation theory to logic. *Informal Logic* 19, 101-117.
- Descartes, R. (1993). *Meditations on First Philosophy* (D. A. Cress, Trans.). Indianapolis, IN: Hackett Publishing Company.
- George, R. (1972). Enthymematic consequence. *American Philosophical Quarterly* 9, 113-116.
- Gilbert, M. A. (1991). The enthymeme buster: A heuristic procedure for position exploration in dialogic disputes. *Informal Logic* 13, 159-166.
- Goddu, G. C. (2015). Towards a foundation for argumentation theory. In F. H. van Eemeren & B. Garrsen (Eds.), *Reflections on Theoretical Issues in Argumentation Theory* (pp. 43-51). Amsterdam: Springer.
- Goldman, A. (2003). An epistemological approach to argumentation. *Informal Logic* 23, 51-63.
- Gough, J., & Tindale, C. (1985). 'Hidden' or 'missing' premises. *Informal Logic* 7, 99-106.
- Grennan, W. (1994). Are 'gap fillers' missing premises? *Informal Logic* 16, 185-196.
- Hitchcock, D. (1985). Enthymematic arguments. *Informal Logic* 7, 83-97.

- Hitchcock, D. (1998). Does the traditional treatment of enthymemes rest on a mistake? *Argumentation* 12, 15-37.
- Hitchcock, D. (2009). Informal logic and the concept of argument. In: D. Jacquette (Ed.), *Philosophy of Logic* (pp. 101-129). Amsterdam: Elsevier.
- Madden, E. H. (1952). The enthymeme: Crossroads of logic, rhetoric, and metaphysics. *The Philosophical Review* 61, 368-376.
- Miller, R. W. (1998). *Study Guide to Introduction to Logic* (10th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Paglieri, F., & J. Woods. (2011). Enthymematic parsimony. *Synthese* 178, 461-501.
- Simonson, S. (1945). A definitive note on the enthymeme. *The American Journal of Philology* 66, 303-306.
- Sorensen, R. (1988). Are enthymemes arguments? *Notre Dame Journal of Formal Logic* 29, 155-159.
- Walton, D., & Reed, C. A. (2005). Argumentation schemes and enthymemes. *Synthese* 145, 339-370.