ISSA Proceedings 2006 - A Pragma-Dialectical Response To Feminist Concerns



1. Introduction

The ideas that motivate this work come from an article written in Informal Logic, Deborah Orr's "Just the facts ma'am: informal logic, gender and pedagogy" (1989). In this article Orr states that she followed the Informal Logic movement throughout the 1980s, and at first she excitedly

implemented the tools of Informal Logic in her classroom teaching. However, Orr comes to find that "the toolbox is less than fully equipped" and so she makes "some suggestions as to where informal logic might look to enlarge its stock of implements" (p. 1). While Orr's main focus comes from a pedagogical and not a field concern per se, Orr's contribution to Informal Logic, that its toolbox is in need of feminist tools, is nonetheless an important consideration for the field. In this paper I maintain that her suggestion, that Informal Logicians begin to incorporate feminist concerns within their theories and models of argumentation, is still largely unexplored. I begin by summarizing Orr's contribution to Informal Logic. I articulate her criticism of Informal Logic further with feminist epistemology and discuss to what extent Informal Logic considers such concerns. Then I turn to Pragma-Dialectics for a better response to addressing such feminist epistemological concerns in argumentation. My investigation shows that the Pragma-Dialectical model provides an adequate foundation for addressing feminist concerns, but it does not provide a very feminist-friendly model of argumentation as it stands.

2. Deborah Orr's "Just the facts ma'am: informal logic, gender and pedagogy" Orr does not hold any one system of reasoning, be it Formal Logic, Informal Logic, Pragma-Dialectics, etc., to be faulty or negligent. Rather, it is just a single area of reasoning equipped with a series of the same tool type. Orr thus likens the field of Informal Logic to a toolbox. That is, a good toolbox is equipped with sets of screwdrivers, nails, wrenches, and so on, and each of these series of tools is a part of a single tool type. Having a toolbox with a dozen different screwdrivers does not give a workperson a wide range of tools to access when building her

project, since she has only a series of that one tool. A good toolbox has a variety of tools that can be accessed. Thus, if a workperson is building a bookshelf, and she needs to nail the shelf onto the frame, it does not matter how many types of screwdrivers are available. A hammer is needed to complete the project. Orr's point is that the particular criteria Informal Logic relies on in its approach to argumentation is much like the situation of a toolbox with only a set of screwdrivers. Informal Logic provides a single tool type with a possibility of different rules to work with, just as the workperson has different types of screwdrivers to access. Orr, however, argues that a possibility of multiple tools of reasoning should exist for Informal Logic, so that the Informal Logician has a fuller toolbox (p. 1).

To concretize this point, consider the two argumentative contexts and rationales that follow. First, imagine you are vying for a particular position in a job interview, what you likely need to do is develop reasoning tactics that strongly support you getting the position. It does not matter how many Formal Logic formulas you have at your disposal (modus ponens, modus tollens, etc.), since even if you plug in the appropriate criteria, using them will probably not help you get the position. One of several different strategies might be to develop descriptive analogies between a previous job and the current position being interviewed instead. This could help develop a strong argument in your favour within the interview. This example, it seems to me, is not a contentious example. In fact, Informal Logic recognizes and is a response to the limited nature of Formal Logic (see Johnson & Blair, 2006, p. xiii; Groarke & Tindale, 2004, p. xv; Govier, 2001, p. ix). But, just as Formal Logic is not really helpful in the context of argumentation in job interviews, Informal Logic has its limitations as well. Consider another example: you are in the midst of a custody battle with your former partner. Both of you need to provide solid arguments for sole custody rights. Important to the field of Informal Logic is reasoning devoid of fallacies. And, let's say you make solid arguments that are not fallacious, ones that meet the requirements for sufficiency. This might not amount to much in your means to resolving, or winning, the custody battle. An alternative helpful strategy could be to focus on finding common ground with the other party instead (see Gilbert, 1997, pp. 111-112), whether or not fallacies are committed.

The above two examples demonstrate situations where acceptable means of reasoning within a particular framework, Formal Logic and Informal Logic in these cases, might not be as advantageous as other, also reasonable, means of

presenting arguments. The list of exceptions and different alternatives in particular contexts is much more extensive, and while it would be easy enough to say that some arguments do not adhere to good standards of reasoning, this runs the risk of sometimes incorrectly placing blame on real interlocutors' methods of communicating arguments instead of theories or models that might not be comprehensive enough. For this reason, Orr proposes that additional sets of argumentation tools need to be introduced and acknowledged as acceptable means of arguing in Informal Logic.

Orr focuses on bringing attention to "the feminine style" of reasoning, one in contrast with the dominant, masculine style of rationality (p. 2). I refer to Carol Gilligan's terms for these two styles of reasoning: the ethic of care and the ethic of justice (1993).[i] According to Orr, Informal Logic upholds the values associated with the ethic of justice, and she maintains that the ethic of care, and its means to reasoning, is largely ignored. The tools that need to be introduced to Informal Logic then are those that align with the ethic of care. A brief explanation of each style of reasoning, based on the empirical research of moral reasoning by Gilligan, follows. An ethic of justice stems from the notion of equality among people. It values universal, objective knowledge. Its nature is generally adversarial and divisive; with it comes an air of detachedness. In contrast, an ethic of care stems from nonviolence. It values particular knowledge and relationships. It considers the context of a situation and interlocutors' narratives. Rather than promoting an adversarial nature, implicit within its values is the maintenance of good relationships between individuals. Orr notes that it has been referred to as an "indirect," "empathic," and even a "narrative mode" (p. 8).[ii] Subscribing to a Wittgensteinian notion, that we must look at what people actually do when they reason, Orr argues that reasoning in line with an ethic of care deserves more attention (p. 5). While she voices the Informal Logic movement as a liberating advance, in terms of its challenges to Formal Logic, criteria in line with the ethic of care have yet to be seriously addressed. Orr writes "the lesson in this for those involved in informal logic . . . is that for the full range of human thinking to develop we must collectively recognize the validity of modes of thinking other than the dominant masculine strain" (what I refer to as the ethic of justice) "and actively foster their development" (p. 9). And, so, while Orr does not mention any concrete tool or reasoning pattern that needs implementation within Informal Logic, I continue in the same vein and demonstrate with examples of reasoning, notions involved with the ethic of care that get cast aside as not relevant to argumentation's concerns according to

Informal Logic.

3. What is meant by "feminism"?

Feminism comes with many connotations and interpretations. Its use here is quite specific: I refer to feminist epistemology. While feminist epistemological approaches are broad, and not simply characterized, a shared concern between them is that *knowers* are particular and concrete, rather than abstract and universalizable. All *knowers* are part of a larger social network, influenced by historical and cultural factors, as well as the intricacies and intersubjectivities of any given context. And, while feminist epistemologists use mostly gender as a category of epistemic analysis and reconstruction, more generally there is an awareness of the analysis and reconstruction of other subjugated categories (race, class, and so on). "Othered" positions, those in positions of subjugation, are thus considered in the construction of knowledge, which directly opposes theories or models of argumentation that align with the ethic of justice, as there is an implicit awareness within feminist epistemology that not everyone is equal and universalizable.

The ideas that initiate scientific studies, hypotheses, questions asked in public surveys, data investigated, and so on, are methods questioned and critiqued by feminist epistemologists of science – much of their work demonstrates the limited nature of the scientific process. [iii] Similarly, the knowledge that drives decision-making within argumentation can also undergo feminist critical evaluation. For instance, one can investigate whether there are inherent values at work within Informal Logic that limit the realm of possible tools of use and evaluation within argumentation. While this paper does not take on this task, its thorough investigation would really focus on the exclusion of voices and practices in argumentation. I now turn to discussing the connections between feminist epistemology and the field of Informal Logic.

4. Does anyone really do feminism in Informal Logic?

In addition to Orr, there are other feminist critiques of Informal Logic. Karen J. Warren (1988) demonstrates that critical reasoning takes place within a patriarchal conceptual framework (pp. 31-32). Once this is recognized, specifically that there is no neutral view of arguments – all theories and models originate from some conceptual framework (p. 33), and so each critical thinker and critical theory is entrenched in a bias of some sort, then a deeper contextual understanding of argumentative communication can ensue. Warren's

characterization of a patriarchal conceptual framework is equivalent to the ethic of justice described above.

There are others who are sympathetic to feminist concerns such as Orr's or Warren's. Verbiest (1995), Fisher (1998), and Gilbert (2005), for example, in dealing with gender styles of reasoning and communication, are in line with feminist concerns. And, Govier (1999) states that "by studying styles of verbal argument and practices of conflict resolution in other cultures, including those many minority cultures that have long been excluded and oppressed by practitioners of Western thought, we can further diversify and strengthen argumentative practice" (p. 64).

In addition to the criticisms of argumentation above, Gilbert (1997) has developed a model of argumentation that addresses feminist epistemological concerns. His multi-modal model of argumentation has opened doors to other forms of argumentation. Beyond logical arguments, Gilbert introduces emotional, kisceral, and visceral arguments (pp. 75-88). [iv] This model of argumentation challenges the field of Informal Logic to extend its parameters beyond just verbal arguments, directly addressing the notion of what is considered "rational" in an argumentative exchange. Its three alternative modes of argument acknowledge different methods of communicating arguments, which ultimately require different means of assessing them. [v] The multi-modal model is an exemplar of argumentation that functions within the framework of the ethic of care, as it is focused on the particular context and situations of the interlocutors involved.

Thus, feminist critiques of Informal Logic evolved in the late 1980s through the 1990s. They question the knowledge centered around the development and implementation of argumentation theories and models. What feminist epistemology and specifically criticisms like Orr's offer Informal Logic is the opportunity to investigate and include unexplored patterns of argument to its repertoire. Beyond intermittent feminist critiques of argumentation though, there is hardly any follow up to addressing argumentation with the ethic of care in mind. While multi-modal argumentation addresses feminist concerns in its approach to argumentation, there is no comprehensive theory or model that speaks to feminist concerns and none address feminism to the extent that Gilbert's model does. Now, I turn away from Informal Logic and investigate whether the Pragma-Dialectical program, as expansive and comprehensive as it is, can better address feminism.

5. A Pragma-Dialectical response to feminist concerns: a good start

The Pragma-Dialectical model of argumentation is a comprehensive research program that addresses argumentation for a number of enterprises: philosophical, theoretical, analytical, empirical, and practical (van Eemeren & Grootendorst, 2004, pp. 11-37, 41). I refer to this model of argumentation because its wellroundedness can offer at least a starting point for feminist-conscious argumentation. Theoretically, Pragma-Dialectics focuses on resolving disputes, and practically it aims to continually improve this practice. One of the model's most useful enterprises is its commitment to empirical research, addressing the extent to which ordinary language users are successful in the resolution of differences of opinion. In this section I focus particularly on a) parts of the definition of argumentation offered by van Eemeren & Grootendorst and its connections with three of the model's four meta-theoretical starting points, and b) articulating feminist concerns with Pragma-Dialectics. I articulate the positive aspects of each discussed constituent of Pragma-Dialectics and then propose ways in which the model can be extended further. It is in the capacity of these extensions that the model can accommodate more types of arguers and argumentative practices that fall under the ethic of care.

a) Definition of argumentation & Pragma-Dialectical starting points

To begin, van Eemeren and Grootendorst define argumentation as "a verbal, social, and rational activity aimed at convincing a reasonable critic of the acceptability of a standpoint by putting forward a constellation of propositions justifying or refuting the propositions expressed in the standpoint" (2004, p. 1). In addition, the four meta-theoretical starting points are functionalization, externalization, socialization, and dialectification. I focus on argumentation as a verbal, social, and rational activity, connecting those characteristics with externalization, socialization, and dialectification.

Verbal activity and Externalization. While verbalized arguments are more ideal, Pragma-Dialectics allows for non-verbal parts of arguments provided they can be placed into words (externalized). This is a necessary step for the reconstruction and analysis of arguments, as we need to include and address what the interlocutors implicitly communicate. What makes this limiting though is the extent to which implicit parts of an argumentative encounter can be externalized. Pragma-Dialectics relies on the performance of speech acts. For instance, if an interlocutor advances a contrary standpoint to the original standpoint, then

Pragma-Dialecticians assume that the interlocutor doubts the original standpoint (van Eemeren & Grootendorst, 1993, p. 61). While I have no objection to this process, I think language use is one method of conveying messages in an argument, other communicative acts can be considered. Body gestures, sighs, silences in dialogue, topic changes, among others, are argumentative cues that could also be addressed for instance. While implementing these additional argumentative moves is more interpretative than focusing solely on language, developing measures for these additional methods allows for a more elaborate and far reaching program, albeit one that adds a rhetorical awareness to a dialectical research program.

In their latest work, van Eemeren and Grootendorst outline some of the differences in a research program that is either dialectically or rhetorically focused. They write, "It goes without saying that there are still more possibilities, that all kinds of variants can be envisioned, and that it may sometimes be fruitful to make use of certain insights achieved in one program in carrying out another program" (2004, p. 41). While dialectical insights are crucial to the resolution process, the rhetorical effects of argumentation are also important. Furthermore, it is the rhetorical aspects that better reflect the ethic of care. The Pragma-Dialectical model, in its normative construction, adheres strictly to the constituents of the ethic of justice. For instance, its reliance on the use of speech acts keeps it relegated to a fairly objective, universal account of argumentative communication, lacking a more contextual awareness of argumentation.

This criticism of Pragma-Dialectics in no way implies that the current use of Speech Act Theory in the determination of implicit argument parts should be abandoned. On the contrary, it is a useful and advantageous method in contexts of critical discussion that rely heavily on verbal discourse. If Pragma-Dialectics continues to rely solely on this method for deciphering implicit argumentative moves, and it plans no alternative or further means of communicating arguments, then the model would remain unable to address feminist concerns. However, a recent addition to Pragma-Dialectical scholarship, strategic maneuvering, acknowledges rhetorical strategies that can enhance critical discussions (see van Eemeren & Houtlosser, 2002). While the authors are clear to note that the rules of Pragma-Dialectics cannot be violated, rhetorical strategies that both follow the model's rules and enhance an interlocutor's argument are certainly acceptable within the Pragma-Dialectical framework. With the recent introduction of strategic maneuvering, Pragma-Dialectics can begin to better address feminist epistemological criticisms of argumentation.

Social Activity and Socialization. Pragma-Dialectics recognizes that the communicative act of argumentation is a social process, relying on the interaction between two or more parties. Its principle of socialization is concerned with determining the roles of arguers. For instance, is an arguer justifying or refuting the standpoint in question? While this is a logistical start to categorizing arguers involved in argumentation, there are more subtle social intricacies that can be investigated, such as a history of the relationship between arguers, the present situations of arguers, conceptual frameworks, among other social influences that have effects on the path an argument takes. Thus, the principle of socialization can extend significantly further than tracking the speech acts which identify the roles of social actors. With this addition to the dialectical measures already in place, a more detailed and arguer-specific model can develop. This is to say that while investigating the process of resolving a difference of opinion in critical discussions is important, it does not bode well for interlocutors and arguments that stray from prescribed argumentative norms. The Pragma-Dialectical model's notion of social awareness is thus also bound to the ethic of justice: there are particular objectively driven criteria that get followed. If we begin to incorporate other social elements, some of which were above mentioned, then the ethic of care begins to take effect within the argumentation model and more contextualized, particularly situated criteria can be explored.

Rational Activity and Dialectification. The principle of dialectification stipulates that arguers' attempts at resolution require them to follow norms of reasonableness while engaged in critical discussion with each other. The model outlines critical discussion rules that ought to be followed, and it is in following these standard rules that argumentation is deemed a rational activity. This is probably the most problematic of notions within the Pragma-Dialectical program as it casts away possible pertinent parts of argumentation that do not fit the standard rules of reconstruction. Standards of reasonableness are not universal, and thus there are categories of arguers who have different argumentative practices that might not be encompassed within the Pragma-Dialectical program. For instance, Pragma-Dialectics does not have the tools to deal with social contexts of power imbalance. There are strategies that interlocutors might use that the Pragma-Dialectical model finds unreasonable, but in the context of a power imbalance they could be reasonable and needed strategies for interlocutors. What follows is only a short sample of an argumentative context that uses silence as a strategic move, and a Pragma-Dialectical response to it.

Consider a workplace environment of approximately thirty colleagues, two who have personal differences and thus do not get along. One is male, and the other is female. While the male is complacent with the dynamics of the workplace, not having serious troubles with the ways that it functions, the female is more critical and notes its problems. The two have a disagreement about the workplace in a series of meetings, in the presence of most of their fellow colleagues. Tensions rise, arguments get made in the midst of personal attacks, and the female strategically decides to respond with silence to what she thinks is continual banter and disrespect, instead of arguments against her view, from her male colleague in the last several meetings. While the male has the support of his (mostly male) colleagues, who also sometimes verbalize their support, the females have mostly all been silent throughout the contentious dialogues. The male and a few others continue to make arguments, but they are met with no response. Eventually the male and female are brought together by a third party to resolve the issue.

The dynamics of sex, silence versus aggressive communication, a group of men versus a single woman, among other constituents, make the above example a case of power imbalance. Specifically, silence cannot be construed as really anything by Pragma-Dialectics, as there are no speech acts to gather information. I argue that silence, especially in the instance of the particular female discussed, should be taken as a strategic sequenced manoeuvre. In this case, silence is important to acknowledge in the arguments' reconstructions, as it is both a calculated move in the argumentation as well as an influencer to the argumentation that follows from it. Following its set of standard rules keeps Pragma-Dialectics regimented, adhering to an ethic of justice framework. However, an awareness of power dynamics and cultural norms that stray from Western-oriented notions of good argumentation can add to the rules already functioning within Pragma-Dialectics and lead to a more feminist-friendly model.

b) How feminist-friendly is the Pragma-Dialectical model then?

To be clear, while each of the above components of the definition of argumentation and three of the program's meta-theoretical starting points have been criticized, they do provide good grounds for a more expansive model of argumentation, one that can address feminist epistemological concerns as well.

I mentioned above that feminist epistemology recognizes that knowers are particular and concrete, rather than abstract and universalizable. Translating this

notion to argumentation, interlocutors are particular and concrete, as opposed to abstract and universalizable. The empirical and practical components of Pragma-Dialectics recognize this. Empirically, the model investigates the success of dispute resolution in real contexts, with an analytical focus on the reconstruction of arguments. Practically, Pragma-Dialecticians continually investigate critical discussions in order to improve the practice. If the notion of a concrete and particular interlocutor in a particular context is taken even more seriously though, then what could evolve instead of a set of limited critical norms to be followed are perhaps sets of argumentative strategies for interlocutors, and additional tools for their evaluation.

All *knowers* are part of a larger social network, influenced by historical and cultural factors. These factors are largely ignored in the Pragma-Dialectical model. For instance, personality styles when it comes to argumentation or cultural upbringing which influences communicative practice are not adequately investigated within argumentation practice.

In addition, the intricacies and intersubjectivities of any given context are filtered out of the core argument structure within Pragma-Dialectics. For instance, discourse that is extraneous to the immediate standpoint in question is deleted as off-topic, repetitive, etc. (see van Eemeren, Grootendorst, Jackson, & Jacobs, 1993, p. 61). These could be strategies for interlocutors though. If an interlocutor continually repeats an idea, there might be a purpose to investigating the idea and untangling its implications, rather than deleting its repetitive parts in argumentative reconstruction. Does it mask something else? Is it really important that others understand it? Is it a safer way of saying something risky within argumentation?

And, finally, though I have not dealt with subjugated positions in any detail here, being aware of subjugated positions within argumentation practice is uncharted territory anywhere. However, feminist epistemology shows the value of the construction of knowledge, which directly opposes objective, detached standards of argument analysis. If any argumentation theory or model considered subjugated positions in their constructions, argumentation analysis would be much different and more difficult. Intricacies and situations would become just as important as the argument parts in question.

6. Conclusion

This paper is meant to be a first step towards linking feminist epistemological

concerns with argumentation. The field of Informal Logic does not accommodate feminist ideas, as its toolbox does not contain a variety of tools to access different forms of argumentation. Multi-modal argumentation is a recent addition to fairly standard argumentation practice, and it both acknowledges feminist concerns and promises future developments within the ethic of care framework if developed. Turning to Pragma-Dialectics, a more thorough research program for argumentation, provides an advantageous foundation for addressing feminism. However, it also needs expansion, and continuing to either develop a rhetorical awareness to Pragma-Dialectics through the outlet of strategic maneuvering, or a rhetorical program as comprehensive as Pragma-Dialectics altogether, one that complements and can work with Pragma-Dialectics, can add new dimensions to argumentation that correspond with Orr's criticisms and feminist epistemological concerns.

NOTES

[i] I specifically use the two terms of Gilligan in order to avoid focusing on issues of biological essentialism. Suffice it to note that any individual can partake in either style of reasoning. In fact, the more resourceful, well-rounded, individual should definitely make use of both the ethic of care and the ethic of justice depending on the context in question.

[ii] Gilligan's work is in response to the moral development studies of Lawrence Kohlberg. Quoted for the sake of brevity, the following is a sample of one of Kohlberg's studies, tested only on males, and then Gilligan's findings of the same study, tested on both sexes. Kohlberg's Heinz study is as follows: "In this particular dilemma, a man named Heinz considers whether or not to steal a drug which he cannot afford to buy in order to save the life of his wife. . . . Should Heinz steal the drug?" (Gilligan 1993, pp. 25-26). In Gilligan's studies, 11-year-old Jake responds by saying that Heinz should steal the drug, as life is more important than money or laws. Amy, also 11 years old, says that Heinz should not steal the drug as there has to be some collaborative way that the money can be found (pp. 26-28). Gilligan writes, "Just as he (Jake) relies on the conventions of logic to deduce the solution to this dilemma, assuming these conventions to be shared, so she (Amy) relies on a process of communication, assuming connection and believing her voice will be heard" (p. 29). This is an example that begins to demonstrate different frames of reasoning at work: Jake ascribing to an ethic of justice and Amy to an ethic of care.

[iii] Nelson's work (1990) emphasizes knowledge held by communities, rather

than just individual knowers, in developing a holistic approach to questions about evidence and justification. In the construction of scientific models, Longino (1990) argues for pluralism as a way of making the values and assumptions of science accessible for critical evaluation.

[iv] It should be noted that visual argumentation is another area that broadens traditional Informal Logic approaches (see Groarke, 1996; Birdsell & Groarke, 1996; Blair, 1996), though it addresses feminist concerns less than the multimodal approach.

[v] Full normative accounts of the three additional modes are not yet developed, though Gilbert has initiated a normative approach to the emotional mode (1997).

REFERENCES

Blair, J. A. (1996). The possibility and actuality of visual argument. *Argumentation and Advocacy*, 33, 23-39.

Eemeren, F. H. van & Grootendorst, R. (2004). *A systematic theory of argumentation: The pragma-dialectical approach*. Cambridge, MA: Cambridge University Press.

Eemeren, F. H. van, Grootendorst, R., Jackson, S., & Jacobs, S. (1993). *Reconstructing argumentative discourse*. Tuscaloosa, AL: The University of Alabama Press.

Eemeren, F. H, van, & Houtlosser, P. (2002). Strategic maneuvering: Maintaining a delicate balance. In F. H. van Eemeren & P. Houtlosser (Eds.), *Dialectic and rhetoric: The warp and woof of argumentation analysis* (pp. 131-159). Dordrecht: Kluwer Academic Publishers.

Fisher, L. (1997). Is reasoning gendered? In H. V. Hansen, C. W. Tindale, & A. V. Colman (Eds.), *Argumentation and Rhetoric: Proceedings from the 1997 Ontario Society for the Study of Argumentation Conference*, Brock University, St. Catherines, Ontario.

Gilbert, M. A. (1997). *Coalescent Argumentation*. Mahwah, NJ: Lawrence Erlbaum Associates.

Gilbert, M. A. (1997). Prolegomenon to a pragmatics of emotion. In H. V. Hansen, C. W. Tindale, & A. V. Colman (Eds.), *Argumentation and Rhetoric: Proceedings from the 1997 Ontario Society for the Study of Argumentation Conference*, Brock University, St. Catherines, Ontario.

Gilbert, M. A. (2005). Argument use in gendered contexts. In D. Hitchcock (Ed.) and D. Farr (Ed. assistant.), *The Uses of Argument: Proceedings of a conference at McMaster University*, Hamilton, Ontario.

Gilligan, C. (1982). *In a Different Voice: Psychological Theory and Women's Development*. Cambridge, MA: Harvard University Press.

Govier, T. (1999). The Philosophy of Argument. Newport News, VA: Vale Press.

Govier, T. (2001). *A Practical Study of Argument* (Fifth ed.). Belmont, CA: Wadsworth/ Thomson Learning.

Groarke, L. (1996). Logic, art and argument. Informal Logic, 18, 105-129.

Groarke L. A., & Birdsell D. (1996). Toward a theory of visual argument. *Argumentation and Advocacy*, 33, 1-10.

Groarke, L. A., & Tindale, C. W. (2004). *Good Reasoning Matters! A Constructive Approach to Critical Thinking* (Third ed.). New York: Oxford University Press.

Johnson, R. H., & Blair J. A. (2006). *Logical Self-Defense*. New York: International Debate Education Association.

Longino, H. (1990). *Science as Social Knowledge*. Princeton, NJ: Princeton University Press.

Nelson, L. H. (1990). Who Knows: From Quine to a Feminist Empiricism. Philadelphia, PA: Temple University Press.

Orr, D. (1989). "Just the facts ma'am: informal logic, gender and pedagogy." *Informal Logic*, 11, 1-10.

Verbiest, Agnes. (1995). Woman and the gift of reason. *Argumentation*, 9, 821-836.

Warren, Karen J. (1988). Critical thinking and feminism. *Informal Logic*, 10, 31-44.