

CHAPTER 4

REASON APPRECIATION

Sharon Bailin and Mark Battersby

1. INTRODUCTION

The pioneering work of Blair and Johnson has made an extremely significant contribution to both research and pedagogy by making reasoning and argumentation a central concern. Their ideas have generated and inspired a great deal of research focusing on both the conceptualization of argument and the teaching of argumentation. In this paper, we would like to extend that work by developing a dimension of reasoning which is seldom made explicit – that of the appreciation of reason. Reason appreciation involves a respect for reasoning based on an understanding of its nature, role and significance, and a recognition of its subtleties and aesthetic aspects. A full appreciation of reason has both cognitive and affective dimensions. Reason appreciation should be one of the goals of critical thinking instruction.

2. WHY A NEW CONCEPT IS NEEDED

The reason we think that the idea of reason appreciation is important might best be demonstrated by a pedagogical example. Elsewhere, one of the authors has described the problem of a student who is having difficulty constructing an argumentative essay (Bailin 1999). He has trouble understanding that

such an essay can be anything other than a summary of other authors' views, or the same with his own unsupported opinion tacked on the end. But the realization does finally come that there ought to be some sort of connection between the points made in the body of the piece and the conclusion drawn at the end: "Oh! So you want us to base our conclusions on reasons and evidence!!!" Any feeling of pedagogical success on the part of the instructor was, however, premature. "OH! So in THIS class, YOU want us to base our conclusions on reasons and evidence."

Now the problem with this student does not seem to be captured in terms of an inability properly to assess reasons. The student might, indeed, have the ability to identify fallacies or evaluate inferences given the right circumstances (e.g., if instructed to that end and then asked to do so in particular examples). It does not seem to be a lack of these types of abilities that is the problem here. Such an example seems to us, rather, to be a case of someone who does not appreciate reason. As a consequence, he does not respect its normative demands nor is he appropriately motivated to adopt its practice. He fails to appreciate what reasoning is all about.

3. DIFFERENCES FROM OTHER CONCEPTS

Numerous critical thinking theorists have argued that there is more to being a competent reasoner than having the ability to evaluate arguments, and most have attempted to characterize this aspect in terms of a dispositional component. This dispositional component has several dimensions. One is an overarching commitment to reason, well captured by Siegel's notion of critical spirit (Siegel 1988). The second dimension is behavioural: the critical thinker is inclined to act in accordance with norms of reason (Ennis 1996a; Siegel 1988). In addition, some of the dispositions proposed by theorists seem to point to an attitudinal and even ethical aspect, for example open-

mindedness, fair-mindedness, a commitment to critical dialogue, and sensitivity to the feelings of others (Ennis 1996a).

The phenomenon which these theorists are pointing to through their use of the concept of disposition has some significant overlap with the phenomenon we are attempting to capture through our concept of reason appreciation. Nonetheless, we believe that referring to this dimension in terms of dispositions is not particularly helpful.

The notion of disposition is used to describe a behaviour, indicating that the person actually behaves in a certain way.¹ It can sometimes also be used to refer to some quality or property of an individual by virtue of which the person behaves in the manner indicated (Siegel 1999).

Neither formulation seems entirely satisfactory as a way to capture the dimension of reasoning which we have in mind. Positing a disposition does indicate that an individual actually does engage in the behaviour in question, in this case assessing reasons appropriately in a variety of contexts, and this is certainly part of what we are after. It tells us nothing, or very little, however, about why the person tends to behave in this way. The property sense does rule out explanations based on external causes, but it would not rule out cases in which the person has a tendency to engage in reason assessment because they have assimilated some external forces, for example, if they have been indoctrinated or if they want to live up to their teacher's expectations (even if teacher is no longer on the scene). These are significantly different from behaving in this way because they understand something about reason assessment and why it is important. And since it does not elaborate in any detail why the person has this tendency to act, its pedagogical usefulness is limited.

This notion of disposition gains its currency from Quine's conceptualization of dispositions in the physical realm (Siegel

1. Ennis, for example, defines dispositions thus: "Roughly speaking, a disposition is a tendency to do something, given certain conditions" (Ennis 1996b).

1999). According to Quine, “a dispositional term is a promissory note for an eventual description in mechanical terms” (1973, p.14) and it is the eventual elaborated mechanical description which will do the explanatory work.² In the case of critical thinking, however, it is not a mechanical explanation in terms of neurons etc. which is at issue. A promissory note is not required because we know full well how to cash it out – in terms of understanding, beliefs, values, and attitudes. Moreover, such concepts are pedagogically useful. It is the particular set of such understandings, beliefs, values and attitudes required for reasoning well which we are trying to capture through the notion of appreciation.

4. THE CONCEPT OF APPRECIATION

Before indicating what the concept of appreciation would add to instructional goals in teaching reasoning, we need to elucidate the concept itself. “Appreciate” is etymologically derived from the word “to value” — to know the value of something. It has come to mean more than that, but still holds that basic meaning. Its secondary meaning is to be sensitive to subtleties and distinctions — what many dictionaries refer to as “delicate perception”. This sensitivity to the underlying qualities of an object or enterprise is often the basis for the valuing or “appreciation” of it. To appreciate something requires knowing enough about a topic to understand (appreciate) what is valuable about it.

In explicating our concept of reason appreciation, we are drawing an explicit analogy to the realm of art as this is an area where the notion of appreciation plays a central role. Appreciating art involves understanding its value as an enterprise as well as understanding the value of particular works. Appreciation involves more than pure intellectual understanding,

2. Siegel implies that the situation is similar for critical thinking dispositions, that a reference to such dispositions is a kind of place-holder until science tells us more about what constitutes such dispositions (Siegel, p.211).

however. It also means, importantly, “getting,” at an emotional level, what a work has to offer.

The foundation for appreciating art lies in knowing what makes a piece of art actually work. In the case of visual art, this would include knowledge of the elements of art such as colour, line, and composition; some knowledge of materials and techniques; an understanding of the relevant artistic tradition and how the work fits into it; and some understanding of the nature of the enterprise. This type of knowledge directs the viewer’s attention to relevant features of the work (delicate perception) and may enable the viewer to make discriminations and notice aspects that might escape the attention of an untutored viewer. It might also provide a basis for making the work meaningful. The viewer thereby gains access to the work’s intricacies and subtleties and the possibility of a rich aesthetic response. A viewer who is able to experience works of art in this manner will likely also have an appreciation for the enterprise of art as a whole, seeing and respecting its value in human life and culture.

Let us illustrate with an example. A highly knowledgeable collector recently introduced one of the authors to her collection of (mostly aboriginal) woven baskets. As she explained the process of producing the baskets (including harvesting and treating the materials), the different materials involved, pointed out the different patterns, various means of achieving water tightness, the different styles of baskets produced by different cultures, etc., our author gained an enormous enhancement of his appreciation of basket weaving (contrary to the usage with which many of us are familiar of “basket weaving” as a term of derision to describe the learning of trivial, useless and too easy to learn skills). At the end of the introduction, he had both a much greater understanding of aspects of basket weaving and much more respect and admiration for the products – he had a much greater *appreciation* for woven baskets. He was learning not only to detect differences in appearance

and function, but also differences in finesse and design. He was gaining respect for the labour and artistry involved in basket production and as a result, his estimation of the value of these baskets increased.

As stated, appreciation has two aspects, highlighted in the preceding definition, which are relevant to reason appreciation. One relates to the recognition of the value, significance or magnitude of the activity and can be cashed out in terms of the concept of respect. The second relates to the aesthetic qualities of the activity, and is grounded in a valuing based on a deeper understanding of the subtleties of the activity.

5. APPRECIATING REASON

5.1. Respect

Perhaps the most fundamental constituent of reason appreciation is respect. Appreciating reason involves, centrally, valuing its processes and outcomes and honouring its normative demands. There are two main kinds of grounds for this respect. One is essentially epistemological, having to do with the role of reason in inquiry and truth-seeking. The other is essentially moral, having to do with the connection between reason and freedom, autonomy, and respect for persons. (There are, however, also ethical dimensions to the epistemological aspect.)

5.1.1. *Epistemological aspect*

One of the primary reasons that reason is deserving of respect is because it is intrinsically connected to the seeking of truth. Reasoning is our primary mechanism for inquiring into what to believe or do and thus our primary means for arriving at better justified beliefs. Thus, we would expect someone who appreciates reason to have an understanding of the nature of the enterprise of reason-giving and evaluation, and an appropriate respect for its role in inquiry and truth-seeking.

Having an understanding of the nature of the enterprise of reasoning involves, to begin with, having a grasp of particular concepts such as reason, argument, evidence, warrant, premise, and conclusion. Such concepts are not isolated, however, but form an interconnected network which is connected in turn with certain principles, and procedures which constitute the core of reasoning. The concept of conclusion, for example, is conceptually tied to concepts such as reasons and evidence, and all these are inextricably connected to that of justification. Thus understanding the enterprise of reasoning means having an understanding of this whole interconnected web of concepts, principles, and procedures which is at the heart of reasoning (Bailin 1999).

What gives this whole conceptual network its grounding and meaning is its goal or purpose, and one of its primary purposes is that of inquiry, which we would define, with Blair, as “an investigation into whether a questioned or problematic point of view is acceptable” (1987, p.193).³ In the process of such an investigation, knowledge claims are formulated, tested and adjusted in order to arrive at the best justified position.

Having some understanding of the nature of inquiry and the role of arguments therein is a *sine qua non* of appreciating reasoning. This would include having a grasp of the epistemological assumptions which are implicit in the enterprise of inquiry and which give coherence to the particular elements, including a recognition of the value of reason, a belief in the possibility of rational justification in terms of the criteria and standards inherent in our critical practices, a belief in the desirability of acting on the basis of rationally justified beliefs, and a belief that any of our particular beliefs or criteria could be mistaken or inappropriate. Without some understanding of this larger epistemological picture in which to ground the particular practices of reasoning and argumentation, such practices

3. We subsequently define inquiry as “the process of carefully examining an issue in order to come to a reasoned judgment” (Bailin and Battersby 2016, p.6).

may seem like “an arcane game with arbitrary rules” (Bailin 1999).

One way to think about what we are after with our concept of reason appreciation might be in terms of MacIntyre’s notion of seeing the point of a practice (MacIntyre 1984). The latter he characterizes thus:

By a ‘practice’ I am going to mean any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity (p.87).

On this account, reasoning could be thought of as a practice which one learns by being inducted into it (Selman 1993). One comes to see the point of the practice, which can only be appreciated from within, through such initiation, and one is then (and only then) in a position to appreciate the goods or virtues inherent in the practice (MacIntyre 1984). Several theorists, in particular Paul (1990) and Burbules (1995), in fact characterize the additional dimension of critical thinking in terms of intellectual virtues. Such a characterization comes considerably closer to our conceptualization than does the characterization in terms of dispositions, as virtues are not psychological reifications added on to the skills of reasoning, but are inherent to the practice of inquiry and come out of appreciation of the nature of the practice. MacIntyre (1984) illustrates this point in terms of a child learning chess who is initially motivated by external rewards:

But, so we may hope, there will come a time when the child will find in those goods specific to chess, in the achievement of a certain highly particular kind of analytical skill, strategic imagination and competitive intensity, a new set of reasons, reasons now not just for winning on a particular occasion, but for trying to excel in whatever way the game of chess demands. Now if the

child cheats, he or she will be defeating not me, but himself or herself (p.188).

There is, then, a kind of normative force inherent in the rules of a practice and entering into a practice entails abiding by these rules and respecting their authority (p.190).

While the learning of games is one way in which MacIntyre elucidates the notion of practices and the goods inherent therein, the analogy between learning to reason and learning a game is helpful only to a point. There are significant limitations to the analogy between appreciating a game and appreciating reasoning. Whereas learning most games is an optional pastime and nothing of great importance hinges upon whether one learns to appreciate them, the practice of reasoning is not really optional. It is, rather, fundamental to human activities and ways of life because it is intrinsically connected to the seeking of truth and is constitutive of a number of key truth-seeking practices, including moral deliberation, autonomous decision-making, legal practice, and scientific inquiry. In virtue of this, it commands respect and carries with it normative force.

There are two ways in which the value of reasoning as a truth-seeking enterprise can be construed. The first of these is pragmatic. Reasoning has instrumental value in helping us arrive at the best justified beliefs according to which to lead our lives. It can be valued as a tool for getting us to the truth or, at least, giving us a reasonable basis for believing we have the truth.

Moreover, it can be argued, as Clifford did in his famous article, "The Ethics of Belief," that there is a positive obligation to seek truth through reason. Clifford argued that the acceptance of unsubstantiated claims was wrong if it might result in a decision that would cause harm, and that this would be the case whether or not the harm occurred because the acceptance of unreasonable belief would inevitably corrupt the individual or society. Clifford's argument is a consequentialist argument

that demonstrates that, even when truth is valued for instrumental reasons, there is an ethical obligation to hold justified beliefs (Clifford 1999).

An instrumental justification, based on consequentialist considerations, does not, however, provide sufficient grounds for the respect which reason is due. A person who does what reason dictates only for pragmatic reasons does not really appreciate it in a full sense. Reason must also be valued for its own sake, as a good in itself or virtue. As MacIntyre (1984) argues, a virtue pursued for instrumental purposes ceases to be a virtue.

... although the virtues are just those qualities which tend to lead to the achievement of a certain class of goods, nonetheless unless we practice them irrespective of whether in any particular set of contingent circumstances they will produce those goods or not, we cannot possess them at all (p.198).

An important dimension of an appropriate stance towards reason which is encompassed by the concept of appreciation is the affective dimension. Here the analogy to art appreciation is again instructive. Appreciating a work of art involves more than having a purely cognitive understanding of aspects of the work. It also has a central emotional component. To appreciate a work involves responding, at an affective level, to what the work has to offer. The situation is similar with respect to the appreciation of reason. Contrary to the popular notion that reason and emotion are opposed and in conflict, numerous theorists have pointed out that reason and emotion are inextricably intertwined. Cognition incorporates many emotional elements, and emotions are based in cognitive judgments (De Sousa 1987; Elgin 1996; Scheffler 1991). The image of a bloodless reason, set in perennial opposition to the passions, is far from the reality. Scheffler (1991), for example, argues that the life of reason demands certain rational passions, including “a love of truth and a contempt for lying, a concern for accuracy in observation and inference, and a corresponding repugnance

at error in logic or fact. It demands revulsion at distortion, disgust at evasion, admiration of theoretical achievement, and respect of the considered arguments of others” (p.4).

The person who appreciates reason will have an emotional impetus to act according to its dictates. The impetus to act according to reason is not, then, to be sought in some external motivation which must be attached to the act of reasoning. It is, rather founded in the obligation one feels to do so. Oldenquist (1982) eloquently sums up this sense of obligation in pointing out that rational dialogue with those with whom we disagree opens up “the possibility of being obligated to lose” (p.183). The appreciator of reason appraises opposing views in a fair and open-minded manner because she understands that such a weighing is what is called for by the practice of inquiry. She is willing to be corrected because she understands that her own view could be mistaken and that fallibilism is a necessary grounding for the practice. She can appreciate even the esoteric pleasure of savoring uncertainty because she knows that one can never be certain that one has knowledge. Moreover, our feelings about ourselves are tied up with such attitudes and actions, as Scheffler (1991) points out: “Failing such demands, we incur rational shame; fulfilling them makes for rational self-respect” (p.5).

5.1.2. Freedom, autonomy and discourse

As well as being the fundamental way to establish truth, reason plays a key role in issues of autonomy, respect for others, and conversational effectiveness. Having a full appreciation of the role of reason requires seeing its role in autonomy and freedom. When we use reason to direct our own activity, we are acting autonomously. Siegel’s view of critical thinking as teaching people to be “appropriately moved by reason” (1988) argues, rightly, that it is a good thing to be moved by reason, rather than being torqued by manipulative marketing tricks or driven by compulsions and irrational fears. It constitutes

an act of freedom and an assertion of one's humanity. From our basic understanding of the concept of maturity (which involves at least being able to generally govern one's actions by rational considerations of future consequences) to the idea of informed consent, reason, and being a reasonable person, is central to our notion of a fully autonomous and responsible human being.

Appreciating reason's role in autonomy also involves recognizing reason's appropriate role in discourse – understanding why it deserves respect not only for its utility but also for its place in the fundament of human intercourse. Reasoning is a particular way of conducting a conversation. It is the least manipulative and most respectful way to motivate and change belief and behaviour. To give someone reasons rather than threats, to reason with, rather than cajole or manipulate, is to treat the person as an “end-in-themselves.” When we reason together, we respect the autonomy of the other person. Students who come to have an appreciation of reason can conduct less fractious and more profitable discussions by avoiding the insults and manipulation involved in irrational and fallacious conversational gambits such as the *ad hominem*. As Socrates points out in the *Republic*, rational persuasion is a crucial replacement for savagery.⁴

5.2. Appreciating the aesthetics of reasoning

The goods internal to a practice are of many kinds, and one important kind is the aesthetic. Truly understanding a practice implies more than skill at executing its procedures. It also involves, importantly, appreciating its aesthetic dimensions. This appreciation has two aspects: appreciating and valuing the practice as a whole and appreciating a move within a practice. Appreciating a practice is partly the result of the sophisti-

4. “Socrates: ... a misologist ... no longer makes any use of persuasion by speech but achieves all his ends like a beast by violence and savagery, ...” From 412a of the Shorey translation.

cation involved in the more micro-appreciation of the specific activities within a practice. Using our basket weaving analogy: as our author learned to understand and appreciate specific baskets, he was learning to appreciate the whole enterprise. Appreciating reason, as with other human practices, also involves understanding the subtleties involved in the practice. This means understanding not only the basic rules of inference, but also what constitutes good argumentative strategies, e.g., insightful and imaginative counter-examples. This more subtle understanding of the practice goes beyond knowing the basic rules of inference and premise acceptability in the same way that understanding the quality of a play in a game, whether intellectual or physical (e.g., bridge or golf), goes beyond merely understanding that the play adhered to the rules: one can have an adequate knowledge of the rules of bridge and be able to play within these rules and still not appreciate the strategies of a bridge maven. Ultimately one would want a student to see not only that an argument is good because it supplies plausible and sufficient reasons for its claims, but also that an argument is exceptionally well done because it achieves its end creatively and insightfully.

A student who can recognize good argumentative moves has attained a fairly high level of sophistication and appreciation. This appreciation of the subtleties of the practice can now also provide a basis for appreciating the whole enterprise. In the case of reason, the route from appreciating particular argumentative moves to appreciating the enterprise seems somewhat indirect because a basic appreciation and understanding is required (is constitutive) before one can proceed to appreciate more subtle aspects of the practice. This is not unique to reason; having a reasonably good understanding of language is a prerequisite to appreciating poetry, while an appreciation of the poetic use of language can enhance one's appreciation of the beauty and power of language generally.

It is important not to confuse issues of rhetoric with issues

of argumentative excellence. While what we are calling the “aesthetics of reason” undoubtedly overlaps with the rhetoric of argument, it is not the same thing. Take J.J. Thompson’s famous treatment of the abortion issue: creating an analogy between becoming pregnant and being captured and attached to a famous violinist (Thompson [1996] 1971). The violinist bit may well add a nice rhetorical flourish to her argument, but the imaginative use of an anatomically dependent adult to refocus the issue of abortion away from the right to life of the child was truly ingenious and an aesthetically pleasing element of her argument.

The appreciation of arguments like these involves more than understanding them, more than agreeing that they are persuasive, and more than appreciating whatever rhetorical force is involved. Arguments like these are elegant, often ground breaking moves in a long debate and demonstrate a kind of imaginative creativity that someone who appreciates reason can and should enjoy. These arguments are justly revered not because they brought us to the truth, but because of their effective use of the argumentative genre to stimulate the imagination and bring us to points of view that we did not initially see.

As argued above, a sophisticated practitioner of a practice such as someone who deeply appreciates art, science or bridge can distinguish merely legitimate or appropriate moves in the practice from superb and elegant ones. These distinctions often require a sophisticated understanding of the enterprise, but such an understanding is the basis of a more or less complete appreciation of the practice. It is also what motivates practitioners as they strive for excellence of practice. As MacIntyre (1984) points out:

Someone who achieves excellence in a practice, who plays chess or football well or who carries through an enquiry in physics or an experimental mode in painting with success, characteristically enjoys his achievement and his activity in achieving. ... As Aristotle says, the enjoyment of the activity and the enjoyment of the

achievement are not the ends at which the agent aims, but the enjoyment supervenes upon the successful activity in such a way that the activity achieved and the activity enjoyed are one and the same state (p.197).

Getting students to experience this unity of appreciation and motivation is much of what teaching is all about.

We have alluded to the way in which recognizing imaginative argumentative moves contributes to the appreciation of reason, but imagination plays an additional role in reasoning. Much of reasoning is about “what if”—about claims that may not be true. The focus of inference in an argument is not on the truth of the conclusion but on whether the conclusion follows from or is well supported by the premises. Notoriously many students have initial difficulty distinguishing between the validity of an argument and the truth of its conclusion. Being able to make the leap to a more abstract view of argument is an important part of appreciating reason. Arguments, especially but not only deductive ones, have an underlying form which is crucial to their epistemological worth. Moving from the details of a particular argument and in particular from the truth values of the claims, to reflection on the value of the argumentative form itself requires a kind of sophistication that is part of appreciating what reason is all about. While one can make appropriate use of argument without this abstract understanding, this lack would mean that one could not fully appreciate particular arguments. Imagine someone saying that Thompson’s argument is poor because medicine has no way of hooking people up in the way that she imagines. This would constitute a failure to appreciate that particular argument resulting from a failure of the imagination.

6. FOSTERING REASON APPRECIATION

It may seem odd that one has to induct students into the practice of reasoning which should not, after all, be “alien” to everyday life in the way in which say, quantum physics or

basket weaving may be. Unlike in the case of games, students of reasoning are not being initiated into the practice, but are involved in it from a very early age. Evaluating reasons, justifying claims, and drawing inferences are all inevitable aspects of living (at least in modern societies) and children are introduced into these practices in so far as they learn to be language-using beings. It can be argued, however, that a large percentage of adults do not engage in this practice with a high degree of skill (Nisbett 1980). They are already practitioners to some degree, but usually not entirely competent ones and almost certainly not as competent as they could be. Even less do they possess the kind of appreciation which is at issue here.

Fostering such appreciation involves inducting students into the practice as contrasted with merely informing them about it, but this is a complex pedagogical process. This is not the place for a comprehensive review of this challenge. What we have tried to do is to outline the richness of the goal. Nonetheless, we shall conclude by suggesting some general pedagogical implications of our view.

The most fundamental and overarching implication of our view is that instructors of reasoning should have reason appreciation as an explicit goal of their teaching which suffuses all aspects of instruction. This means going beyond the mere basic competence and knowledge of the rules of inference and evidence to a more in-depth, comprehensive and nuanced understanding of the practice. This would include an explicit focus on the reasons, both epistemological and moral, why reason should be respected, and an emphasis on the centrality and non-arbitrary nature of the practice of reason, with its entailed moral obligation to adhere to the principles of reasoning. Another aspect would involve focusing on and illustrating the role that reason plays in everyday life and in successful discussion, with its potential for “civilizing the discourse.” Pointing out the aesthetic and imaginative aspects of arguments, those aspects that make an argument more than non-fallacious

or sufficient, is another means for attempting to foster the appreciation of reasoning. Finally, an instructor can attempt to get students to “catch” the affective dimension through displaying her own enthusiasm for the enterprise of reasoning.

If we are successful in fostering an appreciation of reason in the full sense, the result should be students who are able to recognize excellence in reason and be motivated to strive for this excellence.

REFERENCES

- Arnstine, D. 1995. *Democracy and the Arts of Schooling*. New York: SUNY Press.
- Bailin, S. 1999. “The Problem with Percy: Epistemology, Understanding and Critical Thinking.” *Informal Logic* 19, 2-3: 161-170.
- Blair, J.A. 1987. “Argumentation, Inquiry and Speech Act Theory.” In *Argumentation: Across the Lines of Discipline*, edited by F.H. van Eemeren, R. Grootendorst, J.A. Blair, and C. Willard. Dordrecht: Foris Publications.
- Burbules, N. 1995. “Reasonable Doubt: Toward a Postmodern Defense of Reason as an Educational Aim.” In *Critical Conversations in Philosophy of Education*, edited by W. Kohli, 82-102. New York: Routledge.
- Clifford, W.K. 1999. “The Ethics of Belief.” In *The Ethics of Belief and Other Essays*, edited by W.K. Clifford, and Timothy J. Madigan, 70-97. Amherst, N.Y.: Prometheus Books.
- De Sousa, R. 1987. *The Rationality of Emotion*. Cambridge, Mass.: MIT Press.
- Elgin, C. 1996. *Considered Judgment*. Princeton: Princeton University Press.
- Ennis, R. 1996a. *Critical Thinking*. Upper Saddle River, NJ: Prentice-Hall.
- _____. 1996b. “Critical Thinking Dispositions: Their Nature and Assessability.” *Informal Logic* 18, 2-3: 165-182.

- MacIntyre, A. 1984. *After Virtue*. Notre Dame: Notre Dame University Press.
- Nisbett, R.E. and L. Ross. 1980. *Human Inference: Strategies and Shortcoming of Social Judgement*. Englewood Cliffs: Prentice Hall.
- Oldenquist, A. 1982. "Loyalties." *The Journal of Philosophy* 79: 4.
- Paul, R. 1990. *Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World*. Rohnert Park, CA: Center for Critical Thinking and Moral Critique.
- Peters, R.S. 1991. "Reason and Passion." In *Education and the Development of Reason*, edited by R.F. Dearden, P.H. Hirst, and R.S. Peters. London: Routledge & Kegan Paul.
- Quine, W.V.O. 1973. *The Roots of Reference*. La Salle, Il.: Open Court.
- Scheffler, I. 1991. *In Praise of the Cognitive Emotions*. New York: Routledge.
- Selman, M. 1993. "Critical Thinking as a Social Practice." In *Reason and Value: New Essays in Philosophy of Education*, edited by J. Portelli and S. Bailin. Calgary: Detselig.
- Siegel, H. 1988. *Educating Reason: Rationality, Critical Thinking, and Education*. New York: Routledge.
- _____. 1999. "What (Good) are Thinking Dispositions?" *Educational Theory* 49, 2: 207-221.
- Thomson, J.J. 1971. "A Defense of Abortion." *Philosophy and Public Affairs* 1: 47-64.