Comparing Theories of CT in a Critical Thinking Course

CONNIE MISSIMER

A chapter devoted to alternative theories of critical thinking will be a new feature in the 4th edition of *Good Arguments: An Introduction of Critical Thinking*. Why have such a chapter, which to my knowledge appears in no other text on critical thinking? Once students have accustomed themselves to the major features of argumentation and types of evidence, I think it is crucial to help them see that the claims I have made in my textbook actually constitute a theory. Moreover, students should realize that my theory is but one among several theories, containing claims that are congruent as well as contradictory to those made in other texts in CT.

Since the claims we make in our critical thinking courses and the way we judge students on their CT skills rest on a theory of critical thinking, then the reasons that justify my additional chapter will also justify spending some time in class describing to our students our notion of critical thinking, and contrasting it with other notions. This should be done at some point later on in the course, once they have had some exposure to and practice with the material. It would sound much too abstract at the beginning of a course. My account is at the end of Chapter 8, a reprise of the elements of alternative argumentation in light of evidence.

Sizing up alternative claims about critical thinking

This is first and foremost a matter of full disclosure in order to avoid misleading our students. Unlike an introduction to chemistry, in which basic atomic theory is well settled by evidence and authors diverge in approach rather than substance, textbooks on critical thinking differ on the very definition of this concept. Without an explicit reference to alternative theories of critical thinking, students would naturally but wrongly infer that the claims made in their text are all settled questions.

Another reason for showing students alternative views of CT is that a one-view approach is antithetical to the whole idea of philosophical debate. Consider a text on philosophy in which the author acted as if the views of Plato were the only way to think about knowledge or society. We would find it disingenuous to call that book simply "philosophy," and not Platonic philosophy. Similarly, a text by Missimer on critical thinking should show the reader how this is Missimer's view and not that of all theorists of CT. Analogously, an instructor of a critical thinking

© *Informal Logic* Vol. 23, No. 1 (2003) Teaching Supplement #8, pp. 11-16.

course should show his/her students how his/her theoretical views differ from the views of others.

Finally, for those theorists, including myself, who posit that alternative arguments are a necessary condition of the growth of knowledge, students cannot do critical thinking about CT without considering at least one alternative. For critical thinking to grow beyond my theory as well as that of other theorists, nothing but the comparison of alternatives and the presentation of further evidence will drive the growth of knowledge of critical thinking. Thus, my alternative argument theory (AAT) is self-correcting. And who better than our students to make the corrections? Furthermore, what greater gain for students than to have made an original contribution, not to some other subject, but to the field of critical thinking itself? The ultimate point of our texts is not to make a student "think like Missimer" or "think like Ennis," but to think on one's own, even to the point of deciding the criteria by which critical thought is accomplished.

Thinking on the meta-level about critical thinking

This is not as difficult for students as it sounds. Some groups can handle the full-blown comparison of alternative theories. However, if other students would be overwhelmed by the complicated dictates of some theories, one can always use discrete claims. For example, some theories posit that the critical thinker must be intellectually humble, e.g., recognize that they might be or have been wrong in some important area of their thinking. If this is the case, one would expect that those thinkers who drove the growth of knowledge the furthest would show this humility to a high degree. My research has suggested that the exact opposite is the case—these theorists were highly confident of their views and quite unwilling to back down, even in the face of harsh attack. None the less, mine was not an encyclopedic effort, and there may well exist evidence for intellectual humility outside its intuitive appeal. So one or more students can be given the assignment to find this sort of evidence in the life of any one of many thinkers for whom the claim that they drove the growth of knowledge is uncontroversial: Newton, Galileo, Darwin, Watson, Crick, Wittgenstein, Mill, Marx, or a host of other people are possibilities.

Once students realize that their assignment is not complicated, but in this case means just reading the biography of a famous person with the questions "What, if any, admissions did they make that they might be wrong? Were there other signs of intellectual humility?", they are ready for an appraisal of alternatives. My approach has been to start with my own theory, explaining that I have included nothing for which there is no evidence. So, for example, I have evidence that knowledge grows mostly through theories or arguments that contain evidence. Furthermore, I point to evidence that when alternatives are suppressed, knowledge does not grow (see the following table for major differences between the AAT and other CT theories).

Differences between this theory (AAT) and most other theories of CT*

	ATT	Most CT Theories
Focus	**Population View** Large numbers of people comparing alternatives drive knowledge	**Individual View** Certain type of character and skills make up critical thinker
Support	**Intellectual History** (evidence of growth/ retardation of knowledge)	**Intuitively driven argument**
Prospects for theoretical development	**Solely through empirical means**	**Further refinements through argumentation**

*Common areas: Anti-relativist assumptions; CT proceeds via argument, theory.

Occasionally a perceptive student will ask me how knowledge could grow without fair-minded, open-minded, humble thinkers. If no one does, I raise that question for them to grapple with in group discussions. No student has ever come up with the claim the AAT makes on this point: that large numbers of people drive the growth of knowledge concerning any given theory, and so their various character foibles (e.g., being too arrogant or too timid about a view) simply cancel out in the large number of people inspecting any given set of alternatives. Students interested in this facet of CT theory read books on the reception of Darwinism and Newtonian physics. The "population" view is quite different from the individual, "character" view. Some of my best students have made efforts to reconcile these two approaches, with varying success.

Another possible student project is to investigate the idea that one must have a disposition to think critically to be a critical thinker. Is this simply a circular idea—to do *x* you have to have a disposition to do *x*; you are disposed to do *x* so you do *x* (you can make *x* as elaborate as you like, but it still remains circular). I like students to investigate this question, not only to see if they can find a way past the circularity, but because the very question assumes that people are not born critical thinkers but need special training in it (need to develop the disposition). Students are encouraged to go out to sports games with friends who have not had courses

in CT and observe whether they compare alternative arguments about the merits of a player or a particular play. At least in this sense many people appear to be able to spontaneously compare alternatives in an area they know well.

Another question that has never been raised, to my knowledge, is the question how much of one's daily thinking is supposed to be critical thinking. One does get the impression that it should be a constant mental activity, although that is not spelled out (but who wants to be "uncritical?") Yet it is an important question. If you only thought critically every other Sunday but you came up with a theory that drove the growth of knowledge, would you be a critical thinker? As it happens, there is some empirical evidence that giving deep thought a rest makes for better thinking when one again takes up a problem. Sorting out these questions means that students can be critical about these claims about critical thinking itself, either (provisionally) accepting or rejecting them as well as looking for evidence in intellectual history, cognitive psychology, or other disciplines dealing with the brain sciences.

No matter what their major or eventual profession, I would hope that grappling with these comparative questions would make students more open to future opportunities for critical thinking than a student who had merely learned enough of one viewpoint to successfully negotiate an exam.

The strategy in this new chapter in *Good Arguments* is to lay out four theories (to be determined—there are many great ideas from which to choose!). Although the number of claims about critical thinking is legion, I have restricted the number for close consideration to a few in the belief that to offer more would create confusion. Yet it is very important to give students as complete a bibliography as possible of additional theories and to encourage students, perhaps with the carrot of extra credit, to pursue one or two additional theories from the list. The description of each of the four theories takes a little over two pages, offering the theory followed by the best support that can be mustered in its behalf, not only through quotes by the originator theorist, but by my thinking up additional support as well as inviting students to do the same in class.The point is to make each theory, or piece of it, as *strong* as we can in order to judge it as accurately as possible. This would provide further modeling of critical thinking. The exercise enables students to do the ultimate: think critically about the nature of critical thinking and evidence in its support. In my scheme, students choose their preferred theory, offering *the best evidence they can find* for their choice over other theories in a five-page essay.

Mechanics of when and what to study

I have experimented a few times with materials collected from books and journal articles as handouts. These were presented, either in the middle of the quarter or towards the end, depending on the point at which most students understood and applied the basics of argumentation. Presenting alternative theories midway through

the term is preferable, giving students the rest of the course to chew over ways in which they can conceive of critical thinking differently from what they were taught.

In conjunction with this chapter is a five-page comparison paper. My experience has been that there are the just-give-me-one-thing-to-compare people, so the paper as well as parts of the exercise at the end of the chapter model these sorts of problems. And then there are always some more philosophically inclined, I-need-the-big-picture-first people. They can handle the theories in the large (often needing a bit of help, either from the instructor or from study groups).

Problems

Initially, many students get confused when they try to compare two arguments or theories containing conflicting ideas. They think that contradictory ideas must somehow be compatible, or they mistake one person's theory for that of another; or they decide, on the basis of pure plausibility, that one view is superior to another rather than looking in the literature for some form of specific evidence for their favored view. These problems can be anticipated and quickly sorted out. Those students who have no idea where to look for empirical support can be offered a number of possibilities. The chapter will have Web links to journals as well as a bibliography.

Successes

I mark success by the excitement students show when they (think they) have come up with a Brand New Thing—maybe a hybrid view of CT or some other view that I really don't agree with. I have them turn in a draft of their paper a week before it is due, usually on a Friday. I spend the weekend looking over their work and doing some research of my own on ways that they might make each of the alternatives they have discussed stronger. They have from Monday until the due date that Friday to strengthen their papers (or offer me an argument why my suggestion(s) were not relevant). As long as they have considered alternatives and looked for evidence on both sides, they get full marks.

To those who see critical thinking as being concerned with the correct estimation of the strength of competing arguments, this would appear too generous. However, the history of the growth of knowledge is full of *mis*-estimations of arguments by some of the greatest minds. Is it not *hubris* for us instructors to pass that sort of ultimate judgment on the work of our students? Moreover, it gives them the wrong idea about their own capacities as critical thinkers (the instructor must be more correct than I am). I see my job description as that of a coach rather than a judge. I may know more arguments for and against the position the student is taking and it is my job to point out those arguments and get the student to exercise her mind over them, hunt down supporting evidence for them

This instructional stance is consistent with the AAT, taking a population view of the growth of knowledge; hence, the act of argument comparison in light of evidence is part of a huge enterprise of thinking about that subject, of which the student and I are one tiny part, each with a partial view. And the historical record is full of judgments that were brilliant but wrong about the incorrectness of a view, for example the arguments against Newton by Leibniz and Descartes, or Darwin by Lord Kelvin. Thus I find it sufficient that they marshal as much evidence as they can and weigh it. Thus, my theory and its supporting historical evidence argue against judging the weight that *they* assign their evidence. Recall too, that the purpose of the course in CT is NOT to get them to "think like Missimer" but to think for themselves. Those who just offer opinions without external support receive lower grades. Some students opt to accept another theorist's views *en masse*, which is fine too, as long as they support their choice in light of one other alternative.

It seems to me that the classes doing this assignment have been more energized, in general, than earlier classes when I had not thought to try out this experiment. As we instructors all know, classes have personalities, and some personalities are more attuned to a layer of complexity such as this than others. If a group has struggled with the juggling of alternative theories of CT (you know they are sinking when there's a lot of moaning, punctuated by an exasperated "Can't you just tell us what to think about critical thinking?"), then at that point it's better to back off and hope that someday, in a moment of reflection, those students might just muse on the alternatives they did not consider.