

First-Year Writing as *the* Critical Thinking Course: An Interactionist Approach

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For almost forty years, one of the fiercest debates in the critical thinking (CT) literature has been between “generalists” and “specifists.” The former believe that critical thinking is a general or generic skill. A critical thinker can and will think critically, no matter what they think about. The latter, on the other hand, believe that CT is domain- or discipline-specific. Thinking is always about something (not everything); thus, CT ability/desire must always be context-dependent.¹

Recent attempts to conceptualize CT in and for writing studies have largely operated in the space between these opposing positions. Kathleen Blake Yancey (2015), for example, in studying the relationship between writing in the disciplines and critical thought, sought to chart both “patterns of similarity and difference” as to better understand “thinking and writing practices inside [cultures] as well as across cultures” (p. 1). Likewise, Justin Rademaeker (2018), in an elaborate study of faculty values, found that different academic disciplines value certain “dimensions” of CT to different degrees while valuing each dimension to some degree (thus hinting at a potential baseline of general CT skills).

The above scholars take what we can call a “soft” specifist approach to the problem of domain specificity. Adam Katz (2019) dealt with the problem in a different way. He started from the position that any manifestation of CT is bound to be discipline specific (a “hard” specifism). Thus, writing teachers can’t teach critical thought. We can, though, he argued, teach students how to learn to think critically in their eventual disciplines. We do this by teaching students how to learn disciplinary languages. Katz then presented a complex, grammar-focused pedagogy which he argued facilitates this sort of learning. Commitment to such a pedagogy—what he called “a praxis of entry”—situates first-year writing (FYW) as *the* critical thinking course.

Katz’s (2019) argument is bold. He skillfully sidestepped the problem of domain specificity as to allow FYW to emerge as integral to the cultivation of critical thought. I welcome this attempt to link FYW and CT instruction. Many readers of this journal likely welcome it as well. That said, I fear that Katz, and indeed Yancey (2015) and Rademaeker (2018), might be operating within an outdated paradigm. Of late, a new conception of how and why we think has emerged. In light of decades of puzzling empirical findings, reason itself has been redefined. This new “interactionist approach” to reason holds that the ability to reason evolved as a means of social coordination rather than as a device to help individuals reach better decisions. Understanding reason as a social competency instead of an individual one helps explain a wide range of previously inexplicable human behaviors. It also changes the conversation about what CT is and how to teach it. I want to suggest that

these changes have the potential to reposition writing studies at the very center of CT instruction. To facilitate this movement, in the following pages I will introduce our field (for the first time, I believe) to the interactionist approach to reason. I argue that from an interactionist perspective, there are indeed generalized CT skills that can transfer between scenes of thinking. These skills don't entail internalized cognitive functions. Instead, they are *social skills*, involving the ability to construct and maintain the socio-material structures conducive to productive reasoning. I argue that FYW provides the ideal site for students to practice and improve these skills. Drawing on composition's rich history of scholarship related to dialogic learning, I suggest that a pedagogy centered around problem-posing, mutuality and dissensus can allow for such work.²

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Like Katz (2019), I will take the problem of domain specificity as my starting point. Simply put, those of us who wish to use first-year writing to cultivate CT face a dilemma: each academic discipline, each space into which our students will soon enter, understands the term to connote slightly different behavior. As Katz put it, the concept of "analyze," for example (as in critical thinkers are able to perform "analysis"), can have meaning only within a community of practice, within a common project utilizing a certain set of concepts, tools, materials, etc. One always "analyzes" a lab report, a poem, etc., and the nature of the discipline will ultimately decide whether the resulting analysis is accepted or rejected, lauded or attacked. That being so, how can FYW, which is a course preliminary to the disciplines, claim to teach "good thinking"?

One solution is to abstract away from the particular, look at the entire field of disparate disciplinary practices and identify common elements. Indeed, the results of Rademaeker's (2018) broad cross-disciplinary study, which, as noted, suggests a baseline of general CT skills shaped by "discipline-specific privileges," indicate that this might be a productive tact (p. 123). The challenge, assuming a baseline of general skills, is to identify elements common to all or most academic work, and then posit ways in which FYW teachers can use our unique academic position to help students master those elements. When we perform this sort of analysis with CT definitions and manifestations, I want to suggest, the concept of "reason" rises to the fore. Disciplinary content varies, but no matter the scene of thinking, students must engage in reasoning. If FYW can help students reason better—as in more skillfully generate, identify, evaluate and present reasons for belief—we can, therefore, rightfully claim to teach CT.

There is little doubt that reason and CT are intimately connected. As philosopher Harvey Siegel (2013) put it, CT is "best conceived as the educational cognate of rationality." To be "rational" is to "believe and act on the basis of reasons." Thus, to be a critical thinker is "to be appropriately moved by reasons" (p. 32).³ This is true no matter the scene or discipline. Whether in biology, history or math, any activity labeled "critical thinking" will inevitably involve facility with reasons.

Given the tight connection between reason and CT, how we understand the former will shape how we understand the latter. And, as noted, of late reason has been redefined. The prime movers behind this redefinition are Dan Sperber and Hugo Mercier. In a series of widely cited articles, culminating in their landmark book *The Enigma of Reason*, Mercier and Sperber (2017) forwarded what they called an "argumentative" or "interactionist" theory of

reason.⁴ Following an evolutionarily influenced adaptationist program, they believed that we best define reason by its function. The traditional definition—what they called the “intellectualist” approach—holds that the main function of reason is to help individuals better adapt to their world. The exemplary reasoner, per such a view, is a solitary figure, such as that captured in Rodin’s famous sculpture *The Thinker* (Figure 1). The problem, though, is that nearly four decades of empirical research have shown that individual reasoning isn’t very effective at helping us generate knowledge and make good decisions. Humans often fail at simple logical tasks (Evans, 2002). And as Nobel Prize winner Daniel Kahneman has shown most notably, we are terrible at probabilistic reasoning (Kahneman & Tversky, 1972) and subject to a variety of irrational biases (Kahneman, Slovic, & Tversky, 1982). Even worse, sustained reasoning—as in the prolonged search for and evaluation of reasons—often backfires, causing us merely to generate further support for our original biases. Being highly intelligent or educated, receiving monetary rewards for correct answers, or undergoing instruction in the dangers of motivated reasoning all have relatively little impact on reasoning outcomes. Simply put, considered from an intellectualist perspective, reasoning appears to be incredibly ineffective at its assigned task.

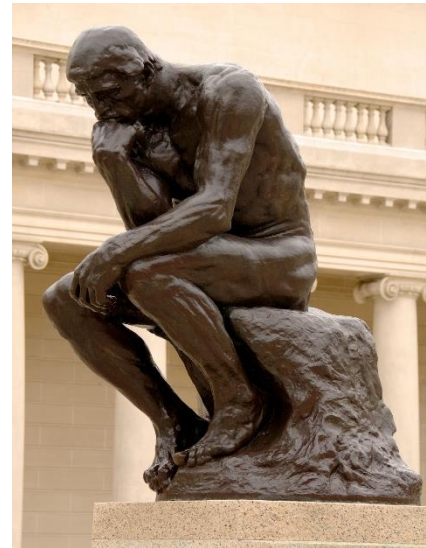


Figure 1: Rodin, *The Thinker*.

The inability of reason to accomplish its putative function lead Mercier and Sperber (2017) to posit an alternative function. They held that instead of working to assist individual thinkers in making better decisions, reason is primarily a social competency. Its ultimate function is to assist social coordination and thus help *groups* reach better decisions. They wrote that the “normal conditions for the use of reasoning”—meaning the conditions under which our reasoning abilities developed and to which they are best adapted—are “dialogic” (p. 247).

The rather simple idea that humans are designed to think in groups explains a wide variety of previously inexplicable empirical findings. First, it explains the prevalence of “myside bias” in individual reasoning. Simply put, the individual reasoner—even the most experienced, most “critical” thinker—will systematically generate reasons for ideas she intuitively supports. At the same time, she will seek (and most often find) reasons not to believe ideas that she intuitively opposes. In other words, my reasoning is fatally tilted to “myside,” which, as Mercier and Sperber (2017) noted, “is pretty much the *exact opposite* of what you should expect of a mechanism that aims at improving one’s beliefs through solitary ratiocination” (p. 218). At the same time, empirical evidence shows that humans are rather good at evaluating the reasons of others. Even preschool children have been shown to be partial to what logicians would label “good” reasons (Koenig, 2012; Mercier, Bernard, & Clement, 2014). Relatedly, evidence indicates that group decision-making—assuming arguments can be freely presented and challenged—is surprisingly efficient (Laughlin, 2011; Moshman & Geil, 1998). So humans can reason logically. We can engage in “objective” analysis. We just don’t (or can’t) when thinking alone.

Mercier and Sperber (2017) ultimately concluded that myside bias and intellectual laziness are not cognitive failures but cognitive features. They are systematic adaptations

which allow groups to divide cognitive labor and thus reach optimal decisions with minimal effort. In short, we don't think of counterarguments because it is expected that other group members (applying the stringent criteria of the evaluator) will do that for us. Then, driven by their own intuitive assumptions, these others will present their ideas and we will assume the role of the evaluator. Through this dialectical process, the group will ultimately reach an optimal decision: where best to hunt, how to build an atomic bomb, etc. According to Mercier and Sperber, human reason evolved to work under these specific social conditions. "Humans reason," they argued, "when they are trying to convince others or when others are trying to convince them" (p. 168). Reason is thus primarily argumentative, interactionist. It emerged to help us socially justify what we think and do. Solitary reasoning, on the other hand, is exceptional. It occurs only in anticipation of future debates, review of previous debates, or in those rare occasions when we experience conflicting intuitions and must engage in discussion with ourselves to figure out what we actually think. Seen in this way, the exemplary reasoner becomes a social animal.

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Earlier, I suggested that the study of CT might be on the verge of a paradigm shift. This is because, as I see it, most CT scholarship has as a root assumption that is something like the intellectualist approach to reason. Reasoning is assumed to be a solitary and internal process; CT instruction focuses on making this process more efficient. In Robert Ennis's (1964) classic formulation, for example, we see an effort to help individuals "avoid the pitfalls in assessment" by teaching them to avoid fallacies and apply logical rules to claims (p. 599). More recent, less logocentric approaches, though recognizing the importance of intuition, non-linear thinking, and abstract psychological tendencies ("dispositions"), still largely operate within the same individualistic paradigm (e.g., Paul, 2018; Siegel, 2013). The goal, in other words, is still "good thinking," considered in an internal, solitary sense.

Educational psychologist Deanna Kuhn (2018) also noted the shifting nature of the CT construct. Aligning with Mercier and Sperber (2017), she believed that CT, like reasoning in general, stems from a need to socially justify belief, to persuade. From her perspective, conventional definitions of CT have failed to take into account this social element. Kuhn thus welcomed the recent emergence of a "process-based account of critical thinking," entailing both inquiry skills—the ability to analyze, interpret, sort and synthesize information—and argument skills—the ability to present reasoned justifications for conclusions drawn from inquiry (p.121).

It is clear that the emerging CT paradigm intersects with the writing studies literature on multiple levels. Many in our field, of course, have long argued for the value of argument as a pedagogical tool (Graff, 2008; Greenbaum, 2012). Likewise, the past three decades have seen a steady movement towards theories which present cognition as externalized and intersubjective (Lotier, 2016; Trimbur, 1987). When writing studies scholarship and recent CT scholarship are put in conversation, though, points of both convergence and divergence are revealed. First, it must be noted that though interactionists believe humans are designed to think in groups, both Mercier and Sperber (2017) and Kuhn (2018) believed that solitary reasoning ability can be improved. To spark improvement, we need to get better at certain types of group behavior. In particular, these scholars have suggested instruction in the art of argument.

In the aptly titled “Natural-Born Arguers,” Mercier, Boudry, Paglieri, and Trouche (2017) made a case that because reasoning is inherently argumentative, to do it better, we need to learn to argue better. Towards this end, they suggested that educational efforts focus on promoting argument production rather than evaluation. They sidelined the teaching of fallacies, training in logical analysis, etc. This is because, as noted, empirical evidence indicates that humans are already quite good at spotting weak arguments. The problem is that we are programmed to avoid scrutinizing our own ideas. Given this state of affairs, the interactionists believe that the best way to improve reasoning is not by asking thinkers to challenge their current ideas directly, but instead moving them to engage with alternate ideas. Counterarguments can thus “win out” in comparison.

Argumentation improves thinking by demanding engagement. Certain structural conditions need to be met, though. In particular, there needs to be sufficient disagreement, the open exchange of ideas, and freedom for participants to change their minds. Given these conditions, social dynamics work to promote optimal outcomes. Whether in a philosophy seminar or a conversation at the local bar, the experience of having a claim dismissed is uncomfortable. To avoid this feeling, when engaged in open debate, we exert extra cognitive effort to consider alternate ideas. We listen more closely, try to understand (as to rebut). Thus, the interactionists claim, properly structured argumentative environments not only provide exposure to counterarguments but move us to engage relatively more intensely with them. This mitigates myside bias, increases the likelihood of conceptual change and ultimately, improves individual reasoning.

So engaging in argumentation can help us think better. What about transfer, though? Is there any evidence that debating one issue can improve reasoning performance when we turn to another topic, enter another discipline? Unlike hard specificists such as Katz (2018), interactionists believe that transfer between scenes of thinking is possible. For example, in a much-cited study, Kuhn and Crowell (2011) showed that students immersed in a culture of group discussion and debate significantly increased solitary reasoning performance, even on topics far removed from the topics debated (see also Resnick, Asterhand, & Clarke, 2013). This suggests there is indeed something like a generalized or generic CT ability that can be improved with practice. It seems again that counterarguments are key. Following Vygotsky (e.g., 1934), interactionists view solitary reasoning as internalized group discussion (Kuhn, 2018). The more experience we have in group discussion, they believe, the more “voices in our heads.” These voices may or may not provide evidence bearing on the topic at hand. Still, their mere existence decenters a thinker ever so slightly, reminding them to seek out additional viewpoints. As a result, with more debate experience, more counterarguments are generated, thus once again mitigating myside bias and improving reasoning outcomes.

A pedagogy proposed by Kuhn (2018) put the above theory into practice. It is described as “experiential,” seeking to cultivate “argument skills and values” through “sustained and dense practice in rich environments that require those skills and values” (p. 123). The main activity involves pairs of students debating controversial social issues via electronic chat. Because each pair must decide together what to communicate, students have the opportunity to engage in both deliberative argument (the goal of which is to build consensus) and disputive argument (the goal of which is to weaken alternative positions). The electronic format allows for sustained review of reasons as well as metacognitive reflection. The underlying premise is that through the purposeful use and analysis of reasoned discourse, students will become more attuned to reasons and gain enhanced

facility in deploying them. This should increase both argumentative skill and CT ability. “In Vygotsky’s terminology,” Kuhn wrote, “the inter-mental with practice [will become] interiorized and transformed into the intra-mental” (p. 123).

Now, if we wished, writing teachers could simply adopt Kuhn’s (2018) pedagogy. At the very least, we could structure our courses to ensure that students engage in substantial amounts of deliberative and disputive argumentation. There’s empirical evidence to suggest that in doing so we could legitimately claim to be teaching “critical thinking.” I think it is perfectly valid to stop at this point. We could also go a step further, though. As we’ve seen, when reason is understood as interactive, our reasoning environments, the structures in which we think, take on added import. Often, as in the case of jury deliberation or the scientific enterprise, these structures exist expressly to help us overcome the (very obvious) limits of individual reason. At all times, though, socio-material structures are integral to the cultivation of individual thinking ability. With this in mind, I’d argue, CT instruction might undergo more radical alteration. Rather than merely creating classroom environments conducive to healthy thinking and argument, we might teach students how to create said environments. We might help students construct and maintain those structures within which reason functions best.

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In the above pages, I’ve detailed the interactionist approach to reason, which holds that humans reason in order to argue, in order to socially justify beliefs and actions. From this premise, interactionists suggest that to reason better we learn to argue better. Indeed, Mercier et al.’s (2017) prime recommendation for improving CT ability is “to make people argue more and better by creating felicitous conditions for group discussion” (p. 1). With composition’s long history of theorizing classroom interactions and rhetoric’s even longer history of theorizing debate and argument, rhetoric and composition is uniquely suited to take up this call. Some might even say that our field has always been “interactionist.” All the better. The cognitive sciences are (finally) moving in our direction. My claim is that rhetoric and composition—and particularly first-year writing—can leverage this movement to take ownership of the CT construct. In broad terms, this involves presenting writing class as a space where students learn to construct and maintain environments conducive to productive reasoning. Rather than mere enculturation, in other words, we teach construction. Rather than learning how to learn (academic) languages, students learn how to build (academic) disciplines. To achieve this end, I suggest we design pedagogies around three elements: problem-posing, mutuality and dissensus. As we’ll see, each one of these elements has a long history in writing instruction.

If students are to engage in reasoning, they of course need something to reason about. As John Dewey most notably argued, the act of reasoning (reflective thinking, as he calls it) is in no way natural or inevitable. Instead, we think, and thus learn, in response to problems. In particular, to trigger critical thought students need to be exposed to what John Bean (2011) called “ill-structured” problems. These are problems that don’t have a clear solution, that must be resolved through negotiation, through the identification, exchange and evaluation of reasons. At its most basic level, CT instruction from an interactionist perspective asks that we immerse students in the negotiation process, that we allow them

“sustained and dense practice in rich environments that require [reasoning] skills,” as Kuhn (2018) wrote.

Though he didn’t present it as such, Adam Katz’s (2018) argument for a “praxis of entry” models the creation of a group reasoning environment. He presented his students with a problem (an ungrammatical poem by Gertrude Stein) and asked them to solve it, in this case by constructing a “critical discourse” that explains how the poem could be made grammatical (p. 5). From an interactionist perspective, Katz’s pedagogy has much to recommend it. We can imagine students presenting arguments as to how Stein’s text should be read. Other students respond, pointing out variables which their classmates failed to consider. Out of this project of exchanging reasons a new discourse emerges. In the process of creation, students practice and improve argumentation skills, which are then internalized, improving individual reasoning ability.

So how does an interactionist take alter Katz’s (2018) pedagogy? Well, first off, it foregrounds the importance of group dynamics. In doing so, we see that problems not only trigger the reasoning process, but also serve an important social function, in that in any group reasoning environment, the problem to be addressed provides the touchstone by which claims, reasons and evidence are to be judged. From an interactionist perspective, therefore, the ability to identify and define problems is itself an important CT skill (as it helps the group get on with its work). Here, Katz defines the problem for his students. An interactionist might worry that in doing so, he robs them of a valuable learning opportunity.

This critique hits upon my second suggested element: mutuality. David Wallace and Helen Rothschild Ewald (2000) described this term as denoting course design which works to “establish reciprocal discourse relations” among teacher and students, and thus allow for knowledge building through “dialogic interaction” (p. 4). Mutuality may involve granting students interpretive agency, as to bring prior experiences to bear on the construction of knowledge. It may also involve sharing responsibility as to course design. The general idea, as I see it, is that the writing classroom be a space of negotiation, both between students and between teacher and students. Integrally, Wallace and Ewald also make clear that the classroom is a *constructed* space. And they suggest that to position students as true knowledge makers (instead of passive knowledge recipients), they be given a say in the construction process. From an interactionist perspective, allowing students this right is essential. The core insight of the interactionist approach to reason, remember, is that social dynamics shape individual thought. To teach CT, therefore, is not to teach internal processes like “logical analysis.” Instead, it is to teach students how to construct *reasoning structures* and how to successfully operate within those structures.⁵ This sort of learning can’t happen when the teacher is micromanaging interpretations or interactions. Instead, students must do the construction work themselves.

Of course, the idea that students should be responsible for their own learning is not novel. What is novel, I believe, is the idea that what *transfers* in a CT pedagogy are not specific patterns of thought but the *social skills* necessary to produce productive patterns. Typically, even in the most enlightened writing pedagogies, teachers are seen as the sole holders of organizational or managerial skills. Students are seen as actors within the environments teachers organize and manage. As an example, consider John Bean’s classic text *Engaging Ideas* (2011), perhaps the definitive account of the relationship between writing and CT. This text, Bean wrote, “suggests numerous ways that teachers can coach critical thinking, including guiding discussions, critiquing solutions developed by small groups, writing

comments on student drafts,” etc. (p. 8). These are all important pedagogical activities, of course. They do indeed promote productive reasoning. But what happens when the teacher is no longer around to guide discussions, critique solutions or write comments? When, per the interactionist approach, we see reasoning as a group competency, rather than an individual one, this becomes a troubling question.

Within the rhetoric and composition literature there are numerous models of mutuality in action. For our purposes, the collaborative learning approach of Kenneth Bruffee is perhaps most instructive. Like the interactionists, Bruffee (1984) drew on sociolinguistic thinkers such as Vygotsky to assert that “human thought is consummately social” (p. 5). In his recommended pedagogy, knowledge is made via negotiation, internalized, and then reintroduced into the social realm via writing. To learn to write, students first learn to converse. “To think well as individuals,” Bruffee argued, “we must learn to think well collectively,” which involves “learning to converse better and learning to establish and maintain the sorts of social contexts” which promote socially desirable conversations (p. 6). In these lines, we see proto-interactionism. Good thinkers and good writers are made from the outside in. Thus, the construction and maintenance of social relations becomes a key part of the writing process. In Bruffee’s classroom students learn to develop and maintain productive social relations by working together to achieve shared goals. They pool knowledge, negotiate meanings, and help correct each other’s biases and blind spots. In other words, they do the same work as scientists or jurors.

In Bruffee’s (1984) proposed pedagogy, the desired outcome is enculturation into a broadly defined academic discourse community. Because Bruffee conceived discourse communities as defined by consensus, widespread agreement is the ultimate goal. No doubt, deliberative or consensus-seeking dialogue is an important part of group reasoning activity. As we’ve seen, though, the interactionist approach makes clear that disputive dialogue (adversarial argument) is also important. Interactionists believe, remember, that humans are designed to present reasons (for their own intuitive beliefs) and challenge the reasons of others. Through this give-and-take, knowledge is made and individual thinking improved. Disagreement and difference of opinion are thus to be celebrated and cultivated. In this regard, the interactionists align with critics of Bruffee’s consensus-seeking, collaborative approach. John Trimbur is one such critic. It is from his work that I draw my third suggested element: dissensus.

Critiquing Bruffee, Trimbur (1989) argued that discourse communities, rather than being defined by consensus, are defined by a thoroughgoing “rhetoric of dissensus,” as groups and individuals with different interests, values and levels of access jockey for voice and position (p. 470). He wanted students to be able to identify these differences and position them in relation to each other. To do so, Trimbur suggested that the writing classroom make consensus itself an object of analysis. How does it function? What (and who) does it exclude? It seems to me that a CT pedagogy based on interactionist principles would take up Trimbur’s call. As noted, optimal reasoning outcomes require difference. Critical thinkers, as I’ve defined the term, are those able to build complex and variegated reasoning structures. They are willing and able to identify different perspectives and restructure relations as to bring in that (and those) previously excluded. This, in turn, requires attention to issues of evidence and validity, to the standards by which reasons are judged. And it might also involve reworking these standards. Once again, I would suggest that these are skills that

transfer between contexts. And they are fundamentally *social* skills, as they involve recognizing and rearranging social relations.

To summarize, I've argued that a writing course that claims to teach generalized CT skills might be designed around three principles: problem-posing, mutuality and dissensus. In the course I propose, students work together to identify, define and address ill-structured problems. Integrally, they are also responsible for designing and maintaining the socio-material structures necessary to formulate solutions. These structures will inevitably include people, tools and language. They might be simple in-class debates or peer-feedback sessions. Or they might be semester-long team projects, necessitating multiple instances of empirical research and input from numerous, differently situated stakeholders. In all cases, the goal for students is to maximize quantity and optimize quality of group reasoning—defined simply as the exchange and evaluation of reasons.

Different instructors, of course, may have different ideas about what students need to know in order to do the above work. Rhetorical theory might be useful, as might recent empirical research about thinking and reasoning. I would suggest, though, that in all cases an effort be made to draw students' attention to issues of evidence and validity, to the standards by which reasons are judged. The goal in doing so, from an interactionist perspective, is both to improve argumentation skills and to increase students' ability and desire to identify and engage alternate ideas and points of view.

I also suggest that throughout the learning process the instructor act not as an ultimate authority, but as a coach or facilitator. Kenneth Bruffee (1984) captured this idea when he wrote that the teacher's task in a collaborative classroom "is to help students negotiate the rocks and shoals of social relations that may interfere with their getting on with their work together" (p. 9). Ultimately, in an interactionist classroom, how to optimize these social relations is what students learn and what transfers to other writing and thinking contexts. "How to optimize" is bound to be different for each learner. It's also likely to be highly tacit, the sort of ability one can only cultivate through active doing. In keeping with Katz's (2018) interest in grammar, perhaps we can say that each student must formulate a sort of personalized "social grammar," a set of principles to guide their reasoning activity now and in the future.

What role does writing play in my proposed pedagogy? Simply put, writing is everywhere. From the very first day, it is made clear that writing is a key component of any reasoning structure. It is a *reasoning technology*, used across contexts both to facilitate the reasoning process and to reflect that process. Towards the former, students might comment on each other's draft solutions. They might chart their classmates' varying positions or use a journal to track how their own thought is developing. Towards the latter, they might create texts which incorporate multiple voices and perspectives, and which articulate and rebut counterarguments, explaining how and why they are counter. In student texts, knowledge made (reasoning product) would not be irrelevant but would be of secondary import to evidence of ongoing negotiation (reasoning process). In this regard, we can say that, in the FYW course I propose, writing works to make the social nature of reasoning visible. Through writing, students come to better understand how the outside shapes the inside, how group activity informs individual cognition, and how this relationship can be turned to their

advantage. No matter the site or discipline, such knowledge is essential to the creation of reasoning structures. It is thus essential to critical thinking. My claim is that when FYW works to cultivate such knowledge and provides a space in which it can be put to use, it can rightfully be called *the* critical thinking course.

Notes

¹Robert Ennis and John McPeck are the preeminent emissaries of these respective positions. For a summary of their debate, see McPeck (1990).

²Though I will not address the issue in this essay, the interactionist approach also has important implications for how we understand writing across the curriculum (WAC) and writing in the disciplines (WID). Working from interactionist principles, WAC/WID proponents might consider how reasoning structures are constructed within certain disciplines. For example, what norms govern feedback and peer review? They might then suggest ways in which rhetoric and writing can be used to optimize these practices.

³For Siegel, as for many CT proponents, to be “appropriately moved” means to follow the dictates of logical analysis. Of course, this sort of logocentrism has long been challenged by others in the CT movement (see Kuhn, 2018; Walters, 1994). Still, though, the connection between CT and reasons (and reasoning) remains.

⁴Mercier and Sperber’s work has been well received by scholars in argumentation and informal logic (Yáñez, 2012), cognitive psychology (Chater & Oaksford, 2018), and philosophy (Vélez, 2019). For an in-depth evaluation and critique of the interactionist program, see the winter 2019 edition of the philosophy journal *teorema*.

⁵As I see it, a “reasoning structure” inevitably consists of humans, human technologies (e.g. procedures for giving and receiving feedback), non-human technologies (e.g., physical tools), and discursive technologies (e.g., language, concepts, narratives). The ability to “function well” within a reasoning structure requires technical skills as well as certain values and dispositions. In regard to the latter, John Duffy’s (2014) articulation of the “rhetorical virtues” could be a useful guide.

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