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Willingness to inquire: The cardinal critical thinking virtue

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ABSTRACT: Critical thinking skills have associated critical thinking virtues, and the internal motivation to carefully examine an issue in an effort to reach a reasoned judgment, what I call the "willingness to inquire", is the critical thinking virtue that stands behind all skilled and virtuous thinking that contributes to critical thinking. In this paper, I argue that the willingness to inquire is therefore a more primary critical thinking virtue than charity, open-mindedness, or valuing fallacious-free reasoning.

KEYWORDS: critical inquiry, critical thinking, skills, virtues, judgment, open-mindedness

1. INTRODUCTION

Critical thinking theorists are nearly unanimous in their contention that critical thinking is a purposeful kind of thinking with special aims, an educational ideal that should be the center of a liberal education, and that the ideal critical thinker possesses certain cognitive abilities as well as certain motivations, dispositions, attitudes, and habits of mind: in short, that the critical thinker is a special sort of person with a special kind of intellectual character. Still, just how critical thinking skills are connected to the character of the critical thinker remains the subject of disagreement.[1] This, despite such consensus statements as are found in Facione (1990), which assert that "each cognitive skill, if it is to be exercised appropriately, can be correlated with the cognitive disposition to do so" (p. 11), and "that being adept at [critical thinking] skills but habitually not using them appropriately disqualifies one from being called a critical thinker at all" (p. 12).

In this paper I attempt to illuminate the connection between critical thinking skills and the character of the critical thinker, with her panoply of motivations, dispositions, attitudes, and habits of mind: what I collectively call "critical thinking virtues". I argue that critical thinking skills indicate associated critical thinking virtues that good critical thinkers should possess and manifest, and that there is one central critical thinking virtue without which those skills will not be appropriately employed in efforts to think critically. Rather than charity, open-mindedness, valuing non-fallacious reasoning, or any other important critical thinking virtue that

[1] For a canvassing of that disagreement, see Tishman & Andrade (1996).

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some scholars have named, and that I argue are also indicated by associated critical thinking skills, it is first and foremost the internal motivation[2] to engage in the process of critical thinking aiming towards its ends that is a necessary condition for any person justifiably to be called a critical thinker.

While I believe this thesis applies to most mainstream conceptions of critical thinking, in order to illustrate how critical thinking skills and virtues are connected I follow Bailin and Battersby's (2010) definition, stipulating that critical thinking is the process of engaging in critical inquiry: the careful examination of a controversial question in an effort to reach a reasoned judgment (p.4). This definition has the benefit of being current, concise, and resembling other mainstream conceptions by stressing that critical thinking is an interpretive and evaluative judgment–making process, based on criteria, requiring the critical thinker to possess both skills and virtues. Though I will not argue the point here, it also satisfies the criteria Johnson (1996) claims any definition of critical thinking should meet; for these reasons, I consider Bailin and Battersby's definition to be one of the more superior conceptualizations of critical thinking on the market.

Given their definition, I argue that critical thinkers should possess and manifest what I call the "willingness to inquire": the internal motivation to engage in the process of critical inquiry, seeking reasoned judgment through a careful examination of controversial questions. While no critical thinking theorist has put the point like this, I find that my formulation is indicated by some major contemporary treatments of critical thinking, such as Bailin and Battersby (2010), who claim that critical thinking involves "a commitment to base beliefs and actions on inquiry" (p. 197), as well as Bailin and Battersby (2007), who argue for the central importance of "reason appreciation" in efforts at critical thinking. Like-minded theorists also include Paul (1990), who thinks that a skilled thinker who does not possess the proper values should only be considered a critical thinker in a "weak sense"; Siegel (1988), who argues for the "critical spirit" of the critical thinker in his "reasons conception" of critical thinking, part of which includes a motivational component whereby a critical thinker is "moved" to seek reasons and act and believe on the basis of them; Ennis (1996), who acknowledges that the inclination to think critically is "a necessary component of, perhaps the essence of, a [critical thinking] disposition" (p. 166); Facione (1990), whose consensus statement on critical thinking as cited above recognizes that if someone is not disposed to use her critical thinking skills then she cannot properly be called a critical thinker, characterizing the disposition to think critically as the "consistent internal motivation to use [critical thinking] skills to decide what to believe and what to do" (Facione, 2000, p. 73); Norris (1992), who argues that if a person does not spontaneously use an ability then she might not have the disposition to do so, but that critical thinkers should have this disposition; and even Missimer (1990), who ironically argues *against* any "character view" of critical thinking but who admits

[2] Cf. the concept of "intrinsic motivation" in psychology, as discussed in the meta-analysis of Deci, et al. (1999). They describe the phenomenon as a "prototypic instance of human freedom or autonomy" in which people engage in an activity "with a full sense of willingness and volition" (p. 658).

that there is some minimum level of "enthusiasm" (p. 149) that leads to the habit of thinking critically.

This formulation is also consistent with recent attempts by argumentation theorists such as Cohen (2005, 2007) and Aberdein (2010) to examine a virtue theoretic approach to argumentation, inspired in part by virtue epistemologists such as Zagzebski (1996).[3] Both Cohen and Aberdein indicate that the "willingness to engage in serious argumentation" is an important argumentative virtue (Cohen 2005, p. 64; Aberdein, 2010, p. 175). My thesis in this paper takes an analogous approach to thinking about critical thinking virtues; however, since argumentation is only one aspect of critical inquiry, the critical thinking virtues represent a broader range of virtues than those Cohen and Aberdein examine.

In addition, this formulation is consistent with some classic attempts to articulate the educational ideal of critical thinking, such as Dewey (1910, 1933) who stresses an attitude of inquisitiveness necessary for critical reflection, and Glaser (1941), who was the first critical thinking theorist to call the panoply of virtues including the motivation to think critically "the spirit of inquiry" (p. 10).

My treatment is also made more plausible by one recent empirical study by Mª Nieto & Valenzuela (2012), which shows that the skills of critical thinking are "activated and maintained" by a motivational component that allows a thinker to gain proficiency in those skills, helping her to become a habitual critical thinker (p. 36). What makes my formulation novel is that I conceptually connect specific skills with specific virtues, contending that the willingness to inquire is the cardinal critical thinking virtue that ranges over all skills and virtues employed in efforts to think critically.

Anticipating one objection, while Facione (2000) concludes on the basis of his important empirical study (Facione & Facione, 1997) querying the link between critical thinking skills and dispositions that "it may be unwise to advance a theory that explicitly or implicitly pairs one and only one [critical thinking] skill in a positive correlation with one and only one [critical thinking] dispositional factor" (Facione, 2000, p. 78), my thesis in this paper avoids this mistake, because I do not claim a correlation between one and only one skill, and one and only one disposition. On the contrary, I maintain that the willingness to inquire is only the central motivating virtue, necessary though not sufficient for a person to be a critical thinker. In addition, my thesis here regarding critical thinking skills and virtues does not posit a "powerful [and] positive automatic correlation" (p. 81), but on the contrary is a conceptual claim with programmatic implications: in our efforts to teach students how to be better critical thinkers outside of the classroom, we should help them to become not only skilled thinkers, but particular kinds of people who value certain ways of thinking and approaching judgments (Cf. Bailin & Battersby, 2007). Since thinkers can be skilled without employing those skills appropriately, and since being virtuous in one's thinking and in one's life is anything but automatic for most people, we should therefore seek to foster in students the related virtues that will enable them to appropriately employ the skills necessary for making

[3] For an excellent canvassing of the various strands of virtue epistemology, see Battaly (2008).

reasoned judgments. This is important because it implies that critical thinking instruction should seek not only to teach important thinking skills, but to nurture the internal motivation to think critically, along with other virtuous intellectual character traits as well.

I will proceed by first presenting what I take critical thinking skills to be. Then I will articulate how associated critical thinking virtues are indicated by those skills. Next, I will argue for why the willingness to inquire is the cardinal critical thinking virtue. Finally, I will present a rebuttal against Missimer (1990), who has argued against any "character view" of critical thinking, but whose critique I find ironically corroborates my view. My conclusion is that critical thinking virtues are required if a thinker is to put her skills to appropriate use in intellectual efforts aimed at reasoned judgments. We should seek to foster such virtues in our students, and we should only call a person a critical thinker if she possesses those virtues, especially the central motivating virtue that is the willingness to inquire.

2. CRITICAL THINKING SKILLS

Critical thinking skills are those learned technical masteries of cognitive activities that a person must possess and be able to perform proficiently if she is to engage in critical inquiry. By conceiving of critical thinking skills in this way I follow the consensus found in Facione (1990), in thinking that critical thinking skills are like any other kinds of skills, in that they are special kinds of purposeful abilities "to engage in an activity, process, or procedure" (p. 14). What makes critical thinking skills special is that they are abilities that contribute specifically to the process of critical inquiry, and to achieving its ends, which are reasoned judgments.

For instance, one important critical thinking skill that is often used in the process of critical inquiry is the ability to identify an argument and its illative core (Cf. Blair, 1995; Johnson, 2000): the conclusion, and its supporting premise or premises. Since arguments are relevant considerations in making reasoned judgments, a skill such as argument identification is therefore properly considered a critical thinking skill when it is employed towards that end. This is the case, even if the skill of argument identification could be put to other uses, such as an attempt to dogmatically or otherwise single-mindedly defend a view from alternative perspectives in a debate. But then, in being employed towards this end, a person should not be considered to be performing a critical thinking skill, though she would still be performing a skilled thinking activity.

Argument identification is only one specific skill that is usually (perhaps necessarily) employed in the process of critical inquiry, however. Theorists agree there are many other skills as well, such as argument analysis and evaluation, clarifying meanings of terms and statements, evaluating authorities and sources, identifying and making inferences, formulating what is at issue, and examining plausible alternatives, among others. These are all activities that contribute to critical inquiry, because they are all relevant to making reasoned judgments. So, if a thinker is not a skilled thinker in these and other ways, she is not a critical thinker.

3. CRITICAL THINKING VIRTUES

Even though being a skilled thinker is a necessary condition for being a critical thinker, however, it is not a sufficient condition for being a critical thinker. One must also be a virtuous thinker, possessing and manifesting what I call the critical thinking virtues. Critical thinking virtues are those excellences of a person's character that enable her to put her intellectual skills to appropriate use in the process of thinking critically, aiming towards reasoned judgments. They are the character traits, motivations, values, dispositions, and other habits of mind that, when coupled with technical masteries, allow a thinker to engage in the interpretive and evaluative process of critical inquiry.

The reason why the critical thinking virtues are necessary for a person to engage in critical thinking approaching the ideal, is that a person can be a highly skilled thinker yet not aim towards reasoned judgments when she employs her skills, or a person can be a skilled thinker aiming towards reasoned judgments yet never be disposed to employ those skills, or a person could be disposed to use her skills aiming towards reasoned judgments, but be compelled, coerced, or otherwise improperly disposed to so employ them.

In the case I mentioned above, for instance, someone who is highly skilled in debate will most likely have a technical mastery of rhetoric, public speaking, logic, and argument identification; yet for all her skill in these areas, since the ends she has in mind when she employs those skills are *not* to reach a reasoned judgment, but rather to win the debate, defending a view at all rhetorical costs from alternatives, then the critical thinking virtues will not come into play, and her skills will be enough for her to fulfill her ends. In the case of the single-minded debater, given her purposes, her skills will not be employed in a way that will lead to a reasoned judgment. Such a person is not thinking critically.

In the case of a person who is a skilled thinker and who *does* aim towards reasoned judgments, we can imagine her not employing her skills to that end because of her intellectual laziness or carelessness. In that case she might haphazardly and prematurely latch onto a claim that is not the main claim being supported, and this would constitute an example of a skilled thinker who has the right ends in mind, but who nevertheless employs her skills in an intellectually vicious enough way such that they are not put to appropriate use considering her aims. This person also is not thinking critically.

Finally, imagine a person who is a critical thinking student in a classroom where employing her skills aiming towards reasoned judgments is required of her: we can imagine her employing her skills aiming towards reasoned judgments *only* in that context. Such a student might be thinking critically in the classroom, but she is doing so because she knows she must in order to earn a passing mark in the course. Outside of the classroom she might not value critical inquiry such that she is disposed to engage in it when the opportunity presents itself. Such a person is not a critical thinker, even if she thinks critically when she is compelled to.

In all of these cases we have examples of thinkers who are skilled but who lack the proper virtues to put those skills to appropriate use in efforts at critical inquiry. But the same cannot be said for someone who is a critical thinker: such a

person not only possesses relevant skills, but also relevant virtues that enable her to employ those skills appropriately to the ends of critical inquiry. For instance, given the skill of argument identification, a critical thinking virtue necessary to employ that skill in a process of critical inquiry is charity: the disposition to fairly interpret whether that which is under consideration is an argument, and if so, what the conclusion and supporting premises are. The reason why charity is necessary to employ the skill of argument identification in critical inquiry is this: if employed uncharitably, such that whatever is under consideration is unfairly or otherwise viciously interpreted, then this stands in the way of the ends of critical inquiry, prohibiting a proper evaluation from being carried out and a reasoned judgment from being reached. So to be able to perform the skill of argument identification in the service of critical inquiry, one needs more than sheer technical mastery at interpreting and identifying arguments. In addition, one needs to identify arguments in a virtuous way: with charity, in other words, *attentively* considering the context, *carefully* extricating whether and what argument is at hand, and *fairly* interpreting what is concluded, and what ostensibly provides the support for that conclusion.

One can be skilled at argument identification without being charitable, but then one must have some other aim in mind besides reasoned judgment when one uses that skill uncharitably. For instance, a politician who interprets her opponent's reasoning in an unfair way might be very skilled at argument identification, but because her purpose is to sway public opinion away from her opponent, her skill at argument identification need not be employed charitably, even though it still may be used in an effective way to achieve her ends.

The same can be said for other critical thinking skills: associated critical thinking virtues are indicated when these skills are put to use in the service of critical inquiry. For instance, to evaluate an argument as part of a process of critical inquiry one must be open-minded: ready to entertain the argument on its merits without deciding beforehand whether it is cogent or not, ready to revise one's view should the argument prove to be stronger than, yet contrary to, a prior view one holds (Cf. Hare, 1979), and ready to admit one's own fallibility (Cf. Riggs, 2010). One can evaluate arguments skillfully without being open-minded, but then one must have other aims when using that skill. A defense attorney, for instance, might evaluate the prosecution's arguments with great skill, but since the end in view is to acquit her client, an open-minded approach to the opposing arguments is not required for her to be effective in her aims.

As a final example, take the critical thinking skill of inference. Making good inferences and avoiding bad ones, as well as being able to recognize good and bad inferences that are made by others, is a key critical thinking skill that is required to reach reasoned judgments. However, inferences can be made fallaciously yet be perfectly efficacious in helping one to achieve some end other than reasoned judgment. For instance, an appeal to popularity is an effective way for an advertiser to sell a product. Appealing to popularity, however, tends to be a poor way to reach a reasoned judgment. A critical thinker must therefore make inferences in a way that avoids fallacies such as an unwarranted appeal to popularity, whereas an advertiser need not so long as it helps her to sell her product. Valuing thinking that is non-fallacious is therefore an important critical thinking virtue that enables a

person who is skilled at inference making and identification to put those skills to appropriate use in making reasoned judgments.

4. WILLINGNESS TO INQUIRE

There is one critical thinking virtue, however, without which no critical thinking skill could ever be employed appropriately in critical inquiry. For regardless of the critical thinking skill, without the internal motivation to use it and a disposition to employ it in efforts at critical inquiry it would either not be employed at all, or employed inappropriately such that it would not contribute to the process of reaching reasoned judgments. In the case of the single-minded debater, the politician, the defense attorney, and the advertiser, whatever skills they employ in their intellectual efforts, they are surely not employing them in efforts to reach reasoned judgments, but for other ends.

For a critical thinker, however, since the ends of her skilled thinking are reasoned judgments reached through a process of critical inquiry, the necessary and central virtue she must possess and manifest before all others is a willingness to inquire: an internal motivation that enables her to employ her skills appropriately, aiming towards reasoned judgments. Such a person recognizes the value of going through that process aiming towards those ends, and is guided by that process in her intellectual efforts. She appreciates the power of critical inquiry and is willing to seek reasoned judgment thorough a careful examination of an issue. In the case of the student who is required to think critically, her skills are wasted outside of the classroom because she does not appreciate inquiry. Without the willingness to inquire, this student will never be a critical thinker.

This is therefore the cardinal critical thinking virtue without which critical thinking skills could not be put to appropriate use aiming towards reasoned judgments, but it is also the principal virtue that stands behind other critical thinking virtues, such as charity, open-mindedness, and valuing non-fallacious reasoning. These other critical thinking virtues are important, but it is a willingness to engage in critical inquiry aiming towards reasoned judgments that stands behind their manifestation in that process.

This is not to say that one cannot be open-minded or exhibit any of the other virtues without having the willingness to inquire. One could be the most open-minded person yet not at all be interested in critical inquiry, but only interested in open-mindedness for the sake of making friends, changing her opinion to curry favor, admitting fallibility to be congenial. But then such an open-minded person could hardly be said to be a critical thinker, even though she evaluated arguments in the most open-minded of ways. If one is to be open-minded *in the process of critical inquiry*, then one must of necessity also have the willingness to engage in that process. So, following Siegel (2009), it seems clear that open-mindedness is necessary though not sufficient for critical thinking, critical thinking is sufficient though not necessary for being open-minded, but I would add that the willingness to inquire is necessary (though not sufficient) if one is to be open-minded in critical inquiry: without the willingness to engage in that process, one cannot be open-minded in that process (Cf. Hare, 1979). The same can be said for the other critical

thinking virtues: the willingness to engage in critical inquiry ranges over the virtuous application of skills that are used to that end.

5. A RESPONSE TO ONE DETRACTOR

I believe my formulation of the critical thinking virtues is consonant with most theorists' take on what are commonly called "critical thinking dispositions" or for some, such as Siegel (1988), following Passmore (1980), "the critical spirit", and Bailin and Battersby (2010), following Glaser (1941) "the spirit of inquiry". This gives my formulation some plausibility, for while theorists are not agreed on exactly how to formulate the educational ideal of critical thinking, nor precisely how to conceive of how critical thinking virtues connect to critical thinking skills, what I believe most implicitly, and sometimes explicitly (e.g., Hare, 1979) agree upon is that in order to think critically one must be both willing and able to do so. My formulation connecting the skills of critical thinking to associated virtues specifies just how this willingness and ability are linked: given the special aims of critical thinking, and the special skills that are required to pursue those aims, there are associated virtues without which the skills will not be appropriately employed. In the pragmatic endeavor of teaching students how to properly employ their skills, we aim towards an ideal that includes the willingness to employ those skills. We should therefore foster in them the associated virtues.

What remains in this paper is for me to briefly show how my formulation falls in line with some other major extant formulations. But rather than showcase all the views that do so, which I believe are too many for this treatment to allow, and a few of which I briefly summarized in the introduction to this paper, I will focus on just one: Missimer (1990, 1995). Ironically, I find that even though she is the most outspoken critic of critical thinking virtues, with her ostensible rejection of critical thinking "character", her articulation of that critique nevertheless concedes my basic point regarding the willingness to inquire, and is consistent with the mostly implicit consensus view that critical thinking skills require the internal motivation to use them.

Missimer attacks the "Character View" of critical thinking, and defends the "Skill-View". According to her, the Character View is the view that "the critical thinker has certain character traits, dispositions, or virtues" (Missimer, 1990, p.145), in line with the consensus view of the ideal critical thinker. The Skill-view, by contrast, is the view "that critical thinking is a skill or set of skills" (ibid). Missimer complains that different versions of the Character View, are "advanced without much analysis"; "are inconsistent"; are such that "historical evidence can be brought against" them; are not as "exciting" as the skill view; and that they "smuggle in moral prescriptions" (ibid.). Rather than rehearse these arguments against the critical thinking virtues and reply to each of them in turn, which I believe Siegel (1997) has already done admirably, I will stress how Missimer's overall attack rings of incoherence, as she concedes that the critical thinker must possess the habit of thinking critically, implying what she herself calls a "minimalist" Character View

position (Missimer, 1990, p. 149).[4] In a word, Missimer's self-styled "ugly stepchild" (Missimer, 1995, p. 8) conceptualization of critical thinking is not a skills-alone view, and does not represent a plausible alternative to major extant conceptualizations of critical thinking: critical thinking is not just a skill, even if it is a thinking process that necessarily involves skill. This is important in light of the emergence of pedagogical tactics to teach the critical thinking virtues (E.g. Sanders, 2013; Battaly, 2006; Tishman, Jay, & Perkins, 1992). We really should be explicitly attempting to instill in our students the internal motivation to think critically, along with other virtues without which critical thinking skills could not appropriately be employed in efforts at critical inquiry.

The incoherence of Missimer's position comes when she discusses the Skill View as being the "minimalist character position: that the only trait necessary [to be a critical thinker] is a disposition to think critically" (Missimer, 1990, p. 149). Missimer says that "to be (thought) a mathematician, historian, [or] sailor, you must do a lot of mathematics, history, [or] sailing as a result of acting on your disposition to do so," and likewise, to be thought a critical thinker, one must do a lot of critical thinking as a result of acting on a disposition to think critically. While Missimer thinks this sounds tautological and trivial (ibid.), rather than also concede that her concept of the critical thinker involves character in an important way, she goes on to say that "[o]ne could think of these dispositions to do critical thinking (or mathematics, sailing, etc.) as character traits; one could as easily think of these activities as habits born of skill and enthusiasm to keep up the habit" (ibid.).

However, Missimer's reasoning denying that the disposition to think critically is an important character trait is unconvincing, when one notices that she describes the habitual critical thinker as one who has a certain "enthusiasm" to think critically, and enthusiasm, especially when it is manifested habitually, is surely a character trait of a person.[5] The enthusiasm to sail or think critically is certainly not a skill, even if through the skillful practice of thinking critically or sailing an enthusiasm for those activities is nurtured. But in any case we should not take that enthusiasm as a result of practice for granted, as Missimer does when she says that "[i]f you get [students] to practice the skills in a myriad of areas but do not tell them that they should have the disposition to do critical thinking, you are teaching the disposition in the sense that you are instilling the habit of critical thinking" (ibid.). This claim is dubious at best. Even in the habitual exercise of some skill it is not a foregone conclusion that the disposition or motivation to use that skill (or an "enthusiasm" to use it, or as I would call it, a "willingness") will thereby be developed. A person might sail every day because her rich father insists on it; she might as a result become a quite skillful sailor; and at the same time she might never wish to sail on her own, never developing the enthusiasm for sailing that would lead her to value and appreciate her sailing skills and to willingly use them away from

[4] Siegel (1997, p. 65) briefly mentions this incoherence as a reason to reject Missimer's position, but does not elaborate. He wonders how her view is a skills alone view when for her doing critical thinking is always "a result of having wanted to" (Missimer, 1990, p. 149).

[5] Cf. Hare (1993), who stresses that enthusiasm is a central intellectual virtue that good teachers should possess and seek to foster in their students (p. 24).

her father's boorish insistence that she sail. The same can be said for any skilled activity, including critical thinking: just because we drill the skills of critical thinking does not mean we instill the will to think critically. Therefore, nurturing in students a respect for inquiry and a willingness to go through that process is not an exercise in triviality based on a mere tautology, but is vitally important for their development as critical thinkers. I submit that even in her attempt to deny that her view involves intellectual character, Missimer reveals that it plays some important role in the skillful habit of thinking critically.

In addition, the presence of this internal motivation to think critically and its connection to skilled thinking is corroborated by empirical evidence, evidence that Missimer (1995) demands should be present if we are to accept that the critical thinker is someone who is skilled, and who has a certain type of virtuous character. That evidence is found in a recent study by Mª Nieto & Valenzuela (2012) that investigates the internal structure of critical thinking dispositions, in which they hypothesize a "motivational genesis of the dispositions of critical thinking" (p. 36), finding that the "motivation to think critically continues to be an important factor in the deployment of critical thinking skills, even though certain mental habits or attitudes associated with performing them have become consolidated" (p. 36), and "that mental habits or attitudes come from the exercise of *motivated* skills" (p. 37, emphasis added). For Mª Nieto & Valenzuela this has the pedagogical implication that we should work towards "increasing the value [students] assign to critical thinking" (ibid.). Their study parallels my conceptual claim that the internal motivation to think critically is the primary virtue of the critical thinker, and that the habit of skillful thinking is in part born of this virtue.

In sum, Missimer's attack against the Character View fails. Apart from the ways that her attack fails on its merits, which Siegel (1997) has done well to enumerate, her view also appears incoherent, as she admits a minimalist position regarding the character view: that the critical thinker is a habitually skilled and enthusiastic critical thinker who wants to think critically. This conceptual connection between skills and virtues is not merely tautological and trivial, but has pragmatic significance when one considers the classroom context: student motivation to engage in critical inquiry should not be taken for granted, but stimulated if it is such an essential part of the process of thinking critically. The same is true for other the virtues, none of which always come so naturally to thinkers. In addition, the evidence Missimer asks for regarding the character dimension has been supplied in the intervening years since she demanded it, from Mª Nieto & Valenzuela (2012). In short, Missimer's Skills-Alone view remains an implausible conceptualization of critical thinking, the Character View remains the most plausible, and is ironically suggested by her own view. This is important because it solidifies the consensus among critical thinking theorists and pedagogues that the critical thinking virtues are a constituent aspect of a person being a critical thinker. It helps my case because by acknowledging the importance of an enthusiasm and a desire to think critically, Missimer echoes the idea that the willingness to inquire is the cardinal critical thinking virtue.

6. CONCLUSION

Critical thinking skills require critical thinking virtues if they are to be appropriately employed in efforts aiming towards the ends of critical thinking, which are reasoned judgments. Critical thinking virtues such as open-mindedness, charity, and valuing fallacious-free reasoning are important, but the willingness to inquire stands behind their manifestation. It is therefore the willingness to inquire that is the cardinal critical thinking virtue; while pedagogues should not neglect teaching and modeling the other virtues in their classrooms, our pragmatic attempts at teaching students how to be better critical thinkers should focus on fostering this virtue, without which they will not be properly motivated to think critically, and will not be disposed to use their skills to engage in critical inquiry. People who lack this and other virtues are not the kinds of thinkers we aim to educate, and should not be called critical thinkers, whatever their intellectual skills.

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