

# Philosophy and Psychology in the Zone: A Call for ‘Critical Spiritedness’

Shannon Rodgers

Western Washington University

Gert Biesta suggests that distance or a *gap* is required for education. Dissuading us from mending the gap, he argues “the gap between the teacher and the student...should [not] be overcome, because it is this very gap that makes communication—and hence education—possible.”<sup>1</sup> Perhaps this gap allows for the emergence of contact zones. Biesta describes the gap as a “place” where education occurs *because of* space or distance. Similarly, in contact zones, “social groups with histories and lifeways different from the official ones” make contact and learn *because of* differences (or space) between them.<sup>2</sup> Noting diverse groups “grapple with each other, often in contexts of highly asymmetrical relations of power,” Pratt describes how “[t]he classroom function[s] not like a homogeneous community or a horizontal alliance, but like a contact zone.”<sup>3</sup>

Contact zones can be violent and “shaped in contradiction to...proclaimed values of truth, respect, justice, and democracy.”<sup>4</sup> That contact zones may reveal such is the main focus of this essay. Further, this examination gives us good reason to make critical thinking a *priority* and awaken what Harvey Siegel calls “critical spiritedness.” Critical thinking must be a priority to defend values at the heart of a democracy currently under fire. As Siegel says, we need “careful analysis, good thinking, and reasoned deliberation in democratic life,” and if we care about democracy, “we must be committed to the fostering of the abilities and dispositions of critical thinking... a democracy can flourish just to the extent that its citizenry is sufficiently critical.”<sup>5</sup> Pratt’s idea of contact zones then proves a significant new entry point for educators to re-consider critical thinking debates in philosophy of education.

## INTO THE GAP: CRITICAL THINKING IN THE ZONE(S)

Minding the gaps *within* Philosophy of Education, important, timely contact zones are emerging concerning critical thinking. As Pettersson suggests, philosophers of education might re-visit how valuing critical thinking as

an educational ideal potentially collides with other values like democracy and human rights.<sup>6</sup> When there is collision, critical thinking should be given priority. Educators have witnessed collisions where diverse student views clash during classroom debates and activities. We wonder if we should allow the activity to continue—promoting critical spiritedness—or end it because some students might feel marginalized.

Connecting the psychological with the philosophical, Petterson claims critical thinking understood in the *philosophical* tradition only gives us “half of the truth.”<sup>7</sup> He describes an important history tracing critical thinking through research and terminology in the *psychological* tradition, presumably the “other half of the truth.”

Analyzing these related points of contact cannot come soon enough. Too frequently now, those with rational arguments who challenge educational policies are facing increasingly violent vitriol (online and in person), including threats of suspension, termination, and, in the social media vernacular, “cancellation.” Certainly such treatment contradicts values of truth, respect and democracy.

Entering contact zones requires courage. As Pratt says, “[a]long with rage, incomprehension, and pain there [are] exhilarating moments of wonder and revelation, mutual understanding, and new wisdom.” But there are also “sufferings...at different moments to be sure, experienced by every student. No one [is] excluded, and no one [is] safe.”<sup>8</sup> In these ways, perhaps the mere consideration of the argument that follows is itself a kind of contact zone.

I begin using Siegel’s ideas of reason assessment skills and of critical spiritedness to provide background to the priority debate. I also give examples of “collision” and depict what I label **the primary contact zone**.

Next, using critical thinking terminology from the *psychological* tradition, I explore some challenges critical thinkers encounter as they attempt to practice critical spiritedness. This sketch describes contact *between* Philosophy and Psychology (**the subsidiary contact zone**), where critical thinking understood in the *philosophical* tradition benefits from the *psychological* tradition.

Finally, drawing upon a recent event in higher education, I discuss a third zone, **the consequential contact zone**. Though any contact zone is arguably consequential, I use this particular term, as the zone arises *as a consequence of* the prior ones. It includes a case where a professor is enveloped in tensions constitutive of the primary and subsidiary contact zones. The illustration is used to highlight the need to educate for critical spiritedness and support a more general endorsement of critical thinking as an ideal.

#### COLLISION: *THE PRIMARY CONTACT ZONE*

Arguing “critical thinking is not just a good or useful addition to the curriculum...[it] is...absolutely fundamental to our educational endeavors,”<sup>9</sup> Siegel describes critical thinking as having two components:<sup>10</sup> reason assessment, “involv[ing] abilities and skills relevant to the proper understanding and assessment of reasons, claims and arguments,”<sup>11</sup> and critical spirit: “a willingness and tendency to reconsider one’s beliefs and to examine their justifiedness.”<sup>12</sup> Spiritedness is “an integrated set of dispositions, attitudes, habits of mind and character traits constructive of that spirit, which conduce to the exercise of those skills and abilities.”<sup>13</sup>

Siegel notes “other aims and ideals might...also be of serious importance, but...none outrank the primary obligation of educational efforts...to foster critical thinking.”<sup>14</sup> Valuing critical thinking as an ideal is particularly important to address prejudice: “Education which develops skills and abilities of reason assessment, and...imbues students with the critical spirit, cannot help but foster...a sensitivity to, and an abhorrence of prejudice.”<sup>15</sup> Finally, critical thinking is fully generalizable as it is “shared throughout the domains or fields in which critical thinkers assess reasons” and “underlies our best conception of what critical thinking is; without it, we can make no coherent sense of critical thinking as an educational ideal.”<sup>16</sup>

Returning to collision between critical thinking as an ideal and democratic values, this concern is reasonable. Educators can imagine cases where classroom activities to develop critical thinking clash with other values, such as equality or justice. It may turn out that the clash is why some avoid critically analyzing an

argument or reconsidering a personal belief (a lack of critical spiritedness) — for doing so may lead to dissonance or conflict with a social justice goal. While worthwhile to consider how educators might address collision, it is important to understand the collision itself. Siegel offers a good example of this, describing critical thinking colliding with feminist academics' desire for equality.

Siegel points at the practice of distinguishing between so-called male and female thinking, “label[ing] ‘rational’ thinking as ‘male,’” and how some feminists argue this is “incomplete, biased, sexist, or worse.”<sup>17</sup> Siegel suggests (from his perspective) that Haslanger’s work goes farther: “a rational stance is itself a stance of oppression of domination, and accepted ideals of reason both reflect and reinforce power relations that advantage white privileged men.”<sup>18</sup>

In another example, Siegel suggests “some Marxists and other ideologues reject critical thinking as biased and bound up with unacceptable hegemonistic interests.”<sup>19</sup> In both examples, the “vision” of these theorists is incompatible with the critical thinking ideal. A social justice goal such as equality then potentially sets a course for collision. Some educators “reject the idea that our educational institutions...ought to be...fostering...skills, abilities and dispositions which constitute critical thinking,”<sup>20</sup> perhaps because such an idea could interfere with their goals.

That there *is* collision between the ideal and democratic values is a justification to make critical thinking the priority. Otherwise, truth and respect—values constitutive *of* a democracy in particular—are threatened. Failing to make critical thinking a priority, like an un-weeded garden, vices such as intolerance and prejudice are permitted to grow — vices that, ironically, social justice advocates in education are trying to weed out. Here, it is useful to examine some challenges critical thinkers face as they attempt to practice critical spiritedness—a subsidiary contact zone to which I now turn.

#### PARTNERS?: *THE SUBSIDIARY CONTACT ZONE*

That critical thinking as an ideal collides with other values tends to be discussed in the *philosophical* tradition. Interestingly, that discussion leads to a subsidiary zone between philosophy and psychology. Using vocabulary from

the *psychological* tradition highlights why the ideal should be given priority and some possible consequences if it isn't.

Several philosophers of education have distinguished between, and debated the usefulness of, critical thinking in the philosophical and psychological traditions. Generally, the former is considered normative and the latter descriptive. As Bailin puts it, "critical thinking is a sort of good thinking, so the notion of critical thinking is fundamentally a normative one," and this is different from "understanding...critical thinking from those common in psychology which treat the notion as descriptive."<sup>21</sup> Siegel notes, "contemporary advocates of the ideal do not understand reason as a special psychological 'faculty.'"<sup>22</sup> For the purposes of this essay, I am interested in descriptions of critical thinking *errors* drawn from terminology in psychology, suggesting they may stand as barriers to critical thinking and indeed to critical spiritedness.

Siegel suggests critical thinking requires development of skills to assess our (and others') arguments and a *willingness to reconsider* our beliefs and our justifications for them. While "(people generally) are rational, or reasonable to the extent that they believe, judge and act on the basis of (competently evaluated) reasons,"<sup>23</sup> we face challenges developing these skills, making it worth some analysis in the *psychological* tradition. Pettersson notes there are a plethora of terms cognitive psychologists use to describe "thinking tendencies" — particularly tendencies that skew logic, hindering development of critical thinking.

Some inter-connected "culprits" include confirmation bias, availability heuristic, selection bias, narrative bias, and a more cognitive-technological term—echo chamber. Collectively, they provide a summary of how the philosophical tradition benefits from the psychological tradition and offers a prelude to the consequentialist contact zone.

*Confirmation bias* is an error where we believe information that *confirms* our beliefs and disbelieve information that doesn't.<sup>24</sup> As Wason says, confirmation bias is "seek[ing] out or evaluat[ing] information in a way that fits with [one's] existing thinking and preconceptions."<sup>25</sup> A contemporary example might be a tendency to pursue information confirming Donald Trump won the *U.S. 2020*

*Presidential Election*, if one's existing belief is that he did (although, factually, he didn't.)

The *availability heuristic* is an error where we make a decision based on how many similar examples we can think of or are "available." Dubbed a "mental shortcut," an example is Tversky's and Kahneman's "K" experiment.<sup>26</sup> Researchers asked subjects if there are more words that have K as a third letter, or more words that begin with K. Almost three quarters believed the latter (though there are twice as many words with K as the third letter). Researchers argue it's *more difficult to think* of words having K as the third letter and *easier to think* of words beginning with K. The easier task (more easily "available") means subjects believe it even though it's incorrect. A contemporary (and controversial) example is if I believe there is "a war against blacks" because of how many recent examples I can recall (or are "available" to me from the media) of blacks being shot by police officers. Sonia Orlu's discussion of this issue is worthy of investigation for those "courageous" critical thinkers.<sup>27</sup>

*Selection bias* occurs when there is a clear (and purposeful) difference between characteristics of individuals chosen to be part of a project and those not chosen. Because subjects should be *randomly* chosen, selection bias is considered an error. A recent example in Canada is the *selection* of former students of residential schools to testify about traumatic experiences and the choice *not* to select students who had a neutral or even self-described positive experience. This is not to question the veracity of the testimony, but rather to point out the purposeful *selection* of these students over others. Indigenous playwright Tomson Highway,<sup>28</sup> who writes of his own positive experience at residential school, offers a more fulsome account.

*Narrative bias* is the error where, in attempting to make sense of our experiences through "story," we omit facts that don't cohere with our story. An example is Borgida's and Nisbett's study where students' choices for university courses were influenced more by a "few brief personal accounts" than by the "mean of course evaluations."<sup>29</sup> Narrative bias is considered an error because it may outright exclude or improperly weigh the significance of some data over other data in relation to sample size.

Narrative bias also includes our tendency to seek patterns. As Heshmat notes, “we look for patterns because [it’s] how we navigate the world and... control it.” When inexplicable events occur, we “come up with explanatory stories that are simple and coherent...this makes us feel good.”<sup>30</sup> This tendency is also highlighted in Ngugi’s work on the narrative bias: “Narrative bias...is the way that we make sense of the world,” allowing us to “turn the information into a story and let go of the facts that do not fit with that story.” In so doing, “we are irrational...story-driven decision makers.”<sup>31</sup> The idea that narrative is *irrational* is important to understanding current challenges to critical spiritedness and making critical thinking an ideal.

As noted, these psychological terms are inter-connected, leading to a kind of echo chamber where beliefs are reinforced and become closed or “insulated” from reasoned rebuttals. Called one’s “bubble,” MIT researchers Van Alstyne and Brynjolfsson describe the echo chamber in the context of social media, where people “screen out material that does not conform to their existing preferences” and “insulate themselves from opposing points of view and reinforce their biases.”<sup>32</sup> The chamber is strengthened when individuals “seek out interactions with like-minded individuals, and thus become less likely to trust...people whose values differ from their own.” This tendency to seek an echo chamber means a “loss of shared values...harmful to the structure of democratic societies,” and Oxford physicist David Robert Grimes concurs in his own warning:

The echo chamber may be comforting, but...locks us into perpetual tribalism, and does tangible damage to our understanding...[W]e need to become...discerning at analyzing our sources...[W]e must learn not to cling to something solely because it chimes with our beliefs, and be willing to jettison any notion when it is contradicted by evidence no matter how comforting the disproven idea may be.<sup>33</sup>

The warning is a call for Siegel’s critical spiritedness where we are willing to question and reassess our reasons, justifications, and arguments for our beliefs. If we are *unwilling*, other cherished values are in peril.

LIVED EXPERIENCE: *THE CONSEQUENTIALIST CONTACT ZONE*

A leading gender-critical feminist who [insists] an individual cannot change their biological sex, Professor Stock [faces] relentless criticism and abuse...with blogs, petitions and Twitter users regularly demanding her dismissal for her allegedly “transphobic” views...To question the idea that a trans woman should be treated as a woman...is an act of “hate speech” that seeks to “erase” her identity, Professor Stock’s critics contend.<sup>34</sup>

Such cases are popping up with alarming frequency, ranging in topic area but primarily focused on issues of race and sex. Ironically, democratic values such as respect and truth (that irrationally and illogically driven “cancellers” claim to be championing) are the same values being trampled amidst cancellation. Perhaps most disturbingly, of all places this is happening *in education*.

Stock’s transgression is that she doesn’t follow a prescribed *narrative* and instead pursues the road less travelled—a critical spiritedness, challenging others’ arguments and asking for justification. Consequently, she is subjected to a level of disrespect and prejudice unbecoming of anyone who claims to be a critical thinker or indeed understands the privilege and responsibilities of living in a democracy.

Stock’s related argument is that advocates of “sex eliminativism” (where biological sex is eliminated as a category) proceed from the false premise that sex is nothing but a social construct. She argues their arguments are unreasonable: “Now we are being told to accept a highly ideological view that a person is whatever they *feel* they are.” Stock addresses this, in critical spiritedness, exposing problems with the current narrative:

...attempts to suppress talk of material facts about sex by progressive institutions and academics can be read as a sympathetic attempt to bolster the fiction of actual transition: to preserve an illusion that sex-change is literally possible. [There] seems to be the assumption that to fictionalize about



something successfully, you also need to fictionalize that you aren't fictionalizing.<sup>35</sup>

Stock is not alone in challenging the narrative. Horváth, a transgender activist and lecturer argues that the “basis of transgenderism...[that] everybody has a gender identity...is not based on scientific evidence [but] the narrative has taken hold.” Further, studies on transgenderism “all involve selection bias and confirmation bias...where we like this view, we want this to be this way, and the other 10 or 20 explanations are ignored.”<sup>36</sup> Horváth, too, is disrespected and labeled a transphobic, conservative pawn.

Such treatment of scholars challenging a gender narrative violates the reason assessment component by “refusing to honor contrary evidence or evaluate relevant evidence fairly and honestly” and violates critical spiritedness by avoiding evidence that challenges a belief.<sup>37</sup> Siegel says, “we are morally obligated to treat students (and everyone else) with respect...[including the] right to question, to challenge, and to demand reasons and justifications.” He continues: “[A]nyone who fails to recognize these rights...[denies] the status of “person of equal worth.”<sup>38</sup> Here, one might consider Wilson’s idea of “monitoring” capturing critical spiritedness:

Monitoring rests...on the idea of sharing and communication... on the attitude of love or friendship, in which other people are seen as equals, whose needs (as well as opinions) are of equal weight...Thus a seriously reflective person is forced by logic to adopt the Golden Rule...to adopt something like the attitude of agape or concern for others.<sup>39</sup>

This might be a better way to proceed—monitoring not cancelling. Wilson cautions about the danger that can “come from fanatics of various kinds who are indeed filled with moral passion—they think they are right— but with irrational passion.” He concludes, “that more good gets done by a kind of low-temperature sharing with other people” or “simply by the incremental progress of reason and sanity, than by those heroes who spearhead various causes—even perhaps those causes that we approve of.”<sup>40</sup>

“The absence of reflection is an important aspect of prejudice,”<sup>41</sup> Siegel suggests, which might explain the shift from critical analysis to narrative, where errors in thinking go unchecked and echo chambers are fiercely protected. It is easy here for critical thinking advocates to lose hope. After all, as novelist and poet Jonathan Swift says, “[r]easoning will never make a man correct an ill opinion, which by reasoning he never acquired.”<sup>42</sup> Narratives aren’t grounded in reason, so challenging them *using reason* seems futile. There’s room for optimism, however, particularly if out of tumultuous contact zones comes the wisdom to re-awaken critical spiritedness and a push from educators to value critical thinking as an ideal.

Kieran Egan suggests stories are a powerful mode of communication with long-lasting emotional impact: “Plato commonly summed up his arguments in...vivid and powerful myths, analogies, parables, metaphors, and allegories,” and such stories “retain their hold on people’s imagination sometimes long after the arguments from which they were derived [are] discounted.” Egan adds, “the story...encourages emotional commitments to it.”<sup>43</sup> Consequently, “the story fixes how we should feel...and provides us with...security and satisfaction.”<sup>44</sup>

Distinguishing “rationality” from story (which develops imagination), Egan argues “rationality did not displace myth but rather grew out of it and on it.” Accordingly, educators must “be careful that our educational schemes do not obliterate it [imagination], but rather set themselves [to] develop it as the foundation of education.”<sup>45</sup> I disagree with Egan here and am concerned that our “educational schemes” may be sidelining critical thinking to pursue other social justice ideals. As such, stories are privileged and rationality (*not* imagination) risks being obliterated.

Narrative mustn’t *replace* critical thinking. Critical spiritedness means I pursue what *is* the case, not a story of what someone *feels* is the case; where I employ reasoning skills to assess reasons and arguments, not silence analyses because they might offend a story-teller; and that I continuously hold up for scrutiny my *own* beliefs, not desist, resist, or rest on the false premise that my beliefs are simply “my truth.”

Philosophers of education have had concerns about narrative for some time. Noddings cautions, while research methods in education include narrative, it is “not science.” In her view, though narrative research might be “an application of the humanities to education and important in its own right,” it would need to employ the “methods, sources, modes of reporting... generally accepted in the humanities.”<sup>46</sup> Further, Noddings references Phillips who, importantly, “raises the question whether we should be concerned with the truth of the narratives used in educational research... [and responds that] at least sometimes, we should be so concerned.”<sup>47</sup> As she summarizes, “we have a moral interest in truth-telling... every researcher should be honest about the status of [their] work as report, philosophical fiction or speculation,” adding crucially that “if the confessed purpose of a narrative is to encourage readers to ‘try looking at it this way,’ the truth of the account may not be of primary importance.”<sup>48</sup> Indeed, because “narrative research... invites interpretation and reinterpretation,” truth, or close scrutiny of research, as a critical spiritedness would require, may be unimportant or even unwelcomed.

Narratives can't be challenged, as Stock suggested. Dearden's distinction of a genuine controversy is helpful here. A genuine controversy requires all competing views be based on *reason*. There isn't a genuine controversy if I claim the world is flat and you claim it isn't. Dearden says, “a matter is controversial if contrary views can be held on it without those views being contrary to reason,” and reason includes “criteria of truth, critical standards and verification procedures.”<sup>49</sup>

## CONCLUSION

Errors in thinking impede critical thinking and a critical spiritedness. Examining critical thinking in the psychological tradition then (the subsidiary zone) proves useful to educators. Narrative used as a method to pursue social justice goals (albeit with noble intentions) also challenges critical thinking, as discussed in the consequential zone. Educators might therefore be skeptical of a potential, ill-conceived paradigm shift,<sup>50</sup> where critical thinking is replaced by narrative, and a focus on *reasoning* shifts to a focus on *feeling*. Furthermore, if critical thinking collides with other values, critical thinking must be given pri-

ority. Otherwise, values constitutive of democracy are threatened, threatening democracy itself. Pratt is right. In contact zones, no one is excluded. No one is safe. Pratt is also right that contact zones inspire revelation and new wisdom. As such, contact zones don't threaten critical thinking. They encourage it.

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1 Gert Biesta, "'Mind the gap!' Communication and the Educational Relation" in *No Education without Relation*, eds. C. Bingham and A. Sidorkin (New York: Peter Lang, 2004), 11-22, 13.

2 Mary Louise Pratt, "Arts of the Contact Zone" from *Ways of Reading*, 5<sup>th</sup> edition, eds. David Bartholomae and Anthony Petrofsky (New York: Bedford/St. Martin's, 1999), 7.

3 Pratt, "Arts of the Contact Zone," 7.

4 Pratt, 7.

5 Harvey Siegel, *Education's Epistemology: Rationality, Diversity, and Critical Thinking* (New York: Oxford University Press, 2017), 7.

6 Henri Pettersson, "The Conflicting Ideals of Democracy and Critical Thinking in Citizenship Education," *Philosophy of Education* 75 (2019): 355-368.

7 Henri Pettersson, "De-Idealising the Educational Ideal of Critical Thinking," *Theory and Research in Education* 13, no. 3 (2020): 322-338.

8 Pratt, "Arts of the Contact Zone," 8.

9 Harvey Siegel, "Educating Reason: Critical Thinking, Informal Logic, and the Philosophy of Education," *Informal Logic* (1985): 69-81, 78.

10 On the limits and potential biases of what "being reasonable" means, see also Susan Verducci's work, notably, "Critical Thinking and Open-Mindedness in Polarized Times," *Encounters in Theory and History of Education* 20 (2019): 6-23; as well as John Passmore's account in "On Teaching To Be Critical," *Inquiry: Critical Thinking Across the Disciplines* 15, no. 3 (1996): 1-16.

11 Harvey Siegel, "The Generalizability of Critical Thinking," *Educational*

*Philosophy and Theory* 23 no. 1 (1991): 18.

12 Harvey Siegel, "Critical Thinking and Prejudice" in *Philosophy of Education: Introductory Readings*, Revised 3<sup>rd</sup> Edition, eds. William Hare and John P. Portelli (Alberta, CA: Detselig Enterprises Ltd., 2001), 181.

13 Siegel, "Critical Thinking and Prejudice," 186.

14 Siegel, *Education's Epistemology*, 6.

15 Siegel, "Critical Thinking and Prejudice," 183.

16 Siegel, "The Generalizability of Critical Thinking," 25.

17 Siegel, "Educating Reason," 70.

18 Siegel, *Education's Epistemology*, 14.

19 Siegel, *Educating Reason*, 70.

20 Siegel, 70.

21 Siegel citing Bailin, *Education's Epistemology*, 5.

22 Siegel, 4.

23 Siegel, 4.

24 P.C. Wason, "On the Failure to Eliminate Hypotheses in a Conceptual Task," *The Quarterly Journal of Experimental Psychology* 12 (1960): 129-140.

25 Wason, "On the Failure to Eliminate Hypotheses."

26 Amos Tversky and Daniel Kahneman, "Extensional Versus Intuitive Reasoning: The Conjunction Fallacy in Probability Judgment," *Psychological Review* 90, no. 4 (1983): 293-315.

27 Sonia Orlu, "Why I Do Not Support the Black Lives Matter Movement," *Macdonald Laurier Institute*, March 2021.

28 Tomson Highway, "Truth and Reconciliation Commission of Canada," *The Survivors Speak*, [https://ehprnh2mwo3.exactdn.com/wpcontent/uploads/2021/01/Survivors\\_Speak\\_English\\_Web.pdf](https://ehprnh2mwo3.exactdn.com/wpcontent/uploads/2021/01/Survivors_Speak_English_Web.pdf); Joshua Ostroff, "Tomson Highway Has A Surprisingly Positive Take On Residential Schools,"

*Huffpost*, December, 2015, [https://www.huffpost.com/archive/ca/entry/tomson-highway-residential-schools\\_n\\_8787638](https://www.huffpost.com/archive/ca/entry/tomson-highway-residential-schools_n_8787638).

29 Cornelia Betsch, Niels Haase, Frank Renkewitz, and Philipp Schmid, “The Narrative Bias Revisited: What Drives the Biasing Influence of Narrative Information on Risk Perceptions?” *Judgment and Decision Making* 10, no. 3 (2015): 241-264.

30 Shahram Heshmat, “What is Narrative Bias?” *Psychology Today*, (May 1998), <https://www.psychologytoday.com/ca/blog/science-choice/201612/what-is-narrative-bias>.

31 Rosie Ngugi, “8 Cognitive Biases that Can Help With Storytelling,” *Stronger Stories*, June 2020, <http://strongerstories.org/2020/06/06/cognitive-bias-storytelling/>.

32 See reference to Van Alstyne and Brynjolfsson in David Robert Grimes, “Echo Chambers are Dangerous,” *The Guardian* (December 4, 2017).

33 Grimes, “Echo Chambers are Dangerous.”

34 Jack Grove, “Kathleen Stock: Life on the Front Line of Transgender Rights Debate,” January 2020, <https://www.timeshighereducation.com/news/kathleen-stock-life-front-line-transgender-rights-debate>.

35 Kathleen Stock, “Ignoring Differences Between Men and Women Is the Wrong Way To Address Gender Disphoria,” *Quillette* (April 11 2019): 1-23.

36 Hacsí Horvath, *Transitioning is Dangerous—Especially for Youth*, April 2019, <https://www.youtube.com/watch?v=dJMMqREtQJc>.

37 Siegel, “The Generalizability of Critical Thinking,” 180.

38 Siegel, “Educating Reason,” 71.

39 John Wilson, “Seriousness and the Foundations of Education,” *Educational Theory* 48, no. 2 (2005): 142-153.

40 Wilson, “Seriousness and the Foundations of Education,” 152.

41 Siegel, “Critical Thinking and Prejudice,” 178.

42 Jonathan Swift, "A Letter to a Young Gentleman, Lately Enter'd Into Holy Orders by a Person of Quality," Second Edition (January 9, 1720), Printed for J. Roberts at the Oxford Arms in Warwick Lane, London, 27.

43 Kieren Egan, "Teaching as Story Telling," *Canadian Journal of Education* (1988): 13.

44 Egan, "Teaching as Story Telling," 21.

45 Egan, 26.

46 Nel Noddings, *Philosophy of Education* (Boulder, Colorado: Westview Press, 2016) 138.

47 D.C. Philips, "Telling It Straight," *Educational Psychologist* 29, no. 1 (1994): 13-21.

48 Noddings, *Philosophy of Education*, 138.

49 R. Dearden, "Controversial issues and the Curriculum," *Journal of Curriculum Studies* 13, no. 1 (1981): 37-44.

50 Thomas Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1962).