It is a great pleasure to respond to Kunimasa Sato’s essay concerning surprise as a cognitive emotion that may play an important role in fostering rationality through education. In his essay, Sato draws heavily on Israel Scheffler’s philosophy and wants to develop it further, exploiting both Scheffler’s work defending the educational ideal of rationality and that concerning the intertwined nature of reason and emotion.

At the outset, it is important to note that Scheffler’s concept of rationality as an educational ideal does not refer merely to the faculty of the human mind that is capable of reasoning, but to a person who is committed to particular epistemic and moral values (such as truth, fairness, and respect for persons) and who is motivated to use and develop her rational capabilities in pursuit of these aims. In my view, without such an interpretation of rationality, it would not be justified to claim that this ideal is crucial for democracy. Furthermore, I take it as a relatively common fallacy to think – contrary to Scheffler’s thinking – that the fostering of rationality as an aptitude for reasoning would automatically produce genuine critical thinkers and productive members of democratic societies. Unfortunately, it seems to me that Sato can at least partially be held accountable for this fallacy. However, this does not imply that there are no fruitful or productive dimensions in his essay. On the contrary, I find his discussion of the receptivity of surprise very interesting and worth developing also in relation to the creation of genuine critical thinkers.

In what follows, I will first consider the fruitful parts of Sato’s work and then present my reservations in terms of the straightforward connections Sato makes between his account of learning from surprise and fostering rationality in the Schefflerian sense.

**SURPRISE AND LEARNING**

The question of the emotional dispositions and virtues that are fundamental for a critical thinker is of extreme importance to education, and Sato’s discussion of receptivity to surprise provides a valuable contribution to this theme. As Sato states, “[a] child may be competent at evaluating the weight of reasons to support a claim while failing to be disposed to understand different views, thereby ending up a dogmatic rationalist. Similarly, although a child finds a reason compelling, she may never be motivated to base her action on the reason just because it is unfavorable to her.”¹ These examples demonstrate that the aim of education cannot be merely the learning of critical thinking skills without adequate character dispositions. As Scheffler himself puts the point: “we talk of giving pupils the ‘ability to think critically’ when what we really want is for them to acquire the habits and norms of critical thought.”²

What these norms and habits actually are, and how to foster their realization through education, is not fully developed, either in Scheffler’s philosophy or in the philosophy of education literature in general. Sato’s suggestion, the receptivity to
surprise, seems to be an interesting candidate for an emotional disposition that is important for the habit of critical thinking. Sato writes, with reference to Slote:

*R*eceptivity can function not as passive acceptance but as selective acknowledgment of something that matters to an agent. In Slote’s account, being receptive to intellectual challenges is not to blindly accept all questions and criticisms from others but to acknowledge important questions and compelling criticisms selectively.  

This kind of receptivity seems important for creating critical thinkers through education. Today, there is an increasing amount of empirical data that demonstrates that people are usually very capable of finding evidence and formulating arguments in support of views they have already accepted, but they are very weak in taking into account the reasons and evidence that support opposing views. The receptivity to surprise (with tolerance for the emotional confusion that surprise produces) seems to be important there. 

**Cognitive Emotions and Fostering Rationality in Education**

In his article, Sato states that one of the most important reasons for pursuing the ideal of rationality in education is its connection to a democratic form of life. Sato devotes the first part of his essay to the defense of the educational ideal of rationality as being crucial for democracy, and then relates the role of emotions, dispositions, and character traits to his discussion on democracy. Therefore, we can justly ask whether Sato’s own suggestion about the role of surprise in fostering rationality has a link to democracy. It is not clear to me that it has. Being surprised about how a pendulum actually works can be important for science education, but it has very little to do with learning rational abilities necessary for participation in democratic society. In addition, I view as somewhat problematic the link Sato makes when he writes, “a question arises: Is it really the case that the fostering of rationality trivializes emotions?,” and then claims that “the answer to this question rests on whether or not – and if so, how – emotions such as surprise play distinct roles in the fostering of rationality.” These two problematic aspects in Sato’s essay risk trivializing two important ideas of Israel Scheffler.

In my view, Scheffler’s essay on cognitive emotions is one manifestation of his wider philosophical view that does not involve any confrontation between cognition and emotion. Scheffler takes the dichotomy between reason and emotion as simply false, and demonstrates through his powerful examples of the “cognitive emotions” and “rational passions” that reason and emotion are fundamentally interdependent. There, Scheffler follows the path of many earlier pragmatists, especially William James, who anticipated contemporary neuroscientific understanding on the interdependent nature of reason and emotion.  

Scheffler’s defense of rationality as an educational ideal, for its part, should be understood as opposing such phenomena as emotional manipulation and irrationality. Both reason and emotion are fallible, but they work together in our thinking and learning. We do not need reason to protect us from our emotions as such, but to protect us, for example, from the kind of emotional manipulation that, for example, dictators use to sway people’s opinions. Similarly, we can use our capacity to reason
in a manner that is not in accordance with the ideal of rationality, when we use self-deceptive rationalizations instead of facing the real reasons for our thinking or action.

It therefore seems to me, therefore, that, first, Scheffler’s defense of the ideal of rationality does not need proof of whether or not “emotions such as surprise play distinct roles in the fostering of rationality,” in order to be saved from accusations of trivializing the emotions, and second, the constructive role of surprise in learning how the pendulum works is not necessarily related to fostering the ideal of rationality that is crucial for members of democratic societies.

Sato’s notion of the receptivity to surprise as a cognitive virtue may, however, be developed further by recognizing the emotional difficulties we seem to have when we face moral, cultural, and political views that differ from our own. Sato mentions the problem of “epistemic distress” and its potential dangers for learning. We may now connect this idea to the Schefflerian understanding of the role of rationality in democracy, and think of the ways one could learn to be receptive to surprise in relation to one’s moral, political, and cultural views, in the area where people – in the light of recent empirical studies – feel deep distress, which is not only epistemological but also emotional and embodied.  

1. Sato, this volume.
3. Sato, this volume.