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Good Learning and Epistemic Transformation

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Abstract

This study explores a liberatory epistemic virtue that is suitable for good learning as a form of liberating socially situated epistemic agents toward ideal virtuousness. First, I demonstrate that the weak neutralization of epistemically bad stereotypes is an end of good learning. Second, I argue that weak neutralization represents a liberatory epistemic virtue, the value of which derives from liberating us as socially situated learners from epistemic blindness to epistemic freedom. Third, I explicate two distinct forms of epistemic transformation: constitutive and causal epistemic transformation. I argue that compared with the ideal conception of epistemic virtue, constitutive epistemic transformation that involves good learning has a transcendent value in light of agents constantly renewing their default epistemic status toward ideal virtuousness.

Keywords: Liberatory epistemic virtue; epistemic transformation; transcendent value; good learning; feminist virtue epistemology

1. Introduction

Learning involves the epistemological dimensions of our lives, such as conducting inquiry and engaging in discursive exchanges. Although learning may be considered to be exclusively relevant to educational enterprises, such as schooling, it occurs throughout various epistemic practices, including those at work and home. To illustrate, suppose that a company's employees attend a workshop to interact with disabled coworkers. This interaction may help the employees realize their ignorance regarding the ways in which disabled people work at their company. As a consequence, these employees may redress their initial stereotypes about disabled people's different abilities and skills, thus becoming motivated to reflect on more inclusive working environments.¹ This exemplifies a case of epistemically good learning in which individuals not only recognize their earlier ignorance and acquire epistemic goods, such as true beliefs, knowledge, and understanding, but also become epistemically sound agents.

This paper explores a liberatory epistemic virtue that is suitable for learning as a form of liberating socially situated agents toward ideal virtuousness, here by drawing on virtue responsibility with a feminist insight into social positioning or situatedness. Section 2 articulates the weak neutralization of epistemically bad stereotypes as a

¹Some social psychological studies reveal that in a work context, workers with some disabilities tend to be systematically associated with incompetence compared with those without them (e.g., Rohmer and Louvet 2016).

distinct epistemic end of our good learning. Section 3 contends that weak neutralization represents a liberatory epistemic virtue, the value of which can be derived from liberating us as socially situated learners from epistemic blindness. Section 4 explicates two distinct forms of epistemic transformation: constitutive and causal epistemic transformation. I then argue that compared with the ideal conception of epistemic virtue, constitutive epistemic transformation that involves good learning has a transcendent value in constantly renewing one's default status toward ideal virtuousness. Finally, I explain that the causal epistemic transformation of individuals into epistemically better learners can take interpersonal forms of learning.

2. A weak epistemic neutralization

2.1. *Good learning as a form of recognizing ignorance*

Let us begin by examining the epistemic goodness of learning. Generally, "goods" refer to the objects about which we care and that are worth pursuing. Exemplary epistemic goods include truth, justification, and knowledge, the latter of which is typically construed as a justified true belief (plus some other debated quality or components). At first glance, the epistemic goodness of learning seems to lie in the acquisition of truth and knowledge.

However, requiring learners to acquire truth and knowledge is too strong a necessary condition for good learning. Consider the case of a company's employees who attend a workshop on disability. The purpose of the workshop is to enlighten workers about the social model of disability² and, thus, to inspire them to create more inclusive working environments. Although not all employees may formulate effective ways to make their working environments more inclusive, they may still have a good learning experience because they recognize their ignorance about disability and realize that they saw disabled workers through a biased lens. Likewise, consider the case of a child at a science museum who forms the question of why stars shine and later develops a persistent interest in the question. Consequently, the child becomes strongly motivated to learn about astronomy. Although the child's own answer is not adequate, it may be legitimate to say that this child has experienced epistemically good learning. His or her robust motivation for truth about astronomy would be praiseworthy, regardless of the epistemic quality of his or her own justification.

Note that I do not deny that good learning can encompass the acquisition of truth and knowledge as a sufficient condition. I doubt the view that learning cannot be good unless learners reach truth and knowledge. Another note is that the goodness of learning can be assessed from plural epistemic standards, including the cultivation of motives for truth and knowledge.³ Thus, knowing truth is legitimately regarded as a quite high criterion for good learning.

What remains unexamined but is worth exploring as a criterion for good learning may be the significant role that serves in recognizing our earlier ignorance.⁴

²The guiding idea of the social model of disability is that disability is socially constructed because the social environments are shaped and adjusted to the majority (Dunn 2015: Ch. 1).

³Other forms of learning include emulation of an expert regarding some technique, testimony from someone whom you trust, such as a schoolteacher, and critical and creative thinking. Traditionally, learning tends to be associated with the construction of knowledge and understanding (cf. Phillips and Soltis 2009). This is exemplified by a constructivist theory of learning, which considers the human developmental cognitive system as one that builds up knowledge out of their experiences (Phillips and Soltis 2009: Ch. 5). I am happy to agree with Hager (2005) on the suggestion that there are numerous different types of learning.

⁴Jean Piaget, a prominent developmental psychologist, famously offered an influential framework of genetic epistemology, according to which humans refine their cognitive systems that build up knowledge by interacting with the external world. However, this understanding of learning is too individualistic: in

Certainly, social testimony, such as that about international affairs that occur even in physically distant areas, may be relevant to our contemporary lives, such as the spread of the novel coronavirus that is exerting an overwhelming and ongoing influence worldwide. Hence, people need to sensibly depend on reliable testimonies, such as information from reputable mass media and authorized websites, to learn the relevant truth and acquire knowledge. On the other hand, the circulation of inaccurate and unreliable testimonies, especially through the internet, can cause falsehood, error, oversimplification, and overgeneralization. Lynch (2019) points out that the present internet culture tends to spread polarized news, consequently rendering us epistemically arrogant in willingly believing what fits with what we already think we know. This intellectual arrogance and indifference to our own ignorance – or as Lynch puts it, a know-it-all attitude – may deprive us of the epistemic potential to think differently.

What is worse, ignorance is apt to let us fall into a variety of epistemic injustices, whether intentional or not.⁵ For example, ignoring prejudiced stereotypes, such as those based on race, ethnicity, gender, class, and nationality, increases the risk of afflicting other people of particular social groups with testimonial injustice, as Fricker (2007) articulates. Testimonial injustice is a wrong in which people unduly receive less credibility than they deserve because of unwarranted prejudicial stereotypes against particular social identities (Fricker 2007: 21). For example, seditious coverage about vaccines to prevent coronavirus may transmit biased information, which may lead hearers to form negative stereotypes against people of particular social types, such as a negative stereotype associating them with dishonesty. As a result of negatively biased stereotypes being forcibly imposed, these people may be afforded less credibility by the hearers merely because of their social type. If this unjust treatment penetrates extensively through various social and political dimensions of discursive exchanges, they may not only be practically harmed as being silenced but also be unjustly undermined as epistemic agents, specifically as testifiers in this context.

Ignorance can also perpetrate another kind of epistemic injustice: hermeneutical injustice. Hermeneutical injustice occurs when the testimony of our social experiences is obscured because of a critical gap in shared hermeneutical resources and expressive styles (Fricker 2007: 148–9). Consider Fricker's scenario in which an obstetrician diagnoses the mental suffering of Wendy Sanford, a postpartum woman. This symptom is presently known as postnatal depression. However, before the concept of postnatal depression was medically recognized in the 1960s, the obstetrician might have misdiagnosed the cause of the woman's experience, even if he or she fairly and critically justified the woman's diagnosis by employing the resources available at the time. In this setting, there is a gap between the predominantly held hermeneutical resources and the resources necessary to make sense of Sanford's painful experience. Despite a lack of existing resources between the patient and the obstetrician, only the patient is epistemically disadvantaged. Hermeneutical ignorance victimizes people of morality and socially powerless groups because of their low social locations.⁶

this view, learning is an individual attempt to try to furnish and renovate knowledge out of one's perceptual world. By contrast, the current paper centers on the social dimension in which good learning plays a distinctive epistemic role.

⁵The epistemological dimension of ignorance is hotly discussed in social and feminist epistemology (e.g., Mills 2007; Medina 2013; Tanesini 2021). I confine the current argument to the studies of ignorance related to epistemic injustice. Moreover, although the following account centers on Fricker's varieties and relevant forms of epistemic injustice, it does not intend to claim that they are exclusive. Recent literature on epistemic injustice acknowledges that there is a wide array of epistemic injustices (Pohlhaus 2017).

⁶There is a debate over to what extent and how hermeneutical injustice involves agent responsibility and culpability. See, for example, Medina (2013: Ch. 2) for articulating responsibility people should take for imagining the possibility of alternative hermeneutical resources.

Moreover, as Pohlhaus (2012) articulates, members of socially dominant groups tend to willfully ignore the voices of minority and socially powerless groups and to maintain their extant hermeneutical resources. Dotson (2012) labels this kind of ignorance contributory injustice in that minority and socially powerless groups can be wrongfully thwarted in contributing to the hermeneutical resources. Take the case of a sick woman who sees a family doctor but does not become well after taking the prescribed medicine, as advised. Now, suppose that the woman goes to see the doctor again. The doctor may dismiss her concern because the doctor considers her to be a layperson and may willfully refuse to reciprocate a further dialogue, here because the family doctor has authority over the patient in terms of the dominant medical resources. In this case, the patient may well be silenced not because no proper word is available in the dominant shared resources, but because she is thwarted in finding competing hermeneutical resources.

Henceforth, I pursue the idea of recognizing our earlier ignorance as a form of good learning in the sense that it serves to prevent people from falling into arrogance and perpetrating various forms of injustices. Admittedly, this idea needs to be further elaborated upon, so I will now provide additional details to support my view of good learning as neutralizing epistemically bad stereotypes.

2.2. Stereotypes

Let us first clarify the relevant features of stereotypes. Roughly, stereotypes are widely held associations of social identities, such as race, ethnicity, class, gender, and religion, with particular personal properties (e.g., Beeghly 2015; Johnson 2020).⁷ In etymology, “stereotype” originates from the Greek words “*stereos*” (solid) and “*typos*” (type). In the 1700s, a French printing company named a metal plate that was used to produce a large quantity of printed books a stereotype. Afterward, the term was commonly used to designate replicas of the original plate. In 1922, Walter Lippman, a former student of William James, referred to a stereotype in *Public Opinion* as a solid, fixed image in the brain (Lippman 1922). Subsequently, although stereotypes have been understood differently in psychological studies, their common feature is considered the classification of a stigmatized group, such as “women,” by way of particular social identities, such as “indecisive” (Brownstein and Saul 2016: 2). Stereotypes can be expressed as generic sentences, such as “politicians are arrogant” (Beeghly 2015: 676). Generic sentences classify individuals into one category with no quantifiers, such as “some” and “many.” Generic sentences that represent some stereotypes tend to lack information about how many individuals and events possess such properties. To illustrate, some people might implicitly assume that “Japanese people are reserved.” This stereotype applies a specific property to Japanese people and offers no information on the number or percentage of Japanese people that are alleged to be reserved. Some Japanese people are open and straightforward, so this stereotype is oversimplified by neglecting information about the number of Japanese people who are reserved.

From an epistemological point of view, it is broadly granted that stereotypes are not easy for the people entertaining them to reflectively access. Such stereotypes are considered a main contributor to *implicit bias* (e.g., Beeghly 2015, 2020; Brownstein and Saul 2016; Holroyd 2019). I will show an example of mine. When I studied abroad as a visiting scholar, I had the chance to share a room with a student from Afghanistan. Before I embarked, Japan’s mass media featured considerable news on terrorists in the suburbs of Afghanistan and international sanctions against terrorism. Having no Afghan friends

⁷See Johnson (2020) for two influential views regarding the psychological makeup of bias, of which stereotype is a category: association based and belief based.

in Japan, I became worried about having this person as a roommate and had no idea if I could believe his testimony. As I spent considerable time with this roommate, however, I realized that I had been unwittingly obsessed with a stereotype that associates Afghan people with terrorists, a stereotype which was overgeneralized. Later, I regretted having held such an implicit stereotype, which might have led to inflicting an incidental testimonial injustice on him. As this shows, stereotypes can be reflectively opaque to the agents who possess them. Agents may fail to become conscious of the implicit stereotypes that they own only through their own reflections.

Another epistemic feature of stereotypes is that they automatically function to constrain people's cognitive faculties in unsettling ways, such as the perception of black suspects as being more dangerous than white suspects in shooter bias.⁸ Suppose that a man holds the gender stereotype "women have fewer abilities and skills to work in the fire service." This may lead him to spontaneously make unfair judgments about female firefighters' performance. However, a recent report reveals that male firefighters regard female colleagues as more skilled at alleviating tense situations, calming patients, and assessing potential risks (McCoppin *et al.* 2018). This attests to the fact that prejudging women as incompetent in the fire service is invalid. Even when people realize that their stereotypes are based on false generalizations, the influence of the automatic stereotype tends to persist in their cognitive faculties, such as in one's social perception. For example, the above man who possesses a gender stereotype might perceive women in emergency services as unfit because he simply cannot imagine a realistic situation in which female firefighters can accomplish a tough job in a highly urgent situation. The man might keep associating women in fire services as being less competent by "subtyping," namely, assuming that the great achievements of female firefighters in the reports are merely exceptions (e.g., Hewstone 1994). This indicates that the alleviation of people's stereotypes should require a form of continuous interactions beyond a one-off intervention, which I will examine in Section 4.

Let us move on to the relationship between good learning and stereotypes. Learners may not have to neutralize all the stereotypes they possess because stereotypes are not necessarily epistemically bad. Some stereotypes can serve as heuristics for making predictions about individuals' attributes and behaviors to facilitate correct judgment and perceptions in particular situations (Beeghly 2020). For example, in the medical context, one may identify a doctor by finding a person wearing a white coat. Likewise, an affective heuristic that can be accompanied by stereotypes may allow epistemic agents to anticipate relevant others' needs and interests.⁹ For example, with knowledge about physical disability, some emotion arising from the recognition of a wheelchair user may prompt agents to anticipate the wheelchair user's approximate need. These examples seem to exemplify epistemically innocuous stereotypes because they neither impede epistemic agents from acquiring truth and knowledge nor result in perpetrating different forms of epistemic injustice to others.

Even if it is admitted that some stereotypes can work innocuously, it still remains doubtful that there are such stereotypes that can be considered epistemically good stereotypes. Perhaps, stereotyping can always involve some risks of misleading agents to false beliefs, such as overgeneralizations, depending on various contexts. Given

⁸Psychological research that confirms shooter bias (e.g., Correll *et al.* 2002) shows that participants in a simulated shooting task manifested the more robust tendency to shoot at unarmed black people than at unarmed white people. As Brownstein and Saul (2016: 2) observe, "substantial empirical support has developed for the claim that most people, often in spite of their conscious beliefs, values, and attitudes, have implicit biases and that those biases impact social behavior in many unsettling ways."

⁹See Madva and Brownstein (2018) for endorsing inseparability between cognitive and affective components in implicit stereotypes.

this, it may be legitimate to say that good learning does not require learners to eliminate every stereotype that they implicitly possess. Therefore, I suggest that the object to be neutralized in good learning practice is epistemically bad stereotypes. In this context, epistemically bad stereotypes not only produce false beliefs, but also render learners ignorant of their ignorance,¹⁰ consequently leading them to afflict epistemic injustice to others. Hence, the following is concluded:

- (1) A distinct end of good learning is to neutralize epistemically bad stereotypes.

2.3. Neutralizing stereotypes

What, then, is the precise meaning of neutralization? Fricker (2007) presents two types of neutralizing prejudicial stereotypes, both of which are regarded as mediating virtuous steps to finally achieve testimonial and hermeneutical justice. She argues, “What is needed on the part of the hearer in order to avert a testimonial injustice – and in order to serve his own epistemic interest in the truth – is a corrective anti-prejudicial virtue that is distinctively reflexive in structure” (2007: 91). In the same way, to redress hermeneutical injustice, individuals must exercise a form of reflexive awareness to correct for the impact of their prejudicial stereotypes in the existing hermeneutical resources (2007: 169–170).

Granted the necessity of some reflective attention in neutralizing implicit stereotypes; however, it remains unclear how the neutralization of “prejudicial stereotypes” or epistemically bad stereotypes is structured. I suggest that the strong and weak neutralizations of stereotypes are conceptually separated. To illustrate this, consider again the case of a company’s employees attending a workshop on disability. Suppose that the employees learn of the distinct competences of physically disabled coworkers at the same office. This may allow the employees to recognize their earlier ignorance, which is considered the step of weak neutralization, because the employees have now come to reflectively assess their previously implicit stereotype associating physical disability with inferior work competence. However, they may not yet recognize how different people with physical disabilities can manifest more diverse abilities and skills, even though they may intensify a motive to do so. To ultimately succeed in achieving more inclusive working environments, the employees will need to obtain more relevant truth and general knowledge about physical disability. This step of success in obtaining truth and knowledge will be regarded as strong neutralization.

Let us define the weak and strong stereotype neutralizations. To formulate them, I first distinguish three epistemic states. Suppose that *S* stands for a learner and *p* stands for an epistemically bad stereotype that must be corrected.

State (a): *S* is epistemically blind if and only if (=iff) no other option exists, except for *p* in *S*’s epistemic state, and *p* is reflectively inaccessible to *S*.

I will call this state *epistemic blindness*. In this situation, *S* implicitly holds stereotype *p*. Second, the epistemic state in which *S* comes to realize stereotype *p* can be described.

State (b): *S* is epistemically free iff there is no other option except for *p* in *S*’s epistemic state, but *p* is reflectively accessible to *S*.

In this state, *S* recognizes *p* as its own stereotype, even though *S* still has no better alternative option available, such as a more nuanced stereotype about different kinds

¹⁰Medina (2013) examines the ignorance of one’s own ignorance as meta-ignorance.

of disability. I call this an *epistemically free state*. This state seems to represent epistemic freedom in that it is not until this state that *S* can willfully consider a better alternative. Finally, there is an epistemic state that I call *epistemically veristic*.

State (c): *S* is epistemically veristic iff a proper alternative option exists other than *p* in *S*'s epistemic state.

Based on this exposition, weak and strong neutralizations can be formulated: the weak neutralization refers to the shift from state (a) to state (b). In this stage, *S* learns to reflectively access their implicit stereotype *p* and can exercise their own will to disbelieve *p* and consider an alternative. This enables *S* to freely consider alternatives. In the next section, I suggest that the weak neutralization is an epistemic form of freedom and is of liberatory value. However, I here confine the argument to the relationship between weak neutralization and good learning.

Good learning requires learners to shift from state (a) to state (b), that is, to neutralize epistemically bad stereotypes in a weak sense. This is an enabling condition for them as they seek an epistemically better view. What about, then, a strong neutralization that represents a shift from state (b) to state (c)? Achieving this means that *S* possesses a proper alternative. However, a strong neutralization to reach the epistemically veristic state seems too demanding as a necessary condition for the goodness of learning, even though the occurrence of such learning might be desirable and sufficient, as demonstrated in the beginning of this section. Thus, apart from success in achieving state (c), good learning may well occur as long as one achieves weak neutralization, that is, a shift from state (a) to state (b). Hence, we have the following:

(2) A distinct end of good learning is to neutralize epistemically bad stereotypes in a weak sense.

In the next section, I will explain the value of this weak neutralization in terms of a liberatory epistemic virtue.

3. Virtuous learners in a liberatory sense

3.1. *Agential aspects*

Granted the weak neutralization of epistemically bad stereotypes as an end of good learning, how can virtuous learners be characterized? This section shifts our consideration from the practice of good learning to the notion of learners who engage in such a practice. I will characterize the virtue regarding the weak neutralization of stereotypes as a liberatory epistemic virtue by incorporating a feminist insight that contains social positioning and situatedness into virtue responsibilism.

Virtue epistemology concerns various forms of epistemic agency that should be exercised in epistemic practices. According to the recent literature, epistemic virtue has two distinct conceptions: virtue reliabilism and virtue responsibilism (e.g., Axtell 1997; Baehr 2011: Ch. 1; Battaly 2015). Roughly, reliabilists consider reliable qualities, including perceptual faculties and cognitive abilities, as virtue (e.g., Sosa 1980, 2007; Greco 2010). Reliable virtue likely produces more truths than falsehoods, even though it need not be infallible. For example, our eyesight can be a reliable source of perceptual beliefs under normal circumstances, enough so that people can reliably succeed in obtaining true beliefs. However, the reliability of such virtuous qualities need not require that the reliable exercise of such qualities is reflectively controlled. Rather, as

epistemic agents use their perceptual faculties and cognitive abilities to succeed in acquiring truth, they can trust the reliability of such qualities.

By contrast, responsibilists regard good character traits as epistemic virtue (e.g., Baehr 2011: Section 2.1; Battaly 2015: Ch. 3). For example, intellectual perseverance motivates agents to accept adversities that hinder the fulfillment of their goals. Despite slightly different concepts of virtue among responsibilists, an acknowledged feature that makes character traits epistemic virtues is the motive to acquire epistemic goods (Montmarquet 1993; Zagzebski 1996). Suppose that those who conduct a fraudulent business are motivated to be attentive in their misconduct. According to virtue responsibilism, they do not deserve admiration for their attentiveness because their motive is not to discover knowledge but rather to steal money from others. People are never appraised as intellectually virtuous unless their manifestation of character traits can be derived from their care for epistemic goods. The motive to acquire epistemic goods is intrinsically valuable because it constitutes a fundamental force to move us to care about epistemic goods, such as truth and knowledge. In other words, epistemic motive reflects what agents care about: this, in turn, involves who they are. Hence, responsibilists consider the value of virtuous character traits as deriving from such an irreducible epistemic motive.

Although reliabilists and responsibilists endorse different conceptions of virtue, these distinct notions of reliability and motives need not be considered incompatible. This is the view that Zagzebski (1996) has argued. Zagzebski regards good character traits as virtue, contending that virtue must encompass not only intrinsic motives, but also success in reliably producing truths. For example, a motive to handle adversities is insufficient for an agent to have the virtue of intellectual perseverance. The virtue of intellectual perseverance further requires the agent to reliably succeed in acquiring the goal by acting in a way that a virtuous perseverant agent would.

Among the different views of epistemic virtue, the present notion of virtuous learners can be characterized alongside virtue responsibilism with Zagzebski's variant. As explained, responsibilists agree to attach the essence of virtue to epistemic motives to move agents toward seeking epistemic goods. This makes the case of a motive to neutralize epistemically bad stereotypes in a weak sense a requirement for the notion of virtue regarding the weak neutralization.

Given the social situatedness of knowers, a motive for weak neutralization is intrinsically valuable. As explained in Section 2, people may unwittingly acquire epistemically bad stereotypes that exist as social norms and images in their society. If society perpetuates such stereotypes, they can work opaquely to individual agents and tenaciously in the networks of social relationships. Feminist epistemologists have long uncovered this kind of epistemic limitation in individuals and have demonstrated that they are socially situated as epistemic agents (e.g., Harding 1986; Haraway 1988). Although social situatedness can be construed differently, an acceptable view would be that individuals have only an embodied perspective influenced by their particular social position as members of different social groups, so their ways of knowing can be susceptible to political and social power relations. Given this view of social situatedness, learners' perspectives are tied to socially grounded positions, such as race, ethnicity, gender, class, and disability, which means that they may be affected by stereotypes and prejudice that are socially prevalent and might only be accessible to people of the same groups. If so, the motive to move learners to neutralize epistemically bad stereotypes can be considered valuable because having such a motive means that socially situated learners care about whether or not they are alert to state (a), that is, their epistemic blindness about epistemically bad stereotypes.

Let us illustrate the point that this epistemic motive is intrinsically valuable. Although people are expected to epistemically depend on reliable social testimony, it

involves numerous epistemic risks, such as acquiring oversimplified information, possibly leading to different kinds of epistemic injustice, as argued in Section 2. For example, people living in remote areas may have trouble identifying accurate information about the spread of the novel coronavirus and its inherent risks. Threatening news may arouse prejudiced emotions toward people of particular nationalities who live near them. By contrast, recognizing their social situatedness, ideal virtuous learners would not only be alert about the reliability of social testimony, but would also sensitize themselves regarding epistemically bad stereotypes against people of particular social types.

3.2. *Liberatory epistemic virtue*

I suggest that this epistemic virtue regarding the weak neutralization of epistemically bad stereotypes can be construed as liberatory. As argued in Section 2, the weak neutralization represents a shift from state (a), that is, epistemic blindness, to state (b), that is, epistemic freedom. Epistemic freedom enables learners to realize the ignorance of their past ignorance that can lead them to relevant epistemic vices and epistemic injustice, and to exercise their own will to freely consider alternatives. This is all the more crucial given that implicit stereotypes are reflectively opaque to the agents who possess them. Admittedly, few people nowadays explicitly advocate for sexism, racism, and other forms of discrimination in egalitarian societies. However, they might unwittingly absorb epistemically bad stereotypes that exist as a social norm, such as that women are unsuitable for heavy lifting, for example, for work in the fire service. Thus, achieving an epistemically free state by way of weak neutralization represents an enabling condition for learners to recognize the ignorance of their possession of such inherited stereotypes.

Note, however, that epistemic freedom does not deny that learners inherit much truth and knowledge by receiving reliable social testimony. This epistemic freedom does not call learners toward Cartesian epistemic solipsism, that is, withdrawal into themselves. Rather, this freedom is constrained by the social situatedness or positionality of learners in a particular society. In this respect, virtuous learners would be the ones who are free to neutralize epistemically bad stereotypes in the received epistemic inheritance. Thus, we have the following:

- (3) The weak neutralization of epistemically bad stereotypes represents a liberatory epistemic virtue.¹¹

It might be doubted that a motive to neutralize epistemically bad stereotypes in the weak sense is enough for liberatory epistemic virtue. Apparently, Zagzebski's variant of responsibilism is needed to articulate two other conditions for the notion of virtuous learners in a liberatory sense. The second criterion is for learners to have a stable disposition to act in accordance with neutralizing epistemically bad stereotypes. Consider the scenario in which a company's employee, Tom, attends a workshop to interact with physically disabled coworkers. During a prolonged discussion with them, Tom becomes motivated to redress his stereotypes concerning physical disability. That is, Tom manifests care regarding knowledge about disabilities. Now, suppose that Tom has never had the habit of discussing a new topic for long with peers, thereby becoming exhausted

¹¹Daukas (2018) proposes a liberatory approach to virtue epistemology. I have obtained many insights from her idea, although the connection between liberatory virtue and the weak neutralization of stereotypes is entirely my original view.

so quickly that he often gives up contemplating effective pathways to a more inclusive working environment. In this case, despite his honorable motive, Tom has yet to be virtuous because he has no reliable disposition to act properly.

The third criterion is that virtuous learners must reliably succeed in neutralizing epistemically bad stereotypes. Suppose that in the above case, Tom has an appropriate epistemic motive and disposition to act accordingly, and he accomplishes a one-off success in neutralizing epistemically bad stereotypes in a conversation with coworkers. However, he may never succeed in doing similarly on subsequent occasions. Despite his virtuous motive and disposition to act, Tom may still be susceptible to the influence of his tenacious stereotypes and fail to replace his preconceived assumptions about disability with true ones. What seems necessary for Tom to be admired as being ideally virtuous is a reliable ratio of success in achieving weak neutralization.

In conclusion, three conditions are necessary – and perhaps sufficient – for a liberatory epistemic virtue regarding good learning: having a motive for weak neutralization, having a stable disposition of action toward such a neutralization, and accomplishing its reliable success. Ideally, virtuous learners must be equipped with these three components.

4. Epistemic transformation

4.1. Causal and constitutive forms

It can be argued that the notion of ideal virtuous learners fails to capture a crucial feature of good learners: good learners are in the process of growing: That is, good learners never stop learning rather than placing limits on themselves. The question is, then, how the value of such continuous growing can be explained in the virtue epistemological framework. In this section, I develop the notion of constitutive and causal epistemic transformation and argue that the former kind of transformation has a transcendent value of constantly liberating epistemic agents.

Epistemic transformation may be quite a new term in analytic epistemology. Some cross-cultural philosophical studies of learning may help us find a starting point to grasp its rough idea. For example, in the work of *Analects*, which describes the Confucian view of learning, learning is considered relevant not only in the acquisition of epistemic goods, but also in the cultivation of one's self. In a similar vein, in Japanese educational thought, “*manabi hogusu*,” which is the Japanese translation of “unlearning” in English, implies the significance of transforming ourselves by reconfiguring what we have learned before (Ueno *et al.* 2020).¹² The point is that learners in these examples can be admired for their ontological transformations and their acquisition of epistemic goods.

However, what the notion of transformation implies epistemologically might be questioned. To answer this, I begin by making a crucial distinction between causal and constitutive epistemic transformation. Consider, first, causal epistemic transformation. Suppose a child, Mary, becomes curious about a celestial phenomenon at a science museum and considers the question of why stars shine. Admittedly, her reason may be beside the point and may not be conducive to the acquisition of the knowledge she seeks. Still, through a critical dialogue with her parents, Mary may appreciate the practice of justification on her own. Because she has more similar learning experiences, she may gradually refine a scientific way of thinking. This case shows that learning

¹²This view of unlearning is not confined to educational settings, such as schooling, and can be construed as applicable to learning in everyday epistemic practices.

practices make us epistemically better learners. Epistemic transformation, as seen in such a process, is causal in that it shapes an agent to be better toward epistemic virtuousness.

Second, and more importantly, the constitutive form of epistemic transformation occurs if and only if constantly advancing one's epistemic default status to a better one toward a virtuousness that is constitutive of one's epistemic agency.¹³ To illustrate this, consider again the case in which Tom attends a workshop about disability. Having a direct acquaintance with the disabled coworkers, he may not only know their specific needs, but also be motivated to neutralize the stereotypes that associate disability with inferiority. Here, we do not need to assume that his distinct experience at the workshop causes Tom to have a motive for the neutralization of his stereotype. That is, Tom is not causally transformed into a better agent. Rather, he may already be epistemically sound enough to be triggered to neutralize his own stereotype. Here, if advancing Tom's default epistemic status to liberate himself is considered an essential part of his epistemic agency, a constitutive epistemic transformation occurred within him.

Although both the causal and constitutive forms of epistemic transformation are closely tied in learning, I carefully keep separating them in furthering the consideration of the relationship between epistemic transformation and good learning. The constitutive epistemic transformation can be achieved by the epistemic cycles of both reflection and unreflective manifestation of proper judgment and action based on renewed understanding. First, reflection is necessary for learners to recognize their ignorance and become aware of implicit stereotypes. For example, some people may need some form of contemplation to reconfigure their implicit stereotype of associating women with less competence in the fire service. However, this reflective part of agency is insufficient for a constitutive epistemic transformation. As learners accumulate good learning experiences, they come to transfer the matter learned to new epistemic circumstances without due contemplation. Such unreflective automatic judgment and action shapes the default status of prereflective epistemic agency. By default, I refer to the case in which epistemic agents have a different strength of a motive to neutralize epistemically bad stereotypes with different degrees of reliability. Consider the above example of rectifying a gender stereotype against female firefighters. Whereas some people may need more learning experiences to cancel out the effect of such a gender stereotype, virtuous people may be immediately disposed to perceive female firefighters manifest their excellent skills by collaborating with them to aid on-site patients.

Based on the above clarification, it is legitimate to conclude the following:

- (4) Constitutive epistemic transformation involves both the reflective and unreflective agential parts.

4.2. *Transcendent value*

A constitutive epistemic transformation does not represent the ideal state of virtuous learners, as presented in Section 3. Even if learners manifest some degree of proper epistemic motive, disposition, and reliable success in liberating themselves from epistemically bad stereotypes, they may not be able to do so perfectly. Still, constitutive epistemic transformation means that learners will constantly renew their epistemic default status. How, then, can such learners be assessed? I suggest that they can be assessed as

¹³I anticipate that the notion of epistemic transformation will have more diverse implications than I have described. I explain only the main features of epistemic transformation as long as it is relevant to virtuous learners according to the stipulations in Section 3.

praiseworthy by the extent to which they advance their epistemic default status. The value of such a transformation is transcendent in the sense that a new, epistemically freer state liberates us toward obtaining ideal virtuousness. Thus, I propose the following:

- (5) Constitutive epistemic transformation has a transcendent value in constantly advancing one's epistemic default status toward ideal virtuousness.

Let us finally consider the aspect of causal epistemic transformation in good learning. It might be argued that Aristotelian virtue epistemologists highlight the importance of individual effort for habituation as a means to cultivate good character traits. However, as Battaly (2016) suggests, this self-cultivation may not be the best means to cultivate epistemic virtues. In particular, it would not serve to develop the liberatory virtue of neutralizing implicit stereotypes because such stereotypes tend to remain unnoticed for ourselves, as noted in Section 2. Perhaps, exercising prereflective agency as well as reflection that we conduct in interpersonal questioning may be all the more crucial for us to become epistemically better learners. Questioning comprises the dynamic processes of asking questions and answering them in combination with prepared arguments. In recent epistemological studies of questioning, the role of questioning is not only to help learners elicit true information from interlocutors, but also to empower them to recognize their epistemic blindness by exercising a sensitivity to the relevant cues for doubt about implicitly held stereotypical ideas that are subsequently deemed dubious (e.g., Hookway 2003; Sato 2016). Given this, the causal epistemic transformation of individuals into better learners by neutralizing epistemically bad stereotypes could take interpersonal forms of learning.

5. Concluding remarks

Thus far, I have attempted to articulate a liberatory epistemic virtue that is suitable for learning as a form of recognizing ignorance of one's ignorance. First, by substantiating it in light of neutralizing epistemically bad stereotypes, I have demonstrated that neutralizing them in a weak sense is an end of good learning. Second, I have argued that given our social positioning or situatedness, the value of a weak neutralization lies in liberating us from epistemic blindness to epistemic freedom. In this understanding, ideal, virtuous learners have a motive to neutralize epistemically bad stereotypes, present a stable disposition to act accordingly, and have reliable success in doing so. Third, I have explicated the constitutive and causal forms of epistemic transformation. Compared with the ideal conception of epistemic virtue, I have argued that constitutive epistemic transformations that are involved in good learning have a transcendent value in light of agents constantly renewing their default epistemic status.¹⁴

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