Ernest Sosa and Linda Zagzebski: Virtue Epistemology

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Abstract

In this article, I turn to the philosophical tradition that underlies my model but has so far remained in the shadows: virtue epistemology. Its founders, Ernest Sosa and Linda Zagzebski, made a turn that often goes unnoticed outside a narrow circle of specialists: they shifted the focus of epistemology from beliefs to the knower. Not "what makes a belief true?" but "what makes a person capable of attaining truth?" This turn has a direct bearing on the CCFP model. If the hard problem of consciousness is a paradigmatic problem requiring a cognitive act of re-conceptualization, then the solution depends not on the accumulation of data but on the qualities of the knowing subject. Virtue epistemology provides the philosophical language for describing these qualities. Sosa speaks of reliable cognitive faculties; Zagzebski speaks of intellectual virtues. I show that the eleven mental mechanisms of the CCFP are a concretization of these two approaches applied to a concrete task. It is in this sense that pedagogy, which forms these mechanisms, becomes not the "transmission of knowledge" but the cultivation of a virtuous knower.

Keywords: virtue epistemology, reliabilism, responsibilism, intellectual virtues, reliable cognitive faculties, Sosa, Zagzebski, communicative-cognitive framework of personality, mental mechanisms, pedagogy.

The Archer Who Hit by Chance

In the previous articles of this series, I have traveled a long path. I began with David Chalmers's "hard problem" and showed that it is a problem of an exhausted conceptual framework, not a problem of missing data. I examined Colin McGinn's answer to the question of whether we can solve it at all, and showed that his pessimism is based on a false premise - on the conception of the brain as a biologically fixed structure. I showed that the human brain is open to cultural and pedagogical evolution. And I outlined which cognitive mechanisms must be formed in order for the act of solving the hard problem to become possible [7; 8].

But here a question arises that I have so far deferred. What does it mean to be a knower capable of such an act? What quality distinguishes a researcher who is capable of going beyond an exhausted paradigm from a researcher who brilliantly solves puzzles within it? Can this quality be described in a philosophically rigorous way?

It is precisely this question that the tradition I turn to in this article answers. It is called virtue epistemology, and its founders - Ernest Sosa and Linda Zagzebski - made a turn that I consider one of the most important in the philosophy of knowledge of the twentieth century. Its essence is this: epistemology must deal not with beliefs but with the knower. Not "what makes a belief true?" but "what makes a person capable of attaining truth?" This shift may seem insignificant, but it changes everything. It transforms epistemology from a logic of propositions into a doctrine of the cognitive qualities of the subject. And a doctrine of cognitive qualities has a direct bearing on pedagogy, because qualities can be formed.

Classical epistemology - the one that dominated analytic philosophy from Descartes to the middle of the twentieth century - dealt with beliefs. Its central question was: "What turns a true belief into knowledge?" Descartes answered: "Clarity and distinctness." Kant answered: "The synthesis of a priori forms and empirical material." Logical positivism answered: "Verification." In all these cases the focus was on the properties of belief, on what makes it justified, true, and reliable. Virtue epistemology shifts the focus: knowledge is not a property of belief but a property of the knower. A belief is knowledge not because it possesses certain internal properties but because it is the product of certain qualities of the subject.

Imagine two archers. The first hits the target by chance: he does not know how to aim, but he is lucky. The second hits because he has a steady hand and a true eye. From the standpoint of the epistemology of beliefs, both shots are "true": both hit the target. But from the standpoint of virtue epistemology, only the second shot is successful in the genuine sense of the word, because it is the result of a skill rather than of chance. Sosa uses this metaphor in *A Virtue Epistemology* precisely in order to explain the difference between "luck" and "success": success is not merely hitting the target but hitting it as a result of an apt faculty [3]. Knowledge, according to Sosa, is "apt belief" - a belief that is such because of the reliability of a cognitive faculty rather than by chance.

Here it is appropriate to recall how Aristotle distinguished an action performed in accordance with virtue from an action that merely happened to coincide with a virtuous deed. A person may give money to someone in need out of fear, out of calculation, or out of habit, or because they are generous. Externally the deed is the same, but the internal structure is different. Virtue epistemology transfers this distinction into the domain of cognition: one can accidentally turn out to be right, or one can know - that is, be right because of the kind of knower one is. This distinction is as old as philosophy itself, but in epistemology it was articulated only toward the end of the twentieth century.

Reliability: Sosa

Ernest Sosa (b. 1940) is an American philosopher of Cuban origin and one of the most influential epistemologists of our time. His approach is called reliabilism (from the English *reliable*), and its essence can be formulated as follows: knowledge is a belief produced by a reliable cognitive faculty [1; 2; 3]. A reliable faculty is one that under normal conditions leads to truth more often than to error. Perception, memory, intuition, introspection, and deduction are all reliable faculties. When I see a table before me, my belief "there is a table before me" is knowledge not because I can justify it (although I can) but because it is produced by a reliable faculty - vision - which under normal conditions does not deceive.

Sosa distinguishes two types of knowledge. "Animal knowledge" is knowledge that is the result of a reliable faculty but does not include reflection on it. "Reflective knowledge" is knowledge that includes reflection on its own reliability, on why the faculty works and where its limits lie. For my model, it is precisely the second that matters. The hard problem of consciousness requires reflective knowledge: knowledge that includes reflection on one's own cognitive processes. A researcher who merely records correlations possesses animal knowledge about the brain. But they do not possess reflective knowledge about why these correlations exist. In order to pass from the first to the second, reflection on one's own cognitive faculties is needed, and this is precisely what I call the development of mental mechanisms.

Sosa's reliabilism is often criticized for not giving sufficient place to the responsibility of the knower. If knowledge is simply the result of a reliable process, then the knower bears no responsibility for their beliefs: they simply "use" a faculty that works automatically. It is precisely this that Zagzebski points to when she proposes an alternative approach, responsibilism. This distinction is important for my model because it shows that virtue epistemology is not homogeneous: it has two poles, and each contributes something of its own to the understanding of the CCFP.

The Weight of Responsibility: Zagzebski

Linda Zagzebski (b. 1956) is an American philosopher and one of the most influential epistemologists and ethicists of our time. Her approach is called responsibilism (from the English *responsible*), and its essence can be formulated as follows: knowledge is a belief produced by a responsible action of the knower [4; 5; 6]. The difference from Sosa is subtle but fundamental. For Sosa, knowledge is the result of a reliable process. For Zagzebski, knowledge is the result of a responsible action. Reliability is a property of a process; responsibility is a property of an agent. Sosa asks: "Does the faculty work?" Zagzebski asks: "Does the agent make an effort to attain truth?"

This distinction has consequences for the understanding of virtues. For Zagzebski, intellectual virtues are not merely reliable faculties. They are traits of character that motivate the knower to attain truth. Openness is not merely the capacity to perceive something new; it is the readiness to perceive something new even if it contradicts one's beliefs. Intellectual courage is not merely the capacity to take risks; it is the readiness to take risks in order to attain truth. Honesty is not merely the capacity to tell the truth; it is the readiness to tell the truth even when it is disadvantageous.

It is precisely this that brings epistemology closer to ethics. Zagzebski speaks directly of intellectual virtues as analogues of moral virtues. Just as courage is a moral virtue, so intellectual courage is an epistemic virtue. Just as moral virtues can be cultivated, so intellectual virtues can be formed through pedagogy. This does not mean that epistemology reduces to ethics; it means that they have a common structure - both deal with the qualities of an agent that can be formed through upbringing.

The distinction between faculty and virtue in Zagzebski is the distinction between "can" and "want." A faculty is what a person can do; a virtue is what a person is inclined to do because it corresponds to their character. One can have the capacity for critical thinking and not have the virtue of critical thinking: a person who can think critically but is not inclined to do so because it is inconvenient. Zagzebski says that knowledge requires precisely virtue, not merely faculty. For pedagogy this is important: the development of virtue requires not only the training of a skill but also the formation of motivation.

Zagzebski also introduces the concept of epistemic responsibility. The knower bears responsibility for their beliefs. They cannot excuse themselves by saying that "it just happened" or "I did not know." If they formed a belief without due effort, they bear responsibility for it, just as a person bears responsibility for careless driving. A researcher who accepts the "brain as computer" paradigm without reflection on its foundations bears epistemic responsibility for this. They cannot excuse themselves by saying that "it is accepted" or "everyone thinks so." They should have made an effort to check the foundations. And if they did not do so, their belief is not knowledge, even if it is accidentally true.

Zagzebski's responsibilism is often criticized for setting too high a standard for the knower. If knowledge requires responsibility, then most of our everyday beliefs are not knowledge, because we do not make an effort to check them. Zagzebski responds to this by distinguishing "knowledge" and "responsible knowledge." Everyday beliefs can be knowledge in a weak sense (they are produced by reliable faculties), but they are not responsible knowledge. In order to solve the hard problem, it is precisely responsible knowledge that is needed - knowledge for which the knower is prepared to bear responsibility.

Two Hands of One Task

At first glance, the distinction between Sosa and Zagzebski may seem technical. Both speak of virtue epistemology, both focus on the knower, both connect knowledge with the qualities of the agent. What, then, is the difference? The difference lies in the direction of explanation. Sosa explains knowledge from the bottom up: from reliable processes to true beliefs. Zagzebski explains knowledge from the top down: from the responsible agent to reliable processes. For Sosa, the reliability of the faculty is primary; for Zagzebski, the responsibility of the agent is primary. This distinction can be formulated through the difference between knowledge and wisdom. Sosa describes knowledge: apt belief produced by a reliable faculty. Zagzebski describes wisdom: responsible belief produced by a virtuous character.

For pedagogy this distinction has direct consequences. If Sosa is right, then pedagogy should focus on the development of faculties: train perception, memory, logic, and intuition. If Zagzebski is right, then pedagogy should focus on the formation of character: cultivate openness, courage, honesty, and perseverance. But in order to solve the hard problem, both are needed. Reliable faculties are needed, otherwise the researcher will make mistakes. Responsibility is also needed, otherwise they will use their faculties without reflection on their foundations.

My CCFP model attempts to combine both approaches. The eleven mental mechanisms are not merely faculties (as in Sosa) and not merely virtues (as in Zagzebski). They are faculties that include a disposition to their use. MM-6, critical thinking, is not merely the capacity to think critically; it is the inclination to think critically, which includes both the capacity and the motivation. This is precisely why my model is closer to Zagzebski than to Sosa: it requires not only the development of a skill but also the formation of a responsible attitude toward its use. But without Sosa it would lose the notion of reliability: the idea that the faculty must work, not merely be motivated. Virtuosity is not merely the desire to play well; it is the desire united with the ability.

A School That Asks “How”

Virtue epistemology changes our understanding of what education is. Traditionally, education is understood as the transmission of knowledge: the teacher transmits information to the student, the student memorizes it, and the examination checks whether they have memorized it. Virtue epistemology says: this is not education but training. Education is the formation of the qualities of the knower that make them capable of attaining truth independently. This distinction has practical consequences. If education is the transmission of knowledge, then the main question is: “What should the student know?” If education is the formation of a virtuous knower, then the main question is: “What should the student become?” The first question leads to the standardization of content. The second leads to the individualization of development. The first leads to examinations. The second leads to the diagnosis of dynamics.

It is precisely this distinction that underlies my model. The traditional school asks: “What does the student know?” My model asks: “How does the student know?” The traditional school evaluates the result. My model evaluates progress in the development of cognitive qualities. The traditional school prepares “successful graduates.” My model prepares virtuous knowers. And this distinction is not merely a pedagogical subtlety. It is the distinction between two types of education that lead to different types of society. Education as the transmission of knowledge reproduces the existing society: students assimilate what is already known and become functionaries of the existing system. Education as the formation of a virtuous knower creates agents of change: students become capable not only of assimilating but also of re-conceptualizing - that is, of changing the very frameworks in which they think. In order to solve the hard problem, it is precisely the second that is needed.

Here I must confess to one doubt. When I speak of the “virtuous knower,” I risk creating yet another ideal, yet another standard that no one can reach. Aristotle spoke of virtue as a mean between extremes, and it seems to me that in speaking of virtuosity it is easy to fall into one of them: either into the cult of genius, where the virtuoso is a rare specimen, or into leveling, where everyone who has completed a training course is declared a virtuoso. Neither is correct. The virtuosity that Sosa and Zagzebski speak of is neither genius nor a diploma. It is a quality of work that can be developed in any person but cannot be guaranteed to anyone. Pedagogy can create the conditions in which virtuosity is probable, but it cannot “produce” it. And this, perhaps, is the most honest formulation of what I have in mind.

The Distant and the Near

Virtue epistemology may seem remote from neuroscience. What do reliable cognitive faculties and intellectual virtues have in common with fMRI, the connectome, and qualia? The answer: everything. The hard problem is not a problem of data. It is a problem of the knower, who is incapable of going beyond an exhausted paradigm. Virtue epistemology provides the language for describing what the knower must be like in order for such a departure to become possible. Sosa speaks of reliable faculties. Zagzebski speaks of responsible virtues. Together they describe the virtuous knower - a person who possesses both faculties and motivation, both reflection and responsibility.

My CCFP model is a concretization of this ideal as applied to the task of solving the hard problem. The eleven mental mechanisms are not merely useful skills. They are concrete qualities that make the knower virtuous. And the pedagogy that forms them is not the transmission of knowledge. It is the cultivation of a virtuous knower. It is in this sense that I say that pedagogy is a strategy for the evolution of the cognitive potential of the species. Not because it “solves the hard problem” but because it creates the conditions without which a solution is impossible. Virtue epistemology explains why this is so. And this is precisely why it is the philosophical foundation of my entire model.

But here I return again to the question with which I began. What does it mean to be a knower capable of solving the hard problem? The answer: it means to be a virtuous knower in the sense of Sosa and Zagzebski. But virtuosity is not given from birth - it is formed through pedagogy. This is the main thesis of the article: virtue epistemology does not merely describe the knower; it prescribes pedagogy. If we want the hard problem to be solved, we must form virtuous knowers. And this means restructuring education. Restructuring not on the model of a factory producing standardized parts but on the model of a workshop in which each student works on their own instrument. Sometimes the instrument breaks. Sometimes the student loses interest. Sometimes the master makes a mistake. But in this

workshop there is something that the factory does not have: the possibility of becoming different. And perhaps this possibility is the only thing that is truly worth transmitting.

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