David Perkins and Shari Tishman: Thinking Dispositions and the Cultivation of the Mind

Aleksandr Kleymenov

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Author: Aleksandr Kleymenov
ORCID: 0009-0004-9404-2400
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Abstract

In this article, I turn to a concept that bridges the philosophical analysis of virtue epistemology and pedagogical practice: the theory of thinking dispositions developed by David Perkins and Shari Tishman. Their approach, developed within the framework of the Harvard Project Zero, begins with a simple but radical observation: having an ability and being inclined to use it are not the same thing. A person may be able to think critically and yet not do so. It is precisely this gap between ability and action that Perkins, Jay, and Tishman explain through a triadic model of disposition, which includes sensitivity, inclination, and ability. They also identify seven key thinking dispositions that characterize good thinking. In the article, I show that this concept is the missing link in my CCFP model: if virtue epistemology explains why the qualities of the knower matter, then the theory of dispositions explains what they consist of and how to form them. I pay particular attention to the idea of enculturation - the formation of dispositions through the creation of a culture of thinking. It is in this sense that pedagogy becomes not the transmission of skills but the cultivation of the mind.

Keywords: thinking dispositions, triadic model, sensitivity, inclination, ability, enculturation, culture of thinking, Perkins, Tishman, communicative-cognitive framework of personality, mental mechanisms.

The Piano That No One Plays

In the previous article, I examined the virtue epistemology of Sosa and Zagzebski. Its main thesis is: knowledge is not merely a true belief but a belief produced by the qualities of the knower. Sosa spoke of reliable cognitive faculties; Zagzebski spoke of intellectual virtues. Both argued that epistemology must deal not with beliefs but with the agent [8].

But here one question remains that virtue epistemology often leaves in the shadows. What happens when a person has an ability but does not use it? One can possess a reliable capacity for critical thinking and not apply it in everyday life. One can know what a logical fallacy is and still commit it. One can be capable and yet not be a thinker.

It is like a piano in the living room: the instrument is tuned, the keys respond, but no one sits down to play it. The ability is there, but the music is not. Why? Because between ability and action lies a gap that traditional pedagogy often fails to notice. It teaches one to play scales but does not teach one to want to play. It develops a skill but does not form an inclination.

It is precisely this gap that the concept I examine in this article addresses. Its authors are David Perkins and Shari Tishman, researchers at the Harvard Project Zero, one of the most influential centers for the study of thinking and education. In 1993, together with Eileen Jay, they published *Beyond Abilities: A Dispositional Theory of Thinking*, which has become a classic [1]. Their main thesis is: good thinking depends not only on abilities but also on dispositions - on how a person is inclined to use their abilities.

This thesis has a direct bearing on my model. If virtue epistemology explains why the qualities of the knower matter, then the theory of dispositions explains what they consist of and how to form them. Without it, the CCFP would remain a philosophical abstraction. With it, it becomes a pedagogical program.

The Anatomy of an Act

The key contribution of Perkins, Jay, and Tishman is the triadic model of thinking disposition. They argue that for dispositional behavior to occur, three components must be present [1; 2].

The first is sensitivity. This is the perception that a situation requires a certain behavior. A person must notice that before them is a problem requiring critical thinking, or an argument requiring evaluation. Without sensitivity, they simply will not see the opportunity to apply their ability. It is like the clinical eye of an experienced doctor: they notice a symptom that a student passes by. Not because the student sees worse, but because they have not yet learned to distinguish the significant from the insignificant.

The second component is inclination. This is the impulse or attraction toward a certain behavior. A person does not merely notice that a situation requires thinking; they feel a prompting to think. Inclination is the motivational component: that which makes a person want to use their ability. Without it, sensitivity remains cold observation: "yes, there is a problem here," but without the desire to solve it.

The third is ability. This is the basic possibility of performing the behavior. A person must be able to do what they feel inclined to do and what they have noticed. Without ability, the disposition remains a good intention: "I would like to think about this, but I do not know how."

Imagine a person who is inclined to seek balanced arguments in a dispute. For this disposition to work, they must notice that they are reading an editorial that requires an evaluation of arguments; feel an inclination to evaluate the arguments rather than merely accept them; and possess the ability to identify arguments for and against. Remove any of the three components - and the disposition falls apart.

This model has radical consequences for pedagogy. Traditional education focuses on abilities: it teaches skills, trains them, and tests their formation. But if a disposition requires three components, then training only abilities is insufficient. One must also develop sensitivity - teach one to notice situations that require thinking - and inclination - form the motivation to use thinking. It is precisely this distinction that underlies what I call a "school of thinking" as opposed to a "conveyor-belt school."

A Portrait of a Thinking Person

On the basis of the triadic model, Perkins, Jay, and Tishman identified seven key thinking dispositions that, in their view, characterize good thinking [1; 4]. These dispositions are not skills in the traditional sense; they are inclinations that include sensitivity, inclination, and ability.

I will not list them as a list. Rather, this is a portrait. A person inclined to be broad and adventurous is open to alternatives, seeks other points of view, and explores boundaries. They are sensitive to narrow-mindedness and dogmatism, and they are able to identify assumptions and consider things from different sides. A person with sustained intellectual curiosity asks questions, seeks problems, and investigates. They are sensitive to unasked questions, to anomalies, and to gaps in knowledge. A person inclined to clarify and seek understanding wants to understand things clearly, to connect ideas with experience, and to seek the essence. They are sensitive to obscurity and superficiality. A person inclined to be planful and strategic sets goals, builds plans, and acts deliberately. They are sensitive to aimlessness and lack of direction. A person inclined to be intellectually careful is precise, organized, and thorough. They are sensitive to possible errors, to disorder, and to imprecision. A person inclined to seek and evaluate reasons questions the given and demands justification. They are sensitive to the need for evidence. And finally, a person inclined to be metacognitive is aware of and controls the flow of their own thinking. They are sensitive to complex thinking situations and are able to manage their own mental processes and to be reflective.

These seven dispositions are not a final list. Perkins and Tishman emphasize that their enumeration is a working hypothesis, not a closed canon. Later researchers, such as Art Costa and Bena Kallick, proposed expanded lists of "habits of mind" [6]. But the model of Perkins and Tishman is important not for the number of dispositions but for its structure: each disposition is described through the triad of sensitivity, inclination, and ability. It is precisely this structure that makes pedagogical intervention possible: each component can be developed separately.

Here it is appropriate to recall how medieval artisans taught apprentices. No one explained the “rules of forging” to them in a lecture hall. The apprentice worked alongside the master, watched how the master held the hammer, how they felt the metal, how they decided when to strike harder and when softer. Knowledge was transmitted not through instruction but through participation. The same happens with thinking dispositions: they cannot be “taught” as a set of rules. They can only be cultivated in a person through experience.

The Air That Thought Breathes

If dispositions consist of three components, how are they to be formed? Perkins and Tishman answer this question through the concept of enculturation. They argue that dispositions cannot be taught directly, as skills. They cannot be transmitted through explanation or training. They are formed through immersion in a culture in which thinking is valued, practiced, and supported [2; 4].

This distinction between transmission and enculturation is fundamental. Transmission is a model in which the teacher transmits knowledge and skills to the student. Enculturation is a model in which the student grows into a culture of thinking, adopting its norms, values, and practices. Just as a child masters language not through grammatical rules but through immersion in a linguistic environment, so thinking dispositions are mastered not through “thinking lessons” but through participation in a culture of thinking.

Perkins, Tishman, and Jay identify four forces of enculturation that must be present in classroom culture. Modeling: the teacher and other adults demonstrate thinking dispositions in their behavior. Explanation: the teacher explains why thinking matters and how it works. Interaction: students discuss their thinking processes with each other and with the teacher. Feedback: students receive feedback on the quality of their thinking, not merely on the correctness of the answer [2; 4]. Later, Ron Ritchhart, a colleague of Perkins and Tishman, developed this idea into the concept of “creating cultures of thinking,” identifying eight cultural forces: expectations, language, time, modeling, opportunities, routines, interaction, and environment [5].

Enculturation is not socialization in the broad sense. It is the purposeful creation of an environment in which thinking is the norm rather than the exception. The key difference from traditional instruction: in traditional instruction, thinking is a means to achieving the correct answer. In a culture of thinking, thinking is the goal and the value. Students learn to think not because it is needed for an examination but because it is part of what it means to be a member of a community that values thinking.

This concept has a direct bearing on my model. The infrastructure that I speak of in the article on mental mechanisms is the material part of a culture of thinking [7]. Individualization through unique abilities is a pedagogical strategy that allows a student to find their own entry point into a culture of thinking. The diagnosis of dynamics is feedback that helps a student see their progress in the development of dispositions. Without a culture of thinking, without enculturation, individual skills remain isolated and do not turn into dispositions.

A Bridge Between Philosophy and the Classroom

Now it is possible to say why the theory of Perkins and Tishman is the missing link in my model. It connects virtue epistemology with pedagogy. Virtue epistemology says: knowledge is the product of the qualities of the knower. But it does not explain what these qualities consist of or how to form them. The theory of dispositions answers both questions: it says that qualities consist of sensitivity, inclination, and ability, and that they are formed through enculturation.

It also refines what a mental mechanism is in my model. I define MMs as concrete skills, abilities, and operational systems. But the theory of dispositions shows that ability is insufficient. MM-6, critical thinking, is not merely the capacity to think critically; it is the disposition to think critically, which includes sensitivity to situations requiring critique, the inclination to critique, and the ability to critique. Without sensitivity and inclination, the ability remains unused. The piano stands there, but no one plays.

And finally, it explains why traditional education often fails. Traditional education focuses on abilities, on skills, and ignores sensitivity and inclination. It teaches students how to think but does not teach them when and why to think.

This is precisely why school graduates often possess critical thinking skills but do not apply them in everyday life. They have not passed through enculturation into a culture of thinking. They can play scales but do not hear the music.

Where the Theory Stalls

The theory of Perkins and Tishman is not free from criticism. I want to identify three objections in order to show that I see the limits of their approach.

First: the vagueness of the concept of disposition. Critics note that disposition is a broad concept that can include anything from habits to traits of character. Without a more precise definition, it is difficult to understand what exactly is being formed and how it is to be measured.

Second: the difficulty of empirical verification. If dispositions are stable traits that manifest themselves in real situations, how are they to be measured? Laboratory tests are unsuitable because they do not reproduce real conditions. Observation in the classroom is a more adequate method, but it requires time and resources. Perkins and Tishman acknowledge this problem and propose using portfolios and behavioral observation as the main methods of assessment [4].

Third: the risk of indoctrination. Enculturation is a powerful instrument. If a school creates a culture of thinking, then who determines what kind of thinking is valued? There is a risk that enculturation will turn into the imposition of certain values and ways of thinking, suppressing alternatives. Perkins and Tishman respond to this by emphasizing that enculturation must be open and reflective: students must not merely accept norms but also make sense of them, ask questions about them, and, if necessary, change them [4].

Criticism is important because it shows that the theory of dispositions is not a dogma but a research program. It has its limits and requires further development. In my model these limits are taken into account: I do not assert that dispositions are all that is needed. I assert that they are a necessary component without which abilities remain unused. Enculturation is not the only method but a necessary condition for the formation of dispositions.

What Remains Behind the Scenes

Virtue epistemology told us that knowledge is the product of the qualities of the knower. The theory of Perkins and Tishman tells us what these qualities consist of and how to form them. A disposition is not merely an ability; it is a triad of sensitivity, inclination, and ability. And it is formed not through the training of skills but through enculturation - through immersion in a culture in which thinking is valued, modeled, and supported.

For my model this means the following. The CCFP is not a set of abilities but a set of dispositions. The MMs are concrete dispositions, each of which includes sensitivity, inclination, and ability. Pedagogy is the practice of enculturation, not the transmission of skills. It is in this sense that I say that pedagogy is a strategy for the evolution of the cognitive potential of the species. It forms not merely intelligent people but people inclined to think - people in whom thinking has become part of their character.

But here a question remains that will become central for the next article: what kind of environment is necessary for enculturation? How is the cognitive niche in which dispositions are formed structured? This is the subject of Article 13, devoted to Andy Clark and David Chalmers. If Perkins and Tishman say that dispositions are formed through culture, then Clark and Chalmers will show that culture itself is an extension of the brain. And then the question of where the mind ends and the world begins will turn out to be not a metaphor but a precise philosophical problem. For now, one thing is clear: the piano does not play itself. It needs the air in which music becomes possible.

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