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ABSTRACT

The connection between sustained high-level critical and creative thought and positive disposition is explored in this paper. The purpose of the paper is three fold: (1) to present the main ideas behind a dispositional conception of thinking; (2) to discuss research on this topic; and (3) to demonstrate the relationship between high-level thinking and moral character, with an eye towards better education. Toward these aims, the elements of disposition and their relationship to moral character are addressed. Intellectual and dispositional stereotypes are discussed as well. Results showed that research on thinking skills and moral development can be used to provide students with a better academic education. (SR)

The Concept of Intellectual Character and its Connection to Moral Character

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The Concept of Intellectual Character and its Connection to Moral Character

Introduction

Think of how wonderfully humane a world it would be if all good thinkers were good people, and all good people were good thinkers. Naive as this seems, there is something intuitively appealing about a link between good thinking and good deeds. And in fact, most cultures have a figurehead or hero who is both smart and good. But despite this wistful ideal, our culture tends to be quite cynical about the possibility of moral excellence and intellectual excellence coexisting seamlessly in one individual. This cynicism shows itself in an assortment of cultural stereotypes we have that highlight the gap between good thinking and good deeds, and reinforce our belief in its inevitability. For example, here are four stereotypical ways of thinking about the disjunction between thinking and character that are familiar to most everyone:

- *The evil genius.* This is the stereotype of brilliant thinker but horrible person, caricatured, for example, in Batman's arch-enemy, the Joker — a brilliantly devious and logical mind bent towards criminal purposes.

- *The simple-minded saint.* This is the sentimental but reliably poignant stereotype of the person with the good heart but weak mind. Forrest Gump, for example, is a the currently popular incarnation of this stereotype.

- *The narrow- or absent-minded professor.* This stereotype has many variations, but the basic theme is: intellectually talented but morally indifferent. Consider for instance Wernher von Braun, the famous rocket scientist who pursued his research for whichever government happened to provide him with funds. Remember the caricaturing lyrics of the Tom Lehrer song?

  > "Once the rockets are up, who cares where they come down?
  > 'That's not my department,' says Wernher von Braun." []

- *The all-consumed artist.* This is the stereotype of the larger-than-life creative genius, whose treatment of those around him or her is often morally second-rate. Take Tolstoy, for example. Brilliant artist and visionary, but a notoriously philandering husband.

Stereotypes are interesting because of both the truths and untruths they contain. Should we accept the inevitability of the sorts of gaps between

character and thinking suggested by these stereotypes? Can education change things? Should it try?

One way to approach these questions is to start by thinking about the definition of good thinking. There are currently some emerging conceptions of the nature of good thinking that suggest a more dispositional, characterological view of thinking than has previously been popular. This new perspective carries with it some interesting implications for the way we think about moral dispositions, and the way we think about the overlap between the intellectual and moral realms. What I try to do in this paper is briefly present the main ideas behind this new, dispositional conception of thinking, mention some research behind it, then look for illuminating connections between high-level thinking and moral character, with an eye towards better education in both areas. The concept of character is the thread I use to try to tie my thoughts together. I begin by looking at the "thinking" side of the equation.

Thinking Dispositions

What is the nature of good thinking? This question has received quite a bit of attention in recent years, and by and large the popular answer has been that good thinking is primarily a matter of cognitive ability, or skill. Hence the term "thinking skills." However, there is a growing trend, especially among those concerned with the teaching of thinking, to look beyond ability and view good thinking as dispositional (Ennis, 1987; Facione, Sanchez, Facione, & Gainen, 1995; Norris, 1992; Perkins, 1995; Perkins, Jay, & Tishman, 1993; Tishman, 1994). The basic insight behind this perspective is that sustained high-level critical and creative thought involves more than just cognitive ability, it also involves motivations, attitudes, passions, sensitivities, values, and habits of mind. In other words, good thinking is a matter of disposition.

Scholars working in this area often use the term "thinking dispositions" as a convenient unit of analysis. Roughly speaking, a thinking disposition is a tendency, or leaning, towards a particular pattern of intellectual behavior. For example, some people are disposed to be careful and precise in their thinking, others are disposed to be intellectually careless. Some people are disposed to probe boundaries and challenge assumptions, other are disposed to accept intellectual constraints.

There are all sort of thinking dispositions, and researchers concerned with the nature of high-level thinking have asked what sorts of thinking dispositions characterize *good* thinking. Not surprisingly, several conceptions and

taxonomies have been put forth. Some scholars talk about an overarching thinking disposition called the disposition to think critically (Facione et al., 1995), or the disposition towards mindfulness (Langer, 1989; Salomon, 1994). Others propose more detailed taxonomies that include items like the disposition to seek reasons and justifications, the disposition to think broadly, the disposition to sustain curiosity, the disposition to find problems, the disposition to be self-evaluative, the disposition to be empathetic, the disposition to consider alternative points of view, and so on. (Ennis, 1987; Paul, 1990; Perkins et al, 1993).

The purpose of this paper is not to discuss specific taxonomies. But there is one taxonomic point I want to make. Most of the items in the various taxonomies of thinking dispositions (and, for that matter, in taxonomies of thinking skills), fall into three broad categories: dispositions concerning *reasoning and deliberation* (e.g. the disposition to seek evidence, or to construct careful explanations) dispositions concerning *inquiry, innovation, and imagination* (e.g. the disposition to think broadly, or to challenge assumptions), and *metacognitive* dispositions (e.g. the disposition to be self-evaluative, the disposition to learn from experience). As I will suggest later in this paper, these three categories have relevance in the moral as well as the intellectual realm.

Thinking Dispositions and the Concept of Intellectual Character

Thinking dispositions, whether conceived broadly or in taxonomic detail, are characterological tendencies. They are stable, in the sense that they are pervasive over time. They are expressed in attitudes and actions, and they involve values, standards, sensitivities, and motivations, as well as abilities. This claim, that dispositions are characterological, shouldn't be particularly controversial. In everyday life we quite naturally take the display of dispositional tendencies as indications of character, and we think that acting in accordance with one's dispositions is to act "in character." For example, a person who is disposed to play devil's advocate can be said to be acting in character when she takes the opposite side in an argument. A person who is intellectually precise can be said to acting in character when he takes the time to make a careful observation.

The concept of intellectual character, then, is simply a convenient way of referring to people's thinking-dispositional profiles. We are complex creatures, and most of us have an assortment of intellectual characteristics. For example,

an individual may be intellectual bold, intellectually adventurous, perhaps a little bit intellectually arrogant, intellectually curious, and occasionally intellectually circumspect. To talk about someone's intellectual character is to talk about the sum and interweaving of their thinking dispositions as they play out in everyday behavior. The term *intellectual character* simply refers to the profile of an individual's thinking dispositions[1].

Shortly I will use the concept of character as a bridge to a discussion about moral character, making the point that there a is deep structural similarity between intellectual character and moral character. But first I want to say a few more words about the concept of disposition.

The Elements of Dispositions

An important difference between a thinking disposition and a cognitive ability is that an ability can lie dormant, while a disposition by definition has behavioral force. For example, you can have the ability to reason carefully about the pros and cons of a decision, but not actually *engage* in the pro/con reasoning, because you don't have the inclination to do so. To better understand intellectual character, then, a logical question is: what components, or elements, make up a thinking disposition? In other words, what mix of elements is necessary to spark dispositional behavior and give it behavioral force? Over the last few years, my colleagues and I have developed what we call a "triadic conception of disposition" (Perkins, et al, 1993; Tishman, Jay, & Perkins, 1993). This is a conceptual analysis of what logically must be involved in order for intellectual dispositional behavior to be activated.

Our claim is that high-level thinking dispositions are comprised of three elements: *inclination, sensitivity,* and *ability,* and that these three elements must together be present in order for dispositional behavior to occur. *Inclination* is the felt tendency toward a particular behavior. *Sensitivity* is the perception of the opportunity for, or appropriateness of, the behavior. And *ability* is the basic capacity to carry through with the behavior[2]. This analysis applies to any sort of thinking disposition, good, bad or indifferent. But since my main concern here is *good* thinking, let me illustrate how this analysis works by using a high-level thinking disposition that most scholars working in this area agree is key to critical thinking: the disposition to seek reasons and justification.

Suppose you are reading a newspaper report about a group of people who found some very old bones in an Arizona desert that appear to have been sharpened into tools by human hands. The group claims that the bones were carbon-dated at 25,000 years old – many thousands of years earlier than it was thought human beings lived in North America. "A new discovery!" the group claims. "Bones in the desert prove that human beings were in North America 25,00 years ago!" As a person who has the disposition to seek reasons and justifications, how will you be disposed to think about this report? Very likely, you will be skeptical about it, and perhaps mentally challenge the claim. But in order to do so effectively, three things must happen. One, you must be sensitive to the fact that a poorly supported claim has been made, i.e. you must notice or detect it in the text. Two, you must feel inclined to make the effort to think further about the claim – to think further, for example, about what might be wrong with it. And three, you must have the ability to engage in the appropriate type of reasoning, such as imagining possible counterevidence or seeking an alternative explanation for the sharpened bones Taken together, it is the spark, or coalescence, of these three elements that is responsible for your dispositional behavior. (This example is adapted from essay test item in Norris & Ryan, 1988)

Can these dispositional elements – sensitivity, inclination, and ability – be empirically isolated? Although we are still in the pilot stages of research, through a grant from the MacArthur Foundation, I and my colleagues have been conducting research with schoolchildren that suggest that these elements are psychologically real and discriminable. For instance, the "Bones" example just mentioned is drawn from a pilot study we recently conducted. We designed a task with three consecutive parts in which each part corresponds to one element of the triad. The results suggest that the influence of each element on intellectual behavior can be identified empirically. For example, some students do not show any sensitivity to the presence of the unsupported claim in the text, but, when it is made salient for them, demonstrate an inclination to do something about it. Some students exhibit neither sensitivity nor inclination, but, on the third part of the task (a brief reasoning-abilities test), show that they very much have the ability to engage in the kind of reasoning an analysis of the claim calls for.

Dispositions and Moral Character

I may seem to be straying from my core agenda, which is to look for connections between the nature of good thinking and moral character. So let me stand back and take stock. So far I have tried to argue for two claims: (1) High-level thinking is dispositional and therefore a matter of "intellectual character," and (2) the mechanism of thinking-dispositional behavior involves a spark between three elements: sensitivity, inclination, and ability. I said at the outset that the concept of character is the thread that runs through this paper. Keeping in mind the three dispositional elements, let me now turn to the concept of moral character, and draw, as promised, some connections.

The main connection I want to make is this: Moral character is susceptible to a dispositional analysis, just as intellectual character is. That is, the three dispositional elements – sensitivity, inclination, and ability – provide a useful way of thinking about the psychology of moral behavior.

For example, the element of sensitivity corresponds to what philosophers sometimes call "moral perception" (Blum, 1991; Murdoch, 1970; Nussbaum, 1990). Moral perception has to do with seeing a situation *as* moral. Seeing it, that is, as a situation in which it is appropriate to think and act morally. The philosopher Lawrence Blum has written illuminatingly about moral perception, and provides the following type of example (Blum, 1991).

> Two people are sitting on a crowded subway. Let us call them Thomas and Carla[3]. Standing near them is a young-ish woman holding two big bundles. Both Thomas and Carla are aware of the standing woman. Carla perceives the woman's discomfort: she notices that the bundles look heavy and hard to hold, so Carla stands up offers the woman her seat. Thomas hasn't particularly noticed the standing woman's discomfort, although perhaps if Carla alerted him to it, he would easily perceive it. Consequently, although he is aware of the woman, Thomas doesn't perceive the situation as one in which a moral act – an act intended to relieve someone else's discomfort – is appropriate.

In "dispositions" language, Thomas lacks the appropriate moral sensitivity. Now Thomas might be just as inclined as Carla to be a kind and generous person, *when* he notices that kindness is called for. And, presumably, both Carla and Thomas have equal ability in this situation – the ability to stand up

and give away their seat. The difference is in their moral sensitivity – their perception of a situation *as* a moral situation.

Moral perception, then, plays much the same role in moral behavior as cognitive sensitivity does in intellectual behavior: both involve the detection of signals in the environment that indicate a particular behavior is called for.

What about inclination, the second triad element? Inclination was defined earlier as the felt tendency, or pull, towards a particular behavior. Spinning out the example just mentioned, recall that not only was Carla sensitive to the opportunity to act morally, she was ***inclined*** to do so. But she might not have been. For example, she could have noticed the woman's discomfort but not felt moved to help relieve it, perhaps because she, too, was carrying heavy bags, or had particularly tired feet. But Carla *was* inclined to give up her seat: the pull of inclination combined with her moral sensitivity to dispose her to act morally.

Ability, the third element of the dispositional triad, is defined as the capacity to follow through with the suggested behavior. In the subway case, ability seems straightforward: it consists partly in the cognitive ability to conceive of the appropriate corrective action to the perceived problem, and partly in the physical ability to take the action, i.e. stand up and offer one's seat. Of course, the subway situation doesn't demand heavily of ability. In terms of cognitive ability, there isn't much choice or interpretation or deliberation involved. Carla doesn't need to think particularly creatively about how to help the woman, nor does she need to be particularly thoughtful about the principles or people involved: she either gives up her seat, or she doesn't. But moral situations often place much heavier demands on cognitive ability. For example, many moral situations require people to be able to construct complex understandings of the needs and desires and motives of other people. To draw our attention to the importance of ability in moral behavior, the philosopher Owen Flanagan, who is particularly interested in the intersect between cognitive psychology and moral philosophy, has formulated the Principle of Minimal Psychological Realism. It states:

> Make sure when constructing a moral theory or projecting a moral ideal that the character, decision processing, and behavior prescribed are possible, or are perceived to be possible, for creatures like us. (Flanagan, 1991)

This is a general principle for constructing moral theories, but it also carries a message for the more fine-grained level of individual moral behavior: in order for a moral disposition to be realized, the agent must have the *ability* to engage in the appropriate moral behavior, above and beyond his or her desire to do so. This seems patently obvious, but with a little effort one can imagine plenty of moral situations that go wrong because ability is lacking. For example, a moment ago I mentioned that sometimes moral situations require the ability to construct complex understandings of other people's motives and desires. Consider in this respect the case of an overbearing mentor who, although she has a genuine moral inclination to help a young apprentice in his career, does far too much of the apprentice's work for him. The apprentice fails to learn and grow at an appropriate pace, because the mentor lacks the ability to see the situation from another perspective – a perspective that would enable her to see the apprentice's need to stand on his own two feet.

Intellectual Character and Moral Character: A Substantive Overlap?

I have been trying to get into focus what I what I think is an important structural similarities between dispositional behavior in the intellectual realm (what I have called intellectual character), and dispositional behavior in the moral realm (moral character). But it is impossible to leave the subject without at least raising the question: What of their content? Are intellectual sensitivities, for example, altogether independent of moral sensitivities? Are intellectual abilities a completely different ball of wax than moral abilities? Is there an overlap, in other words, between the *content* of intellectual character and moral character?

I can't attempt a full-scale answer to these questions here, but I'd like very briefly to suggest a fruitful way of thinking about them. Earlier, when I introduced the notion of thinking dispositions, I mentioned that most taxonomies of high-level thinking skills and dispositions generally include items that fall into three broad categories: reasoning and deliberation (often labeled "critical thinking), inquiry, innovation and imagination (often labelled "creative thinking"), and metacognition (sometimes called "reflective thinking"). These are important categories of moral behavior too, and dispositional elements within them can overlap and cross-trigger each other.

For example, consider the disposition to think broadly and imaginatively about options or ideas (a disposition that falls into the "creativity" category).

This disposition is triggered by a sensitivity to bias and onesidedness, and supported by an ability to conceive of alternative perspectives and points of view. A sensitivity to bias and onesidedness can also trigger the moral disposition for fairmindedness, a disposition which is similarly supported by the ability to conceive of alternative perspectives and points of view.

Sensitivities, inclinations and abilities in each of the three categories often crosscut and obscure the boundaries between the moral and cognitive realms. One way to see this is to look at how moral dispositions aid and abet thinking in each of these categories. For example:

- Reasoning and deliberation are supported by moral dispositions towards honesty, scrupulousness, probity, and fairmindedness.

- Inquiry, innovation and imagination are supported by moral dispositions towards flexibility, openmindedness, commitment, and courage.

- metacognition is supported by honesty (again), thoughtfulness, and humility.

The basic point I wish to suggest is that intellectual character and moral character can reinforce each other, and blur in their boundaries. What counts as a moral disposition can have a strong cognitive orientation, and what counts as a thinking disposition can have strong roots in moral character. "Can" doesn't mean "does," of course. As the stereotypes I described earlier suggest, we have plenty of images of disjunctions rather than conjunctions between intellectual and moral behavior. But I think we should be very wary of accepting these disjunctions as necessary or natural.

Implications for Research and Education

In the last two decades, there has been a good deal of biographical research on the lives and intellectual development of highly accomplished creative people. Also, there has been a good deal of biographical research on the lives and moral development of "modern day saints" and moral exemplars. These bodies of work are invaluable resources, and we can learn a lot from them by looking them over from the perspective of thinking and character. I think there are two areas, however, in which additional research -- theoretical as well as empirical -- is needed. One, we need to go beyond simplistic stereotypical conceptions of the disjunctions between good thinking and good character,

(stereotypes like the evil genius or the simple-minded saint), and develop some careful theoretical models for examining the *relationship* between intellectual development and moral development. Two, and relatedly, we need to continue to probe and challenge the intellectual frameworks we are heir to — the frameworks that support these stereotypes — as we explore this relationship.

Let me say a couple of words about this second agenda, because it touches on the obvious question of why we have stereotypes that caricature the gap between thinking and morals in the first place. One reason these stereotypes prevail has to do with our (often tacit) belief in what the philosopher Michael Stocker has called the Aristotelian "purified view of intellect" (Stocker, 1980). This is the notion, put forth by Aristotle and carried through two millennia of Western history, that high-level thinking — "pure" reasoning — should be empty of affect or emotional contamination. Thinking should be impartial, objective, detached. Of course, deprived of the anchor of emotion or affect, impartial reason can be put to any end, good or bad. Thus, the evil genius is possible. And simple-minded sainthood is the converse possibility: untethered to reason, moral action becomes a matter of pure intuition and impulse.

Another reason these stereotypes prevail, particularly the stereotypes of the absent-minded professor and the all-consumed artist, is a pervasive set of beliefs in our culture around the privileges and costs of expertise. We have an idea that if you're good enough at something — making paintings, writing symphonies, designing rockets — you are somehow exempt from the normal rules of behavior. Your expertise is expected to be so all-absorbing that it's quite natural and possibly necessary for you to neglect, or indeed fail to perceive, the needs and interests of others around you. This conception, along with the "purified view of intellect" just mentioned, are examples of the kinds of traditional conceptions I think merit critical scrutiny.

Let me close by mentioning three implications for education I see in what I have discussed. In the current educational climate, there are several movements afoot to teach critical thinking, and several movements afoot to develop moral character (see, for example, Cohen, 1995). Thinking back to the dispositional triad, one implication for both critical thinking instruction and moral education is that successful instructional design — whether about thinking or about morals — should involve attention to all three aspects of the triad. For example, a program of character education should aim to develop students' moral perceptions, as well as their moral inclinations and abilities. Similarly,

a thinking skills program should aim to do more than develop cognitive ability; it should also develop students' sensitivity to thinking occasions and their inclination to follow through on them.

A second implication — perhaps more controversial — is that the teaching of thinking and the education of moral character should not be thought of as wholly independent enterprises. Put more succinctly, morals should not be taught mindlessly, and thinking should not be taught heartlessly. In fact, I think the stereotypical images I've mentioned thrive in large part because education has reinforced rather than bridged the separation between these areas.

A third and final implication is that, from an instructional perspective, the overlap between intellectual and moral character invites special attention. I would urge that we actively explore the development of instructional initiatives that *encourage* the blending of, and transfer between, these two areas. Some programs already approximate this. For example, the program, *Facing History and Ourselves,* aims to teach thinking and morals in the context of history instruction ((Strom & Parsons, 1982). The Teaching for Understanding initiative, developed by my colleagues at Project Zero, emphasizes teaching for thinking and understanding by focusing on generative topics — topics within and across subject matters that touch in significant ways on the moral and personal dimensions of students' lives (Perkins & Blythe, 1994). Programs like these are exemplary, but they are just a beginning. We have learned rather a lot in the past few decades about high-level cognition, and about the development of moral character. Now is a very good time to try to bring these two areas together.

After all, think what a world it would be if Batman's arch enemy The Joker could care, and Forrest Gump could think.

Notes

1. My concern in this paper is mainly high-level thinking dispositions — dispositions that abet, rather than deter or undermine, high-level critical and creative thought. But of course thinking dispositions can be negative, too. For example, people can be disposed to be intellectually rigid, intellectually sloppy, intellectual dishonest. The concept of thinking dispositions, and, by extension, the concept of intellectual character, is not necessarily normative: someone can have a lousy intellectual character, a good one, or a mixed one. But it is important to recognize that the term character is ambiguous. Sometimes we use the term normatively, such as when we call someone a "person of character." Other times we use it descriptively, to refer to whatever sort of character someone has, good, bad or indifferent. This ambiguity is not peculiar to the meaning of character. For example, a similar ambiguity attaches to the word, art, which can refer to good art, or any kind of art, including bad art.

2. This definition of disposition departs from the everyday sense of the word, in which disposition contrasts with ability. (E.g. Clara has the ability to play the piano, but not the disposition.) Although it's useful to follow everyday usage when possible, we have chosen a stipulative definition because we believe that ability is in fact a necessary component of dispositional behavior. Our stipulative definition of inclination as a felt tendency towards a particular pattern of behavior comes closer to the everyday meaning of the term disposition.

3. Blum calls the characters in this story John and Joan, but his purposes are not exactly my own. In order to relieve him of the responsibility of my agenda, I have taken the liberty of renaming them Thomas and Carla.

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