Wang Yangming's Moral Psychology and Cognitive-Behavioral Therapy

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A dominant trend in moral psychology evinces a renewed appreciation for the powerful role played by unconscious, automatic mental processes in producing ethical judgments. This new perspective marks a sharp break from traditional, "rationalist" approaches, in which moral evaluations derive from conscious reasoning and moral cultivation reflects an improved ability to articulate sound reasons for such evaluations. Seldom noticed is that similar attention to automatic, unconscious processing forms the foundation of cognitive-behavioral therapy, now considered to be one of the most efficacious alternatives to biochemical interventions in treating psychological problems and disorders. Cognitive-behavioral therapy and techniques have been subjected to a substantial degree of empirical testing. More than five hundred outcome studies have demonstrated the effectiveness of cognitive-behavioral therapy for a wide range of psychiatric disorders, psychological problems, and medical problems that have psychological components (see, e.g., Beck 2011; Butler, Chapman, Forman & Beck 2006; Chambless & Ollendick 2001). These include major depressive disorder, obsessive-

compulsive disorder, substance abuse, personality disorders, eating disorders, pathological gambling, chronic back pain, and psychosis. Moreover, several researchers have shown there are neurobiological transformations associated with cognitive-behavioral therapy treatment for various disorders (see, e.g., Goldapple et. al., 2004). In addition, hundreds of research studies have validated the cognitive model of depression and of anxiety (see, for example, Clark & Beck 2010; Clark, Beck, and Alford 1999).

The moral psychology of Wang Yangming (1472-1529 CE) also features a focus on automatic, unconscious processes in moral reasoning. Wang's philosophy presents a compelling view of how our moral judgments result not from a series of conscious calculations but from an innate moral faculty that produces intuitive responses to morally significant situations. His concern was on learning and teaching how to cultivate one's moral thinking, both conscious and unconscious. Influential studies of the philosophy of Wang Yangming have remarked on much he emphasized a *therapeutic* approach in his teachings over a purely *theoretical* one (see, for example, Ivanhoe 2002, 85). This essay is an attempt to take this suggestion seriously and consider some of the implications of this idea.

Wang Yangming's moral psychology is based on a cognitive model that bears key similarities to the theoretical principles of modern mainstream cognitive-behavioral therapy (CBT for short). First, both Wang and CBT hold that our emotional states can be immediately affected by our "automatic thoughts"–which can be so brief, frequent, and habitual that they are not "heard" or "caught." These automatic thoughts are not

always propositional beliefs and may sometimes take the form of images. Second, both Wang and CBT maintain that we can make such automatic thoughts conscious–if they are not conscious already–and that we are able to evaluate, alter, reframe, or replace them. Third, both Wang and CBT assert that our automatic thoughts directly effect behavioral change and that behavioral change can directly effect change of automatic thoughts. While the detailed prescriptions of CBT differ from Wang's model of self-cultivation, the many similarities can point us to a helpful way of understanding how Wang's teachings might practically function in everyday life and how they can enable us to train our thoughts and emotions and assist us in becoming better moral persons.[i]

One of the key insights to be drawn from this study is that well before the research of behavioural economists, psychologists, neuroscientists, and other academics on hot vs. cold cognition and dual-system intuitive vs. deliberate mental processing, Wang had already taught a deep respect for the automatic—and often unconscious—judgements governing behaviour, especially in the ethical realm. Wang and many other Neo-Confucian thinkers have long appreciated the primacy and the power of our intuitive mental processing, which has only recently gained prominence in the research agendas of analytic philosophy.[ii]

Cognitive-Behavioral Therapy and Philosophy

The roots of modern cognitive-behavioral therapy are often traced back to Aaron Beck, a psychiatrist at the University of Pennsylvania in the late 1960s. Fundamental to Beck's theory of cognitive therapy are distorted "automatic thoughts." Most successful

cognitive therapy to date targets such automatic thoughts, which describe a stream of thoughts almost all of us can notice if we try to pay attention to them.

What are "automatic thoughts"? They have several common characteristics (Westbrook, et. al., 2007, 7-9). These thoughts occur automatically and without effort. They coexist with a more manifest stream of thoughts, arise spontaneously, and are not based on reflection or deliberation. They are specific thoughts about specific events or situations. They can be made to become conscious, if they are not already conscious. They may be so brief, frequent, and habitual that they are not "heard." They are so much a part of our ordinary mental lives that unless we focus on them, we would probably not notice them, any more than we notice our breathing in daily life. Most of the time we do not question them. They may also take the form of images. And they have immediate effect on emotional states (Beck 2011, 135-140). We have many kinds of unconscious thoughts, and automatic thoughts constitute one category of unconscious thoughts.

Cognitive therapy trains clients to catch their automatic thoughts, write them down, identify the distortions, and find alternative and more accurate ways of thinking. Depressed people are caught in a feedback loop in which inaccurate thoughts cause negative feelings, which then distort thinking even further. Under therapy, over time, the client's negative feedback loop is broken, and the client's anxiety or depression is abated. With each re-framing, and with each negative thought loop broken, you can change your habits of thought, and in the process, change your moods and emotions (Haidt 2006, 37-39).

Along with Albert Ellis, whose Rational Emotive Therapy greatly informed modern cognitive behavioral therapy, Beck took ideas, techniques, and methods from Stoic and ancient Greek philosophy and removed them from their social, political, metaphysical, and religious contexts to turn them into a therapeutic method used to address depression and other psychological disorders:

Many of the principles incorporated in the theory of rational-emotive psychotherapy are not new; some of them, in fact, were originally stated several thousand years ago, especially by the Greek and Roman Stoic philosophers (such as Epictetus and Marcus Aurelius) and by some of the ancient Taoist and Buddhist thinkers. What probably is new is the application to psychotherapy of viewpoints that were first propounded in radically different contexts (Ellis 1962, 35).

Beck, Ellis, and other CBT pioneers isolated the philosophical principles from their historical background, which "modernized" the ancient philosophical theories, applying the method to 20th-century concerns:

The philosophical origins of cognitive therapy can be traced back to the Stoic philosophers, particularly Zeno of Citium (fourth century BC), Chrysippus, Cicero, Seneca, Epictetus, and Marcus Aurelius. Epictetus wrote in *The Enchiridion*, "Men are disturbed not by things but by the views which they take of them." Like Stoicism, Eastern philosophies such as Taoism and Buddhism have emphasized that human emotions are based on ideas. Control of most intense feelings may be achieved by changing one's ideas (Beck, et. al., 1987, 8).

As such, the theories of cognitive-behavior therapy can serve as an ideal bridge for cross-cultural philosophy, as well as for trans-historical and inter-disciplinary study.

The Power of the Unconscious

To many of us, our actions, thoughts, and beliefs appear to result from deliberate reasoning and explicit intentions, but psychologists have been telling us otherwise for decades. Nobel Prize-winning psychologist and behavioral economist Daniel Kahneman in his best-selling book, *Thinking, Fast and Slow*, details how our thinking is governed by two different systems: "System 1 operates automatically and quickly, with little or no effort, and no sense of voluntary control. System 2 allocates attention to the effortful mental activities that demand it, including complex computations. The operations of System 2 are often associated with the subjective experience of agency, choice, and concentration" (Kahneman 2011, 20-21). The central thesis of his book is that while we often think our System 2 is in control of our decisions, evaluations, and beliefs, most of the time, it is our System 1 that is calling the shots. Kahneman adduces several decades of research in psychology that has been making the same point.

In a classic paper in social psychology, Richard Nisbett and Timothy Wilson argue that people rarely have access to complex cognitive processes, such as decision-making, through introspection (Nisbett and Wilson 1977). In fact, we are more prone to confound or rationalize the actions that our unconscious automatically leads us to perform. An entire field of study–behavioral economics–has risen to prominence through exploring and developing this fundamental insight (see e.g., Ariely 2008).

In his best-selling book, *The Happiness Hypothesis*, Jonathan Haidt makes a similar case to Kahneman in maintaining that "the mind is divided into parts that sometimes conflict. Like a rider on the back of the elephant, the conscious, reasoning part of the mind has only limited control of what the elephant does" (Haidt 2006, xi). In the elephant/rider analogy, which Haidt has been developing since the 1990s, the "elephant" represents what he describes as automatic and largely unconscious mental processes (Haidt 2006, 13-17).

Corresponding developments have emerged in the field of moral psychology. For decades, the dominant view on moral education was a position in developmental psychology championed first by Jean Piaget (1965/1932) and developed by Lawrence Kohlberg (1969; 1971), which held that a child's moral behavior is best understood in terms of the child's articulations of moral principles.[iiii] In Kohlberg's theory (Kohlberg 1969; 1971), which builds on Piaget's foundation, very young children come to think that right and wrong are determined by what is rewarded and punished. As their cognitive abilities mature, usually around the ages of six to eight, they begin to appreciate the value of laws and rules. As their abstract reasoning abilities develop around puberty, they start to be able to think about the reasons for having laws and about how to respond to laws they perceive as unjust. Kohlberg's approach to moral education appealed to many people in the 1960s and 1970s in that it painted a portrait of an active child, creating morality for himself, not just serving as a passive receptacle for social conditioning as some empiricist, blank slate views would have it.

For Piaget and Kohlberg, reasoning follows the perception of an event. The reasoning then results in a judgment. Emotion may emerge from the judgment but is not causally related to it. On this theory, we reflect on specific principles in evaluating our moral choices and then deduce rationally a specific judgment. This "rationalist" model of moral development draws on data culled from the children's justifications. Research in recent decades has, however, called the Kohlbergian perspective into question, especially in its emphasis on justification over judgment.

Several challengers, picking up on a Humean sentimentalist theme, have risen to the fore, proposing in opposition a kind of moral sense or intuitionist theory. For instance, one of the strongest options is offered by Jonathan Haidt, who has observed that even fully mature adults are often unable to provide any sufficient justification for strongly felt moral intuitions, a phenomenon he calls "moral dumbfounding" (Haidt 2001). Even more, people regularly engage in outright confabulation; they invent and confidently tell stories to explain their behavior (Haidt 2007). This has led some to propose a different model, in which the perception of an event or action triggers an unconscious, automatic response, which immediately causes a moral judgment. Reasoning and justification come afterwards in the form of post hoc rationalizations of an intuitively generated response (Haidt and Bjorklund 2008).

Others have proposed alternative models. In a view recently championed by Antonio Damasio based on research on neurologically impaired patients (Damasio 1994; Tranel, Bechara, and Damasio 2000) and by Joshua Greene based on neuroimaging research (Greene 2008; Greene, et. al., 2004), our moral judgments are a blend of unconscious

emotional responses and some form of principled and deliberate reasoning, which both precede and generate the judgment.

These are but a few of the several, viable options currently under consideration in contemporary moral psychology. The major point of tension between the rationalists and intuitionists is in their differing emphases. Rationalists ascribe the real work to controlled processes, which are slow, conscious, and heavily reliant on verbal thinking, while intuitionists say it's done by the automatic processes, which are fast and effortless (Bargh and Ferguson 2000; Chaiken and Trope 1999). While this brief summary of the state of the debate cannot do justice to the intricate arguments and detailed data, I trust that the groundwork has been laid for demonstrating that Wang Yangming's moral theory falls squarely on the side of the intuitionists, and that like the cognitive-behavioral therapy theorists, Wang appreciates the power of unconscious, automatic beliefs in immediately and directly affecting our emotional states and behavior.

Automatic Thoughts and Emotional States

Unlike modern psychology, modern philosophy has been slow in appreciating or even coming to terms with the power of the unconscious. The idea that unconscious thoughts govern a great deal of everyday beliefs and behaviors has also not yet made its full impact on studies of Wang Yangming or of Chinese philosophy. In attempting to understand Wang's theory of "the unity of knowledge and action" (*zhixing heyi* 知行合一), modern scholars have approached it within the context of the philosophical problem of "weakness of will," situations in which we supposedly fail to do what we know we ought to do. Stephen Angle, for example, analyzes "cases of correct feeling

without correct action" in the context of weakness of will and Wang's theory of moral action and knowledge (Angle 2009, 125-131). Much has been made of the centrality of emotions and feelings in Wang's theory of knowledge and action (Tien 2004). Yet Wang's underlying cognitive model of behavior and emotion is able to account for his explanations of his doctrine of the unity of knowledge and action. This is most obvious when examined in terms of his metaphysics.[iv]

For Wang, every failure to act correctly is a result of a failure to grasp a "principle" (*li* 理*)* or "principles" that are already in the mind (*xin* 心). The practice of self-cultivation in Wang's philosophy is basically the process of unearthing and uncovering the obscured thoughts already in our minds. An examination of Wang's metaphysics helps elucidate this process.

In Wang's metaphysics, ideas (*yi* 意) are things (*wu* 物*)* in the mind (*xin* 心) that we need to rectify (*ge* 格). In his explanation of the "rectification of thoughts" (*gewu* 格物), which is commonly translated as "the investigation of things," Wang explicitly rejects Zhu Xi's 朱熹 explanation that *ge* 格 means "to reach" (*zhi* 致) and *wu* means the affairs or principles of things in the external world. Rather, Wang maintains that *wu* refers to the objects or contents of "thought" (*yi*) and not to external objects or events:

The application of a thought (*yi*)[v] requires its [corresponding] *wu*. And the *wu* is the task (*shi* 事). If a thought is applied to serving the parents, then serving the parents is the "object of thought" (*wu*). If a thought is applied to governing the people, then governing the people is the object of thought. If a thought is applied to studying books,

then studying books is the object of thought. If a thought is applied to hearing a lawsuit, then hearing a lawsuit is the object of thought. As long as thought is applied, there will be an object of thought. If there is a particular thought, then there will be the corresponding object of thought. If there is not this particular thought, then there will not be that corresponding object of thought. (WYQ 1:47)

Whenever one thinks, there must be something about which one thinks. That about which one is thinking is the *wu* or "object of thought." The *wu* are the things about which one has thoughts (*yi*).

Wang's multiple examples of what he considers to be *wu* clarifies how different his understanding of this concept is from Zhu Xi's. *Wu* constitute the locus of one's attention and that at which one's mind is directed. So the *wu* in *gewu* is best translated not as "things," but as "thoughts" or, more accurately, the "objects of thought."

The most immediate, direct, and reliable means of accessing these objects of thought are to monitor and reflect on the operations and responses of one's own mind. This is why *ge* in the phrase *gewu* for Wang means "to rectify":

The word *ge* 格 in *gewu* 格物 is the same as the *ge* in Mengzi's expression, "A great man rectified (*ge*) the ruler's mind."[vi] [*Gewu*] means to eliminate whatever is incorrect in the mind and preserve the correctness of its original substance. Wherever there is a thought, eliminate whatever is incorrect and preserve the mind's original substance. Then in all places, at all times, the heavenly *li* will definitely be preserved. (WYQ 1:6)

The more one eliminates these incorrect thoughts, particularly self-centered thoughts (*siyu* 私慾), the more one's mind will be able to function freely and to operate properly.

Central to Wang's philosophy is his concept of "pure knowing" (*liangzhi* 良知), which is the pure faculty of mind behind the obstructions of self-centredness.[vii] Our *liangzhi* faculty functions like sense perception, perceiving moral qualities immediately and effortlessly, but those of us not born with the powers of a sage face a long and difficult journey of "self-examination" and "self-mastery" to wield properly our *liangzhi* faculties (Tien 2004).

In addition to the tasks of "the rectification of thoughts" and "the extension of knowledge," Wang adds the integral phases of "the authentication of thoughts" (*chengyi* 誠意) and "the rectification of the mind" (*zhengxin* 正心).[viii] Taking issue with Zhu Xi's reading of the *Great Learning*, Wang lays out the proper interpretation of the order in which these phases are to be accomplished:

Now, concerning the good that is known by one's *liangzhi* (良知), if one actually does the good in regard to the objects of thought about which one is thinking to the very utmost of one's ability and, concerning the bad that is known by one's *liangzhi*, if one actually gets rid of the bad in regard to the objects of thought about which one is thinking to the very utmost of one's ability, then the objects of thought will be completely rectified and what is known by one's *liangzhi* will not be diminished or obstructed in any way. [This knowledge] then can reach its ultimate extension. As a result, one's mind will be pleased with itself, happy and without any lingering regrets;

the thoughts that arise in one's mind at last will be without a trace of self-deception and can be called "authentic" (*cheng* 誠). This is why it is said that, "When the object of thought has been rectified, knowledge is fully extended. When knowledge is fully extended, thoughts are authentic. When thoughts are authentic, the mind is rectified. When the mind is rectified, the self is cultivated." (WYQ 2:972 ; Ivanhoe 2009, 171-172)

The specific order is taken from the *Great Learning*: the rectification of thoughts leads to the extension of knowledge, which in turn leads to the authenticity of thought, which leads to the rectification of the mind, which results in attaining the goal of self-cultivation.[ix]

For Wang, the key to eradicating self-centered desires and mastering the *liangzhi* faculty is to monitor constantly one's automatically arising thoughts. In carrying out this task, one is to be "like a cat catching mice – with eyes intently watching and ears intently listening. As soon as a single [self-centered] thought begins to stir, one must conquer it and cast it out . . . Do not indulge or accommodate it in any way. Do not harbor it, and do not allow it to escape" (WYQ 1:16; Chan 1963, 35).[x]

Since few people can eliminate their self-centered desires all at once, the task calls for continual effort. Every time one is successful at eradicating an incorrect thought, one's *liangzhi* will be able to operate more freely. The more one's *liangzhi* operates freely, the more easily one's *liangzhi* can identify the incorrect thoughts and eliminate them. This is what Wang has in mind when he gives the analogy of polishing the

mirror, for only when there is no dirt on the mirror's surface can it function properly and reflect the image before it (WYQ 1:20, 23; Chan 1963, 45, 51-53).

In describing his therapeutic method, Wang is characteristically unclear about how his abstract philosophical ideas are meant to be applied in practical life. For a thinker who rails so much against impractical theoretical speculation, his explanations and examples remain at a high level of abstraction, lacking the specific details that modern therapists would require. Admittedly then, it is somewhat unclear how exactly Wang would or did apply his teachings to the vagaries and vicissitudes of daily life. However, based on exegesis of his collected writings, one can delineate the outlines and begin rational reconstruction of his therapeutic prescriptions. It should be noted that the record of Wang's teachings depict Wang as almost always teaching by addressing actual problems brought by particular students. He warned not to abstract or generalise his teachings. The written record of his teaching is a collection of these teaching "sessions" and not essays or analyses of his method. Many are in fact letters to specific people that were then circulated.[xi]

For the most part, Wang's main therapeutic method was first to seek encounters with people and events that cause us to react. Then, as our thoughts arise in response, we are to monitor our mental and emotional processes to uncover our unconscious, spontaneous thoughts and feelings. Some of these thoughts may be self-centered. It is this process of confronting the world so as to stir up in response one's automatic thoughts and feelings that enables us to "catch" our unconscious self-centered desires so that we can cast them out.

This emphasis in Wang's teachings on practical application over theoretical speculation sets him apart from the more scholastic Neo-Confucians like Zhu Xi, as can be seen not only in such cardinal doctrines as "the unity of knowledge and action" but even in the title of his most cited work, *The Record for Practice* (*Chuanxi lu* 傳習錄), which was intended as a guide for concrete, daily life.[xii] Wang drilled this idea into his students: "Your letter says, '[You taught us] to be trained and polished in the actual affairs of life'" (WYQ 1:58).

But the purpose behind Wang's admonition to practical application and external stimuli was not to seek out the particular *li* 理 of each individual thing or event encountered so as to accumulate knowledge of each of these external *li*, as Wang portrays Zhu Xi as advocating. Rather, it was to find the unknown particularized *li* constituting one's own mind, a task that cannot be accomplished in a vacuum.[xiii] These *li* are unknown in the sense that either we are unaware of them, or we are unconscious even of our ignorance of them, or we are ignorant regarding why we are unable to apply our *liangzhi* in the situation. By focusing on "action" in real life situations, we are forcing ourselves to make mistakes so that we can learn about and identify our moral blind spots, weaknesses, and shortcomings.

The student in the passage quoted above continues, "During the day, whether any situations (*shi* 事) occur, he should concentrate on cultivating and nourishing his original mind. If situations occur and affect him, or if he himself feels something, how can we say that no situations occurred?" Wang's reply is highly instructive:
"Throughout his life, a man's effort to learn aims only at this one thing. From youth to

old age and from morning to evening, whether any situations occur, he works only at this one objective, which is: 'Always treat it as a significant situation (*shi*)'" (WYQ 1:58).[xiv]

That is, whether you or anyone else can identify any morally relevant situations occurring at the time, your task is constantly to monitor and scan your own mind's responses to the external world. In that sense, there is always something morally or spiritually significant occurring since we are always thinking and feeling something. Mengzi's phrase, *Biyou shiyan* 必有事焉, for Wang, can thus be understood as, "See the moral significance in every situation" (WYQ 1:58). It is not the external environment that is the ultimate focus of our moral learning, but our own internal processes.

Wang elaborates: "To say that one would rather leave the work undone but the mind must be cultivated and nourished is to treat them as two separate things. 'Always treat it as a significant situation, but let there be no artificial effort to help it grow.'[xv] As things come, only extend *liangzhi* to respond to them. Then one may be said to be practicing conscientiousness and reciprocity and not far from the Way"[xvi] (WYQ 1:59). Separating external situations from one's internal cultivation and treating them as unrelated matters is to prevent oneself from utilising the most (and perhaps only) effective strategy for self-cultivation—monitoring one's internal responses to external situations. As situations arise, one is to "see the moral significance" in them and attempt to respond to them with one's intuitive moral faculty.

Ultimately, Wang's metaphysics explains why he believes knowledge and action are one. If there is a failure in correct action, it is because there is a failure in knowledge of the situationally relevant *li*. Thus, "The sages' doctrine of the unity of knowledge and action means seeking principles (*li*) in my mind (*xin*). Why would you doubt it?" (WYQ 1:43).

Let's take as an example a non-moral situation. If I were obese and judged that it is best for me not to eat the chocolate cake, yet I gobble it up anyway, for Wang, this would not be a case of "weakness of will." Instead, Wang–like much modern psychology–would conclude that there is some other thought, belief, or image undermining my explicitly held belief that I ought to diet and to refrain from eating the calorie-dense chocolate cake in this situation.

Wang would say that I don't have "true knowledge" (*zhenzhi*) of the principles (*li*) of dieting or of the dietary evils of the chocolate cake or of some other situationally relevant principles, or that I held beliefs distorted by self-centered thoughts, which limit, disempower, or obstruct my *liangzhi* faculty from following through properly. If I wish to succeed in my diet and resist the bad but tempting foods, I would need to catch and eradicate my misleading thoughts preventing me from carrying out the desired abstention.

For instance, maybe I have the automatic thought, "If I'm not a total success at this diet, then I'm a total failure" (the cognitive error of "all-or-nothing thinking"); the automatic thought, "If I don't have more sugar, I won't be able to function at all"

("catastrophizing"); the automatic thought, "Because I broke down and had one piece of chocolate this morning [even though I've been good with my diet all week otherwise], it means I'm not cut out for this and will be a fat pig all my life" ("selective abstraction" with "overgeneralization"); or the automatic thought, "It's terrible that I had that piece of chocolate this morning. I should always be strict with my diet" ("imperatives" or overestimating how bad it is that these precise, fixed expectations are not met); or the automatic thought, "I can never do anything right. I'm a loser in life and never succeed at anything" ("tunnel vision" or only seeing the negative aspects of a situation) (Beck 2011, 181-182).

In Wang's moral psychology and in cognitive-behavioral therapy, there are no actual instances of weakness of will in the strict sense. Our automatic thoughts have immediate effect on our emotional states, and when those unconscious thoughts conflict with what we consciously or explicitly think we ought to do, they undermine our abilities to carry out correct action.

Changing Our Automatic Thoughts

The main task of the CBT therapist is to elicit and identify the patient's automatic thoughts and to teach the patient to identify, evaluate, and respond to automatic thoughts.[xvii] The process starts with the recognition of specific automatic thoughts in specific situations. Much like in Wang's process of self-cultivation, over time, the practitioner becomes more adept at identifying, evaluating, and responding to automatic thoughts in a more adaptive way, which should produce a positive shift in affect.

Seen in this way, Wang's method of self-cultivation would be a kind of moral therapy. Becoming more skilled at casting out and eradicating erroneous or self-centered thoughts, at employing the *liangzhi* faculty to perceive the correct *li* in morally relevant situations (*shi*), and at rectifying (*ge*) one's thoughts (*yi*) so that they match up accurately with what is morally required in the situation (*shi*) requires that one constantly monitor one's unconscious, automatic thoughts like a "cat catching mice."

In cognitive-behavioral therapy, a key component in helping patients alter, challenge, or replace their automatic thoughts is the identification of "hot cognitions" (Beck 2011, 142-143). Like a "cat catching mice," the therapist and patient need to be alert to and vigilant in spotting the verbal and nonverbal cues and eliciting these "hot cognitions" because changing the patient's automatic thoughts are best accomplished when the patient is experiencing them in the moment.

"Hot cognitions" may be about the patient herself ("I'm such a failure"), the therapist ("She doesn't understand me"), or the discussion subject ("It's not fair that I have so much to do"). These can undermine the patient's motivation or sense of adequacy or worth. Identifying automatic thoughts on the spot gives the patient the opportunity to test and respond to the thoughts immediately, which is a more effective way of facilitating the work of changing automatic thoughts and hence altering affect (Beck 2011, 143).

A wide range of "situations"–both external stimuli and internal experiences–can give rise to an initial "hot cognition" or a series of automatic thoughts, followed then by an

initial emotional, behavioral, or physiological reaction, which can lead to additional automatic thoughts and additional reactions (Beck 2011, 153-155). For instance, the situation could be a behavior, such as the patient binge eating, which leads to the automatic thought, "I'm so weak; I just can't get my eating under control." Or the situation could be a stream of thoughts such as the patient worrying about an upcoming exam, triggering the automatic thought, "I'll never learn this stuff."

It is the job of the CBT therapist to aid the patient in identifying and evaluating such automatic thoughts. This is a skill that can be practiced and improved over time. When the therapist asks the patient to describe a problematic situation that arose, or when the therapist notices a shift to or an intensification of negative affect, the therapist probes the patient's thinking. A common method is Socratic, in which the therapist uses questions such as, "What was going through your mind just then?" CBT has a large repertoire of techniques for eliciting automatic thoughts from the patient (Beck 2011, 142-143).

Once the automatic thoughts are made conscious and identified, the patient and therapist can begin to evaluate and modify them. CBT clinicians believe that people with psychological disorders make predictable errors in their thinking. Although some automatic thoughts may be true, many are either false or have just a grain of truth (Beck 2011, 181-182). I gave examples in the previous section of some of these typical mistakes in thinking.

Automatic thoughts can also be replaced. Often, before trying to modify a patient's problematic belief, the therapist first confirms that it is a central, strongly held belief, and then formulates a more functional, less rigid belief that is thematically related to the dysfunctional one but which is more realistic and adaptive for the patient (Beck 2011, 213). Sometimes the disempowering automatic thought turns out to be true, in which case the therapist can help the patient focus on problem solving, investigate whether the patient has drawn an invalid inference or conclusion, or work on acceptance. Some problems may never be solved and patients might need help in accepting that outcome. A number of strategies designed to facilitate acceptance, such as Vipassana meditation and Buddhist or Buddhist-influenced mindfulness training, have been successfully integrated into cognitive-behavioral therapy (Hayes, Follette, and Linehan 2004).

For Wang, too, our unconscious, situationally relevant, moral thoughts can be made conscious, evaluated, altered, or replaced. When we vigilantly observe our thoughts as they arise in response to situations, we are engaging in the task of "constantly bringing our thoughts to the fore" (*changti niantou* 常提念頭):

Your letter says, "The Buddhists also have the saying, 'Constantly bring your thoughts to the fore' (*changti niantou*).[xviii] Is this the same as Mengzi's saying, 'Always treat it as a significant situation,' and what you called the extension of the *liangzhi* (良知) to the utmost? Is it the same as constantly being alert, constantly remembering, constantly being aware, and constantly preserving the original mind? If one's thoughts are brought to the fore, when situations and affairs arise, one can handle them in the right way. What I am afraid of is that more often than not one's thoughts are abandoned rather

than brought to the fore and one's task will be interrupted. Moreover, thoughts are abandoned and lost chiefly because of self-centered desires and the stirring of emotions caused by external stimuli. After one is suddenly startled and awakened, then one can bring them to the fore. Between the time when thoughts are abandoned and the time when they are brought to the fore, one's mind is confused and disorderly, in most cases without one's realizing it…

Wang approves of his student's explanation:

Self-discipline, vigilance, and self-mastery describe the task of "constantly bring them forward without abandoning them." This is the same as "always treat it as a significant situation." How can they be unrelated? The answer to the first part of your question has already been clearly explained by you. (WYQ 1:67-68; Chan 1963, 143-144)

In "constantly bringing thoughts to the fore," we are continually scanning our natural responses and attempting to uncover the automatic thoughts that are usually hidden below our conscious awareness. We are attempting to take our underlying unconscious thoughts and subject them to conscious scrutiny.[xix] This is a central component in Wang's therapeutic method.

Moreover, once we discover, identify, or tune into our mind's responses to "morally significant situations" (*shi* 事), we are to attempt immediately to engage in moral cultivation right then and there. This means to amplify or apply the "hot cognition" if it is good or to rectify it if it is bad. Thus, the task of moral cultivation cannot be done

solely in the armchair. One does not collect data on one's own mental and emotional responses and then analyse them later in the comfort of one's study. Rather, the work of moral cultivation is to be done in the midst of experiencing one's own mental and emotional reactions to external situations:

Now that we want to rectify the mind, where in the original substance [of the mind] must we direct our effort? We must direct it where the mind operates, and then the effort will be earnest and strong. In the mind's operation, it is impossible for it to be entirely free from evil. Thus, it must be here that we make earnest and strong effort. This means to make the thoughts authentic (*chengyi* 誠意). For example, when a thought (*nian* 念) to love the good arises, right then and there, love the good. When a thought to hate evil arises, right then and there, hate the evil. If every time thoughts arise and are authentic, then how can the original substance of the mind help being correct? Thus, if one wishes to rectify the mind, he must first make his thoughts authentic. Only when the work (*gongfu* 工夫) reaches this point of the authenticity of thought can it be resolved. (WYQ 1:119; Chan 1963, 248)

One's thoughts (*yi* 意) become "authentic" when one's actions, emotions, and other thoughts are all in accord. This is to be mentally, emotionally, and physically congruent with the original goodness of one's nature and mind. One is acting, thinking, or feeling in complete congruence with the intuitive responses of one's original nature and mind. There is to be no self-deception here.

This assumes that one's thoughts (*yi*) are also congruent with the deliverances of the *liangzhi* faculty. The above passage assumes that the thoughts are correct. That is, the thoughts of loving X or hating Y are correct.

Of course, however, we also have incorrect *yi*, and the work of self-cultivation is to unearth our unconscious incorrect thoughts by forcing them to our awareness so that we can then rectify them:

The extension of knowledge is the foundation of the authenticity of thought. But this extension of knowledge is not something to be done in a vacuum. It is to rectify [what is incorrect in the mind] in whatever actual activities one is doing. For instance, if one has the thought to do good, then one should do it right in the activities one happens to be doing. If one has the thought to eliminate evil, one should eliminate evil right in the activities one happens to be doing. Eliminating evil, of course, is to rectify what is incorrect in the mind so as to return to original correctness. When good is done, evil is corrected, which is also to rectify what is incorrect in the mind so as to return to original correctness. In this way, the *liangzhi* of our minds will not be obscured by self-centered desires and can then be extended fully. (WYQ 1:119-120; Chan 1963, 248-249)

By constantly monitoring and correcting one's self-centered thoughts as they arise, one frees the *liangzhi* to operate properly and effectively.

Wang is explicit about the difference between mere thoughts (*yi*) and the deliverances of the *liangzhi*: "Thoughts should clearly be distinguished from *liangzhi.* Whenever an

idea arises in response to any *wu* (物), this is called a 'thought.' Thoughts can be either correct or incorrect. That which is able to know which thoughts are correct and which incorrect is called *liangzhi*" (translation modified from Ivanhoe 2009, 127; WYQ 1: 217). The deliverances of our innate, intuitive moral faculty are the gauge by which we can calibrate and correct the thoughts in our spontaneous responses.

The *liangzhi* naturally judges thoughts as they arise in response to situations. But one still needs to heed and be congruent with the evaluation of one's *liangzhi* to make one's thinking authentic and avoid self-deception:

Whenever a thought or idea arises, my *liangzhi* knows on its own. Whether it is good or bad, my mind's *liangzhi* itself knows it. It never has to rely on other people's opinions. This is why even those petty people who have done bad things and would stop at nothing, still, "Whenever they see a gentleman, will dislike these [aspects of themselves] and try to conceal their wickedness and display their good points."[xx] This shows the degree to which their *liangzhi* will not permit any self-deception. (Translation modified from Ivanhoe 2009, 170; WYQ 2: 971-972.)

In this sense, the *liangzhi* operates like a universal moral conscience, condemning our bad thoughts and actions. Since the *liangzhi* faculty is part of our originally good human natures, it is present in all of us. When we do not listen to it, obey it, or act in accordance with it, we are being "inauthentic." We deny our original natures and are thinking, feeling, and acting contrary to our true selves. When we go against the deliverances of the *liangzhi*, we are deceiving ourselves in a fundamental and deep way.

And the more we ignore the *liangzhi*, the more estranged from our original natures we become.

Whenever we are faced with a situation (*shi*), we naturally respond with thoughts (*yi*), some of which are correct and some of which are incorrect. Our task, while interacting with society and the external world, is to reflect on our automatic thoughts in order to identify and distinguish between the incorrect, self-centered ones and the correct, *liangzhi*-generated ones. We are to discard the self-centered thoughts and preserve the *liangzhi*-produced thoughts.

Thus, we see that Wang's therapeutic method is premised on our already knowing what we need to know. It is just that mixed up with our *liangzhi*-conceived knowledge is a myriad of bad, self-centered thoughts, which need to be dug up and cleared off. Notice that since we do not know of what we are ignorant, we do not really come to learn anything new morally.[xxi] Our *liangzhi* is always active in us, so in a deep sense, we always already know what is the right action, decision, or thought. When asked whether one's *liangzhi* is unconscious when one is asleep, Wang replied, "If it is unconscious, how is it that as soon as he is called, he answers?" (WYQ 1:105-106; Chan 1963, 218-219). Nivison rightly interprets Wang as saying that "for me to respond to a call with an awareness that I ought to be awake, we must suppose that in some deeper sense I was awake already" (Nivison 1996, 236-237). This self-denial is why being "authentic" (*cheng*), true to oneself, and listening and following one's conscience were so central to Wang's project. It was not so much overcoming one's moral ignorance as it was facing up to what one already knew but was suppressing or repressing.

Through uncovering and scrutinizing one's automatic thoughts, one becomes increasingly self-aware. Then as one abandons the bad, self-centered thoughts, one becomes increasingly self-congruent. The more one is self-aware and self-congruent, the better one becomes at the task of extending the *liangzhi*, which should get easier and easier: "In our thousands of thoughts and tens of thousands of deliberations, we must only extend *liangzhi*. The more *liangzhi* reflects, the more refined and clear it becomes" (WYQ 1:110).

Automatic Thoughts and Behavioral Change

An important but often neglected aspect of cognitive-behavioral therapy is the integration of techniques borrowed from behaviorism. This is a key similarity between Wang's teachings and CBT, but it is also a major area of difference, as Wang's doctrine of "the unity of knowledge and action" (*zhixing heyi* 知行合一) is more developed and plays a much more prominent role in his overall philosophy than behavioral activation does in CBT.

Modern cognitive-behavioral therapy holds that altering our dysfunctional automatic thoughts can create behavioral change. In addition, CBT maintains that behavioral activation is an essential part of treatment, not only to improve the patients' moods, but also to strengthen the patients' sense of self-efficacy by demonstrating to themselves that they can take more control of their mood than they had previously believed (Beck 2011, 80-99).

Patients differ in their need for behavioral activation, but it is essential for most patients. Some need only to be given a rationale, guidance in selecting and scheduling activities. Therapists can also give skeptical or resistant patients behavioral experiments first to let them check the accuracy of their automatic thoughts by comparing their predictions with what actually occurs (Beck 2011, 99). The "behavioral" component in cognitive-behavioral therapy plays a strong supporting role, but most of the theory and training in CBT is limited to cognitive methods and talk therapy.

In his philosophy, Wang Yangming places much weight on practical action and experiential knowledge. In teaching his central doctrine of "the unity of knowledge and action" (*zhixing heyi*), he explains that moral knowledge necessarily entails moral action:

[Someone asked], "Now there are people who, despite knowing they should be filial to their parents and respectful to their elder brother, cannot be filial or respectful. From this it is clear that knowledge and action are two separate things."

[Wang replied, "In this case, knowledge and action] have already been separated by self-centered desires; this is not the original state of knowledge and action. There have never been people who know but do not act. Those who know but do not act, simply do not yet know… Suppose we say that so-and-so knows filial piety and brotherly respect. That person must already be practicing filial piety and brotherly respect in order for him to be considered as knowing filial piety and brotherly respect. It will not do to say that he knows filial piety and brotherly respect simply because he is able to say words

that might be considered filial or respectful… In teaching people, the Sages insisted that only this can be called knowledge." (WYQ 1:3-4; Ivanhoe 2000, 63)

This "action" (*xing* 行) also extends to the affections (Tien 2004). One does not fully understand courage until one has attempted to act courageously, and one does not fully understand compassion until one has attempted to act compassionately (Ivanhoe 2000, 64).[xxii]

Wang would probably say that CBT patients who claim that they know that everything will be all right yet still feel a great deal of anxiety about the future simply do not truly know that everything will be all right. Wang makes the distinction between "real knowledge" (*zhenzhi* 真知), which is like an experiential knowledge, and "ordinary knowledge" (*changzhi* 常知), which is a merely theoretical knowledge.

It is the job of cognitive-behavioral therapy to move patients from such "ordinary knowledge" to "real knowledge." Wang understood the purpose of Neo-Confucian self-cultivation along the same lines:

[The student said,]" In saying that knowledge and action are two different things, the ancients intended to have people distinguish and understand them, so that on the one hand, they take on the task of knowing, and on the other hand, they take on the task of action, and only then can their tasks begin to reach completion."

The Master said, "This is to lose sight of the basic purpose of the ancients. I have said that knowledge gives purpose to action and action is the task of knowledge, and that

knowledge is the beginning of action, and action is the completion of knowledge. If this is understood, then when only knowledge is mentioned, action is already entailed, and when only action is mentioned, knowledge is already entailed. The reason why the ancients talked about knowledge and action separately is that there are some people who are confused and act impulsively without any sense of deliberation or self-examination, and who thus only behave blindly and erroneously. They are not at all willing to make the effort of concrete practice. They only pursue shadows and echoes, as it were. It is thus necessary to talk about action to them before their knowledge becomes 'real' (*zhen*). The ancient teachers could not help talking this way to restore balance and avoid any defect. If we understand this motive, then a single word [of either knowledge or action] will do.

"But people today will discuss and learn the business of knowledge first, they say, and wait until they really know before they put their knowledge into practice. Consequently, to the last days of their lives, they will never act and thus will never know." (WYQ 1:4-5; Chan 1963, 10-11)

Wang revealed that his insistence on the unity of knowledge and action was an expedient. Theoretical knowledge often comes first. But the important thing is to apply the knowledge, to make the theoretical knowledge "real" by putting the knowledge into action.

In CBT, a depressed patient often needs behavioral activation to change how they feel emotionally. Thus helping them become more active and giving themselves more credit

for their efforts are essential parts of treatment. In carrying out the actions successfully, the patient will also begin to modify or replace dysfunctional automatic thoughts with empowering automatic thoughts ("I'll never get back into shape" becomes replaced by, "This is hard, but I can do this and am already making progress"). Behavioral activation fortifies the cognitive work that occurs in talk therapy.

In Wang's model of moral self-cultivation, behavioral activation would be required to live a moral life. Merely having theoretical knowledge that, "One ought to help the indigent" is useless if one doesn't try to apply this knowledge by, for example, volunteering time or donating money to help the indigent. And then once one begins to apply this "ordinary knowledge," it starts to become "real knowledge."

A major reason "action" is more prominent in Wang's philosophy is because he never saw his work as limited to the confines of a therapy room or psychological clinic. CBT is usually conducted in closed, isolated settings, most often in the privacy of a comfortable clinic or office. Wang, however, was adamant that by far the more effective setting for moral and spiritual cultivation was not a private study room or meditation hall, but the outside world, interacting with other people and the natural environment. For Wang, no matter how effective the therapeutic discussions and exercises would be in the clinical setting, until we venture out and test our theoretical knowledge in the real world, with all its nitty-gritty complexities and messy moral situations, we cannot develop in any meaningful way morally or spiritually.

Conclusion

In sum, the principles and practices of cognitive-behavioral therapy bear important similarities to Wang Yangming's moral psychology and model of moral self-cultivation. They both uphold the power of unconscious, automatic thoughts to affect our emotional states. They both advocate a process of catching and identifying our dysfunctional unconscious thoughts and then evaluating, altering, or replacing them with better thoughts that are more effective for achieving the desired emotions and behaviors. Most importantly for Wang, they both share the conviction that behavioral change directly leads to mental and emotional change, and vice versa.

A major point of dissimilarity is the environment and context for which these methods were devised–the modern period vs. Ming China, psychological problems such as depression vs. moral development, the psychology clinic vs. the world of everyday life–leading to a difference in emphasis on the factor of behavioral change. Wang goes further than CBT in maintaining that moral therapy requires behavioral activation, and that moral therapy is unsuccessful unless it leads to a corresponding improvement or transformation in behavior.

Comparing cognitive-behavioral therapy with Wang's moral psychology brings to light the importance of unconscious thoughts in Neo-Confucian moral self-cultivation. Wang and other historical Chinese philosophers held a deep appreciation for the dominating effect of our unconscious thoughts on our behavior–both moral and otherwise–a point that has been repeatedly verified in empirical studies over the last several decades (for

example, see Kahneman 2011 and Cialdini 1993) and has deeply influenced contemporary theories of moral psychology.[xxiii]

ENDNOTES

[i] I am also here bracketing Wang's metaphysical views for the purpose of getting this comparative project off the ground. My focus in this paper is on Wang's therapeutic approach to moral philosophy. For a detailed description and analysis of Wang's metaphysics, see Tien 2010.

[ii] See Sinnott-Armstrong (2008) for an excellent example of recent philosophy work in this area.

[iii] The narrative of this summary is informed by Hauser, Young, and Cushman (2008); and Haidt and Bjorklund (2008).

[iv] For an extended explanation of Wang's metaphysics, see Tien 2010.

[v] Contrast this with Chan's unfortunate translation of *yi* as "will." Wang 1963, 104

[vi] *Mengzi* 孟子 4A:2

[vii] Beyond the scope of this paper is a full defence of the view that *liangzhi* is better understood as a faculty rather than a body of knowledge. For a start, see Tien 2004 and Ivanhoe 2002.

[viii] On Wang's use of *yi*, see Ivanhoe, *Readings in the Lu-Wang School of Neo-Confucianism*, p. 127: "Thoughts (*yi*) should clearly be distinguished from *liangzhi*. Whenever an idea arises in response to a *wu*, this is called a 'thought.'" See also 钱明，《儒学"意"范畴与阳明学的"主意"话语》，**中国哲学史** 2 (2005).

[ix] *The Great Learning* 《**大學**》section 4. In Chan 1963, 106-107, Wang applies this ordering to the specific case of serving and caring for one's parents.

[x] Translation modified from Ivanhoe 2002, 102. The phrase "like a cat catching mice" alludes to a Chan Buddhist story.

[xi] Many thanks are owed to Philip J. Ivanhoe, who in private correspondence reminded me of the importance of this point.

[xii] See Ivanhoe's essay on the meaning of this title. Ivanhoe 2002, 154-161.

[xiii] For the distinction between particularized or manifested *li* and universal *li*, see Tien 2010.

[xiv] *Mengzi* 2A:2. See also Ivanhoe 2002, 107-108.

[xv] *Mengzi* 2A:2

[xvi] *Zhong Yong*, chapter. 13.

[xvii] In CBT, considerable attention is also given to identifying and modifying Core Beliefs and Intermediate Beliefs. But for the purposes of this essay, I focus on the more basic Automatic Thoughts (Beck 2011).

[xviii] This phrase is of unknown origin.

[xix] A fruitful description of this might also be made using the concept of dispositional and occurrent beliefs in which the task is to make our incorrect dispositional beliefs first occurrent and then correct.

[xx] Paraphrase of *Daxue*, section 5.

[xxi] For a version of this problem, see Nivison 1996.

[xxii] For an interesting article on "understanding" as an epistemic concept, see Zagzebski 2001.

[xxiii] I extend my sincere gratitude to Philip J. Ivanhoe, Justin Tiwald, and an anonymous reviewer for valuable suggestions on earlier drafts of this paper. Any remaining flaws are entirely the fault of the author.

References

Wang Yangming Quanji (WYQ)《王陽明全集》*, 2 volumes.* Wu Guang 吳光, Qian Ming 錢明, et. al., eds. (*Shanghai guji chubanshe* 上海古籍出版社, 1992).

Angle, S.C. (2009). *Sagehood: The Contemporary Significance of Neo-Confucian Philosophy* (New York: Oxford University Press).

Ariely, D. (2008). *Predictably Irrational: The Hidden Forces That Shape Our Decisions* (New York: HarperCollins).

Bargh, J.A., and Ferguson, M.J. (2000). "Beyond behaviorism: On the automaticity of higher mental processes," *Psychological Bulletin 126*, 925-945.

Beck, A.T., Rush, A.J., Shaw, B.F., and Emery, G. (1987) *Cognitive Therapy of Depression* (New York: Guilford Press).

Beck, J.S. (2011) *Cognitive Behavior Therapy: Basics and Beyond*, 2nd ed. (New York: Guilford Press).

Butler, A.C., Champman, J.E., Forman, E.M., and Beck, A.T. (2006) "The empirical status of cognitive-behavioral therapy: A review of meta-analyses," *Clinical Psychology Review 26*, 17-31.

Chaiken, S., and Trope, Y., eds. (1999). *Dual process theories in social psychology (*York: Guilford Press).

Chambless, D., and Ollendick, T.H. (2001) "Empirically supported psychological interventions," *Annual Review of Psychology 52*, 685-716.

Chan, W.T. (1963). *Instructions for Practical Living and other Neo-Confucian Writings by Wang Yang-ming*. (New York: Columbia University Press).

Cialdini, R.B. (1993). *Influence: The Psychology of Persuasion, 2nd edition* (New York: William Morrow and Co., Inc.).

Clark, D.A., and Beck, A.T. (2010). *Cognitive Therapy of Anxiety Disorders: Science and Practice* (New York: Guilford Press).

Clark, D.A., Beck, A.T., and Alford, B.A. (1999). *Scientific Foundations of Cognitive Therapy and Therapy of Depression* (New York: Wiley Publishing).

Damasio, A. (1994). *Descartes' error: Emotion, reason, and the human brain (*New York: Putnam/ Boston: Norton).

Ellis, A. (1962). *Reason and Emotion in Psychotherapy: A Comprehensive Method of Treating Human Disturbances, Revised and Updated* (New York: Citadel).

Goldapple, K., Segal, Z., Garson, C., Lau, M., Bieling, P., Kennedy S., et al. (2004). "Modulation of cortical-limbic pathways in major depression," *Archives of General Psychiatry 61*, 34-41.

Greene, J. (2008). "The secret joke of Kant's soul" in *Moral psychology, volume 3. The Neuroscience of morality: Emotion, brain disorders, and development,* W. Sinnott-Armstrong, ed., (Cambridge: MIT Press), 35-80.

Greene, J.D., Nystrom, L.E., Engell, A.D., Darley, J.M., and Cohen, J.D. (2004). "The neural bases of cognitive conflict and control in moral judgment," *Neuron 44,* 389-400.

Haidt, J., and Bjorklund, F. (2008). "Social intuitionists reason, in conversation" in *Moral psychology, volume 2. The cognitive science of morality: Intuition and diversity,* W. Sinnott-Armstrong, ed., (Cambridge: MIT Press), 241-254.

Haidt, J. (2007). "The new synthesis in moral psychology," *Science 316,* 998-1001.

Haidt, J. (2006). *The Happiness Hypothesis: Finding Modern Truth in Ancient Wisdom* (New York: Basic Books).

Haidt, J. (2001). "The emotional dog and its rational tail: A social intuitionist approach to moral judgment," *Psychological Review 108*, 814-834.

Hayes, S.C., Follette, V. M., and Linehan, M.M., eds. (2004). *Mindfulness and Acceptance: Expanding the Cognitive-Behavioral Tradition* (New York: The Guilford Press).

Ivanhoe, P.J. (2009). *Readings from the Lu-Wang School of Neo-Confucianism* (Indianapolis: Hackett Publishing Co., Inc.).

Ivanhoe, P.J. (2002). *Ethics in the Confucian Tradition* (Indianapolis: Hackett Publishing Co., Inc.).

Ivanhoe, P.J. (2000). *Confucian Moral Self Cultivation, 2nd ed.* (Indianapolis: Hackett Publishing Co., Inc.).

Kahneman, D. (2011). *Thinking, Fast and Slow* (New York: Farrar, Straus, and Giroux).

Kohlberg, L. (1971). "From is to ought: How to commit the naturalistic fallacy and get away with it in the study of moral development" in *Cognitive development and epistemology,* T. Mischel, ed., (New York: Academic Press), 151-235.

Kohlberg, L. (1969). "Stage and sequence: The cognitive-development approach to socialization" in *Handbook of socialization theory and research,* D. A. Goslin, ed., (Chicago: Rand McNally), 347-380.

Nisbett, R.E., Wilson, T.D. (1977). "Telling more than we can know: Verbal reports on mental processes," *Psychological Review 84 (3),* 231-259.

Nivison, D.S. (1996). "Moral Decision in Wang Yang-ming: The Problem of Chinese 'Existentialism'" in *The Ways of Confucianism: Investigations in Chinese Philosophy*, B. Van Norden, ed., (Peru: Open Court Publishing), 233-248.

Piaget, J. (1965). *The Moral Judgment of the Child* (M. Gabain, Trans.). (New York: The Free Press. Originally published in 1932 by London: Kegan Paul, Trench, Trubner, and Co.)

Sinnott-Armstrong, W. (2008). *Moral Psychology.* (Cambridge: Massachussetts Institute of Technology), 3 volumes.

Tien, D.W. (2010). "Metaphysics and the Basis of Morality in the Philosophy of Wang Yangming" in *Dao Companion to Neo-Confucian Philosophy*, J. Makeham, ed., (New York: Springer), 295-314.

Tien, D.W. (2004). "Warranted Neo-Confucian belief: Religious pluralism and the affections in the epistemologies of Wang Yangming (1472-1529) and Alvin Plantinga" *International Journal for Philosophy of Religion 55,* 31-55.

Tranel, D., Bechara, A. and Damasio, A. (2000). "Decision making and the somatic marker hypothesis" in *The new cognitive neurosciences,* M. Gazzaniga, ed., (Cambridge: MIT Press),1047-1061.

Westbrook, D., Kennerly, H., and Kirk, J. (2007). *An Introduction to Cognitive Behavior Therapy: Skills and Application* (London: SAGE Publications).

Zagzebski, L. (2001). "Recovering Understanding" in *Knowledge, Truth, and Duty: Essays on Epistemic Justification, Responsibility, and Virtue*, M. Steup, ed. (Oxford University Press).