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Asian and Asian-American Philosophers and Philosophies

DAVID H. KIM, EDITOR

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FROM THE FDITOR

The Embodied and Enactive Mind: Asian and Comparative Perspectives

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Comparisons of Asian and Western conceptions of mind have been commonplace in the academy and the culture at large. One exciting new development is the increasing consolidation of research that unites cutting-edge work in various Asian and Western philosophies of mind (including phenomenological variants of these) and often also neuroscience or empirical psychology. Consider, for example, that a successful NEH seminar in 2012, "Investigating Consciousness: Buddhist and Contemporary Philosophical Perspectives," was directed by Christian Coseru, Jay Garfield, and Evan Thompson on this very subject, with a special focus on Buddhism.

At the 2012 Eastern Division meeting of the APA, the committee on Asian and Asian-American philosophers and philosophies put forward a comparative panel on the embodied and enactive mind. At this meeting, the committee also co-sponsored, with the committee on inclusiveness, a panel entitled, "Cognitive Diversity, Inference, and Language," which featured philosophical and empirical work on Western and East Asian modes of cognition. In addition, at the 2013 Central Division meeting of the APA, the committee offered a panel, organized by JeeLoo Liu, entitled "Memory, Consciousness, and the Self: A Buddhist Perspective," which highlighted Indian and Western conceptions of consciousness, with a special focus on Buddhist thought.

This special edition of the APA newsletter of the committee on Asian and Asian-American philosophers and philosophies features three essays and a report, all of which are a part of the burgeoning research noted. Each of the essays is based on a presentation delivered at the 2012 Eastern Division APA panel on the embodied and enactive mind, and the report is of the Buddhist philosophy of consciousness panel at the 2013 Central Division meeting of the APA.

Few philosophers, if any, deny the mind has some sort of connection to bodies, situations, environments, and actions. But these connections, especially in mainstream philosophy of mind, are often characterized as merely contextual for human mentality. In recent decades, many philosophers of mind and phenomenologists have moved away from this view toward an alternative conception according to which the human mind as such is deeply ontologically

and phenomenologically linked to bodies, situations, environments, and actions. And discussion of strong conceptions of these connections often proceed under the themes of "the embodied mind," the extended mind," "the embedded mind," and "the enactive mind." Playing off of the lettering of these four attributes, some have brought these ideas together under the heading of "4-E Philosophy of Mind." Not all endorse all of the four Es. But a strong conception of any of the 4-Es is a departure from the standard vision of mind as an abstract representational and computational power.

In this special edition, Confucianism, Buddhism, and Daoism are brought into dialogue with both standard philosophy of mind and 4-E philosophy of mind. The first essay, "Neuroscience, Moral Sentimentalism, and Confucian Philosophy: Moral Psychology of the Body and Emotion," by Bongrae Seok, offers a novel philosophically integrative account of neuroscience's and Confucianism's contributions to an understanding of the centrality of embodiment to human moral psychology. In the second essay, "The Resonant Mind: Daoism and Situated-Embodied Cognition," Bradley Park advances both empirically motivated and distinctly Daoist considerations to generate a compelling enactivist alternative—the Resonant Mind—to the vision of mind inherited from Western philosophy's Modern period— Mind as Container. In the third essay, "Self-Making and World-Making: Indian Buddhism and Enactive Philosophy of Mind," Matthew MacKenzie composes a fascinating synthesis of (Indian) Buddhist philosophy and enactivist philosophy of mind to show how the karmic process is an enactment of both self and world and thus how to think alternatively about the mind as embodied, extended, and enactive. Finally, in the report on the 2013 Central APA session panel ("Memory, Consciousness and the Self: A Buddhist Perspective"), JeeLoo Liu relays further suggestive lines of thought in comparative philosophy of mind, especially as this is conducted with a focus on Indian Buddhism and within the rich tradition of early Indian philosophy more generally.

The essays individually contribute to philosophy of mind and to the respective traditions of Asian philosophy they address. Together, and with the report, they give an inspiring sense of possibilities for enriching philosophy of mind through a comparative framework.

This newsletter also offers the opportunity to relay some further notes about the committee. First, I extend my thanks to its members for organizing panels at the divisional meetings of the APA. In addition to the ones mentioned above, the committee put on the panel "Immigration: Justice and Identity" at the 2012 Eastern Division meeting through the organizing efforts of former member Ronald Sundstrom.

It featured the work of Hyeryoung Kang, Mickaella Perina, and Emily S. Lee. Also, at the 2013 Pacific Division meeting, Halla Kim organized a panel "The Philosophy of *Yijing* and Its Contemporary Significances," which included Tze-ki Hon, Chung-Ying Cheng, Eric Nelson, and Halla Kim. Also at this meeting, Prasanta Bandyopadhyay organized a panel, "Different Dimensions of Buddhism," that featured the work of Sara Waller, William Deal, and Prasanta Bandyopadhyay. Many thanks to you all!

Finally, the committee typically shifts its membership over the summer. Concluding his term this summer is Yubraj Aryal. Thank you for your work on the committee, Yubraj! And joining us are Jay Garfield (as associate chair for 2013–14, to be followed by a term as chair from 2014–2017), Bina Gupta, and Leah Kalmanson.

Jay L. Garfield is Kwan Im Thong Hood Cho Temple Professor of Humanities at Yale-NUS College in Singapore and Doris Silbert Professor in the Humanities at Smith College. He also teaches at the National University of Singapore, Yale University, the University of Melbourne, and the Central University of Tibetan Studies in India. Jay works on Indo-Tibetan Buddhist philosophy, nineteenth and early twentieth-century Indian philosophy, and cross-cultural hermeneutics, focusing on various topics in the philosophy of mind, epistemology, logic, and ethics.

Bina Gupta is a Curators' Distinguished Research Professor, Professor of Philosophy, and Director of the South Asia Language and Area program at University of Missouri, Columbia, in the United States. She is the author or editor of several books, over eighty articles, and numerous book reviews on subjects including Indian philosophy, Buddhism, feminism, and comparative philosophy. Some of her important works are Perceiving in Advaita Vedanta (Bucknell University Press, 1991), The Disinterested Witness: A Fragment of Advaita Vedanta Phenomenology (Northwestern University Press, 1998), Cit (Consciousness), (Oxford University Press, 2000), Reason and Experience in Indian philosophy (Indian Council of Philosophical Research, 2009), An Introduction to Indian Philosophy: Perspectives on Reality, Knowledge, and Freedom (Routledge, 2012), and Consciousness, Knowledge, and Ignorance (American Institute of Buddhist Studies, Columbia University, in the series "Treasury of the Indic Sciences," 2012).

Leah Kalmanson is an assistant professor in the department of philosophy and religion at Drake University. She received her Ph.D. in philosophy from the University of Hawai'i at Mānoa in 2010. She publishes in the area of comparative and continental philosophy, including the articles "Buddhism and bell hooks: Liberatory Aesthetics and Radical Subjectivity of No-Self (Hypatia, 2012), "The Messiah and the Bodhisattva: Anti-Utopianism Re-Revisited" (Shofar, 2012), and "Levinas in Japan: The Ethics of Alterity and the Philosophy of No-Self" (Continental Philosophy Review, 2010). She has also edited several collections, including Levinas and Asian Thought with Frank Garrett and Sarah Mattice (Duquesne University Press, forthcoming), Buddhist Responses to Globalization with James Mark Shields (Lexington Press, forthcoming), and Confucianism in Context with Wonsuk Chang (SUNY, 2010). In future research, she is especially interested in thinking through the connections between postcolonial and crosscultural philosophy, studying the role of ritual efficacy in the construction of identity, and articulating Buddhist resources for socio-political activism.

Welcome Jay, Bina, and Leah!

ARTICI FS

Neuroscience, Moral Sentimentalism, and Confucian Philosophy: Moral Psychology of the Body and Emotion

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INTRODUCTION

As an empirical study of the human mind and behavior, "moral psychology" refers to the psychological investigation of human conduct regarding moral values and principles. Lawrence Kohlberg's and Jean Piaget's studies of moral development are classical examples.¹ There are, however, significant traditions in philosophy that consider cognitive and affective abilities of the mind in their analyses of moral judgments and principles. For example, philosophers such as David Hume, Adam Smith, and Mencius discuss moral judgments and dispositions not from the perspective of absolute moral principles but of the specialized functions and abilities of the mind. In this paper, by combining psychological studies of moral cognition and philosophical reflection on the nature of the moral mind. I will develop an empirically informed and philosophically inspired analysis of embodied moral emotion. From the perspectives of neuroscience, moral sentimentalism, and Confucian philosophy, I will discuss the role embodied emotion plays in our moral judgments and actions, and argue that the body is an essential part of our moral ability. Particularly, I will illustrate how an interdisciplinary (philosophy and psychology) and comparative (Eastern and Western moral traditions) approach to moral psychology helps us to understand the nature of the moral mind and how Asian philosophy, specifically Confucian philosophy, provides insight into our investigation of embodied moral affection.

MORAL EMOTION

For decades, philosophers and psychologists have investigated the nature and function of emotion in its contribution to moral judgments and actions. Some psychologists report that a group of emotions—such as disgust, anger, and contempt—initiate, affect, and motivate moral judgments and actions.² Others focus on prosocial emotions—such as empathy, care, and concern—and their contributions to our other-regarding or other-caring moral sense.³ In philosophy, moral sentimentalism promotes the view that our moral judgments are greatly influenced or effectively caused by a particular type of affective sense that arises when we observe others' behavior and dispositions.4 Just as we appreciate the beauty (the aesthetic qualities) of a sculpture when we see its color, shape, and composition, we evaluate the morality (the moral qualities) of actions and dispositions through our affective moral sense. This process of moral cognition (identification of norms and

violations, development of moral judgments, and promotion of moral actions) essentially includes affective sensitivity to and appropriate understanding of human behavior and dispositions. But it does not necessarily require conscious reasoning, extended deliberation, or objective assessment of moral rules and principles. When it comes to morality, Hume says, reason is simply the slave of passion.

The sentimentalist approach, particularly its effort to link moral judgment with the affective abilities of the mind, does not stop at speculative and philosophical theories. It can be found in recent psychological and neurological studies of the mind and the brain. Based on his brain-imaging studies, Greene argues that the sense of moral duty, the essential foundation of Kantian deontological ethics, derives from strong affective reaction whose activity can be measured in the areas of the brain that typically support emotional processes. The psychological foundation of Kantian ethics, according to Greene, does not lie in conscious deliberation of moral values and the rational will to follow universal moral rules, but in strong emotional arousal and affective reaction.⁵ Perhaps our moral judgments and actions are fundamentally dependent upon our deeply rooted emotional reaction against moral violations and our affective concern towards others' well-being.6 Even moral development can be interpreted as the extension and refinement of emotions such as empathy.7

The nature of moral emotion, however, needs careful analysis. One way to understand moral emotion is to interpret it as moral sentiment (i.e., a mental state with an other-regarding sense and affection: out of an other-regarding sense and other-caring affection, we feel approval or disapproval over certain actions and dispositions). In moral sentimentalism. these empathetic and motivational processes are regarded as the essential nature of our moral abilities. It is, however, important to note that a moral sentiment has separate components, and close cooperation or interaction among them, particularly between socio-cognitive and affectivemotivational components, is critical for its successful functions to serve moral judgments and actions. In many versions of moral sentimentalism, particularly Hume's, empathetic concern and caring affection are intrinsically related to or include our understanding of others' inner states. According to Hume, our moral actions and decisions come out of our ability to understand others' behaviors by representing their inner states in our minds and our ability to be affected by and to react to them with approval or disapproval.⁸ Since being moral, in this context, means being able to sense, feel, and be affected by others' beliefs, intentions, feelings, and dispositions, a Humean moral agent needs to have the moral psychological ability to recognize, understand, and share others' inner psychological states in addition to having feelings of attraction (moral approval) and rejection (moral disapproval) toward them.

This seemingly strong association between social cognition (i.e., knowing what others think and feel) and moral cognition (i.e., knowing what is right and good for oneself and others) is typically observed in such moral sentiments as pity and concern. But the association is not absolute. The Social Intelligence Hypothesis, also referred to as "The Machiavellian Hypothesis," suggests that knowing what others think and feel does not necessarily motivate caring

moral behavior. Many individuals are disposed to use their understanding and knowledge of others' cognitive and affective states to manipulate and abuse others. Perhaps human intelligence has evolved to develop and to deal with the potentially manipulative nature of social cognition. On the one hand, psychopaths (individuals who suffer from a particular form of anti-social personality disorder) are often characterized as manipulative Machiavellian individuals. Psychopaths know what others believe, desire, and feel, but, despite their intact social cognition, most of them engage in anti-social or anti-moral behavior. 10 Perhaps the link between social cognition and moral motivation (an essential psychological association that characterizes such moral emotions as empathy, care, and concern) is broken in their minds. On the other hand, lack of social cognition does not necessarily prevent individuals from acting morally or prosocially to others. Many autistic individuals are responsible and compassionate moral agents, even though their impaired social cognition allows only limited ability to understand others' inner representational states.¹¹

One way to respond to this challenge, given that the Social Intelligence Hypothesis is true, is to accept the psychological dissociation between social cognition and moral cognition (moral affection and moral motivation, in particular) and to abandon or modify the sentimentalist assumption regarding the intrinsic or at least close connection between social cognition and moral cognition in some moral emotions, such as pity and concern. If pity or concern consists of a set of dissociable (i.e., independently operating) psychological components, moral sentimentalism, as a theory concerning the nature and function of moral emotion, needs to provide an explanation of why and how these dissociable components are combined in our other-regarding or othercaring affections or to consider the possibility of asocial moral sentiments, i.e., moral affection with minimal social cognition. Even if the Social Intelligence Hypothesis is not true, there still remain questions about the nature of moral emotion, its relation to social and moral cognition, and its power to motivate prosocial behavior. How do emotions affect our moral judgments and motivate moral actions? Can moral sentimentalists answer these questions and deal with their moral psychological challenges?

SOCIAL COGNITION AND MORAL COGNITION

According to Hume, a virtuous disposition or morally praiseworthy action is the one that generates positive (satisfactory) feelings and a vicious disposition or morally blameworthy action is the one that generates negative (uneasy) feelings. These feelings motivate moral approbation and disapprobation. He says that "we partake of their [the suffering victims'] uneasiness by sympathy; and as every thing, which gives uneasiness in human actions, upon the general survey, is call'd Vice, and whatever produces satisfaction, in the same manner, is denominated Virtue."12 He also adds that "reflecting on the tendency of characters and mental qualities is sufficient to give us the sentiments of approbation and blame."13 Here, Humean sympathy plays a dual role. One is the reflection of another's mind (mental states, intentions, and dispositions), and the other is the feeling of moral approbation (satisfaction) or disapprobation (uneasiness). In Hume's sentimentalism, therefore, moral cognition combines moral sense (the sense of what is morally right and wrong) and social sense (the sense of

what others think and feel) through affective states of the mind. Do all moral emotions work like Humean sympathy? That is, are moral understanding (often called "moral sense" or "moral affection") and social understanding (often called "the Theory of Mind ability") necessarily combined in moral emotions?

Emotions such as disgust and anger are regarded as moral emotions because they discourage moral violations and promote remedial behavior. 14 But these emotions are not necessarily empathy-driven and prosocial: they are typically directed at moral violations but do not necessarily require detailed understanding of agents' or victims' inner states (intentions, beliefs, desires, and emotions) and their conditions of well-being. Nor do they necessarily motivate prosocial and other-caring behavior. We can be disgusted by certain actions without fully understanding an agent's thoughts and feelings. We can be disgusted and stand up against their moral violations before we even consider their special circumstances. We can even get angry at things that do not have inner intentional states, like discriminatory social policies, corrupt political regimes, or malfunctioning systems of economy. 15 Yet these emotions play important roles in our moral judgments and actions. It seems that Humean moral sentiments, particularly sympathy, constitute only one type of affective moral ability, namely, one where the sense of morality essentially combines consideration or accommodation of others' inner states with affective interest in their well-being. 16 Other moral emotions, however, do not necessarily come out of this ideal combination. Particularly, some moral emotions that serve moral judgments and actions do not require full understanding of others' (agents' or victims') inner states.17

Even within the framework of Humean moral sentiment, the link between other-regarding social sense and otherdirected affective reaction is not always sustained. Typically, a sentimentalist moral agent has the abilities of sharing others' feelings and being motivated to act for or against others. But this association of social cognition (via imaginary projection, simulation, affective contagion, or theoretical inference) and moral cognition (via affective reaction and motivation), which Hume observed in the natural and casual occurrences of human sympathy, falls apart frequently under various conditions, even in some empathetic states of the mind. As I will discuss shortly, a moral agent can notice others' pain, be affected by their suffering, assess moral violations, and act for their well-being without necessarily knowing their inner thoughts and feelings. Because it is rarely observed and reported, the dissociation between other-directed affective interest and other-regarding social understanding has not been fully understood and analyzed. With the advancement of cognitive science, however, we now have a few compelling cases of such dissociation. As we shall see, cognitive science also offers us general cases of the dissociation between sensory discriminatory and affective motivational processes in perception.

DISSOCIATION OF SENSORY AND AFFECTIVE PROCESSES IN PERCEPTION

Some blindsight patients whose primary visual cortices are damaged or removed can still discriminate emotional expressions of human faces.¹⁸ These patients, most notably

patient G. Y., denied having conscious visual experience in their impaired visual fields, but could discriminate (i.e., guess correctly above the level of chance) emotional expressions (such as the expressions of fear or sadness) of the facial images presented in their impaired visual fields. 19 As reported by several psychologists and neuroscientists, the peculiar neurocognitive profile of blindsight demonstrates that there exist anatomically and functionally distinct pathways in the brain that serve conscious (sensory) and subconscious (affective) processes of visual perception.²⁰ On the one hand, typical visual identification takes place in the cortical areas (such as the primary visual cortices) of the brain. The color, shape, and size of a visually presented object are identified and consciously experienced by these processes. On the other hand, some processes of visual discrimination can function independently. They are subconscious processes that serve our affective sense of visually presented stimuli (e.g., emotional facial expressions).

Unlike blindsight patients, Capgras patients do not undergo any major visual deficit. They can see and discriminate visually presented objects (including faces). But they do not seem to sense the genuine presence and identity of objects that they see. To Capgras patients, the visually presented world is cold, flat, impersonal, and faded. Particularly, familiar human faces (faces of family members and friends) look strange and alien to them. They often complain that their parents and friends are replaced by body doubles or impersonators.²¹ According to a well-received hypothesis, the delusional visual experience of Capgras patients is caused by insufficient and inappropriate affective bodily reactions to faces or familiar objects.²² Their bodily reactions to familiar faces are measured by tracking such physiological changes as heartbeat and perspiration and are observed to be below the typical levels of physiological and affective reactions people generally have to familiar objects. That is, the deprived sense of personal relatedness due to the underlying physiological deficit is the cause of Capgras patients' delusional experiences. From the differential visual abilities of blindsight patients and Capgras patients, one can infer that sensory-discriminatory processes and affective-motivational processes of visual perception are fully dissociable (i.e., separable). These processes may interact with each other by enhancing or interfering with certain aspects of visual experience, but they can function independently of each other in different brain pathways.

The same pattern of dissociation can be observed in sensory modalities other than vision. In human nociception (i.e., pain perception), sensation of and affective reaction to pain are typically related and occur together. If a person feels pain in her pinpricked thumb, she attends to her thumb and quickly moves it away from the cause of her pain. But these typically co-occurring processes of pain can be separated: pain (pain sensation) can come with or without painfulness. Consider asymbolia. Patients with asymbolia can sense their pain (its location, intensity, and duration) and know that their bodies, under a sustained condition of pain, are physically damaged. But they seem to be unaffected by such sensation and knowledge. They do not protect their bodies from painful stimuli and are not motivated to avoid them. That is, they know the relevant physical conditions of their bodies, but their sensory knowledge is not linked to appropriate reaction or motivation. Simply, pain sensation (the identification

and recognition of pain stimuli) is not accompanied by painfulness (an affective state and motivational reaction to pain stimuli).

Schilder and Stengel report that one of their asymbolic patients stabbed herself with needles and jammed objects into her eyelids with little or no hesitation.²³ Berthier and colleagues' asymbolic patient did not attempt to escape or avoid severe burn.²⁴ Grahek, in his analysis of asymbolia, generalizes that "pain . . . is actually a complex experience comprising sensory-discriminative, emotional-cognitive, and behavioral components that commonly go together but may well be disconnected and thus exist, to our great astonishment, separately."²⁵ Among these separable components, he focuses on the dissociation between "feeling pain" (pain sensation) and "being in pain" (painfulness) in asymbolic pain experiences.

If Grahek is right, we can, in principle, find another possible configuration of the same dissociation: the existence of pain-related affection-motivation without the sensationdiscrimination component of pain. In fact, there exist individuals who do not seem to sense pain but experience painfulness. Ploner, Freund, and Schnitzler report that laser stimuli to the hand of their patient, whose primary and secondary sensory cortices are damaged, did not elicit pain sensation but clearly generated unpleasant feeling and avoidance behavior. That is, these patients seemed to experience painfulness without pain sensation. To generalize, what Ploner and colleagues' case along with Schilder and Stendle's and Berthier and colleagues' cases present is a strong case of double dissociation where pain sensation and pain affection are separated and served by different psychological processes with distinct functional and neurological characteristics. ²⁶ Like dissociable processes of vision, dissociable processes of pain exist.

From these cases one can infer a general pattern of dissociable perceptual processes: sensory-discriminatory and affective-motivational processes are typically interrelated but functionally and neurologically separate processes of perception. So far, this dissociation pattern is observed under some limited conditions of visual perception and pain perception, but it can be found in other perceptual modalities or abilities. Since many moral sentimentalists compare moral judgments to aesthetic or perceptual judgments with affective components, considerations of the same pattern of dissociation can be extended to sentimentalist moral sense, if this sense is interpreted as a special type of perception. That is, the pattern of dissociable sensory and affective processes of perception, if successfully and universally established, helps us to analyze and separate two interrelated but independently functioning processes of moral sentiments.

If this dissociation pattern exists in moral sentiments, one can differentiate a wide variety of moral emotions from typical moral sentiments. One of the possibilities is a moral emotion that emerges from strong affective and motivational processes without sensory discriminatory processes of the moral sense. That is, when a moral agent, A, observes an actor, B, hit an innocent-looking victim, C, for no apparent reason, A identifies B's abrupt behavior as a moral violation and develops an affective and caring sense towards C's

painfulness and reactive disapproval of B's action, with minimum knowledge of C's or B's inner psychological states or dispositions. If this type of emotion serves moral judgments (such as "B's behavior is unacceptable") and actions (such as A's motivation to care for C) based on A's empathetic sense of C's painfulness (not pain sensation), it can provide a new opportunity to challenge or enrich moral sentimentalism (depending on how one interprets moral sentimentalism and characterizes moral sentiments). As I shall discuss shortly, based on my analysis of the recent discovery of mirror neuron activities, this type of basic moral affection (with full affective and motivational, but minimum sensory and discriminatory, processes of pain perception) not only exists but also serves our quick but sensible moral judgments and decisions.

Additionally, several psychologists report that this type of affective moral sense comes out of the regulatory homeostatic functions of the body. If moral affection is heavily embodied, it opens up new territory for moral psychology. In contrast to the traditional interpretation where moral emotions are understood as classical moral sentiments (i.e., psychological complexes of sensory discriminatory and affective motivational processes), this new approach takes a minimalist path, focusing only on affective motivational processes of moral emotions and analyzing them from the perspective of the regulatory functions of the body. In the following sections, I will analyze this aspect of embodied moral psychology by providing empirical evidence (from psychology and neuroscience) and philosophical argument (from Confucian philosophy) that some affective states (e.g., embodied moral affection) assess others' suffering (painfulness), detect moral violations, and facilitate othercaring behavior through mirroring regulatory functions of the body but are not dependent upon sensorydiscriminatory processes of empathetic pain perception, where understanding of others' inner psychological states is important or necessary.27

MIRROR EMOTION AND EMBODIED MORAL AFFECTION

Many brain-imaging studies show that when a person observes another's pain behavior, her brain activates as if it were her own pain: neural substrates that are active when one feels one's own pain overlap with those that are active when one observes another's pain. When one feels another's pain as if one feels one's own pain, one's mind seems to be blind to the true ownership of the pain. Often this amazing ability of empathetic nociception is explained by mirroring processes. When we observe others' pain, we instantly replicate (if not exactly copy) it in our mind and are motivated to help and care. Probably, as many psychologists hypothesize, this type of vicarious experience is a very effective way we can understand others' pain (its location, intensity, and duration) and even their other psychological states (thoughts and feelings).

It is reported that there exist three different mirroring processes: mirror action (understanding of others' goal-directed motor behavior via vicarious experience of their behavior, supported by mirror neurons), mirror sensation (surrogate pain sensation derived from the observation of others in painful situations, supported by the primary and

secondary sensory cortices), and mirror emotion (affective reaction to others' pain and suffering, supported mostly by the anterior insula).²⁹ In several studies of vicarious nociception, subjects report disturbing sensations in their bodies (mirror sensation) and strong reactive feelings and prosocial motivations (mirror emotion) when they see images of sharp needles or knives penetrating or coming close to others' bodies or hands.

Among these mirroring processes, I will focus on mirror emotion and its relation to embodied moral affection. Mirror emotion is one of the nociceptive states of the mind where others' pain behavior is observed and their painfulness is sensed. It interacts with mirror action and mirror sensation, but it is a distinct mirroring state with its unique psychological nature: mirror emotion is more naturally associated with affective moral functions (feeling the painfulness of victims, assessing their sufferings, distinguishing moral violations from conventional violations, preparing caring actions, avoidance of harmful environments, etc.) than sensory-discriminatory social functions of nociception (identifying inner cognitive and affective states of victims, estimating location and intensity of pain, etc.).

Unlike other mirroring functions of the brain, mirror emotion is reliably associated with a distinct set of neural substrates (the anterior insula and the rostral cortex). One of these substrates, the anterior insula, is well-known for its regulative functions of interoception (the sense of inner bodily conditions) and homeostatic balance of the body. When the body of a person undergoes sudden physiological changes caused by such disturbing stimuli as others' pain behavior, particularly ones that are caused by moral violations, the anterior insula controls and generates counterbalancing measures (such as changing heartbeat or blood pressure) to stabilize physical processes of the body.

Since the activity of mirror emotion is correlated with that of the anterior insula, one can hypothesize that nociceptive mirror emotion comes out of the essentially embodied processes of the anterior insula. Surprisingly or perhaps intriguingly, the anterior insula is also involved in empathy.³¹ The activities of the anterior insula have been correlated with self-evaluated empathy scales. What this correlation means is that embodied empathy, supported by the activities of the anterior insula, is the underlying psychological nature of nociceptive mirror emotion: our empathy toward others' painfulness is intrinsically related to our mirroring bodily reactions. But it is important to note that mirror emotion is not directly involved with sensory and discriminatory functions of nociception that derives mostly from social cognitive functions of mirror action or mirror sensation. That is, this type of nociceptive empathy intrinsically includes an embodied, other-directed affection but not necessarily other-regarding social cognition that typically serves the identification process of others' pain sensation.

These psychological and neurological studies of nociceptive mirror emotion demonstrate that mirror emotion serves a distinct nociceptive function with unique affective and motivational characteristics. With embodied affection that comes out of mirror emotion, one can sense the painfulness (not pain) of others' suffering and be motivated to act caringly without fully understanding the sensory and perceptual

conditions of their pain. Even though this characterization of embodied affection is limited to nociception, one can easily relate and generalize it to our basic affective moral ability. When we observe others' (victims') suffering, we experience a special emotion that generates prosocial and caring behavior independently of sensory-discriminatory functions of other mirroring processes (cognitive identification of location, intensity, and duration of others' pain through mirroring activities). If this is a moral emotion, it is an empathetic (perhaps, proto-empathetic) moral affection that promotes compassion and prohibits moral violations. The important thing to highlight here is that the whole process of sensing others' painfulness (not necessarily sensing their pain) and reacting to it with caring motivation requires minimal social cognition but essentially involves the body, the body's affective and motivational reaction to the wrongful suffering of innocent victims. In sum, embodied, affective, empathetic, and moral emotion is empirically observed and reported. Can it be a philosophically viable characterization of the moral mind?

THE BODY AND EMOTION IN CONFUCIAN MORAL PSYCHOLOGY

In Western intellectual traditions, the moral mind, with its intellectual and affective functions, is typically characterized in terms of Kantian moral deliberation and rational will, Humean moral sentiment, or Rawlsian moral faculty.³² In these traditions, the body is regarded as physical hardware or a life-sustaining structure that serves cognitive or affective functions of the mind: neither the body nor embodied emotion is sufficiently discussed in many Western moral traditions. Simply, embodied moral emotion with minimal socio-cognitive or sensory-discriminatory functions is an unexplored territory of Western moral psychology and moral philosophy.

An ancient Chinese Confucian philosopher Mencius, however, saw the great potential in this less investigated or less appreciated ability of the moral mind. He developed Confucian moral philosophy from the perspective of our embodied affection to others' painfulness. He carefully described and discussed this natural inclination of the human mind (Confucian heartmind, *xin*) and recognized it as an important foundation of Confucian moral virtue.³³

In the following passage Mencius describes how this embodied affection to others' painfulness arises.

All men have the heartmind that cannot bear to see the sufferings of others. Suppose a man suddenly sees a child about to fall into a well, he will invariably have a feeling of alarm and distress. He feels this way not because he wants to get along well with the child's parents, not because he wants to get fame from his neighbors and friends, and not because he is bothered by the sound of the child's cries. Without the heartmind of pity and compassion, we are not even human beings.³⁴

In this passage, Mencius believes that our basic moral emotion comes out of a spontaneous and reactive, but other-directed and affective state that motivates caring actions without detailed understanding of what other people

think and feel. He called this moral emotion ceyinzhixin (the heartmind of pity and compassion) and recognized it as the foundation of *ren* (the central Confucian virtue of benevolence or humanheartedness). In another passage, Mencius describes a situation where this type of sudden and strong awareness of and reaction to others' painfulness (or potential harm) comes from the body—i.e., spontaneous and abrupt physical changes in the body in reaction to unacceptable behavior (e.g., inappropriate burial practice).

In great antiquity there were some who did not bury their parents. When their parents died, they took them up and threw them into a ditch. Later when they passed by them and saw foxes and wild cats eating them, and flies and gnats eating them, their perspiration started out upon their foreheads, they looked askance and could not bear to look straight. Now the perspiration was not for the sake of other people. It was something at the bottom of their hearts that showed in their expressions. They immediately went home and returned with baskets and spades and covered the bodies. If it was indeed right to cover them, then there must be certain moral principles which made filial sons and men of humanity inter their parents.³⁵

Mencius points out that the bodily reaction is an essential part of our affective rejection of improper behavior and moral violations. Typically, perspiration, eye direction, and body movement are not discussed in philosophical debates of moral issues, but Mencius argues that these bodily reactions reflect our *genuine* moral interest. They are not accidental or optional expressions of preceding judgments or decisions but direct reflections of the genuine moral mind, which, in its foundation, is essentially embodied. He clearly declares that these bodily reactions come from the *bottom of the human heart*. That is, the body is an essential part of the affective moral mind.³⁶

From the studies of nociceptive mirror emotion and Mencius's insightful discussion of embodied emotion, one can generalize that embodied moral affection represents a psychologically possible and philosophically viable option in moral psychology that adds a new flavor or poses a new challenge to moral sentimentalism. This new moral psychological approach highlights the value of interdisciplinary and comparative study of the moral mind, where cognitive science of the West meets ancient philosophy of the East to provide inspiring new observations and analysis of embodied moral affection. A contemporary American neuroscientist Antonio Damasio argued that the body does not simply provide "life support and modulatory effects to the brain" because it is "part and parcel of the workings of the mind."37 To this we hear a strong preceding echo from a temporally and spatially distant moral tradition: an ancient Chinese philosopher Mencius provided a convincing observation that affective bodily reaction to inappropriate human conduct comes from the center, not the periphery, of the moral mind.

NOTES

- Kohlberg, Moral Development; Piaget, Moral Judgment.
- For example, CAD hypothesis relates a group of negative emotions (contempt, anger, and disgust) with specific moral violations (such

- as the violations against the ethics of community, autonomy and divinity, respectively). See Rozin et al., "CAD Triad Hypothesis," and Shweder et al., "Big Three," for further details.
- Noddings focuses on these prosocial emotions and disposition in Caring. Prinz discusses some challenges to this type of empathy based approach to morality in "Empathy," but he generally agrees that emotions are essential for moral judgment and moral motivation (Emotional Construction).
- 4. There are diverse orientations and interpretations of moral sentimentalism. In this paper, I focus mostly on Hume's moral sentimentalism (Treatise). For a discussion of moral sentimentalism, see Darwell, British Moralists; Slote, Ethics of Care; and Slote, Moral Sentimentalism
- 5. Greene, "Secret Joke."
- 6. Haidt, "Emotional Dog."
- 7. Hoffman, Empathy.
- 8. Hume, Treatise.
- 9. Byrne and Whiten, Machiavellian Intelligence.
- 10. Hare, Revised Psychopathy Checklist; Blair, Mitchell, and Karina, Psychopath.
- 11. Blair, "Brief Report"; Blair, "Psychophysiological Responsiveness"; Leslie, Mallon, and DiCorsia, "Transgressors."
- 12. Hume, Treatise, II, II.
- 13. Hume, Treatise, III, III.
- 14. Nichols, Sentimental Rules; Prinz, Gut Reactions; Prinz, "Is Empathy Necessary for Morality?"
- 15. Perhaps Hume can explain these cases by introducing reflective extension of our sympathy to those people who are potentially affected by negative social and political structures. But, even in this broad extension of sympathy to total strangers or to the whole society, understanding of other minds (their traits and dispositions, and their happiness and pleasure) is still required because that is how our affective approval or disapproval arises.
- 16. Sympathy, in the context of moral sentimentalism, can be interpreted in several different ways: (1) It can be a particular emotion, like compassion or pity or a general psychological function. (2) It can be an occurrent state (an emotional state tokened in a particular time and space) or a general disposition or a psychological ability. (3) It can be one's (vicarious) feeling another's inner state of or feeling for another's well-being (or both). (4) It can be part of social cognition or a combination of social cognition and moral/evaluative cognition. In my discussion of sympathy, I will focus on (3) and (4). In Hume's discussion of sympathy, it is typically described as a more general psychological function or process in which others' agreeable or disagreeable behaviors or traits generate approval or disapproval in our mind. It seems that sympathy includes social cognitive and evaluative processes. In contrast, Adam Smith's "fellow feeling," even though it is mostly used synonymously with sympathy, seems to focus more on a social cognitive ability to represent another's inner thoughts and feelings (from another's point of view) in one's own mind. Hume, Treatise; Smith, Moral Sentiments.
- 17. For example, disgust, as a moral emotion that inhibits or controls certain moral violations, does not necessarily require full knowledge of actors' or victims' inner states (thoughts and feelings). In his recent article, Prinz discusses affective moral judgments without empathy and critically evaluate empathy based approaches of ethics. Prinz, "Is Empathy Necessary for Morality?"
- 18. This psychological phenomenon is called affective blindsight. People with affective blindsight can discriminate affective facial expressions above the level of chance. Morris et al., "Differential Extrageniculostriate"; Pegna et al., "Discriminating Emotional Faces"; Gonzalez Andino, "Affective Blindsight."
- 19. Morris, et al., "Differential Extrageniculostriate."
- 20. These processes are functionally and neurologically independent but may interact with each other. See Tamietto and de Gelder, "Affective Blindsight"; and Tamietto et al., "Emotional Reactions."
- 21. In a coauthored paper with Reboul-Lachaux, Joseph Capgras reports a case of a French woman who complained that her husband and other people she knew had been replaced by doubles. Capgras and Reboul-Lachaux, "Illusion."

- 22. Ellis and Young, "Delusional Misidentifications"; Ellis et al., "Reduced Autonomic Responses."
- 23. Schilder and Stengel, "Asymbolia for Pain," 598.
- 24. Berthier et al., "Asymbolia for Pain," 43.
- 25. Grahek, Feeling Pain, 7.
- 26. Ploner, Freund, and Schnitzler, "Pain Affect without Pain Sensation"; Schilder and Stendle, "Asymbolia for Pain"; Berthier et al., "Asymbolia for Pain."
- Perhaps, autistic moral agency can be understood from the perspective of embodied moral affection. See Seok, Embodied Moral Psychology, 81–82.
- 28. Singer et al., "Empathy for Pain."
- 29. See Rizzolatti and Fabbri-Destro, "Mirror System"; and Keysers, Kaas, and Gazzola, "Somatosensation."
- 30. "More recently, it has been suggested that brain areas involved in emotion processing, including the anterior insula and the rostral cingulate cortex (rCC), might perform an 'emotional simulation' of other individuals' experiences, showing activity not only when we experience positive and negative emotions but also when we witness those of others." Keysers, Kaas, and Gazzola, "Somatosensation," 417; Gu et al., "Functional Dissociation"; Singer et al., "Empathy for Pain."
- Singer et al., "Empathy for Pain"; Jackson, Meltzoff, and Decety, "How Do We Perceive the Pain of Others?"; Lamm, Batson, and Decety, "Neural Substrate."
- 32. Hauser, Moral Minds; Miller, "Roots of Morality"; Pinker, "Moral Instinct"
- 33. Xin is translated here as heartmind to stress to its unique psychological nature in the combination of the intellectual and affective characteristics of the Confucian mind.
- 34. Mencius, 2A6. This is my translation.
- 35. Mencius, 3A5; Chan, Source Book in Chinese Philosophy, 71, emphases added.
- 36. For a full exposition of embodied Confucian moral psychology, see Seok, *Embodied Moral Psychology*.
- 37. Damasio, Descartes' Error, 226.

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The Resonant Mind: Daoism and Situated-Embodied Cognition

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Situated and embodied views about mind are gaining increasing currency both in and outside of philosophy. Clearly, there is broad sympathy for the task of critically liberating ourselves from the spell of an Enlightenment conception of subjectivity. The embedded, extended, embodied, and enactive perspectives on cognition and mind (hereafter, the 4-Es) have articulated key vantages for revealing how deeply these modernist presuppositions have informed our notions of cognition, consciousness, affect, and intersubjectivity. The dovetailing of these perspectives provides a powerful set of discourses for critically disentangling ourselves from the received, and oftentimes untenable, assumptions about who we are.

Despite the general alignment with respect to the situated body, however, this new philosophy of mind has failed to coalesce around a general organizing model, metaphor, prototype, or paradigm of mind.1 The primary aim of this paper is to recommend the Daoist conception of the "resonant mind" as a viable candidate for coordinating the 4-E approaches to cognition, because it stands in the right critical relation to the current organizing model of mind, namely, the "mind as container." Moreover, on the positive side, it rather directly entails many of the core commitments distinguishing the 4-E approaches from classical cognitive science. Given the scope of this venue, however, my discussion will have to be largely suggestive in this regard. The bulk of the essay will concentrate on explicating and clarifying the Daoist conception of mind qua sympathetic resonance (ganying, 感應), though I will schematically

introduce some of the obvious points of contact vis-à-vis situated, embodied cognition.

THE MIND: EMPTY AND FLOWING

Daoist notions about mind are ultimately rooted in the experiences of meditative consciousness and skillful flow. The radical openness, stability, and lucidity of meditative poise represents a cultivated state that is simultaneously a return (fan, 反) to the natural (ziran,自然) or genuine (zhen, 真) mind. Likewise, the experience of a flow state in dynamic poise marks the optimal cognition and efficacy of skillful deployed embodiment. The fact that meditative consciousness and bodily flow—as opposed to chess playing and abstract problem-solving, for example—are taken to be exemplary forms of cognition is significant because they operate as phenomenologically and cognitively normative experiences for the Daoist understanding of mind. On both counts it is easy to see what recommends these experiences. Meditative poise marks a kind of phenomenological limitpoint of mental presence qua attention, perception, and affect. It is experienced as optimal awareness, wherein a highly-integrated coherence across the broader cognitive system emerges. It is phenomenologically given as a profound poise amidst experience, and even realized in pre-personal biological registers, which is evidenced by the growing empirical data about the neurobiological coherences, synchronies, and recalibrations enacted through meditative practice. The achievement of meditative poise is vividly attested to by the nondual structure of awareness, wherein nothing stands against, or within, the empty expanse of this lucidity (ming, 明). This field of emptiness is also a field of radical openness that is not bounded on any side by either a subject or an object. Similarly, the dynamic poise of effortless action (wuwei, 無為) achieves what is typically identified within the psychological literature as "flow," "optimal experience," or "effortless attention." It is characterized by six primary features: stable awareness, the unity of perception and action, the absence of reflective or executive self-monitoring, an increased sense of efficacy, a total absorption in the present, and the fact that the flow experience per se is given as intrinsically rewarding, or autotelic.² The effortless attention characteristic of flow not only expresses optimal experience for the subject, but it also correlates with assessments of optimal performance from both first and third-person standpoints. Public appraisals of exemplary performance in sports and music, for instance, tend to correlate with first-person agentive accounts of flow, often characterized in popular parlance as having been "in the zone," "in the groove" or "on a roll."

Another advantage of emphasizing flow as normative of mind is that it is not restricted to a narrow class of cognitive activity. Indeed, flow experience can be realized across the entire spectrum of mindedness, from seated meditation to playing basketball and even to highly abstract modes of reasoning; furthermore, it can be realized individually or within group endeavors, as in the case of sports teams or musical groups. Rather than narrowing the questions of mind to a privileged subset of cognitive activity (e.g., chess playing), the Daoist appeals to the *quality* of performance enacted within a given domain of activity as the measure of its intelligence. In other words, flow and its attending markers are taken as indicators of optimal cognitive performance, and thereby as representing the clearest manifestation of mind.

MEDITATIVE POISE: EMPTINESS AND SYMPATHETIC RESONANCE

There are a number of different entry points into Daoist practices of meditation. For my purposes here, I will concentrate on the specific practice of "fasting or smoothing the mind" (xin zhai心齋) as it is articulated in the Zhuangzi (莊子), which I will take to be generally representative of philosophical Daoism. In the chapter "Worldly Business Among Men," Confucius—here representing the Daoist sage—teaches this practice to his best disciple, Yan Hui.

Unify your attention. Rather than listen with the ear, listen with your heart. Rather than listen with the heart, listen with the energies [qi]. Listening stops at the ear, the heart tallies with thought. As for "energy," it is the tenuous [xu 虚] which waits to be roused [yao 搖] by other things. Only the Way accumulates the tenuous. Attenuating [xu 虚] is the fasting of the heart. / When Hui has never yet succeeded in being the agent, a deed derives from Hui. When he does succeed in being its agent, there has never begun to be a Hui—Would that be what you call attenuating?³

There are several things to be noted in this passage. Most obviously, it points to three nested fields of sensitivity, stretching from the physical senses as represented by the "ear" (er, 耳), to the thinking-affective register of the heartmind (xin 心), and, finally, to energy (qi, 氣), which is simply identified with the tenuous or empty (xu, 虛). The deepest order of sensitivity is correlated with a complete loss of self-conscious agency, which is clearly articulated in the last statement about Hui. On this Daoist view, then, the most genuine efficacy emerges in the absence of an empirical self qua "doer."

The Zhuangzi identifies this cultivated listening with sensitivity and responsiveness. Genuine listening is defined by its capacity to be "roused" or "shaken" (yao 搖) by otherness—rather than being initiated internally by the spontaneity of the self. And yet, meditative poise is not simply an issue of escaping the empirical self or compulsive habits of executive monitoring, because this retraction of the self is concomitantly a retreat from our habitual objectifying of phenomenality. In one sense, gi represents the subtlest order of listening, precisely because it constitutes a cognitive field that is no longer intentionally directed toward objects (i.e., any apparent content). This order of gi is depicted as "empty" (xu) because it describes a leveled sweep of awareness, wherein mind has been "smoothed" (zhai齋) of objects and stilled (jing 靜) into a field of perfect symmetry.4 A common analogy in the Daoist literature is to compare this symmetry of awareness to the smooth surface of a still pool of water—an empty surface that immediately reveals even the subtlest perturbation:

If water is still, its clarity (ming 明) lights up the hairs of the beard and eyebrows, its evenness is plumb with a carpenter's level: the greatest craftsmen take their standard from it. If mere water clarifies when it is still, how much more the stillness of perfect poise and the ecstatic self, the heart-mind of a Sage! It is the pattern of heaven and earth, the mirror of myriad

things. Tenuousness (xu 虛) and stillness (jing靜), calm and indifference, quiescence, effortless action (wuwei 無為), are the level of heaven and earth, the utmost reach of the dao and de.⁵

It is a mistake, however, to take this analogy as explicating a notion of accurate or truthful representation. In the passage already cited above, we read: "As for 'energy,' it is the tenuous which waits to be roused by other things." The most profound order of sensitivity is not predicated on any internal representation standing in for anything else, but on sympathetic response to alterity: one is moved with the movement of others. Indeed, to insist on a representationalist reading of the water analogy is to fixate on its reflective properties while ignoring the deeper dialectic of stilling and movement governing this very lucidity.

A few pages later, the Zhuangzi revisits the water analogy in a way that addresses this dialectical relationship even more pointedly, "when clogged or dammed, it does not flow, it can never be clear (qing, 清)." In the subsequent paragraph, the sage is compared to water in his stillness (jing, 靜), although this stillness represents a subtle mode of activity (dong, 動), "to be indifferent and with relaxed action (wuwei), to move proceeding to nature (tian); this is the way to nurture the ecstatic self (shen, 神)."6 Whereas philosophical discourse in the West has traditionally presumed the ontological and epistemological dualism of reflective metaphors, wherein a reflection is an image of the real and a clear image represents adequate knowledge, the Daoist view is markedly different despite its apparent familiarity. The focus for the Daoist is on the immediacy and effortlessness of response, that is, on the fact that a reflection arises in seamless, effortless coordination with that which is reflected—and, moreover, that such resonant coupling happens across a distance.⁷

Smoothing of the mind, then, is also a quieting of the mind wherein one sinks into a deep symmetry of stable, open awareness, and thereby achieves a brighter lucidity with respect to dim, faint, and otherwise insignificant aspects of the environment. This is precisely why becoming tenuous (xu, \mathbf{c}) is synonymous with a stilling $(jing, \mathbf{F})$, a purification $(qing, \mathbf{f})$, and a return to perfect poise $(jing, \mathbf{f})$:

Without looking and without listening; embrace the ecstatic self (shen, 神) by means of stillness (jing, 靜) and your body (xing, 形) will correct itself. Be always still (jing, 靜) and always limpid (qing, 清); do not overstress your body and do not shake (yao, 搖) your perfect poise (jing, 精). Only then will you live long. When the eye is not the field (suo, 所) of seeing and the ear is not the field of hearing, and the heart-mind is not the field of knowing, then the ecstatic self will safeguard the body, and the body will enjoy long life. §

In the background of Zhuangzi's account of the tenuous mind is the logic of "sympathetic resonance" (ganying, 感應)—an idea that will be specifically engaged below. In the same section that offers us the water analogy, for example, the Zhuangzi first describes the sage's activity explicitly as an instance of ganying, "Only when stirred (gan 感) does he respond (ying 應), only when impinged upon (po 迫) does he move (dong 動)."⁹ This ganying mode of other-guided responsiveness

is contrasted to grasping and containing otherness within the self via representational knowledge: "he [the sage] responds (ying 應) but does not store."¹⁰ This juxtaposition between the storage of representations and the openended responsivity of sympathetic resonance maps squarely onto the Daoist admonition against enforcing (wei, 為) fixed distinctions (shi-fei, 是非), which chop-up the stillness (jing, 靜) and limpidity (qing, 清) of perfect poise (jing, 精), in favor of transient, domain-specific distinctions (yinshi, 因是) that are continually cast aside in the sage's ongoing return (fan, 反) to emptiness.

DYNAMIC POISE: FLOW AND SYMPATHETIC RESONANCE

Alongside the "fasting the mind" passage cited above, which centers on meditative practice per se, the *Zhuangzi* is famous for its stories about embodied skill, which exemplify the tenuous mind in action as a resonant phenomenon. These so-called "knack" passages, such as Cook Ding, the Hunchbacked Cicada-catcher, the Whitewater Swimmer, and Engraver Qing, are offered as exemplars of embodied poise or the dynamic manifestation of stillness.

These accounts of the optimal performing body speak directly to the tenuous mind and the quality of ecstatic agency (shen, 神) characteristic of flow experience. As such, they consistently describe an absence of executive control and a sense of being spontaneously moved by the circumstances themselves. Cook Ding explains that he is "in touch through the ecstatic self (shen) and [does] not look with the eye," while the Whitewater Swimmer sums up his ability thusly, "I enter with the inflow, emerge with the outflow, follow the Way of the water and do not impose my selfishness on it." It is Engraver Qing, however, who is the most eloquent about how his "fasting" or "smoothing" of the heart-mind for seven days makes the full actualization of his skill possible:

I make sure to fast to still the heart . . . I forget that I have a body and four limbs . . . the dexterity concentrates, outside distractions melt away, and only then do I go into the mountain forest and observe the nature of the wood as nature makes it grow. The aptitude of the body attains its peak. . . . So I join what is nature to what is nature (Zhuangzi and Graham 2001, 135). 12

For the Daoists, skillful embodied performance represents the human capacity to harness sympathetic resonance through the cultivated attunement of the body. These knack passages are fascinating because they so effectively articulate the phenomenology of flow experience from a variety of angles. Sympathetic resonance in this context presents us with a compelling description of what it is like to live through the efficacy, efficiency, and ease of optimal performance, wherein the attuned body becomes tightly coupled to, or even entrained by, the saliencies present within the domain of involvement. In flow, the immediate environment guides the body spontaneously, such that one feels buoyed along by the activity itself. It is in this sense that the self is ecstatic (shen), which is to say that the intentional development, efficacy, and energy of an activity seem to stand outside of the self. Indeed, the Zhuangzi asserts that the flow of the heart-mind can find itself "charioted" by the world:

Besides, let the heart-mind roam [you xin, 遊心] with other things as its chariot [cheng wu, 乘物], and by trusting to the inevitable nurture the centre [yang zhong, 養中] of you, is the farthest one can go. Why should there be anything you have initiated [zuo wei, 作為] in the response [bao, 報]?¹³

SYMPATHETIC RESONANCE AND THE 4-ES

The notion of *ganying* explicitly enters Chinese philosophical discourse around the third century B.C.E., when it appears in the *Xunzi*, the outer chapters of the *Zhuangzi*, and in the appendices of the *Yijing*. ¹⁴ As a term of art, it provides a shorthand for communicating already existing assumptions about efficacy, assumptions that were widely-held given that *ganying*, and the closely associated logic of "mutual response" (*xiangying*, 相應), are appropriated by Confucian, Daoist, and Yijing discourses at around the same time. ¹⁵ Charles LeBlanc offers a helpful summary of the syncretic assimilation of *ganying* into Daoist discourse:

As far as Huai-nan Tzu is concerned, the teachings of the School of Yin-Yang and Five Elements may be reduced to four basic ideas: the idea of ch'i (matter-energy); the idea of resonance [ganying] between different formations, configurations and categories of chi'i [qi, 氣]; the idea of an alternating principle of change, Yin and Yang; and a sequence of phrases relating the foregoing "principles" to concrete things and making it possible to classify the latter into systems of correspondence. These ideas blended with Taoist conceptions such as Tao, non-action [wuwei, 無為], naturalness [also, "spontaneity," ziran, 自然] and return to the origin [fan, 反] to form a new all-embracing cosmology.16

The paradigmatic instance of *ganying* appears in the sixth chapter of the *Huainanzi*, and again in the *Xu Wugui* (徐無鬼) chapter of the *Zhuangzi*. The example in both cases centers on a demonstration of sympathetic acoustic resonance between two large zithers (se, 瑟):

When the lute-tuner strikes the *kung* note [on one instrument], the *kung* note [on the other instrument] responds, when he plucks the *chiao* note [on one instrument], the *chiao* note [on the other instrument] vibrates. This results from having corresponding musical notes in mutual harmony. Now [let us assume that] someone changes the tuning of one string in such a way that it does not match any of the five notes, and by striking it sets all twenty-five strings resonating. In this case there has as yet been no differentiation as regards sound; it just happens that that [sound] which governs all musical notes has been evoked.¹⁷

The example of the resonant instruments articulates a model of efficacy that is not simply linear and passive, because it places *attunement* at its center. The particular mechanical structure and timbre of the instrument, in conjunction with its specific tuning, determines its readiness. In other words, there is a sense in which its immediate attunement *selects* the specific resonance frequencies and energy threshold to which it sympathetically responds. Indeed, it effectively picks its resonant frequencies out from a complex excitation, such

as white noise, thereby effectively filtering out frequencies that lack salience. The contemporary state of the instrument in its immediate particularity, which carries with it an individual history of resonance, determines its readiness to be solicited by the sound of another. Moreover, since this example of *ganying* describes the sympathetic resonance of both zithers, it represents a kind of feedforward-feedback system wherein the instruments are mutually attuned and transiently coupled by the dynamics of resonance.

This example of acoustical resonance is simply one manifestation of *ganying*, albeit an immediately accessible one, so there is no need to hang too much on its particular interpretation. More generally, however, I suggest that the Daoist model of the sympathetically resonant mind, broadly construed, offers a compelling alternative to the *container* model of mind that currently dominates our thinking. ¹⁹ Since the notion of resonance is organized around an ontology of waves, it fundamentally undercuts the implicit corpuscular ontology supporting the container metaphor, especially in view of the role that informational quanta play as "inputs."

On my reading of classical Chinese thought, qi should not be conceived atomistically, that is, in reductionist terms that looks for the generic building block of things—regardless of whether it is defined in material or energistic terms. Rather, I suggest that it is used quite promiscuously for talking about any and all species of energy across a variety of descriptive levels. Discussions of gi are almost always prescriptive, pedagogical, and instructive. It is used to draw our attention toward the resonance relationships that obtain within a given domain of interaction, whether these resonance relationships exist between bodies (e.g., kung fu), within the local economy of a body (e.g., acupuncture), between the body and a field (e.g., qigong), between a body and an aesthetic domain (e.g., poetry, music, painting), between physical objects (e.g., causal narratives), and between an object and its environment (e.g., fengshui). In every case, the practitioner is advised that careful attention to qi is necessary for cultivating cognition within that given domain of involvement. Qi, then, is not a reductive concept, but an analytic one. In other words, it should be understood as phenomenologically scaffolding one's attention to the subtle relational dynamics implicit within a domain of involvement. Through this attention to resonant dynamics, one can come to achieve great skill at coordinating, and being coordinated by, the resonance relationships shaping interaction within that domain. Moreover, it is worth noting that qi is formally understood in wave-like terms, which is consistent with our contemporary scientific understanding of resonance. Qi is said to continually oscillate at varying rates between the correlative poles of yin and yang, and that it can enter into different phase states; there are five primary phase states (wuxing, 无形) that manifest distinctive elemental qualities.

To be clear, I am not suggesting that one needs to buy into all the details of a *qi*-cosmology in order to recognize the value of the resonant model for distinguishing embedded and embodied approaches from the classical computational and connectionist perspectives, which are ultimately still committed to seeing the processing of internal content as the "mark of the mental." Rather, the main point here is that a model of resonance aligns naturally with the emphasis on dynamical systems approaches to brain-

body-world interactions that, for example, explicate bodily coordination and control by appealing to coupled oscillators. ²⁰ It also supports the corresponding concepts of phase transitions, phase locking, injection locking, injection pulling, entrainment, and so forth. The wave-like coupling that defines the phenomena of resonance side-steps any representational commitments, while upholding the complex, non-linear dynamical picture of mind as emerging from the "concurrent and mutual interaction" and "reciprocal causation" of brain, body, and world:

Enactivists hold that these dynamic interactions—in which cognition literally consists—are loopy, not linear. For example, in ordinary cases perceptual experience is made possible by organisms engaging with select aspects of the environment in a continuous series of responses that call into play the non-neural body and many areas of the brain. These neural and wider bodily responses are influenced by activity that involves nontrivial causal spread within the brain and the body and among the brain, the body, and the environment. Multiple areas in the brain and body are involved in processes of mutual and concurrent interaction, and patterns of simultaneous reciprocal causation occur among the environment, the brain, and the body.²¹

Besides fitting easily into the theoretical framework of complex systems modeling, the resonant mind is also consistent with the central constitutive claims about mind as noninstrumentally embedded, extended, and embodied. Since the resonant mind is not a "thing" that is simply located, but a distributed resonant activity emerging from the intersecting resonances of a brain-body-world system, it already presupposes these constitutive claims. And again, the resonant mind also lends itself to a strong antirepresentational stance with respect to the lion's share of cognition, because it does not lend itself to being thought in container-like terms.

Unfortunately, there is not room here to fully engage the question of representation, which is fundamental because it bears directly on the kind of cognitive boundaries we are wont to draw between brain, body, and world. In *Radical Embodied Cognitive Science*, Anthony Chemero observes precisely this point, "when the system is representing the environment, one can carve off the system from the environment, by claiming that it is the environment-as-represented that drives the nonextended cognitive system."²² Indeed, the question of representation has become a centrally contentious issue within the broader camp of situated, embodied cognition, one that separates the more radical antirepresentational positions²³ from the representational minimalists.²⁴

Daoism certainly has nothing to compare to empirical neuroscience, and therefore nothing directly to say about the purported existence of subpersonal neurobiological representations. Having said this, however, its critiques of representationally guided action, as well as its corresponding critique of Confucian social normativity, do bear on the philosophical issues of representationalism, including the intelligibility of such subpersonal content; indeed, I see the Daoist view as converging, in interesting ways, with Hutto and Myin's critical analysis of informational content in

Radicalizing Enactivism. By way of concluding, let me simply sketch the nature of this convergence.

Hutto and Myin claim that basic mindedness is "contentless" and explicable solely in terms of "sensitivity to covariance"—a view that nicely parallels the correlative logic of ganying. Moreover, their attending claim that "sensitivity to informational content" is incoherent (since there is no existing theory of content consistent with naturalism) finds support in the Daoist insistence that social normativity ultimately underwrites representational content. This notion is a key piece of their critique of Confucianism. Hutto and Myin and the Daoists recognize that minds can be contentful, since full-blooded representational vehicles, such as language, are made possible by sociality and its corresponding normative practices, but that basic mind or genuine (zhen) mind is necessarily contentless.²⁵

This conviction about the ultimate emptiness of mind, on the Daoist side of things, is not rooted in a logical analysis of the necessary and sufficient conditions for contentbearing vehicles, which is Hutto and Myin's track. Rather, it stems from the experience of meditative practices like "smoothing the mind," wherein one learns to gain a disciplined phenomenological purchase on the role of representations in guiding behavior. While the primary focus of Daoist concerns relying on explicit representation target linguistic conceptualization, their critique of mental content extends toward extremely subtle egoic structures that can guide behavior even while remaining outside the purview of conventional attention; these structures, which are identified with egoism, are not necessarily linguistic or imagistic per se, nor explicitly instructional; but, on the Daoist view, they consistently bear the marks of social norms and reveal themselves as intermediaries dampening the spontaneous unfolding of sympathetic resonance. At bottom then, the Daoist critique of representation is not simply aimed at explicit symbolic representation, but at any and all intermediary structures that need to be "fasted" or "smoothed out" in order to realize the full symmetry of the tenuous mind. Since these representational structures belong to the egoic economy, it must be possible to gain some distance between the background of prereflective awareness and a specific representational structure. To put the point somewhat differently, whatever cannot be objectified and "caught sight of" in the cultivated meditative practice of open attention is, by definition, not the ego, but is taken to be constitutive of the natural openness of mind. Awareness per se, for the Daoist, is egoless, which is to say that it is intrinsically empty of all mediating representational schemes. To recover this intrinsic emptiness by shedding these mediating schemes is to relocate mind in the direct resonant coupling of brain, body, and world.

NOTES

1. My use of organizing "model," "metaphor," "prototype," and "paradigm" here is intended to be suggestive. This is not the place to provide an independent metatheoretical argument for the importance of such an "organizing model." Instead, I will only gesture towards the work of Thomas Kuhn in the philosophy of science; Eleanor Rosch in cognitive psychology; and the cognitive linguistics of George Lakoff and Mark Johnson as providing surrogate arguments for this claim. Despite their obvious diversity, these thinkers offer persuasive accounts about the constitutive normative role that a paradigm, prototype, or metaphor plays in our understanding and practices. My claim here is that the absence of a shared organizing model for mind—regardless of

how simple or austere it may be—is not trivial for the coordination, communication, and theoretical coherence of a broader research program in situated, embodied cognition. Indeed, it is precisely the simplicity of the paradigm, prototype, or metaphor that renders it broadly applicable and thereby so efficacious, albeit in a generally tacit way.

- Nakamura and Csikszentmihalyi, "Concept of Flow"; Csikszentmihalyi and Nakamura, "Effortless Attention."
- 3. Zhuangzi and Graham, Chuang-tzû, 68-69.
- 4. Here, I am appealing specifically to the mathematical notions of symmetry and symmetry-breaking. In a fortuitous example, given our current context, Ian Stewart and Martin Golubitsky describe the smooth surface of a pond as possessing "the symmetry of an infinite plane," which is then broken into circular ripples by a pebble that pierces the surface and disrupts the original symmetry (Fearful Symmetry, 24). Also, "An oddity of the human mind is that it perceives too much symmetry as a bland uniformity rather than as a striking pattern . . . we are intrigued by the pattern manifested in circular ripples on a pond . . , but not by the even greater symmetry of the surface of the pond itself (it's pretty much the same everywhere)" (Ibid., 5).
- 5. Zhuangzi and Graham, Chuang-tzû, 259.
- 6. Ibid., 266, trans. mod.
- 7. If one remains unconvinced about this non-representational reading of the water analogy, it is simply worth noting that the Daoists also valorize the responsiveness of shadows, which foregrounds immediate responsiveness while lacking, rather decisively I think, the qualities of accuracy and detail that feed the epistemological-representational interpretation.
- 8. Zhuangzi and Graham, Chuang-tzû, 178, my translation.
- 9. Ibid., 265.
- 10. Ibid., 98.
- 11. Ibid., 63 and 136.
- 12. This passage is also quite explicit about the social preoccupations that are abandoned during this fasting of the mind, "After fasting three days, I do not care to keep in mind congratulation and reward, honours and salary. After fasting five days, I do not care to keep in mind your blame or praise, my skill or clumsiness. After fasting seven days, I am so intent that I forget that I have a body and four limbs."
- 13. Zhuangzi and Graham, Chuang-tzû, 71, trans. mod.
- 14. In his commentary on the sixth chapter of the Huainanzi, Charles LeBlanc suggests that concrete phenomena and examples of "sympathetic resonance" (ganying) is ultimately "given [the] general form—mutual response [xiangying 相應]." (Le Blanc, Huai-Nan Tzu, 123) (Graham, Disputers of the Tao, 245.
- 15. According to A. C. Graham, *ganying* describes "the spontaneous reactions which precede thought" and are "ascribed to the quintessence" or *jing*, 精, which I render herein as "perfect poise." *Disputers of the Tao*, 245.
- 16. Le Blanc, Huai-Nan Tzu, 197.
- 17. Ibid., 6:2, 138.
- 18. The material (the wood), as well as the structural unity of the instrument itself, changes the way an instrument resonates due to a history of having resonated. The sound of a new guitar, for example, will open up with a sufficient history of having been played, or of having aged. Vintage string instruments are, in part, esteemed because of their history of having been played; a well-made guitar will sound better the more it has been played, or been aged. Note, however, that aging is not a passive process that occurs simply by the passage of time, which is to say that an instrument does not age if, for example, it is not played and just left in its case. Some luthiers even pre-age wood by systematically subjecting it to vibrations, which then alter the physical structure of the wood.
- 19. It is also worth noting that J. J. Gibson, in articulating his view of direct perception, appealed to a radio analogy for thinking about perception, precisely because a radio functions according to resonance: "The 'resonating' or 'tuning' of a system suggests the analogy of a radio receiver" but wherein "A perceiver is a self-tuning system" (Senses, 271). The radio metaphor is grounded in a resonance or attunement model rather than an internalist

information-processing model (wherein processing happens inside the container), which makes it an example that closely resembles the Chinese notion of *ganying*. For Gibson, a percept is the result of an attuned perceptual system resonating with respect to a stimulus invariant. (Ibid., 244).

- For example, Fuchs et al., "Extending the HKB Model"; Kelso and Jeka, "Symmetry Breaking Dynamics"; Haken, Kelso, and Bunz, "Theoretical Model"; Yamanishi, Kawato, and Suzuki, "Two Coupled Oscillators"
- 21. Hutto and Myin, Radicalizing Enactivism, 6.
- 22. Chemero, Radical Embodied Cognitive Science, 31.
- 23. Hutto and Myin, Radicalizing Enactivism; Chemero, Radical Embodied Cognitive Science; Thompson, Mind in Life; Beer, "Dynamical Approaches"; Van Gelder, "Dynamical Hypothesis."
- 24. Clark, Supersizing the Mind; Clark and Toribio, "Doing Without Representing?"; Wheeler, Cognitive World; Rowlands, Body Language.
- 25. Hutto and Myin, Radicalizing Enactivism.

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Self-Making and World-Making: Indian Buddhism and Enactive Philosophy of Mind

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Student, beings are owners of their actions, heirs of their actions; they originate from their actions, are bound to their actions, have their actions as their refuge. It is action that distinguishes beings as inferior and superior.¹

-Majjhima Nikāya

In this short essay, I will explore, first, the distinctively Buddhist idea that through the karmic process we enact ourselves—that is, we make and remake ourselves through our actions. Second, I will discuss the idea that we also enact our world(s) through karma—that is, our patterns of action and reaction bring forth meaningful worlds, which, in turn shape those very patterns for better or worse. In this process, we shape and are shaped by the possibilities for action disclosed within these worlds. And, crucially, we enter enacted worlds midstream, as it were, already at birth products of this on-going process.²

THE ENACTIVE APPROACH

As Evan Thompson summarizes, "the conviction that motivates the enactive approach is that cognition is not the representation of an independent world by an independent mind, but is rather the enactment of a world and a mind on the basis of a history of embodied action." Several related claims are involved in the development of this basic conviction.

First, from an enactivist perspective, organisms are autonomous, autopoietic systems—that is, self-organizing systems that reinforce their own structures through the process of living. Hence, living organisms quite literally enact themselves; the organism's future structure and organization are products of its earlier activity, in addition to being the product of the environment and the evolutionary history of organisms of its kind.

Second, the enactive approach proposes that perception is to be understood in terms of perceptually guided activity. Perception and action evolved together, such that motor activity orients perception while perceptual systems guide activity. Perception, then, is not the passive reception or recovery within the mind of a pre-given world; it is not the construction of an internal representation or model of an objective world. Rather, perception is part of a larger system of ongoing transaction between organism and environment.

Third, cognition more generally is grounded in embodied action—that is, cognition is neither projection nor passive mirroring, but rather a form of know-how. As Thompson explains, "cognitive structures and processes emerge from recurrent sensorimotor patterns of perception and action. Sensorimotor coupling between organism and environment modulates, but does not determine, the formation of endogenous, dynamic patterns of neural activity, which in turn inform sensorimotor coupling."⁴

Fourth, the enactive approach maintains, in agreement with many Buddhists, that cognition bears a constitutive relation to its object. That is, "instead of representing an independent world, [we] enact a world as a domain of distinctions that is inseparable from the structure embodied by the cognitive system." 5 Both mind and world, as distinct phenomena, emerge from the more fundamental dynamic process of enaction.

Finally, because perception and action are so tightly intertwined, the "domain of distinctions" that constitutes one's world will not necessarily be, first and foremost, a domain of distinct objects. Rather, equally, or perhaps more fundamentally, one's world will be a domain of affordances, of opportunities for action.

ENACTING SELVES

In addition to the important role it plays in Buddhist moral theory, moral psychology, and soteriology, the concept of karma does important ontological work within Buddhist philosophy. Self, world, and action are taken to be three interdependent aspects of an ontologically and phenomenologically more basic and universal process of dependent co-arising (pratītyasamutpāda).6 Thus, not only do actions, as common sense would have it, arise from selves interacting with the world, but also, Buddhist philosophers insist, selves and the world arise from actions (karma). That is, we may say that both the self and the world are enacted in and through the process of dependent origination. It is perhaps not clear which idea is more seemingly paradoxical, that we enact ourselves or that we enact the world, but in any case I will begin with the former idea and take up the latter in the next section.

Rejecting the existence of the substantial self, the Buddhists argue that the existence of a person (pudgala) consists in the existence of the five skandhas (bundles or aggregates) organized in the right way. The five skandhas are:

1. Rūpa: the body or corporeality

2. Vedanā: affect

3. Samiñā: perception and cognition

4. Samskāra: conditioning and volition

5. Vijñāna: consciousness

These five *skandhas* are not to be taken as independent things, but instead are seen as interdependent components of a causally and functionally integrated psycho-physical (*nāma-rūpa*) system or process (*skandha-santāna*: an "aggregate-stream" or "bundle-continuum").

Therefore, in the standard Buddhist analysis, the person is not an entity that can exist independently of the five *skandhas*. Take away the complex, impermanent, changing *skandhas* and we are not left with a constant, substantial self; we are left with nothing. Moreover, the diachronic identity of a person consists in the appropriate degree of continuity and connectedness of the *skandhas*—that is, it is a matter of there being a causally and functionally integrated series or stream of *skandhas*. On the other hand, Buddhists do not

deny that we have a fundamental sense of self. This sense of self is not the ontological ground of either the stream of experience or the person, but is rather a product of both the immanent structure of experience and the network of linguistic and social practices within which we find ourselves. It is a dependent phenomenon that, because it is not a reified separate thing, disappears under analysis.⁷

So how does the sense of self emerge from karma? To approach this question I want to focus on two deeply intertwined processes: "I-making" (ahaṃkāra) and the "karmic arc." I-making is a dynamic process of self-appropriation that arises from the more basic autopoietic structure of the sentient being. The karmic arc is a circuit or dynamic loop—indeed, a form of operative intentionality—wherein actions (karma) shape conditioning and volitional dispositions (saṃskāra) and lead to certain results (vipāka) in the life of the agent. This conditioning in turn shapes action and the way in which the results are assimilated into the life of the agent. In this section I will take up I-making, while in the next section I will discuss the karmic arc.

In order to understand I-making, we must begin with the more basic autopoietic structure of sentient beings. According to both Buddhist and enactivist accounts, sentient beings are organized dynamic systems. Hence an understanding of such systems requires that we pay close attention not just to the system's components, but also to its organization.8 We may begin with the distinction between heteronomous and autonomous systems. A heteronomous system is exogenously controlled and can cleanly be modeled as an input-output system. In contrast, an autonomous system primarily will be understood in terms of its "endogenous, self-organizing and self-controlling dynamics," and "does not have inputs and outputs in the usual sense."9 Instead of an input-output model, autonomous systems are understood in terms of perturbation and response. External factors perturb the on-going endogenous dynamics of the system, yielding a response that must be understood in terms of the system's own dynamics and its overall organization. More specifically:

In complex systems theory, the term autonomous refers to a generic type of organization. The relations that define the autonomous organization hold between processes (such as metabolic reactions in a cell or neuronal firings in a cell assembly) rather than static entities. In an autonomous system, the constituent processes (i) recursively depend on each other for their generation and their realization as a network [operational closure], (ii) constitute the system as a unity in whatever domain they exist [organizational closure], and (iii) determine a domain of possible interactions with the environment.¹⁰

Sentient beings, on this view, are understood not as heteronomous, mechanical input-output systems, but rather as dynamic, autonomous systems—necessarily coupled to the environment, but also self-controlling. In addition, autonomous systems, in particular living and sentient systems, involve emergent processes. As Thompson describes, "An emergent process belongs to an ensemble or network of elements, arises spontaneously or self-organizes from the locally defined and globally constrained or controlled interactions of those elements, and does not

belong to a single element."¹¹ Thus, self-organizing systems display *circular causality*: local interactions give rise to global patterns or order, while the global order constrains the local interactions. On my enactivist interpretation, this circular causality is the fundamental action from which the self or I-making emerges. Hence, on this view, through autopoiesis we quite literally enact ourselves from moment to moment.

What, then, is the dependence relation between the prepersonal, autopoietic skandha-santāna and the enacted self? A common analogy for the relation between the self and the skandhas is the mutual dependence of fire and fuel. Just as the fire appropriates (upādāna) the fuel to perpetuate itself, the self appropriates as its own the various mental and physical events that make up the skandha-santāna. As Candrakīrti comments on Nāgārjuna's use of the analogy:

That which is appropriated is the fuel, the five [types of] appropriated element. That which is constructed in the appropriating of them is said to be the appropriator, the thinker, the performing (niṣpādaka) self. In this is generated [the activity of] "I"-ing, because from the beginning it has in its scope a sense of self.¹²

The self, then, is the appropriator (upādātṛ) and the various elements are the appropriated (upādāna-skandha), and yet Candrakīrti insists "the self is not a real, existent thing." That is, the self lacks inherent existence (i.e., it is empty) and it is not any kind of thing or object. Rather, the self is "I"-ing (ahaṃmāna) or on-going self-appropriative activity. The self is appropriates phenomena as "me" and "mine," incorporates them into its own on-going dynamic, by indexing them to the I. Appropriation, then, functions as a self-referential loop or a form of self-grasping (ātmagrāha).

Hans Jonas remarks, "organisms are entities whose being is their own doing . . . the being that they earn from this doing is not a possession they then own in separation from the activity by which it was generated, but is the continuation of that very activity itself." In order to survive, the organism must maintain its own dynamic organization in the face of, but also in virtue of, continuous matter-energy turnover. The viable organism, through its organizational and operational closure, is able to subsume or appropriate both bits of the environment and elements of the organism itself. Furthermore, as Jonas argues, "The introduction of the term 'self', unavoidable in any description of the most elementary instance of life, indicates the emergence, with life as such, of internal identity—and so, as one with that emergence, its self-isolation too from all the rest of reality." 15

At the very root of our embodied existence is a form of living organization that simultaneously constitutes an interior (a living being) and an exterior (a world—*Umwelt* or *loka*) and an internal relation between the two. At the level of the human being, the emergence of sentient individuality, coupled with past conditioning (*vāsanā*) yields a deeply entrenched sense of an independent self (*ātma-dṛṣti*). And this deep sense of an independent self is the lynchpin of *saṃsāra*.

ENACTING WORLDS

On my enactivist interpretation, then, the Buddhist theory of karma highlights the recursive, autopoeitic character of our existence. Indeed, one's accumulated karma is the experientially embodied record of the "history of embodied action" that is the basis from which the self is enacted. Or, as Francisco Varela puts the point, "The cognitive self is its own implementation: its history and its action are of one piece." 16

However, the Buddhist theory of karma also maintains that one's very world is somehow a product of one's karma. That is, it is not just one's situation in a world or even into which world (of all the possible realms) one might be reborn, but the world itself that is a product of karma. For instance, in the Abhidharmakoṣabhāśya (IV 1) Vasubandhu proclaims, "The world in its varied forms arises from action."

As we have seen above, the Buddhist concept of a world (loka) is in an important sense subject-relative. The arising and passing away of the world depends upon such things as sense-consciousness, feeling, craving, and clinging. And further the specific character of a subject's world will depend in part on the subject's psychophysical make-up and karma. Hence, the term loka does not denote an absolutely objective world of entities whose existence and properties can be specified independently of a subject; rather, a loka is a world of experience, activity, and meaning—that is, a lifeworld (Lebenswelt). On the Buddhist view, we find ourselves in a world of persons, objects, events, and situations that are experienced as attractive, repellent, or indifferent; that are identified as "self" or "not-self"; and that are, ultimately, unsatisfactory (duħkha). In the terms of the enactive approach, "a cognitive being's world is not a pre-specified, external realm, represented internally by its brain, but a relational domain enacted or brought forth by that being's autonomous agency and mode of coupling with the environment."17 Hence, a loka is neither a strictly objective ready-made domain, nor a merely subjective projection. Rather a loka is a relational domain of significance and involvement within the vast network of dependent origination. The fundamental claim is that, at bottom, both the subject and her world arise within the karmic process, from action and the effects of action. Thus, sentient beings enact themselves and their worlds in dynamic interdependence over time

The basic structure of the karmic arc can be seen in the broader view of the Buddhist model of the twelve-fold cycle of dependent origination discussed above.

- 1. Ignorance (avidya)
- 2. Conditioning (samskāra)
- 3. Consciousness or cognition (vijñāna)
- 4. The body-mind or sentient embodiment (nāma-rūpa)
- 5. The six sensory domains (*ṣaḍ-āyatana*)
- 6. Sensory contact (sparśa)
- 7. Feeling (vedanā)

- 8. Craving (trsna)
- 9. Grasping (upādāna)
- 10. Becoming (bhava)
- 11. Birth or arising (jāti)
- 12. Death or ceasing (marana)

The twelve-fold cycle is a model of the perpetuation of samsara both across lifetimes and within a lifetime. Moreover, it is important to note that these factors or links ($nid\bar{a}na$) are viewed as mutually conditioning, inter-defined, and related in complex ways both synchronically and diachronically.

The first four factors can be seen as the enabling and constraining conditions of our sentient embodied being. As living, sentient beings ($n\bar{a}ma-r\bar{u}pa$), we are of course embodied and conscious. Further, as we have seen, our bodies and minds are structured by conditioning ($samsk\bar{a}ra$) from both our own past actions and experiences, and those beings with whom we are physically or psychologically continuous (i.e., through rebirth or biological evolution). On this view, the human body-mind is a condensed, embodied history of past patterns of action.

If we refer to the twelve-fold cycle of dependent origination, we see that a human being is understood in terms of a specific form of sentient embodiment (4), which presupposes consciousness or cognition (3), as well as conditioning (2). This seems fairly unproblematic considering what we have discussed thus far, but what of the first factor of ignorance? As mentioned above, the existentially primordial ignorance being referred to here is the instinctive sense of oneself as a substantial entity (ātma-dṛṣti) and its close cousin, the reification of both the self and worldly objects (satkāya-dṛṣti). This ignorance is the root problematic of human existence—leading as it does to the dissatisfaction (duḥkha) that pervades saṃsāra—and is therefore existentially primary. Indeed, we can see this more clearly when we take up the enactive perspective. As Thompson explains:

Individuality in this case (i.e., of an autopoietic system) corresponds to a formal self-identity—to an invariant dynamic pattern that is produced, maintained, and realized by the system itself, while the system undergoes incessant material transformation and regulates its external boundary conditions accordingly. An autopoietic system is thus an individual in a sense that begins to be worthy of the term self.¹⁸

On this interpretation, then, the emergence of bounded identity through organizational closure, in a sense, sets into motion the entire cycle, from ignorance and conditioning to death and rebirth.

The co-emergence of organism and environment, of interiority and exteriority, is reflected in the transition from the first four factors to factors five through nine. The fifth factor, the six sensory domains (\$a\dar{q}ayatana\$), includes both the sense faculties—the five external senses and the inner sense—as well as their correlative sensory objects, e.g.,

sights and sounds. These sensory fields are central to the constitution of the organism's milieu or lived environment (loka). The actual process of sensation, in turn, emerges from on-going sensory contact or coupling (sparśa (6)) with the environment. This coupling is not merely causal, but also intentional. It involves the organism's most basic sensory directedness toward objects. Along with sensory coupling there emerges (7) feeling or affective tonality (vedanā). These modalities in turn condition factors eight and nine, craving (trsna) and appropriation (upādāna). Thus the sensory-affective coupling with the environment feeds into the basic conative orientation in that milieu. A sentient being's milieu involves not just actual conditions but also conditions that must be effected or procured—i.e., objects (potential or actual) of desire and appropriation. Therefore, with the co-emergence of an organism and its lived environment there emerges a dynamic sensory-affectiveconative karmic circuit that is enabled by and reinforces prior body-mind conditioning (samskāra). The recursive, self-reinforcing aspect of this circuit, if successful, drives the continued existence or becoming (bhava, (10)) of the sentient organism. The final two factors, birth (jāti) and death (marana), have different connotations depending on the context of analysis. When the twelve-fold cycle is used to analyze the moment-to-moment dynamics of a sentient being, the terms mean "arising" and "ceasing," respectively. As phases in a complex process, each factor, and indeed the being itself, is dependent and impermanent. On the other hand, when the target of analysis is a longer time frame, these factors indicate both the mutual entailment between birth and death—i.e., life and mortality—and the fact that death leads to rebirth (and ignorance) and a continuation of the entire cycle.

In sum, the enactment of identity through organizational-operational closure and body-mind conditioning are at the root of sentient being (1-4); organism and environment, or interiority and exteriority, are correlative and co-emergent (5); the sentient being is coupled with and oriented toward the environment through a dynamic and self-reinforcing sensory-affective-cognitive-conative circuit (6-9), which, when effective (survival) perpetuates the existence of the sentient being (10); and, finally, this process feeds into the larger dynamic of birth and death that is the existential situation of all sentient beings (11-12).

NOTES

- 1. Bodhi, Buddha's Words, 166.
- 2. See MacKenzie, "Enacting Selves," for the full article.
- 3. Thompson, "Mindful Body," 128.
- 4. Thompson, Mind in Life, 13.
- 5. Varela, Thompson, and Rosch, Embodied Mind, 140.
- 6. My use of the term "self" does not, of course, refer to the atman or substantantial self. All Buddhists reject outright that there is a substantial self. Rather, "self" here refers to the dependently originated sense of self and, by extension, those sentient beings that have a sense of self.
- 7. MacKenzie, "Enacting the Self."
- 8. Thomspon, Mind in Life.
- 9. Ibid., 43.
- 10. Ibid., 44.
- 11. Ibid., 60.

- 12. Ganeri, Concealed Art, 201.
- 13. Ibid., 203.
- 14. Jonas, Phenomenon of Life, 86.
- 15. Ibid., 82-83.
- 16. Varela, Ethical Know-How, 54.
- 17. Thompson, Mind in Life, 13.
- 18. Ibid., 75.

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Report on APA Central Session: New Orleans, Louisiana

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The APA committee on the status of Asian and Asian-American philosophers and philosophies organized one session at the APA Central Division meeting in 2013. The session was entitled "Memory, Consciousness, and the Self: A Buddhist Perspective." Committee member JeeLoo Liu from California State University, Fullerton, organized and chaired the session. There were three speakers: Matthew MacKenzie from Colorado State University, Douglas L. Berger from Southern Illinois University, Carbondale, and Christian Coseru from the College of Charleston. JeeLoo Liu also served as the commentator. Each speaker gave a thirtyminute talk, and after Liu's comment, an hour remained for open discussion. This session drew many people—the room was nearly full during the talks-and there were at least fifteen people who stayed throughout the final Q & A session. As one of the speakers, Doug Berger, remarked at the opening of his talk, "it is rare to see such a good turnout at an APA session on Asian philosophy."

The three talks were closely connected by the theme of the nature of consciousness and the self in different Indian philosophical schools. Mackenzie's "Luminosity, Subjectivity, and Temporality: An Examination of Buddhist and Advaita Views of Consciousness" explored the debate between the Brahmanical and the Buddhist view on the nature of the self. Mackenzie focused on Śamkara's attack on the Buddhist view

from the angle of temporality. According to Śamkara, our experiential facts and our cognitive abilities presuppose a self that persists in time. Śamkara's challenge to the Buddhist's denial of a persistent self is the problem of the possibility of perception, recognition, and memory. Mackenzie's solution to the problem is inspired by Husserl. Using Husserl's notions of retention and protention, Mackenzie explained that the stream of consciousness can be made up of a series of momentary perceptions—retention of the past, immediate perception, and protention of the next moment. What this solution achieves is an explanation of the diachronicity of experience without positing "an enduring self."

Berger's "Between Nyāya and Buddhism: Memory and an Impermanent Self" presented another pair of contrasts between the Nyāya and the Buddhist school, again on whether the self is permanent. The Nyāya school takes selfconsciousness to be necessary for conscious experiences and asserts that the self must be embodied to have any awareness. They posit an agent of perceptions and argue that perceptions must be had through physical sense organs. Once the self is separated from the body, as in the case of liberation from rebirth, the self can no longer have any form of consciousness. In contrast, the Buddhist cognition school denies any persisting self either in purely spiritual form or as embodied. Consciousness is simply a stream of causally connected cognitions, one succeeding another in a temporal sequence. Self-consciousness is the result of an attribution error, since there is no self that exists in both the previous and the subsequent moments. Berger suggested that we find a middle ground to understand the self as "a biologically, psychologically, and socially emergent" phenomenon of embodied existence, which is also causally explicable and "subject to change and cultivation."

In "Presence and Temporality: A Buddhist Approach to Phenomenal Consciousness," Coseru argued that to account for our experience, we must come to terms with the character of phenomenal consciousness. Coseru construed the defining features of phenomenal consciousness as presence and temporality. Presence is the sense we have of enduring objects and events, and temporality is the notion that our cognitive awareness has an event structure. He pointed out that the denial of a permanent self is an integral part of the Buddhist analysis of consciousness. Furthermore, the Buddhist uses the notion of momentariness to define not just the nature of consciousness but also the nature of reality. If so, then how would the Buddhist account for the vivid sense of remembering as well as the sense of agency that dominates our mental life? He concluded that an adequate account of phenomenal consciousness must include a minimal sense of agency.

In her comment, Liu suggested that the debate between the Brahamincal, the Buddhist, and the Nyāya is fundamentally a debate on the ontological status of the self—whether it has existence beyond empirical selves (or whether it survives reincarnation), whether it persists in time during the existence of a single empirical self, and whether it has transient existence from moment to moment, or whether it exists at all. She proposed that we use the four-dimensionalism model to analyze the existence of both the object and the self. According to four-dimensionalism, temporality is the fourth dimension of all existence in space. Therefore, the self

is like an event or a process that is spread out as a spacetime worm. The self is never wholly present at each segment of time, and each segment is part of the whole sequence. The temporal parts of a thing are connected like acts of a play or innings of a baseball game, and each temporal part can be as instantaneous as how time is divisible. This fourdimensionalist model gives us an account of the diachronic unity that is needed for recognition and memory, without positing the same self wholly present at different time segments. She also suggested that the Buddhist school can give an account of memory that is compatible with the contemporary understanding of the function of memory. The contemporary understanding of memory does not postulate any agent or self other than the physical continuity of the brain. Memory of a past event is the brain's encoding and storing information from a previous experience, and then retrieving it at a later time. Each time the brain retrieves the encoded information, it reorganizes the information into a different narrative of the past event. Just as memory is reconstructed, so is the self. Each night when we go into deep sleep, the self disappears. The next morning the brain reorganizes the information and constructs a new sense of the self. This understanding can perhaps provide the middle ground between the Nyāya and the Buddhist school.

All in all, this was a wonderful session. The speakers and the audience had a lively discussion on various topics related to the phenomenal reality of the self, the possibility of self-awareness, and the nature of memory. Quite a few people even lingered in the room after the three-hour session ended. The success of this session proves that as long as Asian philosophies can bring up issues that connect to contemporary philosophical concerns, they will gain much more accessibility and engage more philosophers.