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Metaphor and Meaning in Early China

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Abstract Western scholarship on early Chinese thought has tended to either dismiss the foundational role of metaphor or to see it as a uniquely Chinese mode of apprehending the world. This article argues that, while human cognition is in fact profoundly dependent on imagistic conceptual structures, such dependence is by no means a unique feature of Chinese thought. The article reviews empirical evidence supporting the claims that human thought is fundamentally imagistic; that sensorimotor schemas are often used to structure our understanding of abstract concepts; that these schemas can be selectively combined to result in novel structures; and that there are inextricable connections between body, emotion, and thought in both everyday and philosophical cognition. It also provides a review of a recent trend where, explicitly or not, scholars from a variety of backgrounds have begun to take metaphor more seriously as a foundational bearer of philosophical meaning in early China.

Keywords Metaphor · Emotion · Chinese thought · Chinese philosophy · Embodied cognition

Much has been said in recent sinological literature concerning the role of metaphor in early Chinese discourse. To be sure, scholars from analytic philosophical backgrounds have been prone to ignore or dismiss the importance of metaphors and analogies in early Chinese argumentation, attempting to convert metaphoric utterances into literal equivalents that could then be evaluated and compared on the basis of logical coherence. Outside of philosophy departments, however, a much more common position has been to see metaphor and analogy as important, but also uniquely Chinese, modes of apprehending the world. According to this view, Western thought since the time of ancient Greece has been literal, analytic, logical,

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and dualistic; Chinese thought, in contrast, is portrayed as "holistic" and uniquely image-based. In this article I will argue that both this view and the analytic philosophical approach are mistaken and have served to distort our view of early Chinese argumentation. Although metaphor and analogy do indeed play a foundational, irreducible role in early Chinese rhetoric, this dependence of image-schematic structures is by no means a unique feature of early China or "the East."

I will begin by briefly characterizing some views in the field concerning the role of metaphor in early Chinese thought, including an encouraging recent trend where, explicitly or not, scholars from a variety of backgrounds have begun to take metaphor more seriously as a foundational bearer of philosophical meaning in early China without unduly exoticizing the notion. Making reference to a large body of empirical work from a variety of fields in the cognitive sciences, I will then present the case for the claim that *all* human cognition is heavily dependent on imagistic conceptual structures and cross-domain projections. My critique of the Enlightenment ideal of disembodied reason will focus on four important aspects of the embodied model of cognition and language that are relevant to the issue of metaphor and argumentation: that thought is fundamentally imagistic; that concrete sensorimotor schemas are often used to structure our understanding of abstract concepts (conceptual metaphor theory); that these schemas can be selectively combined to result in novel structures (conceptual blending theory); and that there are inextricable connections between body, emotion, and thought in everyday human cognition. I will then turn to a more specific discussion of metaphor and argumentation in early China, including a brief analysis of an example drawn from the *Mencius*. It is my hope that the empirical literature review, combined with the case example, will make it clear that what is unusual about early Chinese thinkers is not that they relied upon metaphor or metaphoric blends, but rather that they devoted a great deal of conscious attention to developing vivid and consistent sets of interlocking metaphors and metaphorical blends, which makes metaphor and blend analysis a particularly crucial tool when approaching these texts. I will then conclude with some remarks concerning the contemporary relevance of the early Chinese approach to both philosophical rhetoric and ethical self-cultivation.

1 Metaphor in Early Chinese Thought

There is, of course, a long tradition of theorizing about metaphor in the West, as well as the relationship between metaphor and analogy or allegory (see Johnson 1981a; Ortony 1993). Below I will argue for a fairly broad conception of metaphor as the use of one, usually concrete domain to structure our understanding of another, usually more abstract domain. "Metaphor" understood in this sense includes what we might otherwise label as analogy or allegory. This is roughly the understanding of metaphor that informs most of the work on metaphor in early China.

As Mark Johnson has observed (Johnson 1981b), the Western philosophical tradition has long been characterized by a view of metaphor as philosophically superfluous: a decorative rhetorical device expressing a thought capable of being fully reduced to some literal equivalent, and therefore merely entertaining at best, and potentially misleading at worst. Scholars of early Chinese thought trained in analytic philosophy departments are typically heirs to this attitude, dismissing the

metaphorical specificity of arguments in early Chinese thought in the belief that what really matters is extracting their abstract, logical, and propositional essence (see, for instance, Shun 1997: 103-107 or Hutton 2002: 169). For at least the last quarter of a century, however, there have also been a growing number of scholars of early Chinese thought who argue that the key to grasping arguments and concepts in early China is to focus on and unpack the specific metaphors and images that are deployed in the texts, rather than attempting to "translate" Chinese arguments into rational propositions that could be modeled by formal logic.

Some early pioneers in this regard include Harold Oshima (Oshima 1983), who makes a strong case that the concept of "mind" in the *Zhuangzi* cannot be understood in isolation from the specific metaphors employed by the author, which serve conceptually as a "determinate model," rather than mere rhetorical window-dressing. In another early study of the *Zhuangzi*, Robert Allinson (Allinson 1989) argues at length that metaphors have an important, though non-linguistic, cognitive content, based on "engagement of the holistic or intuitive cognitive capacity" (36)—an argument that parallels in many ways the cognitive linguistic model of metaphor that I will be defending below.[1] Although he is often identified with the analytic philosophical approach, P.J. Ivanhoe's work (e.g., Ivanhoe 1993/2000) has always emphasized the foundational role of metaphors in characterizing early Confucian conceptions of human nature and self-cultivation, and his analysis of these concepts is informed by careful attention to the details of the metaphors. And, to take a final example from a later period of Chinese thought, Donald Munro's (Munro 1988) landmark study of the thought of ZHU emphasizes the degree to which unpacking the "pictorial images" pervading ZHU Xi's discourse is crucial to understanding the philosophical concepts that form the basis of his thought.

One could argue, then, that there seems to be a growing consensus that metaphor plays a foundational role in early Chinese discourse. One primary point of continuing disagreement, however, concerns the manner in which we are to understand this use of metaphor in a comparative context: that is, whether or not it represents a culturally-specific form of both rhetoric and thought that is distinctive of early China, or East Asia more broadly. Below I will briefly review three positions that have been taken in the scholarly literature on this question, before turning to a defense of metaphor as a universal and fundamental feature of human cognition.

1.1 Metaphor in a Comparative Context: The Strong View

Many scholars who have commented on the prominence of metaphor in early Chinese thought have portrayed it as a uniquely Chinese mode of discourse and argumentation. To select a few representative examples, WU Kuang-ming, for one, highlights the "universally recognized fact that...arguments by metaphor...are the *central* and *typical* mode of argumentation in China" (Wu 1995: 35), and explains this phenomenon in terms of a uniquely Chinese mode of thinking, which is "concrete through and through" (40). Roger Ames similarly cites "analogical or

[1] As a recent commentator (Chong 2007) has noted, however, Allinson makes no attempt—beyond some vague references to "the empirical evidence of science" (Allinson 1989: 385)—to connect his insights concerning the role of metaphor in the *Zhuangzi* to larger issues of human cognition.

correlative thinking" as "a defining feature of the [early Chinese] Confucian project," and claims that the "absence of a clear difference between literal and metaphorical language" that apparently characterizes China is related to the "irrelevance of our"—i.e., Western—"familiar reality/appearance distinction" (Ames 2008: 41). Ames and his collaborators have, in turn, linked this notion to the belief that the Chinese operate with a uniquely "aesthetic" sense of order that is completely alien to Western notions of "truth," representation or logical coherence (Hall and Ames 1987; Rosemont and Ames 2009). Vincent Shen contrasts the focus on "concepts and argumentations" (Shen 2005: 11) in Western philosophy with the prominence in "Asian thought, especially in Chinese philosophy" of what he terms "Original Image-Ideas" (12), which consist of concrete "images, sounds and plots" (13) as opposed to abstract "pure ideas" (12). Hans-Georg Moeller, in commenting on the use of metaphor in the *Daodejing*, characterizes it as a uniquely "obscure" method of expression through "structures of efficacy" that mirrors the structure of the Dao (Moeller 2006: 20), and as part of a larger distinction between the "autopoetic" thought of the *Daodejing* and the literalistic rationalism that characterizes "the Western tradition" (52). This notion that metaphorical or analogical thinking is a unique feature of early China, or particular thinkers in early China, is a surprisingly common view in our field.[2]

1.2 Metaphor in a Comparative Context: A Weaker View

Two studies that were initially published in 1997 can be singled out as representing a weaker view concerning the cultural uniqueness of metaphor in early Chinese thought, as well as the beginnings of an effort to link discussions of this topic to broader issues in human cognition.[3] Sarah Allan's *The Way of Water, Sprouts of Virtue* (1997), the first book-length treatment in the West of the systematic role of metaphor in early philosophical discourse, explores the foundational role that the "root metaphors" of water and plants play in early Chinese philosophical discourse. Like many who have urged a greater focus on the specific imagery used in the early Chinese texts, Allan argues that the common tendency to transpose early Chinese arguments into the "abstract technical terminology of European philosophical discourse" (xii) obscures more than it reveals, erasing the systematic connections between concepts grounded in important images and analogical reasoning patterns. Despite her occasional suggestions that there might be something culturally unique about the role of metaphor in early China,[4] Allan's work represents an important

[2] My primary focus here is scholarship in North America and Europe, the field with which I am most familiar, but the view that there is something uniquely Chinese about metaphorical reasoning can also be found in contemporary Chinese scholarship. See, for instance, Wang (2005), who contrasts the "image thinking" (*xiangsiwei* 象思維) that characterizes traditional Chinese thought with the focus on rational or logical thinking that one finds in the West.

[3] Also see (Jones 1999) for a discussion of the water metaphor in early Daoism that is briefly linked to the cognitive psychology of James Hillman.

[4] For instance, she seems to suggest at several points that analogy is a particularly Chinese way of thought, grounded in a conceptual "holism" lacking a sense of transcendence, as opposed to abstract, literal Western thought (xii, 23). It should be noted, however, that Allan apparently did not intend to portray metaphor/analogy as in any way distinctly Chinese, and has since clearly distanced herself from claims that there is anything uniquely Chinese about the use of metaphor (personal communications, 2008-2009).

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shift in the study of metaphor in early China because she links her analysis to the early work of Lakoff and Johnson (1980), thereby helping to bring the study of metaphor in early Chinese thought out of the sinological ghetto and into the broader context of human cognition in general. In other important work first published in the same year, Jean-Paul Reding (Reding 1997; cf. Reding 2004) displays a similarly broad perspective on the role of metaphor in early China, explicitly centering his discussion of metaphors of "light" and "mirror" in a cross-cultural comparative context informed by some early work in cognitive linguistics.

While both Allan and Reding are familiar with some of the early cognitive linguistics literature, and recognize that metaphoric thinking is a feature of general human cognition rather than a unique characteristic of the "East," both see the function of metaphor in early Chinese philosophical discourse as being distinct from the West in at least one important aspect: while metaphors in the West function by setting up a rhetorical connection between ontological domains that nonetheless continue to be perceived as distinct, early Chinese metaphors reflect a deeper belief in the "common principles" (Allan 1997: 23) or "basic unity" (Reding 2004: 136) behind the ontological domains involved.[5] For instance, Reding argues that, whereas for the early Greeks metaphor involves connections between clearly distinguishable ontological levels, metaphor in early China involves some sort of perceived "ontological connection" between domains, the two domains invoked in metaphor are, for the early Chinese, "shown to take a share in one and the same nature" (2004: 162). "Chinese metaphor," he declares, "does not try to establish a parallelism between two domains, but rather wants to show that there is a *convergence* between them" (2004: 136). Reding attributes the prominence of positive nature metaphors in early China to a pervasive faith in "natural and spontaneous processes" (162), a claim that echoes Allan's postulation of an "assumption that common principles governed the natural and human worlds" (23) as the motivating force behind the prominence of "root metaphors" involving water and plant growth. To put this another way, Reding is essentially arguing that Western thinkers have always been conscious that their metaphors are "just" metaphors, and therefore have always viewed them with a degree of suspicion, whereas the early Chinese embraced their metaphors in an unselfconscious manner, seeing them as genuine expressions of ontological truths mirroring the normative model of the natural world.[6]

There are at least two problems with this view. To begin with, it simply is not the case that metaphors drawn from the natural world are viewed as unambiguously positive models for the human world: in early China Xunzi, to take one prominent example, celebrates the artificial and man-made, and in fact the normative status of the natural as opposed to the artificial is one of the central debates of the Warring

[5] This claim is more implicit in Allan, but has to be assumed to understand her distinction between "abstract" Western thought and "holistic" Chinese thought.

[6] Pauline Yu's claim that the Chinese entirely lack metaphor is based on this sort of supposed failure to maintain a distance between the domains represented in metaphorical expressions (Yu 1987); see (Bokenkamp 1989) for a helpful discussion and critique of Yu's position, as well as a more general argument, similar to one I hope to make here, against the view that the Chinese use of metaphor is in some way "mysterious" or culturally unique.

States period.[7] A deeper problem, however, is involved in the claim that the Chinese were somehow unique, or at least different from the ancient Greeks, in taking their metaphors seriously. To argue in this way is to take the conceit of Western philosophy—its ancient ambition of directly mirroring reality in a literal, though abstract fashion—at face value, and to underestimate the extent to which, even in the West, meaning and perception are fundamentally shaped by imagistic structures arising from our embodied experience of the world. Whatever Western philosophers may *claim* about their attitudes toward metaphor, one of the most important contributions of the modern cognitive linguistic movement has been to demonstrate how the thought and arguments of Western philosophers and scientists, from Aristotle to Einstein, have been fundamentally predicated on metaphors taken to reveal something important about the world—indeed, such metaphors are often not recognized *as* metaphors precisely because they are taken to be literally true.[8] By refusing to accept the Western philosophical tradition's self-conception as accurate, we can begin to perceive the deeper commonalities in the role of metaphor across cultures and time periods.

1.3 Metaphor and Chinese Discourse: The Weakest (or Really Strong) View

The view of metaphor and early Chinese discourse that I want to argue for here can be viewed either as considerably weaker than the views described above, or radically more extreme, depending on the perspective. It is the weakest in the sense of maintaining that there is no substantive manner in which we can distinguish the use of metaphor in early Chinese philosophical discourse from its use in the West: both Chinese and Western philosophers, like people more generally, rely upon metaphors to both formulate and communicate their views, and take these metaphors to be "true" in the sense that metaphors are perceived as telling us something about the world. The very real and important difference between China and the West with regard to the official philosophical *attitude* toward metaphor, as documented by Reding and others, can thus better be seen as a reflection of a lack of self-awareness on the part of Western thinkers—and a blindness to the metaphoric nature of language taken to be literal—than as an accurate account of different philosophical and rhetorical strategies.

The sense in which my position might be seen as actually *really* strong is that I will argue that both the "strong" and "weaker" portrayals of metaphorical reasoning and argumentation in early Chinese described above are based on a false dichotomy—the literal, logical West versus metaphorical, concrete China—that, in turn, grows out of a fundamentally mistaken conception of the nature of human cognition. The basic problem with these analyses is that they ultimately take for granted the "Western"

[7] See (Puett 2001) on the common error in the study of early Chinese thought of taking a specific argument for a contested point of view as a reflection of some sort of timeless cultural assumption. Metaphors celebrating the normative value of the natural worlds are part of *arguments*, not assumptions, as the Mencius-Gaozi debate analyzed below makes quite clear.

[8] See, for instance, (Lakoff and Johnson 1999) on foundational metaphors that have structured Western philosophical thought since Plato, or (Dunbar 2000) and (Brown 2003) on the foundational role that metaphor and analogy plays in the formulation of scientific hypotheses and interpretation of experimental evidence.

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assumption that the literal versus metaphorical distinction really *means* something: that is, that there is a class of words or expressions—the "literal"—that convey an abstract, amodal meaning that, in turn, refers in some direct way to categories in the world. These "literal" meanings can then be contrasted with "metaphorical" expressions that merely coordinate or juxtapose one domain with another, but do not necessarily tell us anything about the world. Taking empirical work on human cognition seriously—as I will argue below we should—means moving beyond this dichotomy and viewing *all* human language and cognition as, to a greater or lesser degree, imagistic.

In the sections below I will explore some relevant work coming out of various branches of the cognitive sciences that suggests that we are *all* thoroughly dependent on "body thinking," as Wu Kuang-ming 1992 refers to it, and that the Enlightenment ideal of disembodied reason and literal representation of the world is nothing more than a philosophical conceit. Conceits matter, of course. As Reding 2004 has observed, the devaluation of metaphor that can be traced back to early Greek philosophy sent Western thought down certain paths that never appeared to the early Chinese. Similarly, as I will mention briefly below, the questions and concerns that have consumed analytic philosophy in the post-Enlightenment West very much grow out of its rather impoverished conception of human cognition. As we come to realize precisely how impoverished this conception is, we come also to a greater appreciation of the contemporary relevance and importance of early Chinese thought. Working with a more embodied, non-dualist model of cognition, the early Chinese focused on philosophical problematiques and developed styles of self-cultivation that modern scholars of cognitive science and moral psychology are now gradually coming to appreciate. For instance, as many scholars have observed, early Chinese thinkers tend to focus more on practical, spontaneous "knowing-how" than abstract, theoretical "knowing that" (Ryle 1949). This early focus on "know how" takes on new significance in this century as cognitive scientists come to learn more about the crucial importance of implicit, automatic systems for human cognition, which are subserved by different brain systems than those dedicated to explicit knowledge, and which also seem to be much more important for the guidance of everyday activity than explicit systems. Because this form of knowledge has been relatively neglected in most Western philosophical traditions, modern cognitive scientists interested in how this sort of knowledge is acquired, how it is activated, or how it is experienced phenomenologically have begun turning to the rich history of theorizing about "know-how" that one can find in early China and later East Asian traditions.[9]

We must always keep in mind, however, that the very relevance of early Chinese thought for questions such as this is predicated on the assumption—conscious or otherwise—that the same mechanisms of embodied cognition are at work for all human beings, modern or ancient, "Eastern" or "Western." The characterization of Chinese thought as uniquely and distinctly metaphorical—the "strong" view that

[9] See, for example, (Varela et al. 1993) and (Haidt 2005). Scientifically-literate sinologists have also been making these sorts of connections: see especially (Munro 2005), (Bruya 2010), and Slingerland forthcoming (2011).

seems so common in our field—is, I believe, part of a larger trend that sets up a caricatured China or "the East" as a monolithic, incommensurable Other, fundamentally different from an equally caricatured "West." China is said to be characterized by a "holistic" conception of the self and the cosmos—in contrast to Western mind-body, appearance-reality, immanent-transcendent dualisms—that renders such Western concepts as "religion" or "essence" completely alien to the Chinese context. China is said to possess an entirely different concept of time, space, and logic than the West, and to lack a sense of individualism or psychological interiority.[10] I have come to refer to this trend as "reverse Orientalism," in that these claims echo those made by classic Orientalists, such as Hegel, but are presented with an interesting normative flip: whereas Hegel viewed these features of Chinese culture negatively—as evidence that the Chinese were a childlike, naturally "slavish" people—more recent interpreters have instead portrayed the holistic Chinese worldview as a positive corrective to flaws that plague the alienated West.[11] Avoiding the pitfalls of reverse Orientalism allows us to see that the unique strengths of early Chinese thought are only visible against the background of basic human cognitive universals. We can resist overly exoticizing accounts of the role of metaphor in early China by recognizing that the self-conception of Western philosophy as being based upon abstract, literal reasoning is simply inaccurate, which means that the distinction between the "abstract West" and the "concrete East" is more one of self-conception than substance. Again, self conceptions do matter, but they should not blind us to the deeper affinities that function in the background of all human cognition, nor tempt us into the kind of cultural essentializing that can only impede our understanding of the role and function of metaphor in discourse and argumentation.

Some of the most recent work on the role of metaphor in early Chinese thought—much of it explicitly grounded in the cognitive linguistics literature—has taken seriously the origin of metaphor in embodied human experience, thereby steering between the twin excesses of cultural essentialization and intellectual imperialism.[12] While not relegating early Chinese discourse to some ultimately alien and incommensurable thought-world, this work also avoids forcing early Chinese discourse into the Procrustean bed of formal propositional logic, and takes the metaphorical specificity of the original texts as significant in its own

[10] A helpful historical survey of such views, which can be traced back to Lucien Lévy-Bruhl and Marcel Granet, can be found in (Brown 2006); some representative recent expressions of this attitude from prominent scholars in, respectively, Europe and North America, can be found in the work of François Jullien (2007) or Roger Ames (2008).

[11] For more on "reverse Orientalism," as well as a thorough documentation of this trend in current sinological scholarship, the reader is referred to Slingerland (2010).

[12] See, for instance, (Slingerland 2003) and (Slingerland 2004), Teng (2008), and (De Reu 2010). The work of Michael Puett on the concept of "innovation" (*zuo* 作) (Puett 2001), Griet Vankeerberghen on the concept of *quan* 權 (Vankeerberghen 2005/2006), and that of Carine Defoort on metaphors of "light" and "heavy" in Mohist discourse (manuscript), can also be easily translated into a cognitive linguistics framework, although the authors themselves do not formally adopt this perspective. CHONG Kim-Chong has also written recently on the role of metaphor in early Chinese thought (Chong 2006, 2007), discussing the relative merits of alternate theoretical models, including that of cognitive linguistics, but ultimately embracing a Davidsonian view of metaphor as non-cognitive in nature.

right.[13] To my mind, one of the more significant symptoms of the strength of this approach is the fact that some scholars who have previously expressed skepticism about the value of the metaphor analysis approach have—without much fanfare—begun analyzing Chinese philosophical texts from a perspective that appears to be conceptual metaphor analysis in all but name, in that it centers on unpacking the implications of particular foundational images rather than analyzing propositional arguments.[14]

The power and promise of this cognitive metaphor approach center on two features: its empirical plausibility and its hermeneutic productiveness. The approach is empirically plausible because it draws upon and harmonizes with a massive literature concerning the nature of human cognition that fundamentally calls into question, for instance, the traditional Western philosophical view. From a more specifically sinological perspective, it also, I believe, produces much more satisfying interpretations of texts and arguments, as well as links between various texts and schools of thought. I will attempt to at least hint at both of these strengths in the case example below.

2 The Cognitive Science of Meaning

Why do words mean anything? This is not only the central question for contemporary Western philosophy of language, but perhaps also the most urgent question in modern analytic philosophy in general. The so-called "transduction problem" (how perceptual signals could get "translated" into amodal symbols) and the "grounding problem" (how arbitrary, abstract symbols could ever come to refer to something in the world) are fundamental puzzles that present a challenge to the modern Western philosophical representational model of knowledge, whereby human thought involves an internal mind manipulating amodal symbols that somehow hook up with things out there in the world. As Lawrence Barsalou has observed, no one has ever provided a truly satisfactory answer to either of these puzzles, and there is in fact absolutely no cognitive or neurological evidence that the sort of abstract, amodal systems required by the representation model of knowledge exist in the brain (Barsalou 1999: 580). The grounding problem also seems to be fundamentally linked to a dualist model of perception whereby a disembodied mind, separated from the world of physical things, is limited to dealing with mental representations that have, in some mysterious way, been "caused" by those otherwise unknowable "things in themselves" (Putnam 1999: 102).

[13] Something like this shift is lauded in a recent piece in this journal by Eske Møllgaard, who observes that "when we immerse ourselves in the temporal structure of the text, then we begin to think through the figures of thought that actually appear in the text itself rather than through the standard vocabulary of modern philosophy" (Møllgaard 2005: 335). Møllgaard, however, seems in the end to follow commentators such as Bernard Faure in straying into a fetishization of "the particular" as a unique feature of East Asian thought.

[14] See, for instance, Shun's analysis of "imageries" (Shun 2006: 195) related to the concept of purity in Chinese thought, or the discussion of the metaphor of *xu* 虛 ("emptiness") in (Fraser 2008) that recapitulates many of the conclusions of (Slingerland 2003): 175-215.

In response to these empirical and theoretical considerations, cognitive scientists interested in the phenomenon of human perception have, in recent decades, been moving away from representational models toward more embodied, "enactive" or "interactive" models. This enactive approach can be traced back to the phenomenology of Edmund Husserl and Maurice Merleau-Ponty, as well as American pragmatists such as John Dewey and William James, but re-appears in the modern psychology of perception in James Gibson's (Gibson 1979) concept of perception as the experience of the sensorimotor "affordances"of objects in the environment—the possibilities of physical interaction that objects spontaneously present to the embodied observer—as well as Ulric Neisser's campaign for a more embodied and "ecologically valid" model of perception. "Perception and cognition are usually not just operations in the head," Neisser argues, "but transactions with the world" (Neisser 1976: 11). Perception is thus best understood not as a passive absorption of information, but "a kind of doing," a largely implicit skill developed and refined as the embodied mind interacts with the world (Neisser 1976: 52). This "enacted perception" model of essential mind-body-world unity enjoys considerable empirical support, and is the basic working model in contemporary cognitive neuroscience.[15]

2.1 Thought is Imagistic

One of the most fundamental challenges to the representational framework is the growing consensus in various branches of the cognitive sciences that human thought is primarily image-based and modal in character—that is, deriving its structure from sensory-motor patterns. Among cognitive scientists, this image-based view of human concepts has been perhaps most systematically developed by Lawrence Barsalou and his colleagues, who argue for a "perceptual symbol" account of human cognition. According to this model, the symbols manipulated in human thought are understood, not as pictures, but as "records of neural activation that arises during perception" (Barsalou 1999: 583). These records can be abstracted from and combined in various ways in areas of the brain "upstream" from the sensory-motor cortices, but they always remain to some extent grounded in sensory-motor systems. There is a huge and constantly growing body of evidence in favor of at least some version of the perceptual symbol account,[16] but perhaps the strongest argument in its favor is that it avoids the two fundamental problems that plague amodal symbolic accounts mentioned above: the transduction problem and the grounding problem. Barsalou sums up the argument against classical Western amodal theories of meaning by concluding that such theories "are unfalsifiable, they are not parsimonious, they lack direct support, they suffer conceptual problems such as transduction and symbol grounding, and it is not clear how to integrate them with theory in neighboring fields, such as perception and neuroscience" (Barsalou 1999: 580).

[15] See (Berthoz 2000), (Gibbs 2006), and (Thompson 2007) for helpful surveys of the position and its empirical support.

[16] For reviews see the essays collected in Pecher and Zwaan (2005); another important recent statement of the argument for mental images as foundational for human cognition is (Kosslyn et al. 2006), which also includes a helpful review of the empirical evidence.

2.2 The Role of Image Schemas in Abstract Thought

One central problem for the perceptual symbol account is that it is not yet entirely clear how well it can handle abstract concepts. In his recent work, Barsalou has argued that even the most abstract concepts are still fundamentally imagistic, understood perceptually by means of scene construction (see especially Barsalou et al. 2003 and Barsalou and Wiemer-Hastings 2005). Drawing upon work that suggests that words are normally and spontaneously understood against a situational background, Barsalou and Wiemer-Hastings argue that even quite abstract words are comprehended by activating images of relevant situations (Barsalou and Wiemer-Hastings 2005). On this account, both *hammer* and *truth* are comprehended by means of concrete imagery; our sense that *truth* is more "abstract" derives from the fact that its content is distributed across a multitude of situations and involves complex events, introspective simulation of internal somato-sensory states, and multiple modalities of perception.[17]

An alternate—and perhaps more promising—approach to grounding abstract concepts is by means of conceptual metaphor and conceptual blending theory, which argue that sensory-motor schemas are inevitably drawn upon when human beings contemplate or attempt to reason about relatively abstract concepts.[18] Cognitive linguists such as George Lakoff and Mark Johnson have made a strong case that non-propositional, embodied "image schemas"[19] play a fundamental and inextricable role in human cognition. These image schemas are recurring patterns arising from our sensory-motor interactions with the world, similar to what Barsalou refers to as "perceptual simulations" (Barsalou 1999) and include such fundamental structures as PATH, CONTAINMENT, PART-WHOLE, CONTACT, vertical SCALE, and the recurrent CYCLE.[20] Image schemas give rise to "constrained inferences" or "entailments," a term that Johnson deliberately wishes to divorce from its more narrow technical sense in analytic philosophy. For Johnson, the entailments of a given schema include the "perceptions, discriminations, interests, values, beliefs, practices, and commitments" (Johnson 1987: 132) that are tied up with it. Johnson is here inspired by the work of Gibsonian psychologists who argue that perceptions of objects are unavoidably tied with "affordances"—plans of actions that perceived objects inevitably present to the perceiver. As a plan for action, a schema is dynamic, possessing its own logic and sets of expectations. As an "irreducible gestalt" (Johnson 1987: 44), a schema also cannot be translated into the sort of abstract, algorithmic form that the objectivist model of knowledge would demand. Johnson's argument in this regard is echoed by Barsalou's contention that the affordances produced by perceptual simulations are fundamentally modal, and the resulting

[17] For more on the abstract-concrete distinction, see (Wiemer-Hastings and Xu 2005).

[18] I will continue to refer to "relative" abstraction because, as I will touch upon at several points below, it is still something of an open question whether or not there exists in the brain any form of truly amodal representation.

[19] See (Johnson 2007: 144) and the essays collected in (Hampe 2005) for more on image "schemas" (the locution that has become standard to use in place of the more correct, but awkward, "schemata").

[20] Many cognitive linguists have adopted the practice of referring to image schemas and cross-domain schema projects in small caps in order to remind readers that the word or words in question refer not to some amodal concept or proposition, but rather serve as a label for a bodily-based "complex web of connections in our experience and understanding" (Johnson 1987: 7).

"inferences" could not be derived from a hypothetical amodal replacement (Barsalou 1999: 605). Drawing upon the entire sensorimotor state of the individual, image schemas such as this also bring with them affective, normative components (Johnson 2007), which allows them to play a foundational role in argumentation and debate—a theme to which I will return below.

2.3 Conceptual Metaphor Theory

This idea of bodily-based, concrete schemas serving as conceptual templates for our understanding of abstract, or less clearly-structured, domains is the basic insight behind conceptual metaphor theory, which Johnson and Lakoff have done the most to develop. They were pioneers in formulating a comprehensive and coherent model of cross-domain projection and—most significantly—demonstrating the pervasiveness of these projections in all aspects of human conceptual life.[21] Against theories of metaphor that portray it as a relatively rare and somewhat "deviant" mode of communication thrown in to add rhetorical spice, Lakoff and Johnson argue that "conceptual metaphor" is in fact a ubiquitous and fundamental aspect of human cognition. Conceptual metaphor, as they understand it, involves the recruitment of structure from a concrete or clearly organized domain (the *source* domain) in order to understand and talk about another, usually more abstract or less clearly structured, domain (the *target* domain). This is the basic conception of metaphor as a cross-domain mapping introduced above, which encompasses similes and analogies as well as metaphors in the more traditional sense.

The most basic of these projective mappings are a set of "primary metaphors," which are the result of relatively abstract target domains becoming associated with some basic schema source domains—PATH or SCALE, for instance—through experiential correlation. Lakoff and Johnson 1999: 50-54 provide a short list of representative primary metaphors such as AFFECTION IS WARMTH, IMPORTANT IS BIG, MORE IS UP, etc., specifying their sensorimotor source domains and the primary experience correlations that give rise to them. Although they argue that *all* such primary metaphors develop gradually through experiential correlation, it is likely that at least some basic cross-domain associations are the result of fixed synaesthetic cross-wiring,[22] such as the correlation of tones with verticality, or textures such as sharpness with tones or tastes (a "E-sharp" or "sharp cheddar").

However these primary metaphors are developed, all individuals have a huge store of them at their disposal by the time they are able to become productive users of language. These accumulated metaphorical associations then become one of the individual's primary tools for reasoning about him- or herself and the world—especially when it comes to relatively abstract or unstructured domains—as well as for communicating thoughts to others. While concepts such as "time" or "death" may have a skeleton structure that is represented conceptually in relatively amodal terms, in most cases this amodal structure is not rich or detailed enough to allow us

[21] (Lakoff and Johnson 1980 and 1999 and Gibbs 2006) provide helpful introductions to conceptual metaphor theory, and the current state of the field is tracked by the journals *Metaphor and Symbol* and *Cognitive Linguistics*.

[22] For more on the relationship between synaesthesia—the unusual blending of two or more senses—and metaphor, see (Slingerland 2008b: 156-162).

to make useful inferences. Therefore, when we attempt to conceptualize and reason about relatively unstructured realms, this skeleton is fleshed out (usually automatically and unconsciously) with additional structure provided by primary metaphors derived from basic bodily experience, often invoked in combination with other primary metaphors to form complex metaphors or conceptual blends. When primary or complex source domains are activated in such cases and mapped onto the target domain, most aspects of the source domain conceptual topology—that is, inference patterns, imagistic reasoning pattern, salient entities, etc.—are preserved, thereby importing a high degree of structure into the target domain.

Image schemas and conceptual metaphors have been shown to play a foundational structuring role in everything from basic human categorization and grammatical structures to religious and philosophical discourse, scientific theorizing, and legal reasoning.[23] Simple documentation of the pervasiveness and systematicity of conceptual metaphor in human cognition goes a long way toward demonstrating that such schemas play more of a role than as mere figures of speech. In addition to the more general experimental evidence for the imagistic basis for concepts discussed above with regard to the perceptual symbol theory, there is also now a veritable mountain of linguistic and psychological evidence for the claim that conceptual metaphors in fact represent conceptually active, dynamic, language-independent structures that play an inevitable and fundamental role in embodied human cognition.[24] To be sure, the empirical science of metaphor is still in its infancy, and many outstanding problems remain, including how precisely metaphors are instantiated neurobiologically and how they interact with relatively abstract or amodal propositions or conversational intentions. One may also, of course, question the details of specific metaphor analyses, or claims as to the extent to which particular metaphorical entailments are driving a given argument. What is emphatically *not* in doubt, however, is that conceptual metaphors are cognitively real—that is, metaphorical linguistic expressions do activate corresponding image schemas in the sensory-motor regions of the brain—and that these activated schemas play an important role in perception, semantic and syntactic processing, and at least certain sorts of reasoning processes.[25]

2.4 Blending Theory

Conceptual blending theory, originally developed by Gilles Fauconnier and Mark Turner, encompasses conceptual metaphor theory, but goes beyond it to argue that *all* of human cognition—even literal and logical thought—involves the creation of

[23] See (Slingerland 2008a: 170-172) for extensive references.

[24] For reviews of various convergent lines of linguistic and experimental evidence, see (McNeill 1992), (Lakoff and Johnson 1999: 81-89), (Coulson 2001: 75-83), Rohrer 2005, and Gibbs 2006.

[25] There continue to be scholars—typically those working from an analytical philosophy background—who dismiss conceptual metaphors as trivial verbal parallelism, or as cognitively-empty, attention-getting devices. For instance, Chris Fraser characterizes as "preposterous" and "a huge philosophical blunder" the idea that human beings sometimes draw upon image schemas such as object manipulation to understand the phenomenology of agency, and dismisses proposed universal conceptual metaphors as nothing more than superficial syntactic parallels that happen to co-appear in American English (Fraser 2007: 105-106). Such dogmatic philosophical harrumphing is a poor substitute for actual engagement with the relevant empirical evidence.

mental spaces and mappings between them. In this way, it serves as a kind of unified theory identifying conceptual metaphor as merely one particularly dramatic cognitive process (a single- or multiple-scope blend) among many more pedestrian processes, such as categorization, semantic frame construction, and naming. It also goes beyond linguistic production to describe the manner in which novel motor programs, technological interfaces, and social institutions are created through a process of space blending.[26]

The basic unit of blending theory is the so-called "mental space," consisting of a "set of activated neuronal assemblies" (Fauconnier and Turner 2002: 40) that form a coherent structure, often "marked" in some way—as a "past" space or "purported belief" space—and potentially nested inside other spaces. Unlike the sort of entrenched cross-domain mappings that are represented by primary conceptual metaphors and stored in long-term memory, mental spaces are temporary, schematically-structured mental spaces prompted by language or other signals. Built up in working memory as we think or talk, they draw upon more stable knowledge and images called up from long-term memory, but then are able to combine, blend, extend, and reframe these domains in quite unexpected and creative ways—often by systematically connecting elements in one space to elements in another space through neural coactivation-bindings.

One of the primary ways in which blending theory emends conceptual metaphor theory is by showing that many expressions that, at first glance, seem to involve simple source-to-target-domain mappings in fact involve the blending of two or more spaces into a novel conceptual structure. A simple source to target domain mapping is understood in blending theory as a "single-scope" blend, where two input spaces ($Input_1$ and $Input_2$) project into a third, "blended" space, but all of the relevant structure comes from only one of the inputs. In such blends, $Input_1$ corresponds to conceptual metaphor's "source" domain, and $Input_2$ corresponds to the "target." The power of seeing this process as a projection of two domains into a third, temporary, "blended" space is that it allows us to deal with situations where structure is coming from more than one input domain, resulting in a novel blend, with its own emergent structure, that is identical to neither of the inputs. Single-scope blends—accurately represented by simple source to target domain mappings—remain constrained by the input or source domain: structure is projected to a new domain, but no new structure is created. True human creativity would seem to require selective and novel recombination of conceptual units, and blending theory provides us with a general model for how we might represent and trace this sort of selective recruitment and combination of pre-given schemas into novel conceptual structures. These novel conceptual structures, in turn, can then serve as inputs to a further blend, which allows us to model the discrete steps of what I have called "ratcheted innovation": novel blends becoming entrenched in the culturally-transformed environment by means of language or physical artifacts, and then giving rise to additional blends a further step removed from the original input spaces.

[26] Space considerations prevent anything like a thorough introduction to this field. For recent introductions to blending theory, see Coulson (2001) and Fauconnier and Turner (2002); for a comparison with conceptual metaphor theory, see (Grady et al. 1999); and for a very short introduction with some illustrative examples and a helpful bibliography, see (Dancygier 2006).

Metaphorical blending analysis thus allows us to trace with precision how hybrid cultural-biological environments are built, how they are experienced and integrated by the developing body-mind, and how they are recruited to structure abstract thought. Whereas early versions of conceptual metaphor theory tended to focus exclusively on the individual body and the generic physical environment, blending theory allows us to take into account the extent that, for human beings, the physical environment is pervaded with cultural information that can transform basic perceptual schemas and give rise to quite novel and idiosyncratic concepts.[27]

I will return to blending theory in the example from the *Mencius* presented below, but first must discuss a final relevant topic of inquiry in recent cognitive science research: the foundational role of bodily-based emotions—inextricably linked with the images with which we think—in human reasoning.

2.5 Emotions and Reason

The neuroscientist Antonio Damasio has been arguing for decades that emotionally-derived and often unconscious feelings of "goodness" or "badness" play a crucial role in everyday decision-making. Damasio notes that an important feature of human memory is that "when we recall an object...we retrieve not just sensory data but also accompanying motor and emotional data" (Damasio 1999: 161), which means that "virtually every image, actually perceived or recalled, is accompanied by some reaction from the apparatus of emotion" (Damasio 1999: 58). If concepts are imagistic, this means that our entire conceptual life is pervaded, through and through, by such "somatic markers." Damasio argues that somatic markers play a crucial role in human reasoning and decision-making by, in any given situation, selectively drawing our attention to a limited number of strongly-marked concepts or potential outcomes. This model contrasts sharply with what Damasio refers to as the Enlightenment "high-reason" view of decision-making, whereby the individual considers all of the options open to her, performs a cost-benefit analysis of each option,[28] and then coolly chooses the rationally optimal option. Damasio argues that the high-reason model is implausible simply because there are so *many* options theoretically available at any given moment, and the human mind is not capable of running simultaneous analyses of all of the theoretically possible course of action. Therefore, the body contributes by biasing the reasoning process—usually unconsciously—before it even begins by radically reducing the focus of attention to a few emotionally salient objects. "There is still room for using a cost/benefit analysis and proper deductive competence," Damasio notes, "but only *after* the automated step drastically reduces the number of options. Somatic markers may not be sufficient for normal human decision-making, since a subsequent process of reasoning and final selection will still take place in many though not all instances.

[27] See (Gibbs 1999, Kimmel 2005, and Slingerland 2008b: 206-218) for more on this topic.

[28] Damasio conflates the two primary forms of Enlightenment ethical and practical reasoning—utilitarian cost/benefit analysis and deontological reasoning—and therefore incorrectly attributes utilitarian views to Kant (see, for instance, Damasio 1994: 173–174). This does not affect the validity of his point, however, and we might simply add "analysis in terms of deontological principles" to his mentions of cost/benefit analysis.

Somatic markers probably increase the accuracy and efficiency of the decision process. Their absence reduces them" (Damasio 1994: 173).

This point is vividly demonstrated by cases described by Damasio where damage to the prefrontal cortex, a center of emotion processing in the brain, severely impairs an individual's ability to make what most people would consider "rational" decisions. Although the short- and long-term memories and abstract reasoning and mathematical skills of these patients were unimpaired, in real-life decision-making contexts they were appallingly inept, apparently incapable of efficiently choosing between alternate courses of action, taking into account the future consequences of their actions, or accurately prioritizing the relative importance of potential courses of action. Interestingly, when their decision-making processes are examined closely, these patients appear to approach something like the "high reason" ideal: deprived of the biasing function of somatic markers, they seem to attempt to dispassionately consider *all* of the options theoretically open to them, with the result that they become paralyzed by indecision, fritter away their time on unimportant tasks, or simply commit themselves to what appear to outside observers as poorly considered and capriciously selected courses of action. Revealingly, despite his almost complete real-life incompetence, the patient referred to as "Elliot" scored quite well on the Standard Issue Moral Judgment Interview—developed by the Kantian moral psychologist Lawrence Kohlberg, which measures a person's ability to abstractly reason their way through moral dilemmas and other theoretical problems. This theoretical ability to reason about dilemmas did not, however, translate into an ability to make actual reasonable *decisions*: "at the end of one session, after he had produced an abundant quantity of options for action, all of which were valid and implementable, Elliot smiled, apparently satisfied with his rich imagination, but added, 'And after all this, I still wouldn't know what to do!'" (Damasio 1994: 49). Damasio postulates that this statement, as well as Elliot's inability to make effective decisions in real-life situations, can be attributed to the fact that "the cold-bloodedness of Elliot's reasoning prevented him from assigning different values to different options, and made his decision-making landscape hopelessly flat" (Damasio 1994: 51).

Combining metaphor and blending theory with Damasio's insights concerning somatic marking, we could say that the primary function of creating a metaphor or blend is to harness emotions produced by "basic-level" scenarios and recruit them in order to facilitate or influence the direction of decision-making in more complex or abstract scenarios. The manner in which this is accomplished is the projection of somatic images, along with their accompanying somatic markers. Damasio's work constitutes one part of an increasing accumulation of evidence concerning the foundational role of emotions in human reasoning and decision-making, evidence that has begun pushing psychologically-knowledgeable philosophers and philosophically-knowledgeable psychologists toward a position that would please Hume or Nietzsche: that both ethical reasoning and ethical decision-making are grounded in emotional biasing and "gut reactions" (Prinz 2006).[29] Significantly, the

[29] For philosophical work on the importance of emotion and imagery see also (Johnson 1993, De Sousa 1987, Nussbaum 2001), and Prinz 2007, as well as the essays collected in (Rorty 1980 and Solomon 2004).

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role being played by emotions is often inaccessible to—or actively covered up by—our conscious, verbal minds. A large body of experimental work on moral "confabulation" has demonstrated that ethical judgments that can be clearly demonstrated to have emotional causes are quickly and effortlessly "spun" by our conscious minds into rational justifications, which then serves to obscure their visceral origins.[30] Uncovering these origins, and thereby recognizing the role of emotionally-charged, behavior-guiding, embodied and often unconscious *images* as foundational for human cognition both serves as an important corrective to the Enlightenment ideal of disembodied reason and helps us to see the common ground between early Chinese and modern Western styles of argumentation.[31]

The addition of Damasio's somatic marker theory highlights a feature of blends that is not always emphasized: they are not simply normatively neutral devices for accurately apprehending situations, but are in fact often created and communicated in order to advance particular normative agendas, which they accomplish through the stimulation of predictable visceral reactions. In other words, metaphors and metaphoric blends are not normatively neutral mechanisms for understanding the world—or expressing some sort of timeless harmony between nature and man—but rather polemical devices aimed at driving home a particular normative view. This emotive-normative function has been somewhat overlooked in most previous discussions of blending: blends *do* guide reasoning, often in very particular directions chosen by the creators of the blend, but often by means of inspiring normativity-bestowing emotional reactions. This is why blending is arguably *the* primary tool in political and religious-moral debate, where human scale inputs are recruited polemically in order to inspire somatic-emotional normative reactions in the listeners.[32] Acceptance of the validity of such blends inevitably commits the listener to a certain course of action (or, at least, a *potential* course of action), and this effect can be reliably predicted by the blend author on the basis of both cultural knowledge and the relatively fixed nature of human emotional-somatic reactions.

3 Metaphorical Blending and Argumentation in Early China: A Case Example

One of the several great advantages that blending analysis possesses compared to conceptual metaphor analysis is that it allows us to trace the construction of complex blended spaces that are built up over the course of a discourse or conversation. Following this process of blend creation "on the fly," as it were, gives us a sense of how the recruitment of normativity is a dynamic affair, involving not merely the selection of appropriate input spaces, but also the creative and finely-targeted

[30] For reviews of this literature see (Haidt 2001 and Greene and Haidt 2002).

[31] As mentioned above, (Lakoff and Johnson 1999) have documented in some detail the manner in which the thought of philosophers in the Western tradition, from Plato to Frege, is fundamentally predicated upon metaphorical thinking. (Lakoff and Núñez 2000) have similarly demonstrated how the field of mathematics—presumably the abstract science *par excellence*—is also fundamentally structured by image schematic reasoning, a position corroborated by recent experimental and neuroimaging work (see Kadosh and Walsh 2009 and the accompanying peer commentary).

[32] Nothing less than a small cottage industry has sprung up around the analysis of conceptual metaphors and blends in political reasoning and debate; see Slingerland et al. (2007) for a review.

invocation of "counter-inputs" in response to blends created by an argumentative opponent. Although input spaces (the equivalent of "image schemas" in conceptual metaphor terminology) have a certain pre-given structure of their own—derived from embodied experience and cultural knowledge—precisely how and what they project onto the blended space very much depends upon the argumentative context, which in turn is often embedded in a broader conversational or theoretical framework. Precisely how the various influences of input spaces, the growing blend, and the argumentative intentions of the blend author are negotiated is one of the major outstanding problems in blending theory, but the flow of information is clearly going in more than one direction.

This deals with the common criticism of conceptual metaphor analysis that it forces metaphors to carry too much of the burden, as it were: metaphors in and of themselves are not arguments, because their intended meaning depends very much upon how they are being used and to what end.[33] An important early critique of conceptual metaphor theory by Naomi Quinn (Quinn 1991), for instance, argues that Lakoff and Johnson see too much structure emerging automatically and necessarily from a given image schema, failing to notice the degree to which preexisting cultural models and argumentative intentions determine which metaphors are invoked, and which specific entailments of a given metaphor are deemed relevant. People often, she observes, have a clear sense in their minds—one derived from specific cultural beliefs or strategic social goals—about what entailments they are looking for, and only then go in search of a metaphor that will provide them with these entailments. As studies of the use of metaphor in political debate make clear, speakers often have a pre-determined conceptual or emotional point that they desire to make, and then choose metaphors that are designed to communicate this point to others. One of the strengths of blending theory is that it provides us with a way to model this flexible use of image schemas, displaying how which inputs from a given space are deemed "relevant" very much depends on pre-existing blend structure or argumentative intention, and illustrating how cultural and theoretical assumptions can work in the background as unverbalized structuring elements.

3.1 An Early Chinese Case Example: Mencius 6A1-2

I would like to give a sense of how blending theory, enhanced by somatic marker theory as described above, might be used to analyze early Chinese argumentation by looking very briefly at the exchange between Mencius and Gaozi that opens Book Six of the *Mencius*.[34] Some commentators on this debate have famously dismissed it as "a mass of irrelevant analogies" (Waley 1939: 194) or as an "atrociously inept and unconvincing" bit of argumentation (Hansen 1992: 188). Here I would like to illustrate how the debate is neither illogical nor algorithmically logical in the manner

[33] For example, although they typically exaggerate the extent to which I argue that "the metaphor is the argument," some critics of my work on conceptual metaphor theory in Warring States thought (Slingerland 2003) make the important observation that any given metaphor schema could be used to make very different argumentative points, depending on how it is being used and the deeper theoretical assumptions of the user (e.g., Cline 2003: 456, Cline 2008; Chong 2006: 234-5, 245).

[34] Much of the blending analysis below is drawn from Slingerland 2007.

required by analytic philosophy, but rather fundamentally predicated on metaphoric blends linked to embodied emotional reactions.[35]

The first of these two passages begins with Gaozi's opening claim that "Human nature is like the *qi* willow. Morality is like cups and bowls. To make morality out of human nature is like making cups and bowls out of the willow tree." This statement sets up a double-scope blend that can be mapped as in Fig. 1 below:

Here, human beings' innate tendencies are portrayed as a raw material that is fundamentally re-shaped by some external "tool," the precise nature of which depends on who we understand Gaozi to be.[36] In any case, though, the result is portrayed as a beautiful artifact bearing little resemblance to the original, crude material, with the shape this artifact is determined by the tool. While most of the structure of this blend is imported from the CRAFT PRODUCTION space, it is double-scope because one important aspect of the causality (indicated by the dashed line) is derived from the MORAL EDUCATION space: although in craft production it is the artisan who determines the shape of the product (wielding the tool in accordance with his or her design), the behavior-determining importance of the doctrine of impartial caring or training in traditional cultural forms prevails in the blend, resulting in a situation where it is the tool, rather than the artisan, that determines the shape of the "moral artifact." Gaozi's primary purpose in constructing this blend is to get his listener to take the positive feelings that one has toward beautiful, finely carved artifacts—as well as the corresponding negative feelings toward crude, unshaped raw material—and project these onto the project of neo-Mohist or externalist Confucian moral education. The inborn human feeling of partial love for one's parents is ugly and crude, whereas the desired cultivated behavior is beautiful and refined.

Mencius's response is as follows:

> Can you follow (lit. "flow with") the nature of the willow in making your cups and bowls? Or is it in fact the case that you will have to mutilate[37] the willow before you can make it into cups and bowls? If you have to mutilate the willow to make it into cups and bowls, must you then also mutilate people to make them moral? Misleading the people of the world into bringing disaster upon morality—surely this describes the effects of your doctrine!

This is a wonderful example of conceptual blending *jujitsu*: Mencius takes Gaozi's blend and then sets up two new spaces to counteract it, that of LIVING THINGS and WATER. We can map this modified blend as in Fig. 2 below:

The introduction of these two new spaces has a dramatic effect upon the blend. The LIVING THING space as Mencius constructs it maps quite nicely onto the CRAFT

[35] For a related argument against seeing Mencian argumentation as either "top-down," algorithmic reasoning or simply irrational, see (Wong 2002).

[36] Until recently, many scholars have assumed that Gaozi was a "neo-Mohist," in which case the "tool" is likely to be the doctrine of impartial caring, and the desired product a settled determination to practice impartial caring (the construal assumed above and mapped in Fig. 1). In light of the recent Guodian finds, others have suggested that the Gaozi in the *Mencius* may, in fact, be a fellow Confucian, albeit one with a more externalist conception of how one develops a sense of "rightness" (*yi* 義) than Mencius himself (Goldin 1999; Scarpari 2001; Slingerland 2008a). In this latter case, the "tool" would be something like training in ritual, music, and the classics.

[37] *Qiang'zei*; lit. to "steal" or "rob" the nature of willow tree.

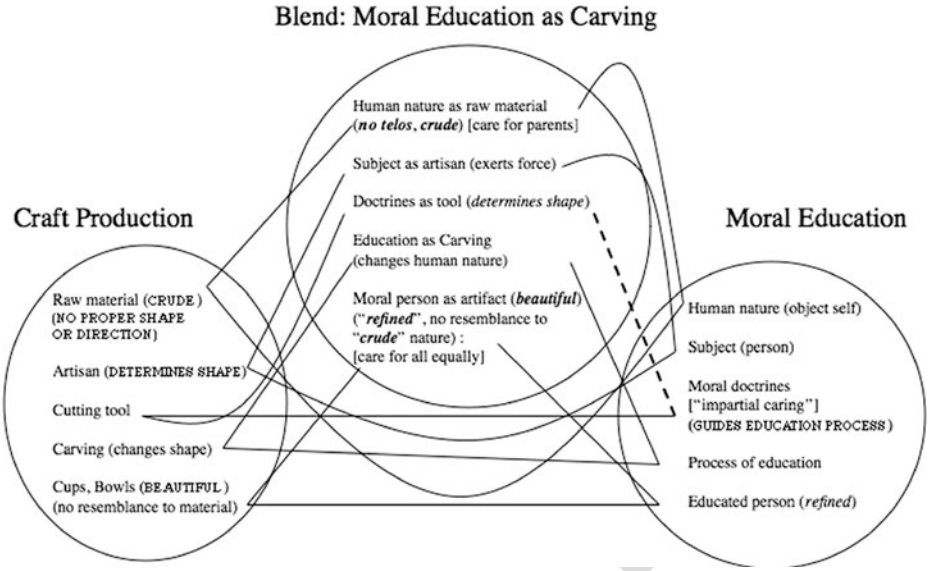

Fig. 1 *Mencius* 6A1 (Gaozi's position)

PRODUCTION space, but in an entirely *disanalogous* fashion (represented by the large arrows). The shapeless raw material is now compared to a living thing with an innate *telos*, which, in turn, transforms the skillful artisan of Gaozi's blend into a cruel mutilator, his useful tool into a harmful weapon, and the process of carving into an act of unnatural deformation. Mencius is no doubt counting upon the negative visceral reactions inspired by these images of cutting into a living being, causing it pain, and inflicting mutilation. In this way, he very effectively subverts Gaozi's

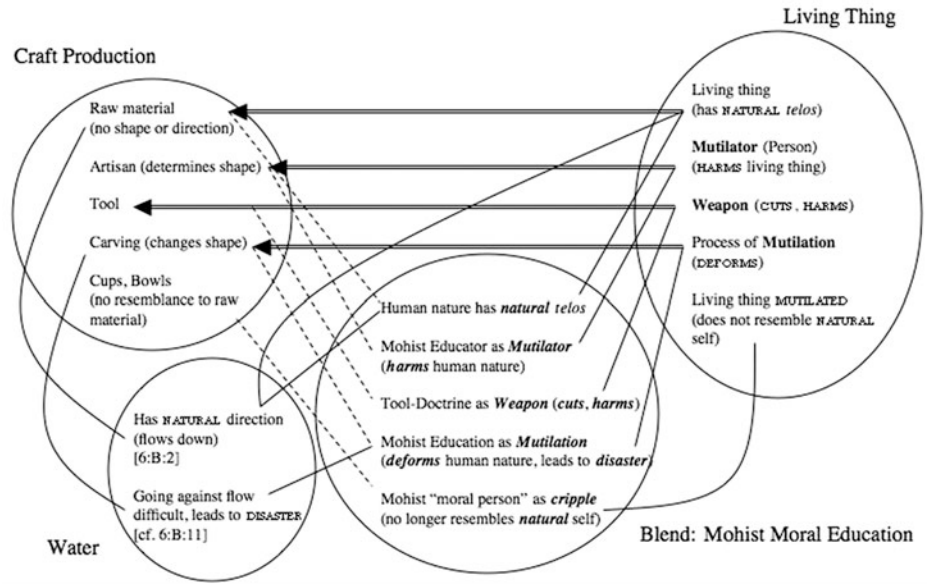

Fig. 2 *Mencius* 6A1 (Mencius' response)

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blend by transforming the original projections from the CRAFT PRODUCTION to the Blend space (dashed lines) into normatively strongly negative ones: the product of an externalist process of education is now portrayed as a tortured moral cripple rather than a skillfully-formed artifact. For good measure, he adds the WATER space to the blend, which both reinforces the negative connotations of going against the natural "flow" and sets up the transition to 6A2.

Mencius 6A2 finds Gaozi picking up on Mencius's water imagery and attempting to turn it to his own rhetorical advantage, switching to the domain of irrigation management to make his point: "Human nature is like a whirlpool. Cut a channel to the east and it will flow east; cut a channel to the west and will flow west. The lack of a tendency toward good or bad in human nature is just like water's lack of a preference for east or west." If we assume the entrenched metaphor, TYPE OF BEHAVIOR AS DIRECTION, Gaozi's statement here can be mapped as a rather straightforward single-scope blend, as in Fig. 3:

With his craft metaphor of 6A1 foiled by Mencius'introduction of the LIVING THING and WATER spaces, Gaozi attempts to make his point by switching to a different domain, that of WATER MANAGEMENT. The normative point here is also the same as in 6A1: just as crude raw material needs to be shaped by a craftsman in order to become beautiful, directionless whirling water in an irrigation pond needs to be directed by a wise manager if it is to be brought to the proper place.

The fact that the book is called the *Mencius*, and not the *Gaozi*, should prepare us to see Gaozi's efforts to turn the rhetorical tables on Mencius be thwarted. As in 6A1, Mencius responds by subverting Gaozi's metaphor:

> Water certainly does not distinguish between East and West, but does it fail to distinguish between up and down? The goodness of human nature is like the downhill movement of water—there is no person who is not good, just as there is no water that does not flow downward.

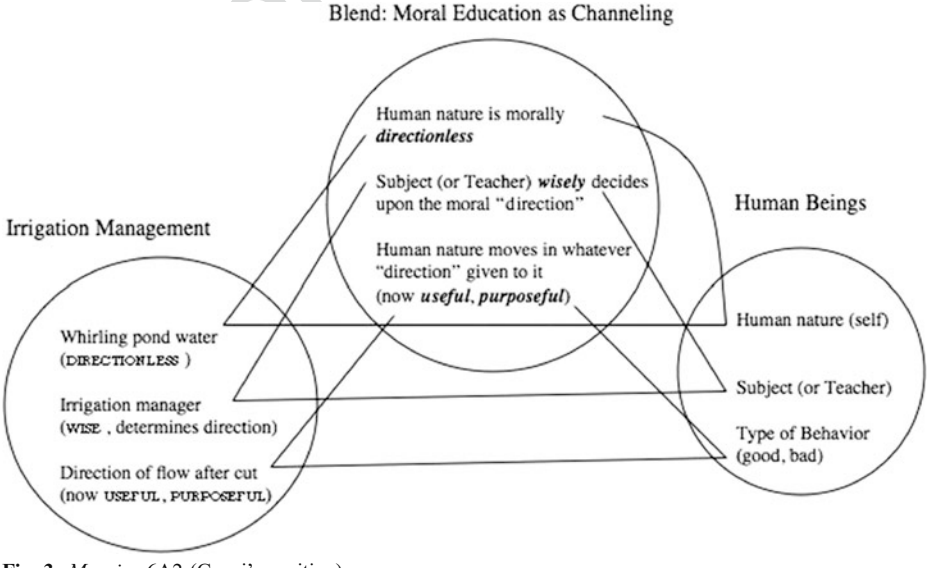

Fig. 3 *Mencius* 6A2 (Gaozi's position)

> Now, as for water, if you strike it with your hand and cause it to splash up, you can make it go above your forehead; if you apply force and pump it, you can make it go uphill. Is this really the nature of water, though? No, it is merely the result of environmental influences. That a person can be made bad shows that his nature can also be altered like this.

Here Mencius subverts Gaozi's blend not by adding new spaces, but by mapping elements of an existing input that Gaozi "missed": water certainly has no preference for East or West, but it certainly has a natural preference for traveling downhill. We can map Mencius's response as in Fig. 4 below[38]:

Mencius's response here nicely shows how deciding the relevant features of an input is a very arguable process—focusing on new elements can give an entirely different quality to the blend.[39] Instead of focusing on a whirling pool's potential to be channeled in whatever direction is determined by the irrigation manager, Mencius uses the WATER space to introduce teleological and normatively charged features: the natural, "internal" tendency of water is to flow downhill, and to go against this tendency requires the application of external force. Although it is possible under certain circumstances to make water flow uphill, this requires a huge expenditure of force and is ultimately unsustainable—going "against the flow" of Nature-Heaven is bound to lead to failure. This image is reinforced by another passage later in the book, 6B11, where Mencius extols the achievements of the great sage-king Yu, who tamed the Yellow River and made China habitable by wisely following the tendencies of nature—gently guiding the rivers into new channels and helping them along to the sea—as opposed to the evil and stupid flood-control managers of Mencius's own day, who go "against the flow," attempting to crudely block and radically re-direct the natural flows of China's rivers and thus bringing disaster to everyone. The harm caused by Yu's counterparts in Mencius's age is analogous to the injury caused by the externalists and their educational strategy that fails to "flow along with" human nature.

3.2 Blending Theory and Textual Analysis

After presenting the above analysis of the Mencius-Gaozi debate to one of my sinological colleagues, she observed that, in her opinion, the same conclusions about the structure and meaning of the exchange could be reached by simpler, and more traditional, textual analysis tools, and wondered what end was served by the crazy diagrams and convoluted theoretical framework. I agreed that most of the insights

[38] This mapping is simplified by not including the entrenched CONTAINER and ESSENCE metaphors, triggered by the mention of "environmental influences" whereby external, environmental causes are understood as "unnatural" and natural behavior (behavior in accordance with the ESSENCE) is the result of inner causality.

[39] Sarah Allan argues that Mencius "wins" the debate against Gaozi because he "*had a better understanding of water than Gaozi*," and because he "truly understood water" (1997: 42). This is accurate if intended as a characterization of the intended *effect* of the blend, but as a meta-analysis it seems to miss the point. It is hard to understand what it would mean to grasp "the true nature of water"—it is equally true that water flows downhill *and* that it has no preference for direction when it comes to a horizontal plane. Getting us to see the particular feature of water that he focuses upon as more "true" or relevant is simply Mencius' rhetorical strategy.

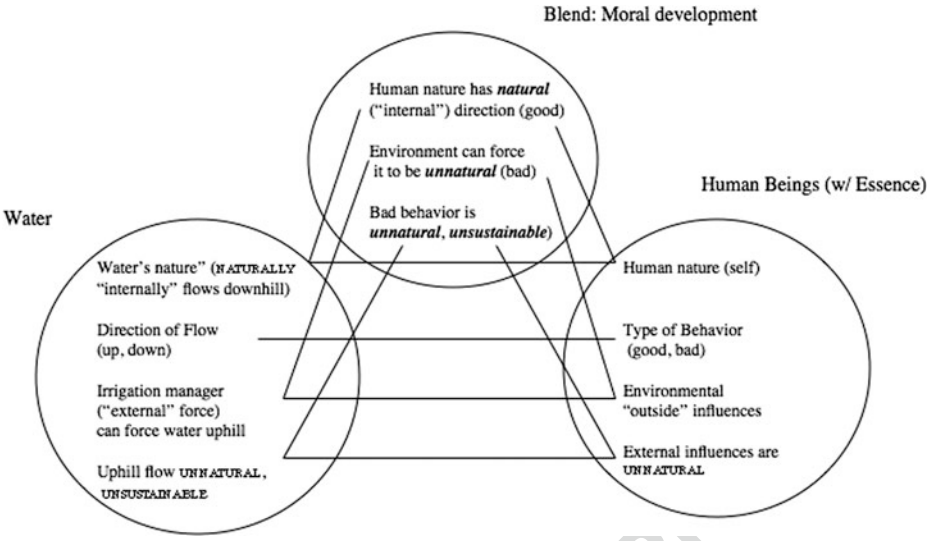

Fig. 4 *Mencius* 6A2 (Mencius' response)

about this particular debate could potentially be reached without the long and technical detour, in the same way that, say, perceptive and intelligent medieval astronomers could often figure out important aspects of the movements of the celestial bodies in an unsystematic, ad hoc manner. This does not mean, however, that developing a modern, systematic science of astrophysics does not represent something of an advance, in that it actually uncovers the underlying mechanisms at play, and thereby makes attaining accurate insights a bit less of a hit-or-miss process.

My colleague rather naturally took exception to being compared to a medieval astronomer, and perhaps that analogy was not the best. A more helpful one might be the contrast between someone who learned to read classical Chinese in something like the traditional manner—that is, immersed in a large quantity of text, building up a sense of the language in the same way one learns one's native tongue—as opposed to someone who combines such training with a knowledge of the grammar of classical Chinese. Most of the time an informal, intuitive sort of knowledge will be enough to accurately make sense of a given passage. There are times, however—when confronted with a particularly opaque sentence, for instance, or commentarial controversy over the meaning of a passage—when a formal knowledge of the underlying grammar is invaluable.

The underlying point of both analogies is the same. There is a very good possibility that conceptual blending theory, yoked to something like Damasio's theory of somatic marking, provides us with a relatively accurate model of "the way we think," to borrow the title of Fauconnier and Turner 2002. At the very least, it has the advantage of being neurologically plausible and being backed by a fairly impressive, and growing, body of empirical evidence—unlike the models of human cognition that inform, consciously or not, much of the work in our field. Although mobilizing such a massive theoretical machinery to explain a relatively short and straightforward rhetorical exchange may strike one as a case of "using an ox cleaver to kill a chicken," as *Analects* 17.4 puts it, we must not lose sight of the fact that ox

cleavers are sometimes necessary and useful. Elsewhere I have used this cleaver to try to reveal at least some of the deeper structures of sections of *Mencius* 2A2 (Slingerland 2008a: 196-206), and I feel that systematically mapping out the central blends at work in this text—a massive ox if ever there were one—requires more complicated tools than those traditionally available to sinologists. More importantly, whether one feels that the specific tool of the blending diagram or talk of somatic markers is hermeneutically useful or not, there is a deeper purpose to this exercise. First of all, I think that it is important to debunk the sorts of exoticizing theories about metaphor and analogy as uniquely Chinese modes of discourse that are still quite popular in our field. Secondly, it is equally important to call into question the modern Western conceit that philosophical or scientific discourse functions on an entirely abstract, propositional level. I am content if I have made progress toward at least these two goals.

4 Human Reasoning and Argumentation

Like economic systems, intellectual trends have a tendency to overcompensate, with corrective movements often shooting past the proper mean to new extremes in the other direction. The mere fact that I can make an extended argument to you, the reader, in relatively—though not completely—abstract language, and expect my argument to be weighed on its intellectual content and the merits of the evidence marshaled, serves to remind us that human beings *are* capable of constructing and processing (mostly) abstract, rational arguments. Recent insights concerning the imagistic and emotionally-bound nature of human cognition have too often tended to obscure the fact that humans have not only clearly evolved systems that work at rather high levels of abstraction, but—especially with proper training—can rely on these systems to counterbalance the fast and automatic judgments of lower-level systems. Many of today's most vociferous critics of the image-based model of human cognition that I have presented above are motivated by a desire to not see the baby thrown out with the bathwater: the fact that much of the Western philosophical tradition has had an exaggerated view of the abstract and rational nature of our reasoning and argumentation processes does not mean that such capacities do not exist at all.[40] In fact, considering how physiologically costly and excruciatingly slow such capacities are, they must have had a considerable evolutionary payoff for our ancestors to have developed at all.

It is nonetheless the case that, of the several sentences that I just wrote above, most of the cognitive heavy lifting, as it were, is being done by such apparently abstract, but in fact thoroughly embodied and visceral, image schemas as *extremes*, *balance*, *shooting past, counterbalance*; *insight* and *obscuration*; *costs* and *payoffs*; and of course—and probably the only one we consciously register as a metaphor—*babies* and *bathwater*. If the model of human cognition emerging from cognitive science that I have presented above is even remotely correct, then argumentation—

[40] The replies and responses accompanying (Barsalou 1999 and Pylyshyn 2003) provide a helpful entrée into the debate concerning imagistic versus amodal reasoning.

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especially in heated, real-life situations, rather than the cool, abstracted context of contemporary academia—should be seen as centrally, if not primarily, focused on winning the battle to metaphorically frame the situation, and thus sway the emotions of one's conversational partners.[41] Getting beyond the conceit of many Western philosophers that they are engaged in the purely rational, completely abstract process of reasoning and argumentation allows us to see that classic Enlightenment thinkers such as Kant were engaged in a project substantially identical to that of Mencius in his debates with Gaozi: drawing upon emotionally-laden images to urge his readers to favor a particular model of morality above another. In fact, looking at Kant's writings in this light reveals how his arguments in favor of his deontological vision skillfully entwine emotions such as "reverence" or a sense of "dignity" and "awe" with his particular approach to ethics, and are fundamentally predicated on such viscerally normative dichotomies as "higher" vs. "lower," "autonomous" and "free" vs. "passive" or "servile," "pure" vs. "contaminated," and "proper" vs. "alien."[42]

The role of less-than-rational forces in philosophical argumentation has, of course, long been argued by post-Enlightenment philosophers such as Nietzsche. Having Kant and his followers in mind, Nietzsche observes:

> They all pose as if they had discovered and reached their real opinions through the self-development of a cold, pure, divinely unconcerned dialectic...while at bottom it is an assumption, a hunch, indeed a kind of "inspiration"—most often the desire of the heart that has been filtered and made abstract—that they defend with reasons they have sought after the fact. They are all advocates who resent that name...wily spokesmen for prejudices which they baptize "truths" (Nietzsche 1886/1966: 12).

This Nietzschean critique has more recently been picked up by modern moral psychologists such as Joshua Greene, who draws upon some of the work on emotions, automaticity, and lack of central cognitive control mentioned above to argue that "deontological philosophy, rather than being grounded in moral *reasoning*, is to a large extent an exercise in moral *rationalization*" (Greene 2007: 36). The same, arguably, can also be said of other "high-reason" based models of ethics, such as consequentialism.[43] What has changed since the 19th century is that

[41] I thus find rather bizarre Jean-Paul Reding's comment, in his discussion of the Mencius-Gaozi debate examined above, that "the specific technique of combating a proposed metaphor with a (better) counter-metaphor seems to be unknown in the West" (2004: 138). One needs only to open a newspaper and consider a typical debate about whether U.S. troops in Afghanistan are "trapped in a quagmire" (or "another Vietnam") or "about to tip the balance of power" between the government and insurgents, to dismiss this claim.

[42] Consider, for example, Kant's indignant rejection of the "slack, or indeed ignoble, attitude which seeks for the moral principles among empirical motives or laws," as well as his claim that the purity of moral philosophy depends upon it being "the authoress of her own laws" rather than "the mouthpiece of laws whispered to her by some implanted sense or by who knows what tutelary nature" (Kant 1785/1964: 93). These lines are explicitly designed to conjure up in Kant's readers a visceral disdain for "slack" and "ignoble" persons, as well, perhaps, as the horrors of the snake whispering alien and evil counsels into Eve's passive ear.

[43] It should be noted that Greene himself disagrees with this claim, arguing that consequentialism is, in fact, more "cognitive"—emotionally neutral—and "more likely to involve genuine moral reasoning" (Greene: 36). To my mind, this obscures not only the degree to which the "costs" and "benefits" involved in a consequentialist calculation are metaphoric entities, endowed with either negative or positive valences that emerge from emotional biasing, but also the degree to which the process of calculation is itself a metaphoric process.

we now have a tremendous, and constantly growing, body of evidence suggesting that Nietzsche was right—not merely about the irrational "germs" of great philosophical systems, but many other things as well, such as the importance of metaphor for human thought or the de-centered nature of the self.

5 Conclusion

I assign the portions of the *Mencius* discussed above (in English translation, of course) to students in my undergraduate survey course on Warring States thought, and they all find it a powerful and amusing piece of discourse, coming away convinced that Gaozi and his followers were misguided or foolish and confident in the wisdom of the Mencian approach to self-cultivation. The commonality of this sort of phenomenon—an ancient text from a completely alien culture speaking to a modern person with a clear and powerful voice—is similar to the ease with which we reach out and grasp a moving object, or gauge the emotions of a person with whom we are speaking and adjust our tone and body language accordingly: effortlessness in all these cases obscures the staggering complexity of the actual processes involved.

Of course modern Canadian college students react predictably to the image of someone foolishly trying to oppose the inexorable downward flow of water. This sense of cognitive transparency makes it easy for us to overlook how astounding it is that a text assembled in archaic Chinese in the 4th century B.C.E. by some wizened Confucian scholars could survive the millennia, be translated into modern English, and trigger the construction of spaces in the minds of 21st century C.E., baggy-pants-clad, text-messaging, facebooking Canadian college students in a manner entirely predictable to its original author. Of course, I may in fact have misconstrued some of these passages in a variety of ways: perhaps I am mistaken about the "whirling pool" in 6A2 having to do with irrigation management (this is not the standard take on it), or I may be ignorant of some important, relevant features of early Chinese irrigation management that in turn has led to a misunderstanding of Mencius's position. It is equally possible that I have missed or improperly interpreted some of the entailments of the metaphors invoked, similarly resulting in misfiring of the intended blend construction. This sort of miscommunication is not uncommon with texts from another culture or time—the primary job of linguists and historians being to help prevent us from making such mistakes. For the most part, however, we move through our world with consummate ease, and the meaning of the vast majority of even quite culturally alien texts such as the *Mencius* is entirely and immediately transparent to people provided with a decent translation.

Occasional failures in comprehension and performance are merely superficial and obvious exceptions that prove the deeply buried rule: human bodies (including the brain part) are built to do certain things, and to do them largely unconsciously and quite well. The fact that the blends constructed by the author of the *Mencius* are re-created by our own brains as we read the translated text supports the argument of cognitive linguists that thought is triggered and communicated by language, but not *constituted* by it. Moreover, the fact that even the specifics of most of the mappings considered—including the somatic-emotional reactions they are intended to trigger—

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are very similar cross-linguistically, and thus immediately comprehensible across the millennia, supports the argument advanced by evolutionary psychologists that human emotional-visceral reactions are fairly invariant and predictable across cultures and times, although the process of conceptual blending allows these reactions to be recruited for a potentially infinite variety of rhetorical purposes. Human beings are apparently unique among animals in possessing the cognitive fluidity and cultural technology to effect some radical changes in what gives us pleasure, what we find worth pursuing, and what we deem as meaningful. But all of this cognitive and cultural innovation is grounded in—and remains ultimately constrained by—the nature of our embodiment. This means that, even when confronted by the most alien of cultural practices or artifacts, our own body-minds can serve as a universal decoding key. The tools provided by cognitive linguistics allow us to use this decoding key to uncover and trace the embodied origins of the products of the human mind across cultures and across time.

The early Chinese argued and thought employing the same cognitive processes as "we" do, and drew upon the same pool of embodied normative values. This is, indeed, the very reason we can understand these texts. Early Chinese philosophical rhetoricians and Enlightenment philosophers of the modern West are engaged in essentially the same sort of argumentative project, employing the same linguistic tools (metaphor and metaphoric blends) to manipulate the same basic cognitive processes (image thinking and affective reasoning). The fact that the early Chinese do tend to highlight the role of metaphor and emotion more than their modern Western counterparts should be seen as an indication that they were a bit less self-deluded about what they were up to, not as evidence of some cultural-cognitive gulf between the Occident and Orient. Breaking out of the false dichotomies that characterize "reverse Orientalism" means not only getting beyond stereotyped and exaggerated conceptions of early China, but also deconstructing the self-conception of modern Western philosophy that is typically set up as the foil to the "holistic East." One of the great strengths of early Chinese philosophy is that its self-conception seems much more empirically plausible in the light of modern cognition science than recent thought in the West, which in turns makes it an important and rich resource for those who wish to reconceptualize philosophy in the 21st century (Munro 2005). Drawing upon this resource, however, is only possible if we take care to avoid cultural essentialism, and thereby manage to see the unique strengths of early Chinese argumentation against the background of common human cognitive universals.

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