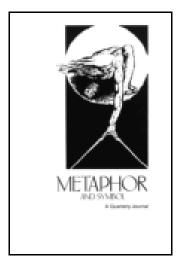
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## Metaphorical Character of Moral Cognition: A Comparative and Decompositional Analysis

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This article studies the moral metaphor system focusing on a subsystem consisting of five pairs of MORAL and IMMORAL metaphors whose source concepts represent some contrastive categories in our visual experience: WHITE and BLACK, LIGHT and DARK, CLEAR and MURKY, CLEAN and DIRTY, PURE and IMPURE. The study examines whether these moral metaphors are manifested in Chinese and English, looking for linguistic evidence in both languages. It is found that the studied moral metaphors are applicable in both languages at varying degrees. This finding suggests that these metaphors may range from being widespread to being universal. The study then further analyzes them regarding whether they are primary or complex metaphors and whether they are equal in status, applying a decompositional approach to metaphor analysis. The result suggests that the moral metaphors under study are complex rather than primary metaphors, and that they are actually not equal in status, some depending on others in meaning making in our moral cognition. If the analysis is valid, the implications are: some conceptual metaphors are more fundamental than others, those that are more fundamental are more likely to be widespread or universal, and hypotheses can be made about conceptual metaphors based on in-depth analysis of their conceptual composition.

Morality is an eternal subject for human inquiry into what it means to be human, concerning the fundamental human judgment on what is good or right in contrast to what is bad or wrong, in the enhancing of human well-being. Lakoff and Johnson (1999) argue that one of the major findings of research in cognitive science, especially in cognitive semantics, is that our moral cognition is largely metaphorical, growing out of a complex metaphor system containing metaphorical mappings for conceptualizing, reasoning about, and communicating our moral ideas: "Virtually all of our abstract moral concepts are structured metaphorically" (p. 290). That is, our moral thinking is imaginative in nature, depending fundamentally on our metaphorical understanding, and it is through metaphor that many of our ethical values and principles emerge from our embodied and socioculturally situated habitation of the world (Johnson, 1993, 2014; Lakoff, 2002; Lakoff & Johnson, 1999, Chapter 14). In the past decades, conceptual metaphor theory (CMT) of cognitive linguistics (see, e.g., Fusaroli & Morgagni, 2013; Gibbs, 1994; Kövecses, 2005, 2010, 2015; Lakoff & Johnson, 1999, 2003; Lakoff & Turner, 1989; see also Gibbs, 2011, 2013 for its evaluations) has inspired, to varying degrees, a considerable amount of research on metaphors for

morality in other disciplines: for instance, medical and religious studies (e.g., Diekema, 1989; Howe, 2006; Massengill, 2008), but especially philosophy (e.g., Cady, 2005; Campbell, 2013; Courte, 1998; Fesmire, 1999; Klaassen, 1998; Warmick, 2004) and psychology (e.g., Haidt, Koller, & Dias, 1993; Haidt, Rozin, MaCauley, & Imada, 1997; Landau, Meier, & Keefer, 2010; McAdams, Albaugh, Farber, Daniels, Logan, & Olson, 2008; Meier & Robinson, 2004; Meier, Robinson, & Clore, 2004; Meier, Robinson, Crawford, & Ahlvers, 2007; Sheikh, Botindari, & White, 2013; Sherman & Clore, 2009). According to Kövecses (2010), morality is one of the common target domains of conceptual metaphors.

With respect to the experiential grounding of the moral metaphor system, it has been observed that the range of possible metaphors for morality is fairly restricted, and all of them appear to be grounded in our experiences of well-being, especially physical well-being (Lakoff & Johnson, 1999). Thus, for instance, morality and immorality are conceptualized in terms of "light" and "darkness," a moral or immoral person is conceptualized as being "healthy" or "sick," or "strong" or "weak," and the moral character of a person can be "high" or "low," or "pure" or "polluted" (Johnson, 1993; Lakoff & Johnson, 1999). Lakoff and Johnson's (1999) findings come from their study of the moral metaphor system as manifested in the English language. The question that comes along with them is whether or not conceptual metaphors for morality found in English are culture-specific, widespread, or universal. Lakoff and Johnson (1999, p. 311) note that, since the source domains of these conceptual metaphors cluster on "basic human experiences of well-being," they "define a large part of the Western moral tradition" and, furthermore, "they are not unique to occidental culture" and some of them may very well be candidates for universals. Nevertheless, as they point out, the "cross-cultural research has not been done yet to determine whether any of them are truly universal" (p. 312).

Despite the growing body of conceptual metaphor studies in the field of cognitive linguistics, it seems, research into metaphorical understanding of morality in languages other than English has been surprisingly scarce, in contrast with studies of, for instance, emotion and time metaphors. The present study represents part of my attempt to contribute a Chinese perspective on moral imagination through metaphor. To this end, my primary task is to discover the "range" of moral metaphors (Kövecses, 2010, pp. 183–184) in Chinese. In collecting data, I mainly used the CCL corpus (Center for Chinese Linguistics at Peking University).

My preliminary analysis of the linguistic data shows that a complex moral metaphor system does exist in Chinese. This system consists of some subsystems as clusters of conceptual metaphors whose source concepts are from domains of physical experiences. For the present study, I focus on one particular cluster of metaphors grounded especially in our visual experiences, specifically in terms of color, light, clarity, cleanness, and purity. Thus, the source concepts are related to and coherent with one another in our perceptual experiences, and these conceptual metaphors have emerged from our everyday embodied experience in the physical surroundings. Table 1 lists the source concepts in pairs for the contrast between MORAL and IMMORAL as their target concepts, along with the corresponding conceptual metaphors to be studied in this article.

In Table 1, apparently, the source concepts cluster together as some related and contrastive visual categories in our perceptual experience. They are closely linked in our visual experience in two ways. First, while black and white are two extreme colors in stark contrast with each other, the rest of the concepts are related to color in a dual way. Thus, a color can be "light" or "dark," "clear" or "murky," "clean" or "dirty," "pure" or "impure." Furthermore, the colors

Targets	MORAL WHITE	IMMORAL	Conceptual Metaphors		
Sources		BLACK	"MORAL IS WHITE"	"IMMORAL IS BLACK"	
	LIGHT	DARK	"MORAL IS LIGHT"	"IMMORAL IS DARK"	
	CLEAR	MURKY	"MORAL IS CLEAR"	"IMMORAL IS MURKY"	
	CLEAN	DIRTY	"MORAL IS CLEAN"	"IMMORAL IS DIRTY"	
	PURE	IMPURE	"MORAL IS PURE"	"IMMORAL IS IMPURE"	

TABLE 1
The Cluster of Moral Metaphors Grounded in Visual Experiences

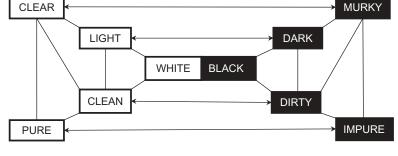


FIGURE 1 Conceptual Network of the Source Concepts for the Cluster of Moral Metaphors.

black and white are central to the remaining categories of visual experience in a contrastive manner. Therefore, white is a prototypical example of a "light" or "clear" color, a color that brings things to "light and clarity," whereas black is a prototype of a "dark" or "murky" color, a color that covers things up and hides them "in the dark" or "in murky mystery." Also, while white is seen as the color of "cleanness," "cleanliness," and "purity," black is associated with dirtiness, contamination, or pollution that is "impure" in nature. It is in such experiential coherence that the cluster of moral metaphors in Table 1 is grouped together.

To illustrate the experiential coherence among the visual categories, Figure 1 shows how the source concepts hang together in a conceptual network with its elements relating to and contrasting with one another. The lines with arrows on both ends indicate contrastive relations, and those without arrows represent experiential links that can be correlative or implicative in relationship.

In what follows, I will first show how this cluster of conceptual metaphors is manifested in Chinese. I will then shift to English to look at the same cluster of moral metaphors for a comparative perspective. After that I will conduct a further analysis of the cluster of metaphors with a Decompositional Approach to Metaphorical Compound Analysis, or DAMCA for short (see Yu, 2011a, 2011b), before reaching some conclusions.

#### THE CLUSTER OF MORAL METAPHORS IN CHINESE

As characterized by Lakoff (1993, pp. 210–211), each conceptual metaphor is a fixed pattern of conceptual correspondence across conceptual domains. Such conceptual mappings are realized

on two different levels of language use. At the lexical level, source domain lexical items may or may not have a conventionally lexicalized sense in the target domain. Even if they do not, the knowledge structures associated with them can still be mapped by conceptual metaphors onto the target domain as inference patterns at the level of discourse. Table 2 lists lexicalized moral senses of some words that express the source concepts in Table 1 in three popular Chinese dictionaries. The listed words are meant to be best examples because there are other words that encode the same or similar concepts in Chinese. Provided in the parentheses are literal translations, followed by natural translations. I used XSDHYDCD, an authoritative Chinese-English dictionary, for the translations.

Notably, for instance, the moral senses of  $b\acute{a}i$  ("white") are not listed in the first two dictionaries, but this does not mean that the term for the color white does not have a conventional moral sense in Chinese. The dictionaries always define  $b\acute{a}i$  as the "opposite" of  $h\bar{e}i$  ("black") and therefore its moral senses are implied as "opposites" of those of  $h\bar{e}i$  that are explicitly listed. This will become clear as we turn to examples from real-life discourses that instantiate the cluster of conceptual metaphors in Table 1.

#### "MORAL IS WHITE" AND "IMMORAL IS BLACK"

As is claimed, black and white are "perceptual symbols" in contrast with each other in a moral sense (Sherman & Clore, 2009), while the remaining source concepts in Table 1 are aligned with these two in our moral cognition as well as in our perceptual experience (see also Daniel, 2010; Klaassen, 1998; Meier et al., 2004; Meier et al., 2007; Menéndez-Viso, 2009; Williams & Roberson, 1967). In Chinese, the color terms \$h\bar{e}i\$ ("black") and \$b\hat{a}i\$ ("white") form one compound word that can mean "right and wrong" or "good and evil." For instance, 混淆黑白 \$h\hat{a}nxi\hat{a}o\$ \$h\bar{e}ib\hat{a}i\$ ("mix-up black-white") means "confound/confuse right and wrong." It is worth mentioning that there is a mismatch in conventional order between "black and white" on the one hand and "right/good and wrong/evil" on the other: namely, BLACKis mapped onto WRONG/EVIL whereas WHITEonto RIGHT/GOOD. In (1) below are two sentential examples:

- (1) a. 我们经常说,人生有"白道",有"黑道"。 We often say that there is a "white way" and a "black way" in life.
  - b. 可是,眼下也有部分人渐渐地开始了道德是非的混淆、伦理**黑白**的困惑。 However, at present some people are starting, gradually, to confound moral right and wrong, and to confuse ethical **black and white**.

Note that (1a) also instantiates the "LIFE IS A JOURNEY" metaphor, which entails a "life path" mapped onto one's "way" of life. This "life path" can be either "white" (白道 báidào ["white-way"]), i.e., moral and legal, or "black" (黑道 hēidào ["black-way"]), i.e., immoral or illegal. In (1b), "black and white" (黑白 hēibái ["black-white"]) simply refers to good and bad/evil in a moral sense.

It has been noted in terms of affective meanings of color that black is bad but strong whereas white is good but weak (Adams & Osgood, 1973; see also MacLeod, 1991). In daily life, therefore, a drop of black paint can discolor white paint more readily than the reverse; its extension in ethical life is that a single immoral act can counteract an otherwise exemplary reputation, whereas a single moral act cannot compensate for a life of questionable behavior (Sherman &

TABLE 2
Lexicalized Moral Senses of the Relevant Words in Three Chinese Dictionaries

	Conventionally Lexicalized Moral Senses					
Lexical Items	HYDCD	XDHYCD	XXDHYCD			
白 bái ("white")			纯洁 ("pure-clean"), pure and honest; with a spotless reputation 清白 ("clear-white"), pure; clean; immaculate			
黑 hēi ("black")	坏 ("bad"), bad 狠毒 ("ruthless-poisonous"), vicious; wicked; venomous	坏 ("bad"), bad 狠毒 ("ruthless-poisonous"), vicious; wicked; venomous	坏 ("bad"), bad			
明 míng ("light")	心地光明 ("heart-bright"), pure-hearted	光明 ("light-bright"), honest; open-hearted; guileless; aboveboard	心地光明 ("heart-bright"), pure-hearted 良好 ("fine-good"), good			
暗 àn ("dark")	黑暗 ("black-dark"), corrupt; evil	黑暗 ("black-dark"), corrupt; evil				
清 qīng ("clear")	公正 ("fair-upright"), fair; just; impartial 清白("clear-white"), pure; clean; immaculate	公正 ("fair-upright"), fair; just; impartial 廉洁 ("honest-clean"), honest and clean	清高 ("clear-high"), morally superior 清白 ("clear-white"), pure; clean; immaculate 清正 ("clear-upright"), honest and upright			
浊 zhuó ("murky")	贪鄙 ("corrupt-low"), impudently greedy; avaricious and despicable 卑污 ("low-dirty"), despicable in character; evil-minded		品行坏 ("conduct-bad"), bad in moral conduct; of loose morals 卑劣 ("low-inferior"), base; mean; despicable			
洁 jié ("clean")	洁白 ("clean-white"), pure and innocent 清白不污 ("clear-white not-dirty"), immaculate and clean	纯洁 ("pure-clean"), pure and honest; with a spotless reputation 洁白 ("clean-white"), pure and innocent	操行清白("behavior clear-white"), of immaculate behaviour 品德高尚 ("moral-character high-value"), of noble moral character			
污 wū ("dirty")	卑鄙 ("low-low"), base; mean; contemptible; despicable 卑下 ("low-down"), base; lowly 淫乱 ("lewd-messy"), loose in sexual relations	不廉洁 ("not honest-clean"), dishonest and unclean	污秽 ("dirty-dirty"), filthy 卑污 ("low-dirty"), despicable in character; evil-minded 腐败 ("rotten-decayed"), decadent; corrupt			
纯 chún ("pure")	美 ("beautiful"), good 善 ("good"), good (vs. evil) 淳厚 ("honest-thick"), simple and honest		美 ("beautiful"), good 善 ("good"), good (vs. evil) 纯正 ("pure-upright"), pure and upright			
不纯 <i>bùchún</i> ("not pure"), impure	None of the three dictionarie ZXHYCD, does: 不纯正	es lists this as a single lexical it ("not pure-upright"), impure, If morality is impure, people v	下纯净 ("not pure-clean"), impure,			

Clore, 2009). The linguistic realization of this asymmetric status between black and white is that, as shown in Table 2,  $h\bar{e}i$  ("black") has extended moral and legal senses (e.g., "unlawful, wicked, evil, vicious") listed in all three Chinese dictionaries whereas  $b\dot{a}i$  ("white") has them listed in only one. Thus, for instance,  $h\bar{e}i$  occurs in a large number of expressions suggesting immorality or illegality that do not have antonymous  $b\dot{a}i$  expressions for morality or legality. The following are some examples of black-immoral/illegal expressions:

```
(2)
     a.
           黑暗
                    hēiàn (black-dark) "dark; corrupt, evil, reactionary"
           黑帮
                    hēibāng (black-gang) "sinister gang; gangster"
     b.
           黑车
     c.
                    hēichē (black-vehicle) "unlicensed taxi; car without registration"
     d.
           黑点
                    hēidiǎn (black-spot) "blemish, smirch, disgrace"
     e.
           黑店
                    hēidiàn (black-inn) "inn run by outlaws"
           黑话
                    hēihuà (black-speech) "(thieves') cant; (bandits') argot"
           黑货
                    hēihuò (black-goods) "contraband (goods); smuggled goods"
     g.
           黑客
     h.
                    hēikè (black-guest) "hacker"
     i.
           黑名
                    hēimíng (black-name) "bad reputation"
           黑幕
     j.
                    hēimù (black-curtain) "(sinister) inside story; shady deal"
           黑钱
     k.
                    hēiqián (black-money) "money obtained by unlawful means (e.g., bribery, etc.);
                    ill-gotten money; 洗黑钱 "money laundering"
           黑市
                    hēishì (black-market) "black market"
           黑手
     m.
                    hēishŏu (black-hand) "evil backstage manipulator"
     n.
                    hēixīn (black-heart) "black heart; evil mind"
           黑账
     o.
                    hēizhàng (black-account) "secret account; private record"
           抹黑
                    mŏhēi (smear-black) "blacken someone's name; throw mud at; bring disgrace on"
           涉黑
                    shèhēi (involve-black) "be involved in underworld activity"
     q.
           打黑
                    dăhēi (beat-black) "fight the underworld immoral or illegal forces"
                    hēimíngdān (black-name list) "blacklist"
     t.
           黑势力
                    hēishìlì (black forces) "underworld elements and forces"
                    hēishèhuì (black-society) "underworld"
```

In contrast, other than the two examples in (1) above, *bái* ("white") is found only in the idiom 白璧无瑕 *báibì wúxiá* ("white-jade without-flaw"), which means "flawless white jade" literally, but can mean "impeccable moral integrity" in a metaphorical sense. In sum, the linguistic data suggest that there is an asymmetry in the linguistic realization of the conceptual mappings between WHITE and MORAL and BLACK and IMMORAL. That is, the linguistic manifestation is much more robust for the black-immoral link than that for the white-moral link. It seems that the latter is manifested especially when the color term for white is used contrastively in collocation or conjunction with that for black, as in examples (1a) and (1b).

#### "MORAL IS LIGHT" AND "IMMORAL IS DARK"

In our visual experience, light and darkness are correlated closely with the colors white and black. Thus, white is the extreme of a light color in contrast with black as the extreme of a dark color. Also, "white light" and "black dark" alternate saliently in our cyclic everyday life. It has been argued from the cognitive-linguistic point of view that, with extension to and reinforcement

from WHITE and BLACK, LIGHT and DARK are biologically rooted image schemas that are often metaphorically elaborated and mapped onto GOOD and BAD, and "GOOD IS LIGHT" and "BAD IS DARK," as a pair of conceptual metaphors, are richly manifested not only in language, but in visual art as well (Forceville & Renckens, 2013). It is due to the experiential correlation between LIGHT and GOOD and between DARK and BAD that experimental studies show that people automatically assume bright objects are good whereas dark objects are bad, and that positive evaluations primed light perceptual judgments while negative evaluations primed dark perceptual judgments (see Meier et al., 2004; Meier et al., 2007).

In Chinese, the contrast between LIGHT and DARK is encoded by a pair of antonyms, míng ("light; bright") and àn ("dark; dim,") among others. The connection between LIGHT and MORAL is found in one of the ancient Confucian classics, The Great Learning (大学 dàxué), where it is said that the purpose of great learning is 明明德 míng míngdé (literally "to brighten/lighten the bright/light virtue"), i.e., "to promote high moral character." The moral sense of míng and àn as a pair of antonyms is also illustrated by the saying 明人不做暗事 míngrén bù zuò ànshì (literally "a light/bright person does not do dark things"), which means "An honest person will never do anything underhand." In this saying, a "light/bright person" is morally good whereas "dark things" are morally bad. Furthermore, the two antonyms can each combine with other words to form compounds or idioms. For instance, 光明 guāngmíng ("light-bright"), light; bright; aboveboard, and 黑暗 hēiàn ("black-dark"), dark; corrupt; evil, both have their extended moral senses, as illustrated in (3):

- (3) a. 越在黑暗中越做光明的事,这就是道德教育。
  The more one is in the dark (lit. "black-dark"), the more one does bright (lit. "light-bright") things, and that is ethical education.
  - b. 光明与黑暗不能并存,正义与邪恶不能兼容。
    Light (lit. "light-bright") and dark (lit. "black-dark") cannot coexist, and justice and evil are not compatible with each other.

As in the two examples here, the purpose of ethical education is to teach people to do "light" things in a "dark" environment, and "light" and "dark" forces always clash with each other in a zero-sum fashion. In addition, the Chinese words  $\beta y \bar{y} n$  and  $\beta y \bar{y} n g$ , which originally represent the two natural forces in the law of unity of opposites in ancient Chinese philosophy, are also used in a moral context. The former refers to the "seamy" side, and the latter the "sunny" side of things. See the following examples:

- (4) a. 该电影揭露了学术界中不讲道德、追逐名利的**阴暗**现象。

  The film exposed the **gloomy and dark** (or **seamy**) phenomena of paying no attention to morality and of hankering after fame and gain in the academic circles.
  - b. 他看透了口头道德的虚伪和官僚们**阴阳**两面的真相。

    He has seen through the hypocrisy of morality in words only and the true looks of the bureaucrats with their **seamy** and **sunny** sides.

When, in (4a), the phenomena in a particular social community look "gloomy and dark" (阴暗  $y\bar{n}an$  ["gloomy-dark"]), like a gloomy and dark day, it means this community is corrupt with ethical problems. In (4b), those bureaucrats are hypocritical in that they are double-faced: their "sunny" (阳 yang) side looks moral, but their "seamy" (阳  $y\bar{n}$ ) side is really immoral.

#### "MORAL IS CLEAR" AND "IMMORAL IS MURKY"

As a pair of concepts, CLEAR and MURKY refer to the degrees of transparency, which is possible only in light and impossible in the dark. Again, black and white are respectively murky and clear colors to the extreme. In Chinese, the concepts of CLEAR and MURKY are mainly encoded by a pair of antonyms: 清 q̄ng ("clear") and 浊 zhuó ("murky"), both of which originally describe liquids that are clear or murky in a visual sense. When these two words form a compound, 洁 q̄ngzhuó ("clear-murky"), its meaning extends into the moral domain, meaning "pure and impure; good and evil" (cf. 1b). Thus, the idiomatic expression 清浊同流 q̄ngzhuó tóngliú ("clear-murky together-flow"), literally "clear and murky water flows together," means "the good and the evil are mixed." These two words also each combine with other words to form other compounds with a metaphorical moral sense.

- (5) a. 如果可能的话,让他涤尽心灵上的邪恶,成为道德上**清白**的人。
  If possible, let him wash away the evil in his heart, and become a morally **clean** (lit. "**clear** and white") person.
  - b. 评议对提倡**清廉**高洁的道德风尚起到一定的作用。 Appraisals produced an effect on the promotion of the **honest and upright** (lit. "**clear-honest"**), and noble-and-unsullied (lit. "high-clean") social ethics.

In (5a), the compound word is 清白  $q\bar{n}ngb\acute{a}i$  ("clear-white"), which means "pure; clean; immaculate" in a moral sense. An evil, immoral person is "dirty" in the heart, and only when the heart is "washed clear and white" can this person become moral again. In (5b), the compound is 清廉  $q\bar{n}ngli\acute{a}n$  ("clear-honest"), used to describe someone who is morally honest and clean. The two examples below involve  $zhu\acute{o}$  ("murky; muddy"), the opposite of  $q\bar{n}ng$  ("clear"), in the compounds.

- (6) a. 腐败分子把许多正直善良的人的心灵世界也搅得越来越阴暗**混浊**。

  Corrupt elements stir the mental world of many honest and good people, causing it to be darker and **muddier** (lit. "**mixed and murky**").
  - b. 他们所倡导的是孔孟的仁义道德,而真心去鼓励的是**污浊**与无耻。 What they promoted was virtue and morality of Confucius and Mencius, but what they really encouraged was **filth** (lit. **"filthy and muddy/murky"**) and shamelessness.

In (6a) and (6b), both 混浊 hùnzhuó ("mixed-murky") and 污浊 wūzhuó ("filthy-muddy") involve zhuó("murky; muddy") and have the meaning of immorality in contrast with the compounds in (5) which involve qīng "clear." In (6a), the hearts and minds (or "mental world") of honest and good people originally contain "clear water," which is however so stirred up by the corrupt people that it is losing its "transparency" and "clarity" and becoming "muddier and muddier." As in (6b), "filth and mud" are the opposites of virtue and morality.

#### "MORAL IS CLEAN" AND "IMMORAL IS DIRTY"

The clean-dirty contrast is a major source domain for moral metaphors (see, e.g., Johnson, 1993; Lakoff & Johnson, 1999; Lee & Schwarz, 2010; Lizardo, 2012; Sherman & Clore, 2009; Williams

& Roberson, 1976). Such metaphors are grounded in our embodied experience of physical clean-liness. For instance, experimental studies show that people tend to physically cleanse their "dirty" body parts believed to have been involved in immoral acts or in contact with morally tainted people or objects, and that moral judgments are sensitive to and affected by physical cleanliness manipulations (e.g., Haidt, 2001; Lee & Schwarz, 2010; Schnall, Benton, & Harvey, 2008; Zhong & Liljenquist, 2006). In a cognitive-linguistic study that attempts an image-schematic characterization of dirt and cleanliness metaphors applied to moral reasoning and moral cognition, DIRT is conceptualized as a substance in a "container" where it does not normally belong, whereas CLEAN is conceptualized as that substance being kept free from the "container" (Lizardo, 2012).

- (7) a. 市长就必须干净干事,堂堂正正做人。
  A mayor should do things **cleanly**, and be a decent and upright human being.
  - b. 一个人得经过艰巨的道德斗争,才能使自己**洁净**。

One has to go through a hard moral struggle before one can make oneself **clean** (lit. "**clean-clean**").

As in (7a), the primary moral standard of mayors, who have much power in a Chinese context, is that they should act "cleanly" (干净  $g\bar{a}njing$ ), i.e., be an incorruptible official. This is not easy, as can be seen in (7b), because even for an ordinary person who has no power, making oneself "clean" (洁净  $ji\acute{e}jing$  ["clean-clean"]) means "a hard moral struggle." In the following examples, the relevant compound words consist of a "clean" word and another one.

- (8) a. 你要恪守新闻工作者职业道德准则,**廉洁**自律。
  You should hold onto the professional moral codes for journalists, and be **honest and clean** and self-disciplined.
  - b. 有最洁白的良心,跟全没有良心或有最漆黑的良心,效果是相等的。 It is of equal effect if one has a most **clean-and-white** conscience (i.e., is morally good) and if one has no conscience at all (i.e., is conscienceless) or has a pitch-black conscience (i.e., is immoral or evil).

The relevant compounds are 廉洁 *liánjié* ("honest-clean"), incorruptible in (8a), and 洁白 *jiébái* ("clean-white"), pure white in (8b). In (8a) journalists have to be "clean" to adhere to the ethical principles of their profession; in (8b) one's conscience can be "clean and white" or "pitch black," i.e., "dirty," in its moral contrast. The examples in (9) below all involve immoral-dirty mappings as instantiated in some compounds.

- (9) a. 我要主动积极改造,用自己的汗水洗刷心灵深处的**污垢**。

  I want to reform myself initiatively and actively, washing off with my own sweat the **dirt** and filth in the depths of my heart.
  - b. 作者竟是一个毕生钻在最无耻、最卑鄙**龌龊**的泥沼和最**污秽**的泥浆里的家伙! Unexpectedly, the author is a guy who has for the whole life crouched in the most shameless, basest and **dirtiest** mire and the **foulest** (lit. "**dirtiest and filthiest**") mud!
  - c. 一个人如果在道德情操方面是**肮脏**的,那么他就是一个卑鄙讨厌的人。 If a person is **filthy and dirty** in morality and sentiment, then he is a base and disgusting person.

As in (9a), someone with moral problems has "dirt and filth" (污垢 wūgòu ["dirt-filth"]) in the depths of the heart, which however can be "washed away with one's own sweat." In (9b) there are two "dirty" words (污秽 wūhuì ["dirty-filthy"], foul, and 龌龊 wòchuò ["dirty"]). The morally bad guy actually "crouched in the dirtiest mire and foulest mud" for the whole life. In (9c) 肮脏 āngzāng ("filthy-dirty"), dirty, is another common "dirty" word, and a person's ethics and sentiment are "filthy and dirty" if this person is problematic morally.

Obviously, the source concepts CLEAN and DIRTY are related to those discussed previously in a coherent way. While white is the clean color, or the color of cleanliness, what is dirty is often said to be black (e.g., "hands **black** with grime"), i.e., very dark in color. Also, for instance, water clear in light is perceived as clean whereas murky water is associated with contamination or pollution that is essentially dirty. In a similar vein, CLEAN and DIRTY are related with PURE and IMPURE, to which we now turn.

#### "MORAL IS PURE" AND "IMMORAL IS IMPURE"

The concept of PURE or IMPURE is not necessarily a visual one, but instead refers to a state of being mixed or unmixed in material, substance, quality, character, etc. Whether something is pure or impure, however, is often noticeable visually. Therefore, both color and light can be pure or impure, and what is clear or clean is seen as pure and what is murky or dirty is considered as impure. In our moral cognition, physical purity serves as the experiential grounding for moral purity, and moral impurity is a result of moral taint, contamination, or pollution (e.g., Daniel, 2010; Howe, 2006; Johnson, 1993; Lakoff & Johnson, 1999; Landau et al., 2010; Lee & Schwarz, 2010; Lizardo, 2012; McAdams et al., 2008; Schnall et al., 2008; Sherman & Clore, 2009; Zhong & Liljenquist, 2006).

The pair of concepts PURE and IMPURE is represented by 纯 *chún* ("pure") and its negative form 不纯 *bùchún* ("impure") in Chinese, as illustrated by the examples in (10).

- (10) a. 作家在道德上应该是纯洁的人。
  - Writers should be ethically pure and clean people.
  - b. 纯净的心灵才能出纯净的文字。
    - Only pure and clean hearts can produce pure and clean language.
  - c. 奴隶社会的道德已从原始社会"纯朴道德的顶峰"跌落了下来。
    - The ethics of slave society had already fallen off "the peak of the **pure and simple** ethics" of primitive society.
  - d. 近年来出现了道德滑坡、党风**不纯**、世风恶化。
    - What happened in recent years are: moral landslide, the party ethics becoming **impure**, and social ethics deteriorating.

As in (10a–c), chún ("pure") combine with other components to form compounds that are primarily used in a moral sense. For instance, it is important that writers be morally "pure and clean" (纯洁 chúnjié ["pure-clean"]; 10a) because only "pure and clean" (纯净 chúnjìng ["pure-clean"]) hearts can produce "pure and clean" language (10b). It is suggested in (10c) that people are generally "pure and simple" (纯朴 chúnpǔ ["pure-simple"]) staying on the "moral peak" in a primitive society, but morality "falls" from that height in a slave society. The last sentence in (10d) is an example in which the negative form 不纯 bùchún ("not-pure"), impure, is used. When the party

ethics is "impure," there is a "moral landslide" in terms of social ethics. In Chinese culture, the lotus flower has long been regarded as a symbol of moral purity because it remains pure and clean even though it grows out of the mire that is black, muddy, and dirty.

In summary, this section has illustrated the linguistic manifestation in Chinese of the moral metaphors whose source concepts mainly cluster in the domain of visual experience. A prominent feature is that the source concepts are usually lexicalized as compound words, of which many consist of two elements that instantiate two different source concepts such as "black and dark" or "clear and white." The next section will switch to English so as to provide a comparative perspective on the study.

#### A COMPARATIVE PERSPECTIVE FROM ENGLISH

This section looks at the same cluster of moral metaphors in English for the purpose of a comparative perspective. Although there is a substantial body of literature on moral metaphors in English (see the references in the preceding sections), relatively few such studies fall in the field of linguistics and none of them have looked at the same cluster of metaphors as a coherent subsystem of the moral metaphor system. Thus, for instance, cognitive-semantic studies of morality have focused on the systematic manifestation in English of the moral accounting metaphor, the family model metaphor, moral strength metaphor, the moral purity or dirtiness metaphor, among others (e.g., Johnson, 1993; Lakoff, 2002; Lakoff & Johnson, 1999; Lizardo, 2012). My study here can by no means be comprehensive; instead, I have a simple goal in mind, i.e., to see if the conceptual metaphors in Table 1 are manifested in English as they are in Chinese. I hope to set up another viewpoint for cross-linguistic and cross-cultural comparison, which is needed in cognitive-linguistic research on metaphor because it can establish perspectives unavailable otherwise (see, e.g., Ansah, 2014; Caballero & Díaz-Vera, 2013a, 2013b; Díaz-Vera & Caballero, 2013; Ibarretxe-Antuñano, 2013; Kövecses, 2005; Sharifian, Dirven, Yu, & Niemeier, 2008; Yu, 1998).

Table 3 provides the conventionally lexicalized moral senses of the relevant lexical items in three English dictionaries: *Webster, Oxford*, and *Longman*. As shown in this table, the moral senses of the English lexical items involved are listed in all three dictionaries with two exceptions, namely, (a) *light* has no moral sense listed in any of the three dictionaries, and (b) *murky* has a moral-related sense, "shameful," listed in *Longman* only. Having no conventional moral sense listed under *light* in the dictionaries does not mean that there is no conceptual correspondence between LIGHT and MORAL. Again, its moral senses can be activated by being the antonym of *dark*, whose moral senses such as "evil" are conventionally lexicalized in the target domain. Such activation takes place at the level of language use in actual discourse, mapping the inference patterns of the source onto the target domain.

At the level of language use, as I have found, all of the English words listed in Table 3 have their moral senses realized, to varying degrees and with various emphases, in actual discourses, instantiating the cross-domain mappings of the conceptual metaphors in Table 1, as illustrated by the examples from COCA (Corpus of Contemporary American English, Brigham Young University).

TABLE 3
Lexicalized Moral Senses of the Relevant Words in Three English Dictionaries

	Conventionally Lexicalized Moral Senses				
Lexical Items	WNCD	CODCE	LDCE		
white	as a symbol of purity; free from moral impurity	innocent; unstained; of harmless kind	showing moral goodness		
black	thoroughly sinister or evil;	deadly; sinister; wicked; hateful	evil		
light					
dark	arising from or showing evil traits or desires; evil	evil; atrocious	evil		
clear	free from guile or guilt; innocent	lustrous; unblemished	free from guilt or blame; untroubled		
murky			shameful		
clean	free from moral corruption or sinister connections of any kind	absence of corruption or bribery; absence of guilt	morally or sexually pure; honorable; free from guilt		
dirty	base; unsportsmanlike; indecent	obscene, lewd; sordid, mean, despicable; ill-gotten	(of thoughts or words) concerned with sex in an unpleasant way		
pure	free from moral fault or guilt	not corrupt; morally undefiled, guiltless, sincere; sexually undefiled, chaste	free from evil; without sexual thoughts or experience		
impure	lewd, unchaste	unchaste	morally bad; of bad sexual habits		

- (11) a. "The Catholic Church, or any other church, has moral absolutes: black and white; and good and bad; right and wrong; evil—bad, good; whatever."
  - b. "I'm of a generation that learned to think in black and white." "No moral shadings?"
- (12) a. "... there's two forces within all of us. There's the good side, the **light** side, the side that's giving and caring and loving, and there's—the **dark** side, the negative side, the opponent."
  - b. "Only then can the church regain its moral authority and voice to be a **light** in a world that is often very **dark**."
- (13) a. "Every generation has its dirty and clean versions of popular music."
  - b. "... these female sex workers indicate that they operate with a finely grained moral system of respectability. ... Many of them still conform to the gender ideals of Puerto Rican society by cultivating intimacy and trust with male clients, by prioritizing their identity and duties as mothers, or simply by maintaining distinctions between clean and dirty sex or clean and dirty clients."
- (14) a. "In addition, students will need to act as people of moral character, good judgment, and clear conscience."
  - b. "He's drawn into the murky underworld of this secret killing cult and he has to decide if good is going to triumph over evil."

(15) a. "Those who are outraged are **pure**. Moral **purity** is the new prerequisite for outrage, it seems."

b. "He stabbed her twenty-three times in a parking lot in Hamburg, Germany, because of her alleged impure moral conduct."

As shown in (12a) and (12b), even though the English word *light*, noun or adjective, has no lexicalized sense in the domain of morality according to the three English dictionaries, its moral sense can be activated at the level of discourse, presumably in response to the underlying force of the metaphor "MORAL IS LIGHT," in contrast to "IMMORAL IS DARK," in our conceptual system. Also, it is worth noting that *clear*, which primarily means "transparent" in a visual sense, is often used to mean "free from misinterpretation or doubt" in a mental sense, triggered by the conceptual metaphor "KNOWING IS SEEING." Its moral sense is usually limited to the collocation "clear conscience" as in (14a). Its three possible antonyms, murky, muddy, and turbid, are chiefly used in a mental rather than moral sense too, but muddy does have a lexicalized moral sense, "morally impure," listed in WNCD.

Example (13b) is interesting in that "sex workers," who are perceived as "dirty" altogether in many cultures, act according to a "moral system" in Puerto Rican society, where morality and immorality are distinguished at the level of "clean" versus "dirty" sex or "clean" versus "dirty" clients. This example shows that moral conception is relative to cultural contexts, and to the metaphors people live by.

#### **FURTHER ANALYSIS**

The linguistic studies above have led to the qualitative findings summarized in Table 4. That is, the source concepts of the moral metaphors in Table 1 are encoded by the corresponding lexical items in two languages. As we can see in Table 4, all of those lexical items except English *light* have lexicalized moral senses, which are listed in at least one of the three dictionaries in their

TABLE 4
Distribution of Lexicalized and Extended Moral Senses of the Chinese and English Words Encoding the Source Concepts of the Moral Metaphors

	Chinese			English		
Source Concepts	Lexical Items	Lexicalized Moral Senses	Extended Moral Senses	Lexical Items	Lexicalized Moral Senses	Extended Moral Senses
WHITE	É bái	X	X	white	X	X
BLACK	黑 <i>hēi</i>	X	X	black	X	X
LIGHT	明 míng	X	X	light		X
DARK	暗 àn	X	X	dark	X	X
CLEAR	清 qīng	X	X	clear	X	X
MURKY	浊 zhuó	X	X	murky	X	X
CLEAN	洁 jié	X	X	clean	X	X
DIRTY	污 wū	X	X	dirty	X	X
PURE	纯 chún	X	X	pure	X	X
IMPURE	不纯 bùchún	X	X	impure	X	X

respective language. Furthermore, all of those lexical items, with no exception, have extended moral senses established in actual discourse. This means that the cluster of conceptual metaphors in Table 1 is applicable, in its entirety, in both Chinese and English. It needs to be pointed out again that these findings are qualitative, disregarding the varying degrees to which the conceptual metaphors are manifested in each language. For instance, as mentioned above, the pair "MORAL IS CLEAR" and "IMMORAL IS MURKY" is apparently manifested more marginally in English, where CLEAR and MURKY seem to play a more central role in the metaphorical conceptualization of mental comprehension (i.e., "KNOWING IS SEEING" and "KNOWABLE IS SEEABLE"). Studies that quantify differences in linguistic manifestation among the conceptual metaphors in each language as well as between the two languages are yet to be conducted.

Regardless of whatever differences there might be in linguistic manifestation, Chinese and English appear to exhibit a high degree of similarity, at the conceptual level, with respect to the applicability of the cluster of moral metaphors in Table 1. The question is why this is the case. The answer lies at least partially in the theoretical construct of embodiment in cognitive science (see, e.g., Gibbs, 2006). That is, our moral cognition arises partially through metaphor from our embodied experience in the physical world. Of course, embodiment is always situated in a specific sociocultural context, and the interaction between bodily experience and cultural interpretation of such experience determines the selection of metaphors (see, e.g., Gibbs, 1999; Kövecses, 2005, 2010, 2015; Yu, 2015). Thus, for instance, we cannot predict whether CLEAR and MURKY will serve as source concepts for moral metaphors in a particular culture. We can, however, hypothesize that if they are indeed utilized, CLEAR would be mapped onto MORAL and MURKY onto IMMORAL based on our embodied as well as cultural experience that causes us to feel positive or negative about aspects of our physical surroundings. In moral imagination, similar cultural interpretation of certain related and contrastive categories in our visual experience as positive or negative contributes to the commonality between Chinese and English in the cluster of conceptual metaphors under study. Given that Chinese and English are unrelated languages, the results of the study lends a plus to the candidacy of at least some of the metaphors in the cluster as being widespread or even universal. Which is the case remains to be studied in more languages and cultures.

In my analysis, I treat the color concepts BLACK and WHITE as central to the source concepts of the conceptual metaphors in the cluster (see Figure 1). This is because these two concepts both perceptually and culturally "highlight" the contrast between the two groups of source concepts respectively for MORALITY and IMMORALITY. First, the two colors form the clearest contrast that best represents the moral contrast visually. More importantly, the two concepts are culturally loaded with symbolic meanings so that they prototypically define and characterize the remaining concepts that surround them. It is worth noting that the contrast between WHITE and BLACK as representing the positive and the negative is not completely cultural. For instance, people would not feel comfortable living in a house with its interior painted entirely in black, but would not have the same negative feeling if the interior is painted all white, regardless of the culture to which they belong. It is common sense that black absorbs light while humans need light.

Finally, I would like to discuss the status of the conceptual metaphors in the cluster. My first question is: Are they primary or complex metaphors (e.g., Grady, 1997a, 1997b; Lakoff & Johnson, 1999, 2003)? My answer is that they are all complex metaphors. Thus, for instance, "MORAL IS LIGHT" can be taken apart, with a decompositional approach to metaphor analysis (Yu, 2011a, 2011b), as composed of a proposition and a primary metaphor as in (16).

(16) "MORAL IS LIGHT" (Complex metaphor)
a. "MORAL IS GOOD FOR PUBLIC WELL-BEING" (Proposition)
b. "GOOD IS LIGHT" (Primary metaphor)

Here, (16a) is a literal proposition that is the major component of the concept of MORAL. This component itself contains two key elements: (a) GOOD (vs. BAD), which represents a value judgment, and (b) PUBLIC WELL-BEING, which represents the scope to which the judgment is made. In other words, something is "moral" only when it is "good" for the "pubic well-being" (vs., e.g., "one's self well-being"). What is of interest to the metaphorical analysis under discussion is that the first key element GOOD is understood metaphorically in terms of something crucial in our physical well-being, LIGHT. Thus, (16b) is a primary metaphor that is, by definition, based on our experiential correlation, i.e., derived from our fundamentally embodied experience in which LIGHT (sensorimotor experience) and GOOD (subjective judgment) are correlated with each other. As a primary metaphor based on such experiential correlation, "GOOD IS LIGHT" entails, and is grounded by, its non-metaphorical reverse LIGHT IS GOOD, not listed in (16) for simplicity. So analyzed, the metaphor "MORAL IS LIGHT" is complex because it comprises a primary metaphor (16b) and a literal component (16a). What is interesting is the fact that this literal component still relies on a primary metaphor for the understanding of its key element for moral judgment. It is in this sense that morality is not all metaphorical but its understanding and reasoning cannot be achieved without metaphors (see Lakoff & Johnson, 1999, pp. 325–326). In light of this analysis, we can hypothesize, for instance, that children would acquire "GOOD IS LIGHT" before "MORAL IS LIGHT" and that the latter would be acquired only when they develop the conception that morality is good for public well-being. In this analysis, GOOD is a basic concept whereas MORAL is a more complex one that is in a sense a subcategory (or subordinate) of GOOD. Also, "GOOD IS LIGHT," as a primary metaphor, can appear in other complex metaphors as well.

My second question regarding the conceptual metaphors in the cluster is: Are they all "created equal" or some are more fundamental than others? I would argue that they are not equal in status and some depend on others in meaning making. In the cluster, two pairs of the five are more fundamental: "MORAL IS LIGHT" and "IMMORAL IS DARK," "MORAL IS CLEAN" and "IMMORAL IS DIRTY." In the following I will show how and why. To save space, I will use only the moral-side cases for illustration because the immoral-side cases are exactly symmetric and, as such, can be easily derived by simple substitution.

First, CLEAN and DIRTY, as much as LIGHT and DARK discussed above, have their intrinsic positive and negative values, meaning that something or somewhere is "without/with unwanted matter," where "unwanted matter," i.e., DIRT, means "matter out of place" (Lizardo, 2012). As such, they are basic concepts as much as GOOD is. The "MORAL IS CLEAN" metaphor can undergo the same decomposition as "MORAL IS LIGHT" in (16):

(17) "MORAL IS CLEAN" (Complex metaphor)
a. "MORAL IS GOOD FOR PUBLIC WELL-BEING" (Proposition)
b. "GOOD IS CLEAN" (Primary metaphor)

Here, "GOOD IS CLEAN" is again a primary metaphor (see Yu, 2009, pp. 303–305 for further discussion). In "MORAL IS PURE" and "IMMORAL IS IMPURE," however, PURE and IMPURE are inherently neutral, meaning respectively "unmixed" and "mixed" with something

else, but whether this "something else" is wanted or unwanted depends on specific cases. For instance, if I do not like the tasteless pure water, I can squeeze lemon juice into it to make it impure. Thus, PURE is positive only when it is equivalent to CLEAN or "unmixed with unwanted matter." Similarly, IMPURE is negative only when it is equivalent to DIRTY or "mixed with unwanted matter." This suggests that in moral metaphors, PURE and IMPURE ("unmixed/mixed with unwanted matter") are more complex and specific than CLEAN and DIRTY ("without/with unwanted mater"). We can therefore have the following decompositional analysis.

(18) "MORAL IS PURE" (Complex metaphor)
a. "MORAL IS GOOD FOR PUBLIC WELL-BEING" (Proposition)
b. "PURE AS CLEAN IS GOOD" (Proposition)
c. "GOOD IS CLEAN" (Primary metaphor)

Compared with (17), (18) contains one more proposition or condition (18b): "PURE is good when it means CLEAN." According to this analysis, the positive metaphorical meaning of PURE depends on that of CLEAN, and at the core of the metaphor "MORAL IS PURE" is "GOOD IS CLEAN" as a primary metaphor. We can therefore hypothesize a hierarchical ranking for future study: "MORAL IS CLEAN"  $\rightarrow$  "MORE IS PURE." That is, in any given language, if the latter applies, so does the former, but not necessarily the other way around.

As Figure 1 shows, CLEAR and MURKY are each linked with two concepts: the former with LIGHT and CLEAN; the latter with DARK and DIRTY. It can be hypothesized that "MORAL IS CLEAR" and "IMMORAL IS MURKY" are less fundamental as moral metaphors than those that have LIGHT and CLEAN, and DARK and DIRTY, as their source concepts. This is because, in the physical world, whether water or glass, for instance, is clear or murky depends on whether it is, primarily, in light or dark and, secondarily, clean or dirty. The question that follows is whether "GOOD IS CLEAR" and "BAD IS MURKY" are primary metaphors. It seems that there is clear motivation based on robust correlation in our embodied experience (i.e., CLEAR IS GOOD and MURKY IS BAD), but it takes further study, linguistic and nonlinguistic, to answer the question. One thing is clear, however, that the extent to which the source concepts CLEAR and MURKY are utilized metaphorically in the moral domain varies from language to language. My observation, as indicated earlier, is that they are more commonly used in the target domain of morality in Chinese than in English. In the mental domain, however, their metaphorical extension is very salient in both languages, where we see rich linguistic and multimodal manifestation of the metaphors "KNOWABLE/UNDERSTANDABLE IS SEEABLE" and its agentive counterpart "KNOWING/UNDERSTANDING IS SEEING."

As for "MORAL IS WHITE" and "IMMORAL IS BLACK," they are more complicated cases because, as shown in Figure 1, their source concepts are each linked to all others, directly or indirectly, on each side. This is so because the linkage is based on a metonymic relationship that connects the elements on each side in the conceptual network. It is worth noting that the colors black and white are inherently neutral. For instance, black, though a color to be avoided for house interior, is a favorite for many in fashion. The concepts BLACK and WHITE are, however, culturally loaded with various symbolic meanings. Looking at Figure 1, we can say that BLACK and WHITE are linked to the rest on each side in a symbolic relationship that is metonymic in essence (Forceville, 2013). That is why, in my analysis, WHITE stands metonymically for LIGHT or CLEAN, and BLACK for DARK or DIRTY, with (19) below as an illustration:

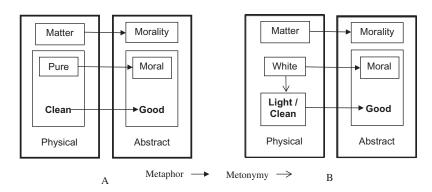


FIGURE 2 Schematic Illustration of the Decompositional Analyses in (18) and (19).

(19)	"MORAL IS WHITE"	(Complex metaphor)
	a. "MORAL IS GOOD FOR PUBLIC WELL-BEING"	(Proposition)
	b. "WHITE STANDS FOR LIGHT/CLEAN"	(Metonymy)
	c. "WHITE FOR LIGHT/CLEAN IS GOOD"	(Proposition)
	d. "GOOD IS LIGHT/CLEAN"	(Primary metaphor)

The decompositional analyses in (18) and (19) can be schematically illustrated as in Figure 2, which also shows how this decompositional approach works in principle.

In this figure, the line with a solid arrow head represents a metaphorical mapping, and that with an open arrow head represents a metonymic mapping. The bold font type indicates a primary metaphor. A frame within another frame means that the former is a subcategory of the latter. Thus, in Figure 2A, "MORAL IS PURE" as a complex metaphor involves a mapping across two conceptual domains. The target is an "abstract" domain of subjective judgment in general and moral judgment in particular whereas the source is a "physical" domain of material matter. As shown at the top, MATTER is mapped onto MORALITY, representing a mapping at the ontological level. "MORAL IS PURE," however, is a mapping of properties, represented by the adjectival concepts in the rectangular frames below it. In the target domain, MORAL is a special kind of GOOD (i.e., "good for public well-being"); therefore, the frame for MORAL is inside that for GOOD in general. In the source, PURE is mapped onto MORAL only when it falls within the conceptual space of CLEAN (i.e., "free from unwanted matter"). PURE, a more complex concept than CLEAN, is not "good" when it means "free from wanted matter." On the other hand, CLEAN always means "free from *unwanted* matter," and is therefore always "good." That is why, in my analysis, "GOOD IS CLEAN" is treated as a primary metaphor, but "GOOD IS PURE" is not. This is because CLEAN IS GOOD unconditionally, but PURE IS GOOD conditionally.

<sup>&</sup>lt;sup>1</sup>My suggestion that GOOD IS PURE is not a primary metaphor is based on the observation that PURE ("unmixed with other matter") is inherently neutral with two possible alternatives in value: "unmixed with unwanted (positive)/wanted (negative) matter." Thus, e.g., in "pure folly" and "pure terrorism" (from COCA), pure is not positive in meaning. That is, PURE is a more complex concept than is CLEAN, which is intrinsically positive and more basic in character, simply meaning "free from dirt or unwanted matter."

If my analysis is on the right track, then "MORAL IS CLEAN" (17) and "MORAL IS PURE" (18) share the same primary metaphor "GOOD IS CLEAN."

Figure 2B undergoes a similar decompositional analysis except that, in this case, the source concept WHITE for MORAL as its target stands for either LIGHT or CLEAN in a metonymic relationship, which constitutes a mapping within the source domain. Under this analysis, the primary metaphor that grounds "MORAL IS WHITE" is either "GOOD IS LIGHT" or "GOOD IS CLEAN." In the former case, (19) shares the primary metaphor with (16); in the latter it shares the primary metaphor with both (17) and (18).

In sum, with DAMCA, a deep analysis of metaphors can be conducted when needed. Thus, the five pairs of conceptual metaphors in Table 1 "look" very similar to each other and equal in status. However, a decompositional analysis shows that some of them are more central than the others in the subsystem, and how they are related to one another in the cluster as a radial category. By taking the complex metaphors apart, it is also possible to see what component is metaphorical and what is not metaphorical in a metaphorical complex, and by digging to the foundation stones of primary metaphors, we can be more specific about the motivations that ground metaphors. Needless to say, DAMCA as an analytical tool still has much room for development and refinement. It calls for, I believe, a more rigorous and comprehensive working definition of what constitutes a primary metaphor, a construct on which the whole analysis hinges.

#### CONCLUSION

For the research presented in this article, I have studied a subsystem of the metaphor system for moral cognition. This subsystem consists of five pairs of conceptual metaphors whose source concepts represent some common categories in our visual experience. My study shows that the five pairs of moral metaphors are applicable in both Chinese and English, based on a cognitive-semantic analysis of lexicalized moral senses of the corresponding visual words and how their extended moral senses are realized in actual language use. The linguistic data manifest the underlying moral metaphors in both languages that are genetically unrelated. This finding suggests that these metaphors may be widespread across languages and cultures, but its confirmation awaits further research.

This study has also applied a decompositional approach, DAMCA, to further analyzing the status of the five pairs of moral metaphors under study. My analysis suggests that they are complex rather than primary metaphors, and that they are not "created equal," with some depending on others in meaning making in our moral imagination. The implication is that the cluster of moral metaphors forms a radial category, some members being more prototypical or central than others. The more central ones rely more directly on a primary metaphor with a simpler conceptual composition. It can be hypothesized that these are the ones that are more likely to be widespread or universal than the more peripheral ones.

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#### APPENDIX: DICTIONARIES

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