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## Immorality and Bu Daode, Unculturedness and Bu Wenming

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#### **Abstract**

In contemporary Western moral philosophy literature that discusses the Chinese ethical tradition, it is a commonplace practice to use the Chinese term *daode* 道德 as a technical translation of the English term *moral*. The present study provides some empirical evidence showing a discrepancy between the terms *moral* and *daode*. There is a much more pronounced difference between prototypically *immoral* and prototypically *uncultured* behaviors in English (USA) than between prototypically *bu daode* 不道德 and prototypically *bu wenming* 不文明 behaviors in Mandarin Chinese (Mainland China). If the Western concept of *immorality* is defined in contraposition to things that are matters of etiquette or conventional norms and thus tied to a more or less tangible moral / conventional distinction, then we are dealing with a different structure in Mandarin Chinese – the prototypically *bu daode* and *bu wenming* behaviors seem to largely overlap. We also discuss whether *bu lunli* 不倫理 and *bu hefa* 不合法 can be considered adequate candidates for translation of *immorality* and we answer in the negative.

**Keywords:** Normative domains, morality, daode, moral philosophy, moral psychology, cross-cultural studies

#### Introduction

In contemporary Western moral philosophy literature that discusses Chinese ethical tradition, it is a commonplace practice to use the Chinese term daode 道德 as a technical translation of the English term *moral*. Such usage is supported by references to dictionaries; these terms seem to be used interchangeably by bilinguals (Buchtel et al. 2015), and it is also endorsed by contemporary Chinese academic authors writing about daode or lunli 倫理 (ethical) (Gao 2005). At the same time, many authors also notice problems with equating morality, as it is usually understood in the Western literature, with daode. Kupperman (2002) pointed out that for early Confucians, questions of style – usually understood as primarily an aesthetical concern – would be an important part in considerations on good life and character and / or right action, thus in practice functioning as a *moral* concern in the Western sense of the term. Rosemont (1976) suggested that early Confucians did not distinguish the specifically moral sphere of human reality as separated from other normative domains. He encourages everyone to accept the thesis that there "are no unique concepts of morals, moral actions, or moral dilemmas in early Confucianism" without in any way implying that this is a philosophical defect. On the contrary, Rosemont seems to suggest that understanding the unique patterns of early Confucian normative categorizations would provide us with broader and less culturebound perspectives in moral philosophy and psychology (Rosemont 1976, 50). Additionally, in fact, recent studies in comparative moral psychology provide some empirical evidence showing a discrepancy between the English term *moral* and the Chinese term *daode*, indicating that violations of conventional norms of civilized or cultured behavior in everyday Chinese usage are conceptualized as bu daode 不道德, or, if we agree with the dictionaries and academic convention, immoral acts (Buchtel et al. 2015). In the present article, we intend to contribute to this discussion on the meaning of the terms morality and bu daode. We believe that these questions are not only interesting in their own right as questions of lexical

semantics, but that they can also have implications for descriptive projects in Moral Psychology and Moral Philosophy, and that they can inform choices made in translation.

### Daode 道德

The contemporary Chinese term *daode* is a compound of two important, rich, and not easily translatable terms of the early Chinese thought tradition. The term *dao* 道 literally means "road, path, way". In its broader sense, it also means a way or method, art, teachings of being, acting, and functioning (Ames and Rosemont 1998). The term *de* 德 – commonly translated as "virtue", "power", or "potency" – in its earliest usages has denoted a non-physical and non-coercive influence of one person on the other, arising from the common and mutually beneficial interactions between two humans (Nivison 1996; Pines 2002; Gassmann 2011). In short, *de* can be aptly explained as a particular, instantaneous and unique expression of the totality of the human way of life and action (or *dao*, in early Chinese terminology; Rosemont and Ames 2009). In the early Chinese tradition, there are also less human-centered understandings of *dao* and *de*, but, taken in the most general form, it is clear that in this more Confucian rendition of the terms, there is a significant thematic overlap with what would be considered *moral* concerns in the West.

This apparent overlap of the two terms – *moral* and *daode* – seemingly justifies and facilitates scholarly explorations of what Chinese, past and present, hold as a "moral issue" and what Chinese consider as "immoral actions". Such a formulation of the question poses a problem. Namely, specifically the English term from a Western cultural background is taken as a reference point in the subsequent cross-cultural discussions, and almost never the opposite is true (Shun 2009). As a result, an existence of a universal moral domain or moral cognition as existing separately from conventional or aesthetical normative domains is often taken for granted. Then, the non-Western cultures, at best, are forced to answer "Procrustean

questions" that vex people with a Western worldview, but cannot necessarily be adequately expressed in non-Western traditional and modern languages (Rosemont 1988; Goldin 2005). This is not to say that non-Western intellectual traditions have never in any way or form inquired or given answers to what we in the West call *moral* questions. We suggest that, for example, in the Chinese intellectual tradition, we can find many relevant deliberations that touch upon important aspects of what would be understood as *moral* sensibilities in the Western sense. However, it seems that the Chinese start their questions and discussions from a set of normative categories that are significantly different from the Western ones.

## Daode 道德, wenming 文明, and li 禮

A different approach would require starting from the Chinese concept *daode*, allowing that it could possibly be a unique Chinese way to categorize norms (Rosemont 1976; Buchtel et al. 2015). Accepting *daode* as a unique normative domain would also require to restrain from a critically unreflected intention to fit it into the allegedly universal sphere of *moral* norms. In contemporary academia, one of the most widespread ways in which moral psychologists and moral philosophers writing in English elucidate the concept *moral* is by contrasting it with the concept of *conventional* (Turiel 1983). Within this *conventional* domain one can find norms of etiquette, as well as other forms of "cultured", "civilized" behavior. If the terms *moral* and *daode* have the same meaning, we should see a similar moral / conventional contrast in Chinese as well. However, once we start the analysis of *daode* as *Chinese* concept within the Chinese cultural environment and intellectual tradition, we immediately see that various important terms that belong to the concept cluster surrounding the term *wenming* 文明 (culture) are also close affiliates to the concept *daode*. Namely, for the Confucian tradition, the *dao* and *de* were foremost the terms to analyze and describe human actions, and

conditions, and already in the early Confucian texts dating as early as 3rd century BCE, the dao and de were closely associated with refined, cultured, and civilized (wen 文) life and actions, which were subsumed within the notion of li 禮 (see Liji: Quli I.8, Xunzi 1.12). In such a cultural context, it is difficult to expect a strict separation or even an intention to separate conventional (cultural) and moral norms.

The term *li* is usually translated as ritual, but it also means ceremonies, rites, customs, proprieties, etiquette, and also morals. It is one of the most fundamental concepts in early Chinese intellectual tradition, denoting the whole set of culturally agreed, formalized ways of personal and social interactions that has to be personalized in each particular interpersonal encounter. The important thing to note here is that there is a "moral" meaning that is present in the term *li*, but it seems to be inseparable in early texts from all the other connotations that are closer to the contemporary Western idea of the domain of "conventional", including aesthetical norms of decorum and cultural norms of civilized behavior (Rosemont 1976). Even more importantly, suggestions are made that for early Chinese, *li* is not merely a social and secondary attribute of human communities, but is also a fundamental quality in a sense of "human-building conventions" that constitute human beings and make human life possible (Neville 2008, 29).

## Do daode 道德 and wenming 文明 overlap?

Taking these traditional Confucian views into account, and given the continuing cultural and social influences of Confucian worldview on contemporary Chinese society, one should expect that conventional cultural norms and regulations, or civilized behavior (*wenhua* 文化 / *wenming* 文明 in contemporary Chinese) for the everyday Chinese speaker would naturally

be included into the *daode* normative domain. Thus, when translated in a standard way into English, these norms would be conceptualized as *moral* norms. To the extent that in the traditional Chinese view *li* is understood to be definitive of the very human existence itself, one can also expect that questions concerning the accordance to conventional cultural norms and civilized behavior will be met by Chinese with a very strong conviction and emotional response, similar to one that is observed in Western respondents reacting to moral transgressions (see, for instance, research on moral / conventional task: Nucci 2001; Smetana 1993; Tisak 1995; Turiel 1983).

Claims to these effects are not limited to theoretical literature, though. Emma Buchtel and her colleagues in a recent empirical paper (2015) note that the "Chinese lay concept of "immorality" is more applicable to spitting on the street than killing people" (p. 1386). In describing one of their studies they write: "although 70% of Beijing participants called *to spit on the public street* "immoral" (11% of Westerners), only 42% of Beijing participants called *to kill a person* "immoral" (81% of Westerners)" (p. 1388). As further noted by these authors, "Results suggest that Chinese were more likely to use the word *immoral* for behaviors that were uncivilized, rather than exceptionally harmful, whereas Westerners were more likely to link immorality tightly to harm" (p. 1382).

Such results seem to suggest that *bu daode* is a significantly different concept from English *immoral*, which presents us with at least two theoretical options. Either some other expression of Mandarin Chinese translates "immoral" or no exact translation is available and Mandarin Chinese presents an alternative division of the normative space. In this paper, building on the pioneering work of Buchtel and her colleagues, we will discuss new empirical data bearing on these questions.

#### **Study 1: Free-listing**

In this study, we set out to collect prototypically *immoral* and prototypically *uncultured* behaviors, as understood by American, Mainland Chinese, and Lithuanian participants. In order to explore the typicality of transgressions, we have adopted one of the traditional methods in cognitive anthropology – free-listing. It is especially useful in that it allows researchers to familiarize themselves with the concepts shared and used by the respondents (see de Munck, 2009, Ch. 3). Free-listing allows one to describe the conceptual domain from an *emic* perspective, as it is used within a particular cultural group. It is a snapshot of the most salient features of the concept under investigation. *Emic* data can be useful in themselves and they also can be quantified and structured into *etic* (that is, formulated in the language used by the social scientists) categories.

#### Method

*Participants*. American, Chinese, and Lithuanian participants were recruited online to complete a short questionnaire (N=356; After removing 3 participants from outside the US and 4 incomplete questionnaires: N=349; Age range=17-63; Median age=24; Mean age=28; Male=130; Female=229). US participants were recruited via Mechanical Turk for a small fee. Chinese and Lithuanian participants were recruited by distributing the web link to an online questionnaire among students and staff of universities in the respective countries.

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<sup>&</sup>lt;sup>1</sup> Participant characteristics by country: USA (N=114; After removing 3 from outside US: N=111; Age range=20-63; Median age=30; Mean age=34; Male=55; Female=65); Mainland China (N=122; Age range=17-61; Median age=22; Mean age=24; Male=34; Female=88); Lithuania (N=121; After removing 4 incomplete answers: N=117; Age range=18-63; Median age=22; Mean age=29; Male=41; Female=76).

*Materials and procedures*. Participants were given the following prompt (two groups: one was asked about *immoral*, the other about *uncultured* behaviors):

The aim of this study is to learn which actions or behaviors are considered immoral [uncultured]. Please provide a list of actions and behaviors which, in your opinion, are immoral [uncultured]. Please list at least five examples. There are no correct answers, we are just interested in your opinion.

The following term-pairs (Table 1) were used in the English, Mandarin Chinese, and Lithuanian versions. Please refer to **Appendix 1** for precise formulations in all three languages.<sup>2</sup>

## [Insert Table 1 approximately here]

Coding. Participants provided lists which were mostly composed of lists of simple verbs or nouns referring to particular behaviors. However, some terms were either synonymous or superfluously formulated, therefore we ran through the lists to reduce the number of terms by unifying synonyms, where appropriate, changing from singular to plural and vice versa, and checking for typos. Lithuanian and English lists were coded each by two of the authors and then any remaining differences were resolved through discussion among all three authors. Mandarin Chinese lists were coded by one author and any remaining questions were settled by discussions with native speakers of Mandarin Chinese.

respects.

<sup>&</sup>lt;sup>2</sup> Note, in this paper we will sometimes refer, for ease of exposition, to Chinese or Lithuanian terms by using English terms. This, however, should not be taken as suggesting that, for example, *bu daode* is an exact translation of *immoral*. In fact, we will argue, on the basis of our results, that the English term *immoral* and Chinese term *bu daode* differ in very crucial

#### Results

#### Free-listing frequencies

The numbers of different terms resulting from data analysis with the software program FLAME (Pennec et al., 2012), which builds upon the now classic program for free-list analysis ANTHROPAC (Borgatti, 1996), are reported in Table 2.

## [Insert Table 2 approximately here]

The most frequently used terms and their frequencies are reported in Table 3 and Table 4.

## [Insert Tables 3 and 4 approximately here]

The results on prototypically *immoral* transgressions seem to accord with recently reported results, employing similar methodologies. US results for *immoral* are largely in accordance with results by Gray et al. (2015), Mainland Chinese results for *bu daode* are in accordance with results reported by Buchtel et al. (2015), while Lithuanian results accord well with a study reported by Berniūnas and Dranseika (2017). Free-listing studies on *uncultured*, *bu wenming*, *nekultūringa* were not previously done, to the best of our knowledge.

At first glance, the following trends seem to emerge in the data. In Mandarin Chinese, lists of *bu daode* and *bu wenming* behaviors seem to be very similar (Table 5): the top 3 items overlap ("being loud", "littering", and "spitting"), 7 items overlap in the top 10, and 12 items make it into both top 20 lists. Numbers are much smaller for Lithuanian, and, especially, English lists. Only one item ("stealing") made it into both lists of the top 10 USA *immoral* and *uncultured* behaviors. Within the top 20 lists, one more item is common – "fighting / hitting". This suggests that there is a much more pronounced difference between

prototypically immoral and prototypically uncultured behaviors in the USA than between prototypically *bu daode* and prototypically *bu wenming* behaviors in Mainland China, with Lithuanian results falling closer to American than Chinese results. This seems partly in conformity with results reported by Buchtel et al. (2015), who report that in Mandarin Chinese, an especially strong link exists between "immoral" and "uncivilized".

[Insert Table 5 approximately here]

Comparison between groups

In order to look at these data in a more quantitative manner, we put together the top 10 most frequently mentioned items from all six lists (3 languages; 2 conditions (immoral and uncultured) in each) and, after removing duplicates, a list of 39 items was compiled (see **Appendix 2**). Then we checked the percentage of participants who mentioned any particular item in their lists as well as differences between the lists (see Appendix 3). For example, in an immoral condition, stealing was mentioned by 78.33% of American participants, while in an *uncultured* condition – by 12.24% of American participants. Then we treated the difference between percentages as a measure of difference between the lists, thus resulting in a numerical value of 66.09 as a measure of difference between the American immoral and uncultured lists for the term "stealing". Differences between USA and Mainland China, and between Lithuania and Mainland China were statistically significant. For example, differences between frequencies of items in *immoral* and *uncultured* lists were larger than differences between frequencies of items in bu daode and bu wenning lists). A Mann-Whitney U test indicated that differences between conditions in the USA sample (Mdn=6.67) were larger than differences between conditions in the Mandarin Chinese sample (Mdn=1.75), U = 460.5, p = .003,  $r_{rb} = .39$ . Similarly, a Mann-Whitney U test indicated that

differences between conditions in the Lithuanian sample (Mdn=8.93) were larger than differences between conditions in the Mandarin Chinese sample (Mdn=1.75), U = 395.5, p < .001,  $r_{rb} = .48$ . No difference was observed between USA and Lithuania. A Mann-Whitney U test did not indicate that differences between conditions in the USA sample (Mdn=6.67) were either larger or smaller than differences between conditions in the Lithuanian sample (Mdn=8.93), U = 733.5, p = .787,  $r_{rb} = .04$ .

#### Discussion

Our data seem to support the claim by Buchtel et al. (2015) that the Chinese tend to think about "immoral" and "uncivilized / uncultured" as tightly interconnected concepts, whereas the Westerners tend to conceive of these two categories as rather different, and perhaps opposing, as in a moral/conventional distinction of the Turiel tradition in moral psychology (1983). The results are also in agreement with the theoretical position expressed by Rosemont (1976).

It may also be worth noting that Kupperman (2002), writing on why Western philosophers should read Kongzi, stated:

"The characteristic preoccupations of contemporary Anglo-American ethical philosophy, especially, begin with moral or social choice. Such choices in their nature involve a great deal at stake, and for most people will seem to occur infrequently. This focus leads to [..] 'big moment ethics,' one of whose appealing features is that (by its emphasis on major choices at ethical crossroads) it in effect treats almost all of life apart from the big moments as an ethical free-play zone, in which one can do whatever one likes." (p. 40).

This characterization seems to also fit the ordinary Western concept of morality emerging from our data. Prototypically, immoral behaviors for American participants can be characterized as being more extreme and less likely to be encountered in daily activities, whereas prototypically *bu daode* behaviors for Mainland Chinese participants, on the contrary, were quite mundane and likely to be encountered in daily activities. While killing/murder was the most frequently mentioned item in the USA sample (mentioned by 82% of participants) and made it to the top 3 in the Lithuanian sample (38%), only one Chinese participant mentioned it. Furthermore, the most frequently mentioned items in the Chinese list (being loud, littering, spitting, cutting in line) were mentioned very seldom, if at all, by Lithuanians and Americans.

## Study 2: Bu lunli 不倫理 and bu hefa 不合法

Given the fact that prototypically *immoral* behaviors were very different from prototypically *bu daode* behaviors, we decided to explore two other Chinese terms to see whether they will allow us to identify terms whose prototypical instances are more similar to the American *immoral* behaviors. The terms we chose are *bu lunli* 不倫理 and *bu hefa* 不合法. For these two additional studies, we used the same method and data coding procedures as the previous study. The only difference was that the terms inserted in the probes were different. Please refer to **Appendix 1** for precise formulations.

## Study 2a: Bu lunli 不倫理

The reason for choosing *bu lunli* is that it is yet another Chinese term that could potentially be equivalent to the field of immorality as it is understood in the West. In contemporary Chinese academia, the terms *daode* and *lunli* were even taken to roughly correspond to the

morality and ethics, which is a well-established distinction in Western philosophical literature (for a short overview see Gao 2005, 44-58). In this case, daode is taken as a more subjective aspect and taken as a translation of morality. Lunli is taken to translate as the English term ethics, understood as a systematic development and grounding of subjective moral intuitions and convictions, as a theory of morality (Gao 2005, 44). Lunli, too, has a long history of usage in early Chinese texts and both Chinese characters have been important terms in the Chinese tradition. Lun 倫 in early Chinese texts means "class of things" or "order of things", but was primarily used as meaning "interpersonal human relations", or — in more processual reading by Roger Ames — as "the living of one's roles and relations" (Ames 2011, 97). This term was also widely used in a compound wulun 五倫 which in Confucian tradition means "five cardinal human relations". Li 理, another important and rich term in Chinese intellectual tradition, here simply means "structure, pattern". Both Chinese characters compose a single term lunli meaning "patterned human relations"

The study participants were recruited online via SoJump.com for a small fee (N=52; Age range=20-45; Median age=29.5; Mean age=30; Male=25; Female=27). The most frequently mentioned items are listed in Table 6.

## [Insert Table 6 approximately here]

There are three items that overlap between the top 10 lists of *bu daode* and *bu lunli* behaviors: spitting, stealing, and insulting. However, looking at the whole lists, there seems to be a rather clear difference among them in a sense that the prototypical *bu daode* (as well as *bu wenming*) behaviors are more often issues of public propriety, where there is no clear individual victim (e.g. being loud, littering, spitting), while the prototypical *bu lunli* 

behaviors are more saliently those that have identifiable victims, often in the family context, such as unfilial conduct and adultery. This seems to be consistent with the traditional Chinese usages of *lunli* as explained above. However, overlap among the top 10 lists of American *immoral* and Mandarin Chinese *bu lunli* behaviors is very limited – there are only two items in common: stealing and adultery.

## Study 2b: Bu hefa 不合法

The notion hefa 合法 in contemporary Chinese means "legal, lawful, legitimate". It is clearly a legal notion, associated with formalized legal norms, which are supervised by the state authority. The second character in this binomial, i.e. fa 法, in early Chinese intellectual tradition meant "norm, law, standard, regulation", while the first one, he 合, simply means "to suit, to agree with". Fa 法 was one of the central terms in the early Chinese school of thought fajia 法家, or the Legalists. This school was one of the main intellectual rivals of Confucians in suggesting the best ways of structuring people's lives, society, and the state. In this rivalry fa, as one of the main pillars of Legalist thought, was mainly contrasted with li 禮, or the ritual, which was one of the pillars of Confucian thought. Fa was to be formally established and enforced by the state through the means of punishment. Li, on the other hand, was understood more as a communal means of interaction, that has to be personally internalized through education. The adherence to the li norms was to be induced by the personal example of state and communal leaders (see, for example, Lunyu 2.3).

For this study, participants were also recruited online via SoJump.com for a small fee (N=58; Age range=20-66; Median age=31; Mean age=34; Male=30; Female=28). The most frequently mentioned items are listed in Table 6. There are three items that overlap between the top 10 lists of *bu daode* and *bu hefa* behaviors: stealing, damaging public property, and

not observing traffic rules. However, there seems to be a rather clear difference between the two lists in a sense that the prototypical *bu daode* (as well as *bu wenming*) behaviors are more often issues of public propriety, while the prototypical *bu hefa* behaviors are those that have clear legalistic implications. Four items overlap between the top 10 lists of USA *immoral* and Mandarin Chinese *bu hefa* behaviors: killing / murder, stealing, cheating, and raping.

Furthermore, all four items appear high on the lists: within the top 5 items in both lists. One interpretation of these results is that there is an accidental connection here based on the fact that legal regulations also cover the most extreme moral transgressions. However, there can be an alternative interpretation, suggesting that there is a close connection between law and modern Western notions of morality, as suggested by Anscombe (1958). Under this legalistic reading, there indeed would be some affinity between *morality* and *hefa*.

#### **General discussion**

These differences between prototypically *bu daode*, *bu wenming*, *bu lunli*, and *bu hefa* behaviors seem to hint at different aspects of why behaviors are valued negatively: *bu daode* and *bu wenming* seem to be especially focused on public propriety, *bu lunli* – on interpersonal relationships within a family context or relations with identifiable others, while *bu hefa* seems to refer to legal prohibitions. All three aspects can be recognized within the English meaning of *morality*, but these preliminary results seem to suggest that the Chinese have more explicit and more clearly delineated normative domains focused on these aspects.

One of the reviewers encouraged us to explain why we should interpret these results as relevant not only to lexical semantics – that is, the study of the meanings of words in human languages – but also to conceptual distinctions in Psychology and Philosophy. That is why we think that our empirical methods could be suitable for the latter task.

On the one hand, we would be happy to limit ourselves in this paper to a more modest claim that – as a matter of meaning of words – *daode* does not translate as *morality*. We would be happy if this article serves as a warning and a reminder to academic translators of Western and Chinese literature, and Chinese-speaking students of Western tradition, as well as English-speaking students of the Chinese tradition.

On the other hand, we would like to provide three arguments why we think that the present work can be relevant to cross-cultural Moral Psychology.

First, free-listing is a classic cognitive task used routinely to recover the prototypical structure of how people cognitively represent various concepts and categories (see, for instance, the classic work by Eleanor Rosch on the internal prototypical structures of ordinary object concepts via lists of attributes and characteristics of different kinds of ordinary everyday objects; Rosch and Mervis, 1975). There is a long tradition of using this method as a cognitive measure in psycholinguistics and cognitive anthropology (de Munck, 2009). Indeed, the free-listing method has been employed to study a wide array of cultural domains, where "[a] domain may be defined as an organized set of words, concepts, or sentences, all on the same level of contrast, that jointly refer to a single conceptual sphere" (Weller & Romney, 1988). Thus, we are reluctant to agree that the method is suitable only to the study of the meanings of words.

Second, the results of the present study are in line with results obtained using other and perhaps less controversial methods. One reviewer helpfully pointed out that it would be a good idea to use different and more experimental methods to study how people conceptualize morality. By giving them scenarios of various kinds of transgressions (and by avoiding any usage of the English *immoral* or the Chinese *bu daode*, we would be in a better position to grasp the conceptual interconnection between the moral and conventional domains. As a

matter of fact, in a different study (Berniūnas, Dranseika, and Silius, *under review*) we did exactly that and found that, indeed, Chinese tend to moralize – in a sense of "moral signature" (Berniūnas, Dranseika, and Sousa, 2016)) – typically conventional (as usually understood in the Moral Psychology literature) transgressions more often than the American participants. Edouard Machery also refers to an ongoing research program (see Machery 2012 for a description and Levine et al. (unpublished manuscript) for the first results) that aims to uncover differences in how people categorize norms and found that "Americans draw a sharp distinction between moral and nonmoral norms and also distinguish different kinds of moral and nonmoral norms. In contrast, Indian participants do not seem to draw distinction between moral and nonmoral norms, suggesting that the moral domain may not be a universal." (Machery 2018: 263).

Third, Machery provides an argument that aims to show the relevance of such linguistic data to the study of cognitive universals. Referring to the work of Anna Wierzbicka, who claims that, in contrast to such deontic modals as "ought" and such normative predicates as "right" or "wrong", some languages do not have a word for "morality" and thus do not lexicalize the distinction between morally good and morally bad (Wierzbicka 2001; 2007). Machery writes: "If the moral domain were a fundamental feature of human cognition, we would expect the distinction between moral and nonmoral norms to be lexicalized in every language, as are deontic modals and the distinction between good and bad" (2018: 262).

In the light of these arguments, we have hope that our paper will make a modest contribution to the psychological understanding of moral cognition.

#### Conclusion

How should we approach the question of whether bu daode and immorality is the same concept? One motive to resist their identification is the following: concepts do not function in isolation, they come in larger conceptual schemes and the business of translation should preserve these relations between concepts. If we believe that the Western concept of immorality is defined in contraposition to things that are matters of etiquette or conventional norms (which is very much consistent with results obtained from the American and Lithuanian samples) and thus tied to a more or less tangible moral / conventional distinction, then our results indicate that in the case of Mandarin Chinese, we are dealing with a different conceptual structure. It seems that the prototypically bu daode and bu wenning behaviors largely overlap, thus making this pair of terms not suitable to express a conceptual contrast that we see in the classic moral / conventional distinction, so central to contemporary Moral Psychology (e.g. Turiel 1983; Nucci 2001) and Moral Philosophy (e.g. Nichols, 2004; Joyce, 2006). The current study seems to support an emerging skepticism about the rigidity and centrality of moral / conventional distinctions in folk moral cognition (see also Levine et al., unpublished manuscript; Machery and Mallon, 2010; Sachdeva, Singh, and Medin, 2011; Sripada and Stich, 2006). Indeed, there is a kind of functional lack of equivalence between these term pairs in English and Mandarin Chinese, and one ought to keep this in mind while conducting cross-cultural investigations of moral psychology, as well as when translating these terms between the languages.

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#### References

- Ames, R. T. (2011). *Confucian role ethics: A vocabulary*, Hong Kong: Chinese University Press.
- Ames, R. T., & Rosemont, H. (1998). *The Analects of Confucius: A philosophical translation*, New York: Ballantine Books.
- Anscombe, G. E. M. (1958). Modern moral philosophy. *Philosophy*, 33(124), 1–19.
- Borgatti, S. (1996). ANTHROPAC 4.0. Natick, MA: Analytic Technologies.
- Berniūnas, R., & Dranseika, V. (2017). Thou shalt not kill, steal, and lie: A preliminary study on cognitively salient moral transgressions among Lithuanians. *Žmogus ir žodis*, 19 (4), 94–107.
- Berniūnas, R., Dranseika, V., Silius, V. *(under review)*. Moralization East and West: Moralizing different transgressions among Chinese, Americans and Lithuanians.
- Berniūnas, R., Sousa, P., Dranseika, V. (2016). Are there different moral domains: evidence from Mongolia. *Asian journal of social psychology*, 19, 275–282.
- Buchtel, E. E., Guan, Y., Peng, Q., Su, Y., Sang, B., Chen, S. X., & Bond, M. H. (2015). Immorality East and West. Are immoral behaviors especially harmful, or especially uncivilized? *Personality and Social Psychology Bulletin*, 41(10), 1382–1394.
- De Munck, V. C. (2009). Research design and methods for studying cultures. Walnut Creek, CA: AltaMira.
- Gao Guoxi 高国希 (2005). *Daode zhexue* 道德哲学 [Moral philosophy], Shanghai: Fudan daxue chubanshe.
- Gassmann, R.H. 2011. Coming to terms with dé 德: the deconstruction of "virtue" and an exercise in ccientific morality. In R.A.H. King and Dennis Schilling (eds.) *How should one live? Comparing ethics in Ancient China and Greco-Roman Antiquity*, Berlin, Boston: Walter de Gruyter: 92–125.
- Goldin, P. R. (2005). *After Confucius: Studies in early Chinese philosophy*, Honolulu: University of Hawaii Press.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of personality and social psychology*, 101(2), 366–385.

- Joyce, R. (2006). The evolution of morality. Cambridge, MA: MIT Press.
- Kupperman, J. J. (2002). Naturalness revisited: Why Western philosophers should study Confucius. In Bryan W. Van Norden (Ed.), *Confucius and the Analects: New essays*, (pp. 39–52). Oxford: Oxford University Press.
- Levine, S., Rottman, J., Davis, T., O'Neill, E., Stich, S., & Machery E. (unpublished manuscript). *Religion's Impact on Conceptions of the Moral Domain*.
- Liji 禮記 [The Book of Rites], in Chinese Texts Project. http://ctext.org/liji/qu-li-i#n9485.

  Accessed 15 Aug 2016.
- Machery, E. (2012). Delineating the moral domain. *Baltic international yearbook of cognition, logic and communication*, 7(1), 6.
- Machery, E. (2018). Morality: A historical invention. In K. Gray & J. Graham (Eds.), *The atlas of moral psychology*. New York: The Guilford Press: 259-265.
- Machery, E., & Mallon, R. (2010). Evolution of morality. In J. M. Doris (Ed.), *The moral psychology handbook* (pp. 3–46). New York, NY: Oxford University Press.
- Neville, R. C. (2008). *Ritual and deference: Extending Chinese philosophy in a comparative context*. New York: SUNY Press.
- Nichols, S. (2004). Sentimental rules. New York: Oxford University Press.
- Nivison, D. S. 1996. *The ways of Confucianism: Investigations in Chinese philosophy*, edited with an introduction by Bryan W. Van Norden. Chicago and La Salle, Illinois: Open Court.
- Nucci, L. P. (2001). *Education in the moral domain*. Cambridge: Cambridge University Press.
- Pennec, F., Wencelius, J., Garine, E., Raimond, C., & Bohbot, H. (2012). *FLAME 1.1*. Paris: CNRS.
- Pines, Y. 2002. Foundations of Confucian thought: Intellectual life in the Chunqiu period, 722-453 B.C.E., Honolulu: University of Hawai'i Press.
- Rosemont, H. (1988). Against relativism. In James Larson and Eliot Deutsch (Eds.) *Interpreting across boundaries: New essays in comparative philosophy*, (pp. 36–70).

  Princeton: Princeton University Press.
- Rosemont, H. (1976). Notes from a Confucian perspective: Which human acts are moral acts? *International philosophical quarterly*, 16(1), 49–61.
- Rosemont, Jr., H., & Ames R.T. 2009 (tr.). *The Chinese classic of family reverence: A philosophical translation of the Xiaojing*, Honolulu: University of Hawai'i Press.

- Rosch, E., & Mervis, C. B. (1975). Family resemblances: Studies in the internal structure of categories. *Cognitive psychology*, 7, 573-605.
- Sachdeva, S., Singh, P., and Medin, D. (2011). Culture and the quest for universal principles in moral reasoning. *International journal of psychology*, 46(3), 161–176.
- Schein, C., and Gray, K. (2015). The unifying moral dyad: Liberals and conservatives share the same harm-based moral template. *Personality and social psychology bulletin*, 41(8), 1147–1163.
- Shun, K. (2009). Studying Confucian and comparative ethics: methodological reflections, *Journal of Chinese philosophy*, 36(3), 455–478.
- Smetana, J. (1993). Understanding of social rules. In M. Bennett (Ed.), *The development of social cognition: The child as psychologist*, (pp. 111–141). New York: Guilford Press.
- Sripada, C., & Stich, S. (2006). A Framework for the psychology of norms. In P. Carruthers, S. Laurence, & S. Stich (Eds.), *The innate mind, Volume 2: Culture and cognition*, (pp. 280–301). Oxford University Press.
- Xunzi 荀子, in Chinese Texts Project, accessed on-line (2016 08 15) http://ctext.org/xunzi/quan-xue#n12253
- Tisak, M. (1995). Domains of social reasoning and beyond. In R. Vasta (Ed.), *Annals of child development* (Vol. 11), (pp. 95–130). London: Jessica Kingsley.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention.*Cambridge, England: Cambridge University Press.
- Weller, S. C., and A. K. Romney. 1988. *Systematic data collection*. Newbury Park, CA: Sage.
- Wierzbicka, A. (2001). What did Jesus mean? Explaining the Sermon on the Mount and the Parables in simple and universal human concepts. New York: Oxford University Press.
- Wierzbicka, A. (2007). Moral sense. *Journal of social, evolutionary, and cultural psychology* 1: 66–85.

## **Tables**

Table 1. Term pairs used in the study

	Immoral	Uncultured
Mandarin Chinese	不道德 (bu daode)	不文明 (bu wenming)
English	Immoral	Uncultured
Lithuanian	Amoralu	Nekultūringa

Table 2. Number of lists and cited items

	Immoral	Uncultured	Number of lists	Number of cited items (types)	Number of cited items (tokens)
Mandarin	不道德 (bu daode)		57	91	276
Chinese		不文明 (bu wenming)	65	72	314
English	Immoral		60	91	301
Diignon		Uncultured	49	118	248
Lithuanian	Amoralu		61	110	341
Litnuanian		Nekultūringa	56	106	308

**Table 3. Most frequently mentioned** *immoral* (*bu daode*, *amoralu*) behaviors. *Numbers in brackets represent the number of participants in a condition. FREQ shows how many participants mentioned a given term. Percentages indicate the proportion of participants in the group who mentioned a given term in their lists.* 

LITHUANIAN (61)			AMERICA	AN (60)		CHINESE (57)			
ITEM	FRE Q	%	ITEM	FRE Q	%	ITEM	FRE Q	%	
meluoti / lying	28	45.90 %	killing / murder	49	81.67 %	公共场合喧哗 / being loud	28	49.12 %	
vogti / stealing	26	42.62 %	stealing	tealing 47 78.3.		乱扔垃圾_ / littering	27	47.37 %	
žudyti / killing/murder	23	37.70 %	cheating	25	41.67 %	随地吐痰 / spitting	24	42.11 %	
smurtauti / violence	20	32.79 %	raping	24	40.00	插队 / cutting in line	15	26.32 %	
tyčiotis / bullying	18	29.51 %	lying	20	33.33	欺骗 / cheating	14	24.56 %	
išduoti / betrayal	11	18.03	animal abuse	9	15.00 %	公共场合吸烟 / smoking in public	13	22.81 %	
negerbti kitų / disrespecting others	10	16.39	adultery	8	13.33	盗窃 / stealing	8	14.04	
svetimauti / adultery	8	13.11	paedophilia	8	13.33	辱骂他人 / insulting	8	14.04	
kankinti gyvūnus / animal abuse	8	13.11	harming others	7	11.67	破坏公物 / damaging public property	6	10.53	
apkalbinėti / slandering	7	11.48	violence	7	11.67	不遵守交通规则 / not observing traffic rules	6	10.53	
išnaudoti / exploiting	7	11.48	fighting / hitting	6	10.00	不让座 / not giving seat	5	8.77%	
sukčiauti / cheating	7	11.48	child abuse	6	10.00	随地大小便/ urinating or defecating publicly	5	8.77%	
girtauti / alcohol abuse	6	9.84%	discriminating	4 6.67 %		打架/打人 / fighting/hitting	5	8.77%	
vengti atsakomybės / avoiding responsibility	6	9.84%	racism	cism $4 \begin{vmatrix} 6.67 \\ \frac{6}{9} \end{vmatrix}$		不赡养父母 / not providing for parents	4	7.02%	
veidmainiauti / hypocrisy	5	8.20%	exploiting	4	6.67 %	破坏花草 / damaging lawn	4	7.02%	

negerbti tėvų / disrespecting parents	5	8.20%	disrespecting others	3	5.00	背后议论 / slandering	3	5.26%
nepadėti / not helping	5	8.20%	torturing	3 5.00 欺负 % / bullying		3	5.26%	
ignoruoti kitus /ignoring others	4	6.56%	incest	3	5.00	涂鸦 / graffiti	3	5.26%
diskriminuoti / discrimination	4	6.56%	damaging environment	3	5.00	损人利己 / being selfish	3	5.26%
elgtis savanaudiškai / being selfish	4	6.56%	sodomy	2	3.33 %	道德绑架/ moralizing	3	5.26%

Table 4. Most frequently mentioned uncultured (bu wenming, nekultūringa) behaviors.

Numbers in brackets represent the number of participants in a condition. FREQ shows how many participants mentioned a given term. Percentages indicate the proportion of participants in the group who mentioned a given term in their lists.

LITHUANIAN (56)			AMERIC	AN (69)	ı	CHINESE (45)			
ITEM	FRE Q	%	ITEM	FRE Q	%	ITEM	FRE Q	%	
keiktis / swearing	27	48.21	swearing	13	26.53	随地吐痰 / spitting	44	67.69 %	
spjaudytis / spitting	22	39.29 %	farting	13	26.53	乱扔垃圾 / littering	44	67.69 %	
triuksmauti / being loud	17	30.36	picking nose	12	24.49	公共场合喧哗 / being loud	38	58.46 %	
siukslinti / littering	17	30.36	burping	11	22.45	公共场合吸烟 / smoking in public	18	27.69 %	
negerbti kitų / disrespecting others	10	17.86 %	being loud	11	22.45	插队 / cutting in line	18	27.69 %	
tyciotis / bullying	9	16.07	spitting	7	14.29 %	说脏话 / swearing	16	24.62 %	
apkalbineti / slandering	9	16.07 %	not washing	7 14.29 不遵守交通规则 / not observing traffic rules		/ not observing traffic	10	15.38	
negerbti vyresnių / not respecting older people	8	14.29	being rude	6	12.24	辱骂他人 / insulting	10	15.38	
ignoruoti kitus / ignoring others	7	12.50	stealing	6	12.24	随地大小便 / urinating or defecating publicly	7	10.77 %	
girtauti / alcohol abuse	7	12.50	chewing with mouth open	6	12.24	乱穿马路 / jaywalking	6	9.23%	
pertraukineti kitus / interrupting others	7	12.50	bullying	5	10.20	打架/打人 / fighting/hitting	6	9.23%	
nesisveikinti / not greeting others	6	10.71	eating with hands	5	10.20	涂鸦 / graffiti	6	9.23%	
čepsėti / chewing with mouth open	6	10.71 poor manners 5 10.20 西 / eating in unsuitable places		/ eating in unsuitable	6	9.23%			
grubiai bendrauti / being rude	6	10.71	not holding doors	4	8.16	上厕所不冲水 / not flushing toilet	5	7.69%	

vėluoti being late	6	10.71 %	quarreling	4	8.16 %	霸占座位 / seizing seat	4	6.15%
rūkyti viešumoje / smoking in public	6	10.71 %	fighting/hitting	4	8.16 %	破坏公物 / damaging public property	4	6.15%
lįsti be eilės / cutting in line	5	8.93%	not thanking	3	6.12	不讲究卫生 / poor sanitation	3	4.62%
neišjungti mobilaus / leaving mobile on	5	8.93%	cutting in line	3	6.12	打扰他人 / disturbing others	3	4.62%
nesilaikyti KET / not observing traffic rules	5	8.93%	scratching private parts	3	6.12	抖腿 / shaking legs	3	4.62%
krapštyti nosį / picking nose	5	8.93%	talking with mouth full	3	6.12 %	吵架 / quarreling	2	3.08%

Table 5. Overlap between most frequently cited immoral and uncultured behaviors

	Overlap in Top 3	Overlap in Top 10	Overlap in Top 20
Mandarin Chinese	3 (100%)	7 (70%)	12 (60%)
English	0 (0%)	1 (10%)	2 (5%)
Lithuanian	0 (0%)	3 (30%)	5 (25%)

**Table 6. Most frequently mentioned** *bu lunli and bu hefa* behaviors. *Numbers in brackets* represent the number of participants in a condition. FREQ shows how many participants mentioned a given term. Percentages indicate the proportion of participants in the group who mentioned a given term in their lists.

Bu lunli (52)		Bu hefa (58)				
ITEM	FRE Q	%	ITEM	FRE Q	%	
辱骂他人 / insulting	13	25.00 %	盗窃 / stealing	51	87.93 %	
打架/打人 / fighting/hitting	12	23.08	强奸 / raping	23	39.66	
随地吐痰 / spitting	10	19.23	杀人 / killing	19	32.76 %	
不孝 / unfilial conduct	10	19.23	不遵守交通规则 /_not observing traffic rules	18	31.03	
通奸 / adultery	10	19.23	欺骗 / cheating	14	24.14	
盗窃 / stealing	9	17.31 %	醉酒驾驶 / drunk _driving	12	20.69	
乱伦 / incest	9	17.31 %	打架/打人 / fighting/hitting	12	20.69	
随地大小便 / urinating or defecating publicly	8	15.38	放火 / arson	8	13.79	
不尊老 / not respecting older people	8	15.38	逃税 / tax evasion	7	12.07	
公共场合亲热 / intimacy in public	7	13.46	破坏公物 / damaging public property	5	8.62 %	

# Appendices

Appendix 1. Free-listing prompts for the studies reported in the present article

	Prompts
English	The aim of this study is to learn which actions or behaviors are considered immoral [uncultured]. Please provide a list of actions and behaviors which, in your opinion, are immoral [uncultured]. Please list at least five examples. There are no correct answers, we are just interested in your opinion.
Mandarin Chinese	这项调查旨在了解常人认为的何谓不道德[不文明/不伦理/不合法]的动作和行为。请列举出您个人认为是不道德[不文明/不伦理/不合法]的动作或行为。请最少列举出 5 个例子。这里没有标准答案。我们对您个人的意见感兴趣。
Lithuanian	Šiuo tyrimu norime išsiaiškinti, kokius veiksmus ar poelgius žmonės laiko amoraliais [nekultūringais]. Prašome pateikti sąrašą veiksmų ar poelgių, kurie jūsų asmenine nuomone yra amoralūs [nekultūringi] (pateikite bent penkis pavyzdžius). Čia nėra teisingų ar klaidingų atsakymų, mums tik rūpi jūsų nuomonė.

Appendix 2. Terms used for quantitative analysis in the study

No.	EN	LT	CN
1	killing/murder	žudyti	杀人
2	stealing	vogti	盗窃
3	cheating	sukčiauti	欺骗
4	raping	prievartauti	强奸
5	lying	meluoti	说谎
6	animal abuse	kankinti gyvūnus	<b>残害</b> 动 <b>物</b>
7	adultery	svetimauti	通奸
8	paedophilia	pedofilija	恋童癖
9	harming others	kenkti kitiems	损人
10	violence	smurtauti	暴力
11	bullying	tyčiotis	<b>欺</b> 负
12	betrayal	išduoti	背叛
13	not respecting others	negerbti kitų	不尊重他人
14	slandering	apkalbinėti	背后议论
15	exploiting	išnaudoti	剥削
16	being loud	triukšmauti	公共场合喧哗
17	littering	šiukšlinti	乱扔垃圾
18	spitting	spjaudytis	随地吐痰
19	cutting in line	lįsti be eilės	插队
20	smoking in public	rūkyti viešumoje	公共场合吸烟
21	insulting	įžeidinėti	辱骂他人
22	damaging public property	naikinti visuomenės turtą	破坏公物
23	not observing traffic rules	nesilaikyti KET	不遵守交通规则
24	swearing	keiktis	说脏话
25	farting	persti	放屁

26	picking_nose	krapštyti nosi	挖鼻孔
27	burping	riaugėti	打嗝
28	not washing	nesiprausti	不洗澡
29	being rude	grubiai bendrauti	<b>粗</b> 鲁对 <b>待他人</b>
30	chewing with mouth open	valgyti pravira burna	嚼着不闭嘴
31	not respecting older people	negerbti vyresnių	不尊老
32	ignoring others	ignoruoti kitus	不理他人
33	alcohol abuse	girtauti	酗酒
34	interrupting others	pertraukinėti kitus	随意打断他人说话
35	urinating and defecating publicly	tuštintis viešai	随地大小便
36	jaywalking	eiti per gatvę neleistinoje vietoje	乱穿马路
37	fighting/hitting	muštis/mušti	打架/打人
38	graffiti	graffiti	涂鸦
39	eating in unsuitable places	valgyti netinkamose vietose	在禁止吃饭的场合吃东西

Appendix 3. Frequencies of terms in *immoral* and *uncultured* conditions (in percents) and differences between conditions

		US			Mainla	and China		Lithuania			
N o	Term	Immor al	Unculture d	Differenc e	Immora I	Unculture d	Differenc e	Immor al	Unculture d	Difference	
1	killing/murder	81.67	4.08	77.59	1.75	0	1.75	37.7	0	37.7	
2	stealing	78.33	12.24	66.09	14.04	3.08	10.96	42.62	1.79	40.83	
3	cheating	41.67	4.08	37.59	24.56	1.54	23.02	11.48	0	11.48	
4	raping	40.00	2.04	37.96	0	0	0	4.92	0	4.92	
5	lying	33.33	4.08	29.25	3.51	0	3.51	45.9	5.36	40.54	
6	animal abuse	15.00	2.04	12.96	1.75	0	1.75	13.11	1.79	11.32	
7	adultery	13.33	0	13.33	1.75	0	1.75	13.11	0	13.11	

8	paedophilia	13.33	0	13.33	0	0	0	0	0	0
9	harming others	11.67	2.04	9.63	0	0	0	6.56	1.79	4.77
1 0	violence	11.67	6.12	5.55	1.75	0	1.75	32.79	3.57	29.22
1 1	bullying	3.33	10.20	6.87	5.26	0	5.26	29.51	16.07	13.44
1 2	betrayal	1.67	0	1.67	0	0	0	18.03	0	18.03
1 3	not respecting others	5.00	0	5	1.75	0	1.75	16.39	17.86	1.47
1 4	slandering	0	0	0	5.26	1.54	3.72	11.48	16.07	4.59
1 5	exploiting	6.67	0	6.67	0	0	0	11.48	0	11.48
1 6	being loud	0	22.45	22.45	49.12	58.46	9.34	1.64	30.36	28.72
1 7	littering	3.33	4.08	0.75	47.37	67.69	20.32	1.64	30.36	28.72
1 8	spitting	0	14.29	14.29	42.11	67.69	25.58	0	39.29	39.29
1 9	cutting in line	0	6.12	6.12	26.32	27.69	1.37	0	8.93	8.93
2 0	smoking in public	0	2.04	2.04	22.81	27.69	4.88	1.64	10.71	9.07
2	insulting	0	0	0	14.04	15.38	1.34	3.28	7.14	3.86
2 2	damaging public property	1.67	0	1.67	10.53	6.15	4.38	1.64	1.79	0.15
2	not observing traffic rules	0	6.12	6.12	10.53	15.38	4.85	0	8.93	8.93
2 4	swearing	3.33	26.53	23.2	5.26	24.62	19.36	4.92	48.21	43.29
2 5	farting	1.67	26.53	24.86	0	0	0	0	1.79	1.79
2 6	picking nose	0	24.49	24.49	0	0	0	0	8.93	8.93
2 7	burping	0	22.45	22.45	0	0	0	0	7.14	7.14
2 8	not washing	0	14.29	14.29	0	0	0	0	1.79	1.79
2 9	being rude	0	12.24	12.24	1.75	1.54	0.21	0	10.71	10.71
3	chewing with mouth open	0	12.24	12.24	0	0	0	0	10.71	10.71

3	not respecting older people	0	0	0	1.75	1.54	0.21	1.64	14.29	12.65
3 2	ignoring others	0	2.04	2.04	1.75	0	1.75	6.56	12.50	5.94
3 3	alcohol abuse	1.67	4.08	2.41	0	0	0	9.84	12.50	2.66
3 4	interrupting others	0	4.08	4.08	1.75	1.54	0.21	1.64	12.50	10.86
3 5	urinating and defecating publicly	0	0	0	8.77	10.77	2	1.64	1.79	0.15
3 6	jaywalking	0	0	0	0	9.23	9.23	0	0	0
3 7	fighting/hitting	10.00	8.16	1.84	8.77	9.23	0.46	3.28	3.57	0.29
3 8	graffiti	0	0	0	5.26	9.23	3.97	0	1.79	1.79
3 9	eating in unsuitable places	0	0	0	3.51	9.23	5.72	0	0	0
		Avrg. diff.		13.36			4.37			12.55