Running Hea	d: CULTUR	AL DIFFER	ENCES IN I	MORALITY

Cultural Differences in Moral Judgment and Behavior, Across and Within Societies

Jesse Graham, Peter Meindl, Erica Beall, Kate M. Johnson, & Li Zhang
University of Southern California

in press, Current Opinion in Psychology

Abstract: 117 words

Text: 2336 words

Corresponding Author:
Jesse Graham
Department of Psychology
University of Southern California
3620 McClintock Ave.
Los Angeles, CA 90089
jesse.graham@usc.edu

Abstract

We review contemporary work on cultural factors affecting moral judgments and values, and those affecting moral behaviors. In both cases, we highlight examples of within-societal cultural differences in morality, to show that these can be as substantial and important as cross-societal differences. Whether between or within nations and societies, cultures vary substantially in their promotion and transmission of a multitude of moral judgments and behaviors. Cultural factors contributing to this variation include religion, social ecology (weather, crop conditions, population density, pathogen prevalence, residential mobility), and regulatory social institutions such as kinship structures and economic markets. This variability raises questions for normative theories of morality, but also holds promise for future descriptive work on moral thought and behavior.

Cultural Differences in Moral Judgment and Behavior, Across and Within Societies

There is no question in current moral psychology about whether culture is important for morality – it is, and recent work is beginning to show exactly how. Most major theories in moral psychology include a primary role for cultural transmission of shared norms and values in predicting moral thought and action [1-5]. For instance, cultural learning (in which cultures differentially build on universally-available intuitive systems) is one of the central tenets of Moral Foundations Theory [3], which was based in part on Shweder's comparisons of cultures in the three ethics of Autonomy, Community, and Divinity [1]. The cultural ubiquity of moral norms and values is a testament to the central role morality plays in holding societies together. Human beings are a physically weak species whose evolutionary success depended on the ability to cooperate and live in groups. As such, shared norms – and their enforcement – are essential [6]. Indeed, children as young as three years old comprehend and enforce moral norms on behalf of others [7].

In this paper we review contemporary work on cultural factors affecting moral judgments and values, and those affecting moral behaviors. We define these broadly, as any judgments and behaviors people find morally relevant; cross-cultural research has shown great variety in the very definitions of "moral" or "immoral," for instance with Westerners using immoral to connote primarily harmful actions, and Chinese to connote primarily uncivilized actions [8]. For both moral judgments and moral behaviors we highlight examples of within-societal cultural differences in morality, to show that these can be as substantial and important as cross-societal differences. We end by discussing future directions for psychological work on culture and morality.

Moral Judgments and Values

Multifaceted psychological measurement of morality has opened up the doors to studying cross-cultural similarities and differences in moral judgments across a variety of content domains. Some domains like honesty are consistently endorsed as morally important across cultural contexts [9]. However, cultural variations in whether moral concerns focus on individual rights or communal social duties predict moralization of a broader range of personal and interpersonal actions [10-11]. Cultural variations in moral focus affect not only which behaviors individuals will find morally relevant, but also the extent to which their personal values will be reflected in their attitudes about social issues. For example, endorsement of self-transcendence values (e.g., believing that the universal well-being of others is important) strongly predicts prosocial and pro-environmental attitudes in individual rights-focused cultures, where investing one's own resources in collective goods is seen as a personal choice. However, the same value-attitude relationship is attenuated in cultures emphasizing duties toward one's community, as personal resources are culturally expected to contribute to the common good [12].

As individualism-collectivism research would suggest, research using multifaceted measurement has shown that while Western, Educated, Industrialized, Rich, and Democratic (WEIRD) [13] cultures are generally more apt to endorse moral codes emphasizing individual rights and independence, non-WEIRD cultures tend to more strongly moralize duty-based communal obligations and spiritual purity [8, 14-16]. In turn, individuals in autonomy-endorsing cultures view personal actions such as sexual behaviors as a matter of individual rights, whereas those in community-endorsing cultures are more likely to see them as a collective moral concern [10]. These societal prescriptions of what one should do to be a moral person facilitate endorsement of congruent personal values. Further, whether one's cultural prescriptions provide

a range of morally acceptable responses or only one moral course of action affects the extent to which individuals' social attitudes and behaviors are able to reflect personal—rather than systemic—moral values [17].

These same cross-cultural differences in moral prescriptions of duty versus individual rights also inform interpersonal moral judgments and moral dilemma responses. In trolley-type dilemmas, respondents are asked whether they should sacrifice one person (say, by pulling a lever to redirect a runaway trolley) in order to save several others. While most people across cultures will say that flipping the lever is the morally right choice, those in collectivist cultures are more likely to also consider additional contextual information when forming judgments, such as whether or not it is their place (or duty) to act [18]. This relational consideration in turn leads to less admonishment of individuals who do not flip the lever, and fewer character attributions of actions made in absence of their broader contextual meaning [19].

Even when there is cross-cultural agreement in the moral importance of abstract concepts like justice or welfare, cultural differences can emerge in the perceived meaning of these concepts [8, 20]. For people in autonomy-emphasizing cultures, justice and fairness are often viewed as a matter of equity, in which outcomes are proportional to personal effort regardless of the potential detriment to less-deserving others. By comparison, people in duty-based, communal cultures often view justice and fairness as an issue of equality, in which all individuals deserve equal outcomes and moral judgments are based on whether a self-beneficial outcome will cause others to suffer [21-23].

Factors Contributing to Cultural Differences

In addition to elaborating cultural differences in moral values, current research is also addressing factors that can help to explain them. One source of cultural variation in moral values, particularly ones pertaining to fairness and prosocial behavior, can be found in social institutions such as kinship structures and economic markets [24]. For example, higher degrees of market integration are associated with greater fairness in anonymous interpersonal transactions [6]. Ecological factors can also promote certain kinds of moral norms and values. For instance, pathogen prevalence predicts endorsement of loyalty, authority, and purity concerns, which may discourage behaviors leading to disease contagion [25]. Similarly, exposure to high levels of threat (e.g., natural disasters or terrorism) produces morally "tight" cultures in which violations of moral norms related to cooperation and interpersonal coordination are more harshly punished [26]. And residential mobility in a culture is associated with greater preference for egalitarianism over loyalty when it comes to preferred interaction partners [27].

Religion is one of the strongest cultural influences on moral values [28], and in a large cross-national study of values religious values varied between nations more than any other single factor [29]. But religious values also vary hugely within nations and societies. For example, Protestants, Catholics, and Jews, all of whom coexist within many nations, differ in how much moral weight they give to impure thoughts versus impure actions, with Protestants more strongly condemning "crimes of the mind" (e.g., thinking about having an affair) [30].

Cultural Differences Within Societies

While cross-national comparisons of moral judgments have existed for decades, recent work is showing that cultural differences *within* nations and societies can be just as substantial. For example, within the US individuals from higher social classes make more utilitarian

decisions in moral dilemmas than do those from lower classes [31]. Also within the US, state-level analyses show substantial variation in tightness (rigidly enforced rules and norms) vs. looseness (less rigid norms, more tolerance of deviance) [32]. Antecedents of tightness (compared to looseness) include ecological and man-made threats such as natural disasters, lack of resources, and disease prevalence, and outcomes of tightness include higher social stability, incarceration rates, and inequality, and lower homelessness, drug use, creativity, and happiness. Thus, the factors contributing to within-nation variations in tightness-looseness are largely the same as those contributing to cross-nation variations [33].

Political ideology has emerged as an important dimension for within-society cultural differences in morality. Moral Foundations Theory [3] has described ideological debates about moralized issues as liberal/left-wing cultures (vs. conservative/right-wing cultures) preferentially building more on Care and Fairness foundations than Loyalty, Authority, and Purity foundations [34-35]. These left-wing/right-wing differences have been replicated within several different nations and world areas [16]. Moral foundation endorsements and judgments can vary as much within nations (vegetarian vs. omnivore subcultures) as between nations (US vs. India) [36].

Moral Behavior

The moral status of specific social behaviors can vary widely across cultures [24]. At an extreme, the most morally repugnant actions in one cultural context (such as killing one's daughter because she has been raped) can be seen as morally required in another cultural context [37]. And individual-difference and situational factors known to affect prosocial behavior (such as trait religiosity and religious priming) do so only through culturally transmitted norms, beliefs, and practices [38-39].

There has been less work on cultural differences in moral behaviors than moral judgments, and the vast majority of the moral behavior work has been limited to behaviors in economic games. Though recent cross-cultural moral research has revealed considerable differences in donations, volunteering, helpfulness, and cheating (for instance showing less helping of strangers in cultures prioritizing ingroup embeddedness) [40-42], most often research has focused on cooperation (i.e., working together to achieve the same end). This work indicates that there are strong differences in cooperation between WEIRD and non-WEIRD cultures [43], as well as between relatively similar industrialized countries [44]. However, it appears that cross-cultural variability is sensitive to the costs associated with cooperating and with free-riding (benefiting from others' cooperation while not cooperating oneself). When punishment for freeriding is not a possibility, intercultural differences are substantially reduced [43]; such differences are similarly lessened when cooperation is less personally costly [45].

There are also strong cultural differences in patterns of reciprocity – both positive (rewarding proven cooperators; [44]) and negative (punishing freeloaders [43, 46]). Again, these differences exist even between WEIRD countries [44]. Cross-cultural differences in *anti*social punishment (the punishment of cooperators) appear to be especially pronounced. While in some countries (USA, Australia) antisocial punishment is exceptionally rare, in others (Greece, Oman) people actually punish cooperators as much as free-riders [47]. Relatedly, recent work has uncovered cultural differences in rates of third-party punishment (i.e., costly punishment made by an agent for an interaction in which they were not involved [48]), which is more prevalent in cultures with low social mobility and strong social ties [49].

Factors Contributing to Cultural Differences

Various overlapping factors may account for these differences, including cultural norms, environmental and structural variables, and demographic and economic factors. Cooperation and punishment norms vary considerably across cultures, and these differences translate into meaningful behavioral differences. For instance, antisocial punishment appears to be especially pervasive in cultures that lack a strong norm of civic cooperation [47]. Historical cultural traditions also shape moral judgments. Purity behavior is also strongly influenced by cultural norms. For example, because of their traditional emphasis on the face as a locus of public selfrepresentation, Southeast Asians are more likely to cleanse their faces following a moral transgression in order to reduce guilt and negative self-judgment, whereas people from WEIRD cultures tend to cleanse their hands [50]. But where do these norms come from in the first place? Research indicates that social-ecological factors – such as a community's staple crops [51] and population size [6] – contribute to cooperation differences because they alter the types of behaviors that are required for communities to thrive. There is also growing evidence that exposure to markets might contribute to moral differences, by increasing positive interaction experiences, thus encouraging more trust, and, ultimately, increasing cooperation [6, 52].

Cultural Differences Within Societies

There is also evidence of moral differences between groups in the same nation or society. For instance, even within a single city, residential mobility (the frequency with which people change where they live) has been associated with less prosocial (and more antisocial) behavior [53-54]. In terms of cooperation, though within-culture variability may be lower than between-culture variability overall, in the absence of threats of free-rider punishment, there appears to be

even more variability *within* cultures than between cultures, likely due to considerable differences in punishment habits between cultures [43].

One specific within-culture difference in cooperation is that low-income people in WEIRD cultures appear more cooperative than wealthy people [55]. Lower income people are also more generous with their time, more charitable, and less likely to lie, cheat, or break driving laws [55-56]. At least in part, these differences seem to stem from wealthy people's greater acceptance of greed [56].

A sizeable amount of research also indicates there are within-culture moral differences that result from religious diversity. Though some types of religiosity appear to contribute to ingroup bias [57-58], recent research has primarily focused on the positive consequences of religious belief. Religious people appear to naturally act more prosocially [59], and priming religious concepts increases generosity and reduces cheating, though only among people who hold religious beliefs [38]. Many explanatory mechanisms have been proposed for religious prosociality [60], but from a social psychological perspective, promising explanations include the bonds and sentiments arising from communal activities such as ritual and synchronous movement [28, 61-62] (see also [63] in this issue for more on religion and culture).

Future Directions

Research on the role of culture in morality, and on the role of morality in culture, will continue to thrive in coming years. This work is likely to have an increasing societal impact as the role of moral concerns in intergroup conflicts becomes more well-understood. Sacred moral values (those people refuse to exchange for mundane resources like money) such as honor or holy land have been shown to play an exacerbating role in intergroup conflicts [64-66], and this

role has been shown to vary across cultures (for example playing particular roles in Iran and Egypt [67-68]). Pluralist approaches to moral judgment [3-4] can help delineate which values have such exacerbating effects in which cultural and relational contexts.

Conclusion

Cultures vary substantially in their promotion and transmission of a multitude of moral judgments and behaviors. Cultural factors contributing to this variation include religion, social ecology (weather, crop conditions, population density, pathogen prevalence, residential mobility), and regulatory social institutions such as kinship structures and economic markets. Notably, variability in moral thought and action can be just as substantial within societies as across societies. Such variability brings up many difficult normative questions for any science of morality, such as what criteria could allow anyone to claim a specific action or practice is objectively moral or immoral [69]. But at the descriptive level, this variability offers untold opportunities for future moral psychology as it continues to identify the antecedents, sources, and structures of our moral lives.

References

- 1. Shweder R, Much N, Mahapatra M, Park L: The "big three" of morality (autonomy, community, divinity) and the "big three" explanations of suffering. *Morality and Health* 1997: 119-169.
- 2. Haidt J: The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological Review* 2001: **108(4)**:814-834.
- 3. Graham J, Haidt J, Koleva S, Motyl M, Iyer R, Wojcik S, Ditto P H: **Moral Foundations Theory: The pragmatic validity of moral pluralism**. *Advances in Experimental Social Psychology* 2013: **47**:55-130.
- *4. Rai T S, Fiske A P: Moral psychology is relationship regulation: moral motives for unity, hierarchy, equality, and proportionality. *Psychological Review* 2011: **118(1)**:57-75. Presents a cultural view of morality as social regulation via four different relational models and distinct moral motives: communal sharing (unity), authority ranking (hierarchy), equality matching (equality), and market pricing (proportionality).
- 5. Jensen L A: Moral development in a global world: Research from a cultural-developmental perspective. Cambridge University Press 2015.
- 6. Henrich J, Ensminger J, McElreath R, Barr A, Barrett C, Bolyanatz A, Ziker J: **Markets, religion, community size, and the evolution of fairness and punishment**. *Science* 2010: **327(5972)**:1480-1484.
- 7. Schmidt, M. F., Rakoczy, H., & Tomasello, M. (2013). **Young children understand and defend the entitlements of others.** *Journal of Experimental Child Psychology*, *116*(4), 930-944.
- *8. 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*, 0146167215595606. Explores lay concepts of immorality in Western (Canada, USA) vs. Chinese cultural contexts, finding that while immorality is tightly linked to harmful actions in the West, it is more closely linked to uncivilized actions for Chinese participants.
- 9. Smith, K. D., Smith, S. T., & Christopher, J. C. (2007). What defines the good person? Cross-cultural comparisons of experts' models with lay prototypes. *Journal of Cross-Cultural Psychology*, *38*(3), 333-360.
- 10. Vauclair C M, Fischer R: **Do cultural values predict individuals' moral attitudes? A cross-cultural multilevel approach.** *European Journal of Social Psychology* 2011: **41(5)**:645-657.
- 11. Fischer & Boer, this issue

*12. Boer D, Fischer R: **How and when do personal values guide our attitudes and sociality? Explaining cross-cultural variability in attitude—value linkages.** *Psychological Bulletin* 2013: *139*(5):1113.

Societal-level factors affect the extent to which individuals' personal values affect their attitudes towards social issues. Higher disease levels decrease conservation value-attitude relationships and individualism increases self-transcendence value-attitude relationships.

*13. Henrich J, Heine S J, Norenzayan A: **The WEIRDest people in the world?** *Behavioral and Brain Sciences* 2010: **33(2-3)**:61-83.

Damning critique of the majority of psychological science as based on a radically unrepresentative subset of the human population. Recommendations for expanding empirical investigations to non-WEIRD samples are offered, but the field just went with MTurk.com instead.

- 14. Haidt J, Koller S, Dias M: **Affect, culture, and morality, or is it wrong to eat your dog?** *Journal of Personality and Social Psychology* 1993: **65**:613-628.
- 15. Guerra, Giner-Sorolla R: **The Community, Autonomy and Divinity Scale: A new tool for the study of cross-cultural psychology.** *Journal of Cross-Cultural Psychology* 2010: **41**
- 16. Graham J, Nosek B A, Haidt J, Iyer R, Koleva S, Ditto P H: **Mapping the moral domain**. *Journal of Personality and Social Psychology* 2011: **101**: 366-385.
- 17. Vauclair C M, Fischer R, Ferreira M C, Guerra V, Hößler U, Karabati S, Spieß E: What Kinds of Value Motives Guide People in Their Moral Attitudes? The Role of Personal and Prescriptive Values at the Culture Level and Individual Level. *Journal of Cross-Cultural Psychology* 2015: **46(2)**:211-228.
- 18. Gold N, Colman A M, Pulford B D: **Cultural differences in responses to real-life and hypothetical trolley problems.** *Judgment and Decision Making* 2014.
- 19. An S, Trafimow D: **Affect and morality: a cross-cultural examination of moral attribution**. *Journal of Cross-Cultural Psychology* 2013: 0022022113511298.
- 20. Vauclair C M, Wilson M, Fischer R: Cultural conceptions of morality: Examining laypeople's associations of moral character. *Journal of Moral Education* 2014: **43(1)**:54-74.
- *21. Schafer, Hahn, Tomasello (in press): **Fair is not fair everywhere.** *Psychological Science* 2015.

Children from three different cultural backgrounds assigned rewards to themselves and a game partner using justice norms that reflected their culture: Western culture children assigned rewards based on equity of effort, pastoralist children divided rewards evenly regardless of amount of effort, and hunter-gatherer children took both equality and some merit into account.

- 22. van der Toorn J, Berkics M, Jost J T: **System justification, satisfaction, and perceptions of fairness and typicality at work: A cross-system comparison involving the US and Hungary.** *Social Justice Research* 2010: **23(2-3)**:189-210.
- 23. Wu M S, Schmitt M, Zhou C, Nartova-Bochaver S, Astanina N, Khachatryan N, Han B: Examining Self-Advantage in the Suffering of Others: Cross-Cultural Differences in Beneficiary and Observer Justice Sensitivity Among Chinese, Germans, and Russians. *Social Justice Research* 2014: 27(2):231-242.
- 24. Henrich J: **Culture and social behavior**. *Current Opinion in Behavioral Sciences* 2015: **3**:84-89.
- 25. Van Leeuwen F, Park J H, Koenig B L, Graham J: **Regional variation in pathogen prevalence predicts endorsement of group-focused moral concerns.** *Evolution and Human Behavior* 2012: **33**:429-437.
- 26. Roos P, Gelfand M, Nau D, Lun J: **Societal threat and cultural variation in the strength of social norms: An evolutionary basis**. *Organizational Behavior and Human Decision Processes* 2015: **129**:14-23.
- 27. Lun J, Oishi S, Tenney E R: **Residential mobility moderates preferences for egalitarian versus loyal helpers.** *Journal of Experimental Social Psychology* 2012: **48(1)**:291-297.
- 28. Graham J, Haidt J: Beyond beliefs: **Religions bind individuals into moral communities**. *Personality and Social Psychology Review* 2010: **14(1)**:140-150.
- **29. Saucier G, Kenner J, Iurino K, Malham P B, Chen Z, Thalmayer A G, Shen-Miller S: Cross-Cultural Differences in a Global "Survey of World Views." *Journal of Cross-Cultural Psychology* 2015: **46(1)**:53-70.

A large-scale values comparison across 33 countries finds that the largest cultural variations can be found in constructs related to religion and family norms. Psychological constructs not often compared cross-nationally, such as Machiavellianism and materialism, were also explored.

*30. Cohen A B: Religion's Profound Influences on Psychology Morality, Intergroup Relations, Self-Construal, and Enculturation. Current Directions in Psychological Science 2015: **24**(1):77-82.

Comparisons of Protestant, Catholic, and Jewish cultures reveal that differences in theologies and religious cultures encompass not only explicitly theological beliefs, but also important psychological constructs such as self-construal and intergroup relations.

- 31. Côté S, Piff P, Willer R: **For Whom Do the Ends Justify the Means? Social Class and Utilitarian Moral Judgment**. *Journal of Personality and Social Psychology* 2013: **104**:490-503.
- 32. Harrington J R, Gelfand M J: Tightness–looseness across the 50 united states. Proceedings of the National Academy of Sciences 2014: **111(22)**: 7990-7995.

- **33. Gelfand M J, et al: **Differences between tight and loose cultures: A 33-nation study.** *Science* 2011: **332(6033)**:1100–1104.
- Large distillation of several cultural factors including social institutions, threats, daily regularities, social ecology, and individual differences into the dimension of tightness-looseness of social norms and expectations, predicting a wide swath of social attitudes and behaviors.
- 34. Graham J, Haidt J, Nosek B A: Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology* 2009: **96**:1029-1046.
- 35. Federico C M, Weber C R, Ergun D, Hunt C: **Mapping the connections between politics** and morality: The multiple sociopolitical orientations involved in moral intuition. *Political Psychology* 2013: **34(4)**:589–610.
- 36. Ruby M B, Heine S J, Kamble S, Cheng T K, Waddar M: **Compassion and contamination. Cultural differences in vegetarianism.** *Appetite* 2013: **71**:340-348.
- 37. Fiske A P, Rai T S: Virtuous Violence: Hurting and Killing to Create, Sustain, End, and Honor Social Relationships. Cambridge University Press 2014.
- 38. Shariff A F, Willard A K, Andersen T, Norenzayan A: **Religious Priming A Meta-Analysis With a Focus on Prosociality.** *Personality and Social Psychology Review* 2015.
- 39. Stavrova O, Siegers P: Religious Prosociality and Morality Across Cultures How Social Enforcement of Religion Shapes the Effects of Personal Religiosity on Prosocial and Moral Attitudes and Behaviors. Personality and Social Psychology Bulletin 2013: 0146167213510951.
- 40. Knafo, A., Schwartz, S. H., & Levine, R. V. (2009). **Helping strangers is lower in embedded cultures.** *Journal of Cross-Cultural Psychology*, *40*(5), 875-879.
- 41. Lewis A, Carrera S, Cullis J, Jones P: **Individual, cognitive and cultural differences in tax compliance: UK and Italy compared.** *Journal of Economic Psychology* 2009: **30(3)**:431-445.
- 42. Smith P B: **To Lend Helping Hands: In-Group Favoritism, Uncertainty Avoidance, and the National Frequency of Pro-Social Behaviors.** *Journal of Cross-Cultural Psychology* 2015: 0022022115585141.
- 43. Gächter S, Herrmann B, Thöni C: **Culture and cooperation.** *Philosophical Transactions of the Royal Society B: Biological Sciences* 2010: **365(1553)**:2651-2661.
- 44. Gächter S, Herrmann B: **Reciprocity, culture and human cooperation: previous insights and a new cross-cultural experiment**. *Philosophical Transactions of the Royal Society B: Biological Sciences* 2009: **364(1518)**:791-806.

- **45. House B R, Silk J B, Henrich J, Barrett H C, Scelza B A, Boyette A H, Laurence S: **Ontogeny of prosocial behavior across diverse societies**. *Proceedings of the National Academy of Sciences* 2013: **110**(36):14586-14591.
- The researchers tracked children and adults from six diverse societies and found considerable similarities but also differences in both general rates and developmental trends in cooperation. For instance, cultures differed most when cooperation was personally costly, but these differences were especially pronounced after middle childhood.
- 46. Balliet D, Van Lange P A: **Trust, punishment, and cooperation across 18 societies A Meta-Analysis**. *Perspectives on Psychological Science* 2013: **8(4)**:363-379.
- 47. Herrmann B, Thöni C, Gächter S: **Antisocial punishment across societies.** *Science* 2008: **319(5868)**:1362-1367.
- 48. Hoff, K., Kshetramade, M., Fehr, E. (2011). **Caste and punishment: the legacy of caste culture in norm enforcement.** Economic Journal, 121, F449-F475.
- 49. Roos, P., Gelfand, M., Nau, D., & Carr, R. (2014). **High strength-of-ties and low mobility enable the evolution of third-party punishment.** *Proceedings of the Royal Society of London B: Biological Sciences*, 281(1776), 20132661.
- 50. Lee et al: A Cultural Look at Moral Purity: wiping the face clean. Frontiers in Psychology 2015.
- 51. Talhelm T, Zhang X, Oishi S, Shimin C, Duan D, Lan X, Kitayama S: **Large-scale** psychological differences within China explained by rice versus wheat agriculture. *Science* 2014: **344(6184)**:603-608.
- 52. Al-Ubaydli O, Houser D, Nye J V, Paganelli M P, Pan X: **The causal effect of market participation on trust: An experimental investigation using randomized control**. 2011
- **53. Oishi S: The psychology of residential mobility implications for the self, social relationships, and well-being. *Perspectives on Psychological Science* 2010: 5(1): 5-21. Expansive overview of the social ecology of residential mobility, both between and within cultures, and its implications for both prosocial and antisocial behaviors.
- 54. O'Brien D T, Gallup A C, Wilson D S: **Residential mobility and prosocial development within a single city**. *American journal of community psychology* 2012: **50(1-2):**26-36.
- 55. Piff P K, Kraus M W, Côté S, Cheng B H, Keltner D: **Having less, giving more: the influence of social class on prosocial behavior.** *Journal of personality and social psychology* 2010: **99(5)**:771.

- *56. Piff P K, Stancato D M, Côté S, Mendoza-Denton R, Keltner D: **Higher social class** predicts increased unethical behavior. *Proceedings of the National Academy of Sciences* 2012: **109(11)**:4086-4091.
- The results of seven studies suggest that compared to lower-class individuals, upper-class individuals are more likely to break driving laws, lie, cheat, and exhibit unethical decision-making. The results of these studies also suggested that at least in part, these differences are accounted for by upper-class individual's more positive attitudes towards greed.
- 57. Galen, L. W. (2012). Does religious belief promote prosociality? A critical examination. *Psychological Bulletin*, *138*(5), 876-906.
- 58. Hall, D. L., Matz, D. C., & Wood, W. (2010). Why don't we practice what we preach? A meta-analytic review of religious racism. *Personality and Social Psychology Review*, 14(1), 126-139.
- 59. Norenzayan A, Henrich J, Slingerland E: **Religious prosociality: A synthesis**. *Cultural evolution* 2013: 365-378.
- 60. Norenzayan A: Does religion make people moral? Behaviour 2014: 151(2-3):365-384.
- 61. Wiltermuth S S, Heath C: **Synchrony and cooperation**. *Psychological Science* 2009: **20(1):**1-5.
- 62. Xygalatas D, Mitkidis P, Fischer R, Reddish P, Skewes J, Geertz A W, Bulbulia J: **Extreme rituals promote prosociality.** *Psychological science* 2013: 0956797612472910.
- 63. Cohen & Varnum, this issue
- 64. Atran, S., & Ginges, J. (2012). Religious and sacred imperatives in human conflict. *Science*, *336*(6083), 855-857.
- 65. Atran, S., Sheikh, H., & Gomez, A. (2014). Devoted actors sacrifice for close comrades and sacred cause. *Proceedings of the National Academy of Sciences*, 111(50), 17702-17703.
- 66. Graham, J., & Haidt, J. (2012). Sacred values and evil adversaries: A moral foundations approach. In P. Shaver & M. Mikulincer (Eds.), *The Social Psychology of Morality: Exploring the Causes of Good and Evil* (pp. 11-31). New York: APA Books.
- 67. Dehghani, M., Atran, S., Iliev, R., Sachdeva, S., Medin, D., Ginges, J. (2010). Sacred values and conflict over Iran's nuclear program. Judgment and Decision Making. Vol. 5 (7), pp. 540-546.
- 68. Gelfand, M. J., Severance, L., Lee, T., Bruss, C. B., Lun, J., Abdel-Latif, A. H., ... & Moustafa Ahmed, S. (2015). Culture and getting to yes: The linguistic signature of creative agreements in the United States and Egypt. *Journal of Organizational Behavior*.

69. Shweder R A, Menon U: **Old questions for the new anthropology of morality: A commentary.** *Anthropological Theory* 2014: **14(3)**:356-370.