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### Defending a Social Learning Explanation: A Comment on *The Origins of Shared Intuitions of Justice*

*Christopher Brett Jaeger\**

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This is a Response to the Article, *The Origins of Shared Intuitions of Justice*, by Professors Paul H. Robinson, Robert Kurzban, and Owen D. Jones, published in the November 2007 issue of the *Vanderbilt Law Review*.<sup>1</sup>

The notion of “desert” permeates our criminal justice system. We ask our judges and juries to determine punishments based, in part, on the blameworthiness of offenders’ actions. But how do we know what actions deserve which punishments? Empirical evidence suggests that people share surprisingly similar views about desert: Across cultures and in a variety of experimental paradigms, people tend to agree on the relative blameworthiness and appropriate severity of punishments for various offenders.<sup>2</sup> Yet while we can state with empirical support that people share inclinations as to what is just, we nevertheless are left with the underlying question of *why*.

Professors Robinson, Kurzban, and Jones argue that a specific evolved human mechanism is a more plausible explanation of our shared views of justice than “general social learning.”<sup>3</sup> These scholars acknowledge that the social learning explanation “cannot be ruled out

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1. Paul H. Robinson, Robert Kurzban & Owen D. Jones, *The Origins of Shared Intuitions of Justice*, 60 VAND. L. REV. 1633 (2007).

2. See *id.* at 1636–37 (reviewing empirical results finding cross-cultural similarities in moral intuitions); see also Paul H. Robinson & Robert Kurzban, *Concordance and Conflict in the Intuitions of Justice*, 91 MINN. L. REV. 1829, 1854–65 (2007) (same).

3. Robinson, Kurzban & Jones, *supra* note 1, at 1687.

on present evidence,” but contend that it presents difficulties.<sup>4</sup> First, they argue that social learning theory depends on people favoring group interests above their individual interests—an unlikely proposition given empirical evidence that this is exceedingly rare. Second, they contend that social learning theory does not adequately explain the extent of similarity in views of justice across cultures.<sup>5</sup> Finally, they argue that moral principles are not transmitted easily through social learning because they are intuitive—arrived at quickly, and often based on unconscious, inaccessible principles.<sup>6</sup>

This Response addresses the purported shortcomings of the “accumulated social learning” theory and argues that it provides the best explanation of our shared views of justice.<sup>7</sup> First, an accumulated social learning theory does not necessarily require the members of a society to decide to put group interests ahead of their own; rather, if each generation simply spreads its norms as widely as it can, the rise of cooperative social norms can be explained simply by the spread of efficient norms over time. Second, an accumulated social learning theory adequately explains the similarity of moral inclinations across cultures because, as with an evolutionary theory, pressures place constraints on the universe of likely moral orientations: a society must develop certain core norms or it will collapse and its norms will not persist in future generations. In addition to predicting the core set of moral inclinations widely held across cultures, social learning theory better accounts for the ways in which moral inclinations differ, both within and across cultures. Finally, social learning theory not only allows for, but emphasizes, the common nature of nonlinguistic learning. Ultimately, social learning theory provides the simpler and more testable explanation of present data.

#### DEFINING “ACCUMULATED SOCIAL LEARNING THEORY”

Before contending that accumulated social learning theory adequately explains widespread similarities in moral inclinations, it will be helpful to define an “accumulated social learning theory.”

First, the term “social learning theory” has special meaning for psychologists.<sup>8</sup> It refers to the theory that people acquire new

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4. *Id.*

5. *Id.* at 1682–84.

6. *Id.* at 1684–87.

7. *See id.* at 1681–87 (describing the theory of accumulated social learning).

8. Albert Bandura is widely considered the father of social learning theory among psychologists. See ALBERT BANDURA, SOCIAL LEARNING THEORY (1977), for a detailed description of the theory, particularly of learning through observation and modeling.

behavioral tendencies through several learning mechanisms, including classical conditioning, operant conditioning, and observational learning (including what is called “vicarious conditioning”).<sup>9</sup> Classical conditioning, which results in acquisition of reflexive, involuntary behaviors, is not especially relevant to moral situations and therefore is beyond the scope of this Response. Operant conditioning and observational learning, however, bear on voluntary conduct, including moral conduct.

Operant conditioning refers to the use of reinforcements and punishments to modify voluntary behavior. The simple, underlying logic is that we are more likely to repeat behaviors that lead to positive consequences for us and less likely to repeat behaviors that lead to negative consequences. We experience operant conditioning throughout our lives: children receive an allowance as reinforcement for chore completion and groundings as punishment for aggressive behavior like fighting. The potential connection to moral development is obvious, as children come to see rewarded behavior as (morally) “good” and punished behavior as (morally) “bad.”

Observational learning refers to the lessons gleaned from watching others’ experiences. Put simply, people of all ages observe their environment and process the information and behaviors around them, and their processing of this information in turn impacts their own behavior.<sup>10</sup> “One would not . . . permit an adolescent to learn to drive a car by means of trial-and-error procedures, nor would one entrust a firearm to an armed services recruit without a demonstration of how it should be handled.”<sup>11</sup> An important subset of observational learning—vicarious conditioning—parallels operant conditioning: Just as individuals will shape their behavior in response to reinforcement and punishment, individuals will shape their behavior according to the perceived reinforcement and punishment of others. If observed behavior leads to desirable consequences or reinforcement, the observers likely will imitate it; if it leads to punishment, the observer is less likely to imitate it. Thus, when a five-

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9. Some social learning theorists also include “reasoning” as a source of new behavioral tendencies. If “reasoning” is included, though, reference to it is beyond the scope of this comment. A theory of social learning that emphasizes operant conditioning and observational learning is sufficient to explain striking similarities in moral intuitions across cultures.

10. BANDURA, *supra* note 8; Joan E. Grusec, *Social Learning Theory and Developmental Psychology: The Legacies of Robert Sears and Albert Bandura*, 28 DEVELOPMENTAL PSYCHOL. 776, 784 (1992).

11. ALBERT BANDURA & RICHARD H. WALTERS, SOCIAL LEARNING AND PERSONALITY DEVELOPMENT 52 (1963).

year-old girl watches her big brother punch a friend and promptly get grounded, she is less likely to engage in punching behavior.<sup>12</sup>

The “accumulated” component of an “accumulated social learning theory” refers to the tendency for adaptive norms to spread through a group or society via social learning. Social learning gives us a mechanism for adaptation that operates far faster than biological adaptation. Under an accumulated social learning theory, the norms spread through a group are not random; rather, they make up the set of efficient norms that emerges after successive generations of social learning. “In a sense, this argument borrows the refinement mechanism of evolutionary theory and makes it available to the general social learning explanation. . . . [G]roups with efficient norms grow, do better, and spread their norms, and thus over time there comes to be a great deal of agreement” as these efficient norms are spread through social learning.<sup>13</sup> A society that does not punish murder or physical violence is less likely to flourish and spread its norms because these norms are inefficient in essentially all contexts. Thus, social evolution creates significant constraints on the universe of moral views likely to be prevalent in a society.

To recap, for the purposes of this Response, accumulated social learning theory posits that members of a group or society spread increasingly efficient norms through operant conditioning and observational learning; or put more generally, through rewards, punishments, and modeling. Given this definition, it is now time to respond to some critiques of this theory’s ability to explain our shared moral inclinations.

#### I. AN ACCUMULATED SOCIAL LEARNING THEORY NEED NOT RELY ON INDIVIDUALS PUTTING GROUP INTERESTS ABOVE THEIR OWN INDIVIDUAL INTERESTS

One of the first critiques of social learning explanations of shared moral inclinations is that they are too dependent upon “the individual’s choice to adopt views of justice that are efficient *for the group*.”<sup>14</sup> And, as Professors Robinson, Kurzban, and Jones rightly point out, the evidence suggests this is rare: People tend to favor self-

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12. See Grusec, *supra* note 10, at 783 (“Bandura and McDonald (1963) questioned the basic tenets of cognitive developmental theorizing concerning moral development by showing that, through a training procedure involving social reinforcement and modeling, the moral judgments of young children could be modified.” (citing BANDURA & WALTERS, *supra* note 11)).

13. Robinson, Kurzban & Jones, *supra* note 1, at 1681.

14. *Id.* at 1679 (emphasis added).

interest over group interest in a variety of situations.<sup>15</sup> Therefore, a social learning explanation arguably is inconsistent with experimental data.

A strong response in defense of a social learning theory is to challenge the first premise: Social learning explanations do not necessarily depend on individuals choosing to place the group before themselves, and in fact, need not involve much choice at all. Rather, an accumulated social learning theory requires only that people transfer (through reinforcement and punishment) the norms that they themselves have learned.

As described above, the instruments of social learning are conditioning and observational learning. Neither method requires deep, rational deliberation about views of justice from a learner; the learners' behavior is shaped largely by the nature of the responses particular actions evoke. Thus, the normative appraisals of behavior that shape moral inclinations under a social learning explanation often are not the appraisals of actors themselves, but the appraisals of people in a position to reinforce or punish their actions. Much of this learning occurs early in life, when the person offering feedback is the parent or guardian of a child and the parental appraisals are, in turn, informed by the parents' own learning history.<sup>16</sup>

Furthermore, given that the evolutionary theory itself explains pro-social moral intuitions through the benefits such intuitions provide to individuals, it is strange to challenge a social learning theory account because it requires people to prefer what is good for the group over what is good for themselves. If certain pro-social moral intuitions are beneficial for individuals under an evolutionary account, it seems the same pro-social moral inclinations likely would be beneficial for individuals under a social learning account. After all, reliable access to resources and freedom from unnecessary violence are things that not only help one survive until sexual reproduction, but also make life easier for individuals and make societies more efficient.

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15. *Id.*

16. One of the reasons Professors Robinson, Kurzban, and Jones argue that an evolutionary account of moral intuitions is more plausible than a pure-social-learning account is that the evidence that patterns of moral intuitions arise among children at a very young age—perhaps as young as three years of age. *Id.* at 1683. But this evidence is consistent with a social learning explanation as well. Children learn much through conditioning and observational learning, and may generalize from their experience to create moral rules and principles without need for long, philosophical conversations and rational deliberation about moral options. Again, for a general historical discussion of social learning theory, see Grusec, *supra* note 10.

At no point, then, does accumulated social learning theory require a member of a group or society to make a deliberate decision placing group interests above individual interests. The model is analogous to that of evolutionary biology, with efficient norms increasingly spreading from generation to generation through social learning just as increasingly adaptive genes pass from generation to generation through natural selection. Again, people need simply to pass along the norms they have learned; over time, as unsuccessful norms lose out and more successful norms proliferate, the set of norms in a group or society will tend to become more efficient and, importantly for the next Part, more uniform.

## II. ACCUMULATED SOCIAL LEARNING THEORY CAN ADEQUATELY EXPLAIN SIMILARITIES IN MORAL INCLINATIONS ACROSS SITUATIONS AND CULTURES

The general argument in support of an evolutionary explanation is that cross-cultural similarities are more plausibly explained by inherited, common moral intuitions than accumulated social learning. In short, “Evolutionary explanations . . . fit naturally with human universals.”<sup>17</sup> Yet an accumulated social learning theory seems to predict a core set of universal moral inclinations just like an evolutionary account: Some societal norms are more likely to be efficient and spread than others, particularly with respect to foundational social principles like opposition to unprovoked physical harm, the taking of property, and cheating in exchanges.<sup>18</sup> Furthermore, moral inclinations are not all universal—beyond a set of core norms, peripheral norms vary (sometimes widely) across people and over time.<sup>19</sup> Some of these variations are arguably better explained by social learning than by an evolutionary account.<sup>20</sup> Because social learning accounts for both a core set of stable moral inclinations and the volatility in peripheral inclinations without reference to a yet-to-be-demonstrated evolved human mechanism, it is the more parsimonious explanation of current evidence.

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17. Robinson, Kurzban & Jones, *supra* note 1, at 1683.

18. These three norms are named as core norms by Robinson, Kurzban, and Jones. *Id.* at 1676. These norms, though, seem more adaptive and efficient at the societal level than at the individual level.

19. See GRAEME NEWMAN, COMPARATIVE DEVIANCE: PERCEPTION AND LAW IN SIX CULTURES (1976) (discussed in detail in Part II.B. of this comment).

20. See *infra* Part II.B.

*A. Accumulated Social Learning Theory, Like an Evolutionary Theory, Predicts Similarities in Moral Inclinations Across Cultures*

Accumulated social learning theory “borrows the refinement mechanism of evolutionary theory,”<sup>21</sup> with less successful norms losing out to more successful norms over time. Due to this refinement mechanism, social learning theory predicts similarities in moral inclinations across cultures. That is, if groups with efficient norms do tend to grow and spread their norms, then norms within a society will become increasingly uniform as efficient norms replace inefficient ones. It follows from this principle that societies inherently are predisposed to encourage and discourage certain types of behavior, because any society failing to do so likely would fail and cease spreading its norms.

Imagine two segments of a society, segment A and segment B. Within segment A, the norm is to permit, rather than punish, murder. Meanwhile, within segment B, the norm is to discourage murder through punishment. Over time, the norm of segment B seems more inclined to spread. Segment A (and its norms) will die out as its members kill one another—at the very least, the segment A subculture is not likely to thrive. Segment B’s population likely will grow more quickly than Segment A’s (thanks to a lower murder rate), and members of Segment B are inclined to teach their children, among other things, that murder is wrong and should be punished. After several generations, Segment B’s anti-murder norm is going to “win out,” and Segment A’s norm will fall to the wayside.

Similarly, societies inherently are predisposed towards the norm of respecting and protecting their citizens’ property. Any society that did not respect or protect property probably would not grow rapidly because many of its citizens would lack the secure resources needed to survive and raise a family. Furthermore, leaving property “up for grabs” likely would result in devastating internal violence, as property essentially would belong to anyone with the ability or power to take it.

These examples demonstrate that social learning theory, like evolutionary theory, predicts cross-cultural agreement on certain core norms. Some alternatives to core norms, like refusing to condemn murder, are simply off the table because they will be too inefficient to spread over time in any society. These examples also highlight the great difficulty in teasing apart the evolutionary and social learning explanations of shared moral inclinations: The evolutionary and social

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21. Robinson, Kurzban & Jones, *supra* note 1, at 1681.

learning theories often lead to the same conclusion—here, widespread agreement across cultures on core norms.

Professors Robinson, Kurzban, and Jones contend that extensive cross-cultural similarities in moral inclinations support an evolutionary explanation: “How could one explain this consensus [on the core intuitions of justice] if those views simply reflect the efficient norm for each group?”<sup>22</sup> Again, the preceding examples illustrate that some norms are directionally forced under a social learning account, as alternatives are too inefficient to spread in essentially any conceivable group. Further, the issues on which norms are directionally forced in this way are the areas addressed by core moral inclinations: physical harm, the taking of property, and cheating in exchanges.<sup>23</sup> Finally, it is important not to overstate the degree of cross-cultural similarities. Evidence suggests that there are some moral inclinations upon which cultures do not entirely agree.

Professors Robinson, Kurzban, and Jones also seek to support the evolutionary explanation with evidence of cross-cultural similarities in moral *development*.<sup>24</sup> After acknowledging that Lawrence Kohlberg’s view that people go through predictable phases of moral thinking is somewhat dated, they argue that “evidence . . . of a predictable developmental path for all humans, however that path might be conceptualized and described” supports a biological explanation.<sup>25</sup> They contend that, if there were no specific developmental system for the acquisition of moral intuitions and a child’s moral development depended on his environment, children would show very different paths and timing in moral acquisition across cultures.<sup>26</sup>

Yet a social learning explanation, like an evolutionary explanation, accounts for widespread similarities in moral development. Correlations between moral development and age can only tell us so much because children’s environments change as they age, and many changes in the child-environment dynamic are similar across locations and cultures. What Kohlberg and later scholars consider “an age-related change in moral reasoning may actually be little more than an age-related change in familiarity with the kinds of problems being described.”<sup>27</sup> A great deal of psychological literature

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22. *Id.* at 1683.

23. *Id.* at 1646.

24. *Id.* at 1664–66.

25. *Id.* at 1666.

26. *Id.*

27. KELLY G. SHAVER & ROGER M. TARPY, *PSYCHOLOGY* 482 (1993).

describes moral development through processes of socialization and internalization.<sup>28</sup> A famous 1963 experiment by Albert Bandura and Frederick J. McDonald offers strong support for this description: the researchers asked boys ages five to eleven to “observe a model who was reinforced for stating moral judgments (using either intentions or consequences as an explanation for why a particular action was blameworthy) that were either more or less advanced than the boys.”<sup>29</sup> The boys subsequently adjusted their moral judgments to more closely conform to the model.<sup>30</sup>

It warrants emphasis that social learning theories do not deny the role of biology in learning. Children will be better able to grasp certain lessons at different stages in their development due to the biological development of their brains. But while biological factors (like learning ability) may interact with environment factors (like exposure to certain types of moral problems) in determining when children acquire certain moral inclinations, there is no explanatory need for an evolutionary mechanism specific to moral learning.

The key point is that the extent of cross-cultural similarities in moral inclinations and development do not, in and of themselves, clearly support either the evolutionary explanation or social learning explanation. An analysis that is potentially more informative involves looking at the ways in which people *do* differ in their moral inclinations in an attempt to determine which theory better accounts for the differences.

*B. Where People Do Differ in Their Moral Inclinations, Social Learning Theory Provides a More Satisfactory Explanation than the Evolutionary Alternative*

People across and within cultures tend to express similar moral inclinations, as both the evolutionary and social learning theories predict.<sup>31</sup> But people also display some important differences, and an

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28. See Joan E. Grusec, *The Development of Moral Behavior and Conscience from a Socialization Perspective*, in HANDBOOK OF MORAL DEVELOPMENT 243, 243–65 (Melanie Killen & Judith Smetana eds., 2006) (providing background on “how the ideas of socialization theorists about children’s acquisition of the values and standards of society, including moral values and standards, have evolved over time”).

29. *Id.* at 248 (concisely describing Albert Bandura & F.J. McDonald, *The Influence of Social Reinforcement and the Behavior of Models in Shaping Children’s Moral Judgments*, 67 J. ABNORMAL & SOCIAL PSYCHOL. 274 (1963)).

30. *Id.*

31. Robinson & Kurzban, *supra* note 2, at 1862. Professors Robinson and Kurzban specifically review empirical findings of strong cross-cultural similarities from four studies: Michael O’Connell & Anthony Whelan, *Taking Wrongs Seriously: Public Perceptions of Crime*

analysis of these differences is helpful in determining which theory best explains present evidence. First, there is some empirical evidence that people of different social classes within a culture tend to evaluate the relative seriousness of offenses differently, even within the realm of “core” moral intuitions like opposition to physical violence.<sup>32</sup> Social learning theory better accommodates these differences. Second, beyond the core offenses, local variation in moral appraisals tends to emerge. It is noteworthy that cultures demonstrate variance in evaluating issues of sexual morality, including, to a degree, incest.<sup>33</sup> Arguably, a social learning theory better accommodates variance on these issues, particularly incest.

### 1. Evidence That Elements Within a Society View Certain Crimes Differently Provides Strong Support for Social Learning Theory

Research has demonstrated that people of higher social classes tend to view violent offenses as being significantly more serious than people of lower classes do.<sup>34</sup> A 1978 study asked 650 members of the general population of Sheffield, England, belonging to various social classes, to rate the seriousness of eleven criminal offenses captured in vignettes.<sup>35</sup> The offenses ranged from a man not reporting some income to a tax inspector—saving one pound in taxes—to a man attacking his wife with a knife.<sup>36</sup> Participants’ evaluations of several offenses varied significantly depending upon their social class.<sup>37</sup> Most relevant for this Response, people of higher social class rated the knife attack—an infliction of physical harm—as significantly more serious than members of other social classes, both in terms of raw seriousness rating and relative to other crimes.<sup>38</sup>

This finding is problematic for an evolutionary explanation of shared intuitions of justice. As will be emphasized in Part II.C, evolutionary processes take a long time to shape behavior. Thus, a

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*Seriousness*, 36 BRIT. J. CRIMINOLOGY 299 (1996); Marlene Hsu, *Cultural and Sexual Differences on the Judgment of Criminal Offenses: A Replication Study of the Measurement of Delinquency*, 64 J. CRIM. L. & CRIMINOLOGY 348; NEWMAN, *supra* note 19; David M. Bersoff & Joan G. Miller, *Culture, Context, and the Development of Moral Accountability Judgments*, 29 DEVELOPMENTAL PSYCHOL. 664 (1993).

32. Monica A. Walker, *Measuring the Seriousness of Crimes*, 18 BRIT. J. CRIMINOLOGY 348 (1978)

33. Robinson, Kurzban & Jones, *supra* note 1, at 1645.

34. Walker, *supra* note 32.

35. *Id.*

36. *Id.* at 349.

37. *Id.* at 360.

38. *Id.* at 360–61.

relatively accidental characteristic like membership in a social class—familial membership that may have been acquired in the most recent generation or two, the blink of an eye in evolutionary terms—should not have much influence on the identified core moral inclinations. The fact that core inclinations like opposition to physical harm may be influenced by accidental and evolutionarily recent social factors, makes it less probable that the inclinations are deep-seated products of evolution.

## 2. Social Learning Theory Better Accommodates the Cross-Cultural Differences That Do Exist

Cross-cultural research does reveal striking similarities in moral inclinations across cultures, as predicted by either an evolutionary or social learning theory of moral learning.<sup>39</sup> Consensus is particularly strong with regard to crimes rated as being the most severe—particularly the infliction of the physical harm and taking of property. Again, this does not do much to suggest whether the consensus is the product of evolutionary forces or social learning. Such results are consistent with either theory. In crimes of lesser seriousness, however, some local variation does tend to emerge.<sup>40</sup> Examining variation within these lower-order moral views may provide us with insight into their origins, particularly if either an evolutionary theory or social learning theory would seem to predict widespread stability.

It is important to discuss at the outset some important limitations on this type of analysis. Evolutionary theory does not predict that every feature or tendency that should arise and spread does arise and spread; rather, features and tendencies arise only through chance mutation, and spread significantly only in environments in which they are advantageous in sexual selection. Thus, variance regarding a moral inclination that seems to be evolutionarily beneficial does not necessarily lead to the denial of the evolutionary explanation of widespread moral similarities. Rather, environmental pressures may simply never have strongly favored the particular moral inclination. That said, the primary claim of this Part is that an accumulated social learning theory provides a more parsimonious account of current empirical evidence on shared moral inclinations than an evolutionary explanation. This claim is supported

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39. Robinson & Kurzban, *supra* note 2, at 1862.

40. O'Connell & Whelan, *supra* note 31, at 301 (citing Julian V. Roberts, *Public Opinion, Crime, and Criminal Justice*, in 16 CRIME AND JUSTICE: AN ANNUAL REVIEW OF RESEARCH 137 (Michael Tonry ed., 1992)).

when accumulated social learning theory comports more easily with moral variation than the evolutionary theory does.

For most issues, evolutionary and social learning theories yield the same predictions. For example, Professors Michael O'Connell and Anthony Wheelan asked participants in Dublin, Ireland, to evaluate and rate the seriousness of ten different offenses, and then compared their data to those from a British sample taken ten years earlier. The researchers found some cross-cultural differences between the Irish and British data with respect to less serious offenses like selling marijuana,<sup>41</sup> but neither an evolutionary theory nor social learning theory would predict strong cross-cultural similarities. Intuitive opposition to the use or sale of marijuana simply has not been especially evolutionarily salient. Similarly, while it is implausible for a social group that does not oppose murder to thrive and spread its norms, it is quite plausible for social groups to function, grow, and spread their norms regardless of their stances on marijuana use. With an issue like marijuana use, there are not inherent limitations: Societies can succeed and spread with a range of norms.

Certain issues relating to sexual conduct and reproduction may, however, provide relevant evidence. Sexual reproduction is necessarily at the heart of any evolutionary explanation of widely shared moral inclinations. Research demonstrates significant cross-cultural variance on several issues of sexual morality—including, to a degree, incest—for which evolutionary theory arguably would seem more likely to predict stability than social learning theory.

Graeme Newman conducted an enormous study on cross-cultural moral inclinations, asking over 2,000 participants from six countries with distinctive cultures to rate nine “offenses” in terms of their seriousness.<sup>42</sup> His results demonstrate a familiar pattern: overall similarities in the ordering of acts across countries and considerable agreement as to the amount of punishment appropriate for each act.<sup>43</sup> Yet, the results contain items on which there is significant disagreement: “Vast cross-cultural differences were found in respondents’ definitions of criminal, deviant, and non-deviant conduct.”<sup>44</sup> Some of the biggest differences in cross-cultural normative appraisals involved actions related to the highly-evolutionarily-salient act of sexual reproduction.

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41. *Id.* at 310.

42. NEWMAN, *supra* note 19.

43. *Id.* at 115, 140–41.

44. *Id.* at 135.

With respect to incest in particular, any evolutionarily driven influence would be towards universal condemnation and punishment. Professors Robinson, Kurzban, and Jones nicely articulate the connection: “Because of the detrimental effects of inbreeding, evolution appears to have selected for genes that cause organisms to develop behavioral systems that lead them away from mating with close genetic relatives. In humans, this manifests itself as disgust and, perhaps concomitantly, a shared sense that committing incest is wrong.”<sup>45</sup>

Accumulated social learning theory suggests that societies will not tend to develop pro-incest norms (because such societies are not likely to grow and thrive), but social pressures are less likely to be stringent shapers of sexual conduct than sexual selection. Societies may survive and spread their norms regardless of whether their norms include strong oppositions to incest; some people within a successful society may, and historically have, engaged in incest. There is simply more room for various sexual norms at the societal level.

Newman’s results reveal some level of cultural differences in moral appraisals of incest. While the majority of respondents in all countries surveyed considered incest deviant, the size of the minority identifying incest as non-deviant showed surprising variance across cultures.<sup>46</sup> Over twenty percent of American and Sardinian participants indicated that incest was a “non-deviant” act, while only three percent of Indonesian participants found incest “non-deviant.”<sup>47</sup> Among participants recommending prison as punishment, proposed sentences for incest varied more across cultures than the proposed sentences for any other act examined in the study.<sup>48</sup> American participants on average rated incest as a less serious form of deviance than taking drugs and put it roughly on par with individual pollution; participants from some other countries—Yugoslavia and Iran—rated incest as the most serious form of deviance in the study, even more serious than robbery.<sup>49</sup> Incest and other actions related to sex and sexual reproduction, like abortion, were the issues for which Newman found the most cross-cultural variance.<sup>50</sup>

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45. Robinson, Kurzban & Jones, *supra* note 1, at 1645.

46. NEWMAN, *supra* note 19, at 129 tbl.10.

47. *Id.*

48. *Id.* at 145 tbl.13.

49. *Id.* at 118 tbl.5.

50. Newman found very significant divergence across countries on the issue of abortion. Two of the countries surveyed, the United States and Yugoslavia, demonstrated a preference for decriminalization of “abortion, with the Yugoslavians showing much greater tolerance of this act than any other. The Indian respondents also were very tolerant of abortion . . . .” *Id.* at 114.

It is important to restate the caveat: the evolutionary theory of cross-cultural moral similarities *can* explain these data. The connection between reproductive norms and evolutionary fitness is not as direct as it may seem: Evolution would shape moral intuitions only when having a particular moral intuition was advantageous in sexual selection. Yet the data seem to comport more easily with social learning theory, which, recall, already accounts for wide cross-cultural agreement on the core norms regarding physical harm and the taking of property.

*C. Social Learning Theory Provides a Significantly Better Explanation of Variance in Cultural Norms over Time than the Evolutionary Alternative*

In discussing their research on moral consensus across cultures, Professors O'Connell and Whelan raised the issue of whether there is consensus about offense seriousness over time.<sup>51</sup> Significant variation in moral inclinations over time tends to support a social learning explanation. The relevant time in evaluating evolutionary processes is the time of evolutionary adaptation: Behavior is shaped directionally, giving rise to new predispositions only when environmental pressures favor a behavioral system with one set of tendencies over a behavioral system with another. As described by Professors Robinson, Kurzban, and Jones, shared intuitions of justice necessary to facilitate human sociality likely developed in the distant past, and as intuitions became more widespread, any individuals with divergent core intuitions were up against increasingly strong evolutionary pressure.<sup>52</sup> Selection pressures slowly eliminated divergent sets of core moral intuitions, "stabilizing them and making them essentially universal in the species."<sup>53</sup> All of this takes a long time.

That any norms are prone to change over a generation or two is evidence that supports social learning theory. Under an evolutionary account, some form of social learning is necessary to explain relatively

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Cultural differences are sizeable: only 21.9% of those surveyed in the United States believed abortion should be punished with legal action, while 95.3% of those surveyed in Indonesia believed it should be punished with legal action. *Id.* at 116 tbl.4. Beyond legal punishment, countries vary greatly in their opinions about whether abortion is considered deviant behavior—around 73% of respondents in the United States, Yugoslavia, and Sardinia find abortion to be non-deviant behavior, while under 5% of Indonesian respondents considered abortion non-deviant. *Id.* at 129 tbl.10.

51. O'Connell & Whelan, *supra* note 31, at 302.

52. Robinson, Kurzban & Jones, *supra* note 1, at 1653.

53. *Id.*

quick shifts in non-core moral inclinations. Because social learning theory can explain *both* enduring core norms and changing peripheral norms without needing to reference another account, it is, again, a more parsimonious account of the spread of moral inclinations.

Finally, any evidence of relatively quick shifts with respect to moral inclinations within, or close to, the class of “core inclinations” tends to undercut an evolutionary account. Changes to evolutionarily salient norms should take a long time to occur. Yet there is at least anecdotal evidence that such changes to even the most core moral inclination—opposition to unprovoked physical harm—may have shifted relatively recently in evolutionary terms. Ancient history is replete with examples of human sacrifice of non-hostile others, including children.

### III. SOCIAL LEARNING THEORISTS EXPECT, AND EVEN EMPHASIZE, LEARNING THROUGH NONLINGUISTIC MEANS

Professors Robinson, Kurzban, and Jones urge that “the intuitional nature of judgments about justice” makes social learning theory a less likely explanation of shared moral inclinations.<sup>54</sup> “Social learning without language is not impossible, but it is certainly difficult.”<sup>55</sup> But social learning theory, as understood by psychologists, not only allows for but emphasizes the human propensity to learn through nonlinguistic means.

The instruments of social learning—operant conditioning and observational learning—do not require language from any of the actors involved. Albert Bandura laid out four conditions necessary for effective behavioral modeling: a person must (1) pay attention to the model, (2) retain the memory of the modeled behavior, (3) have the motor ability to replicate the modeled action, and (4) have motivation to replicate the modeled behavior. None of these conditions requires language.<sup>56</sup> To use an example with moral implications: little Timmy watches his older brother John hit his younger sister, Alice. Timmy sees Alice crying and his mother’s stern, disapproving face. A simple instruction of “don’t hit” to John may follow, but is not essential. The negative consequences that Timmy observed suggest to him that the action John has engaged in is “bad” and that Timmy should not engage in such behavior. This is observational learning in action; if Timmy had hit Alice himself and received his mother’s glare, he could

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54. *Id.* at 1686.

55. *Id.* at 1687.

56. BANDURA, *supra* note 8.

have learned the same lesson through nonverbal conditioning. Children learn many fundamental lessons at a very young age in this way; in fact, core norms—not physically harming others, not taking property, and not cheating in exchanges—are precisely the norms for which parents seem most likely to punish violating children.<sup>57</sup>

Much of the work of social learning theory focuses on child development. Children often, at very young ages, acquire new skills through nonverbal social interaction.<sup>58</sup> “Children . . . attain many of their most important social and cognitive abilities by observing and copying what others do.”<sup>59</sup> Much of Bandura’s research, for instance, focused on observational learning of aggressive behavior in children, finding that children who witness aggressive actions being punished are less likely to engage in aggressive conduct than children who engage in aggressive actions being rewarded.<sup>60</sup> “It also has been argued that the transmission of culture is founded on instances of social learning involving children, their carers (fathers or babysitters), and objects.”<sup>61</sup> Research, like that of Mark Nielsen, often focuses on the tendency of young children to imitate and adapt the actions of adult models without verbal interaction; consistent findings support the claim that children learn without need for language.<sup>62</sup> It is no stretch to extend these learning principles to moral issues: Much empirical evidence from Albert Bandura and his colleagues suggests that social reinforcement and modeling can modify the moral judgments of young children.<sup>63</sup>

Social learning does not occur only among young children; adults experience conditioning and observational learning every day. For instance, the use of criminal punishment to achieve specific

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57. The acquisition of moral inclinations or intuitions through early episodes like the one described, with little emphasis on language (even if the mother says “don’t hit,” she is not likely to follow it with an elaborate moral justification of the principle), may contribute to the “moral dumbfounding” phenomenon cited by Professors Robinson, Kurzban, and Jones as evidence favoring an evolutionary explanation. Robinson, Kurzban & Jones, *supra* note 1, at 1685.

58. Mark Nielsen, *Copying Actions and Copying Outcomes: Social Learning Through the Second Year*, 42 DEVELOPMENTAL PSYCHOL. 555, 555 (2006).

59. *Id.*

60. See, e.g., Albert Bandura, Dorothy Ross & Sheila A. Ross, *Vicarious Reinforcement and Imitative Learning*, 67 J. ABNORMAL & SOC. PSYCHOL. 601, 601 (1963) (finding that children viewing a video of rewarded aggression were more likely to imitate the aggressive behaviors than children who viewed a video of punished aggression).

61. Nielson, *supra* note 58, at 555.

62. E.g., *id.*; Elizabeth Hanna & Andrew N. Meltzoff, *Peer Imitation by Toddlers*, 29 DEVELOPMENTAL PSYCHOL. 701 (1993).

63. See generally Grusec, *supra* note 28, at 247–48 (stating that during the 1960s, “Bandura and his colleagues published a large number of studies demonstrating the utility of their approach in the moral area,” describing these studies and providing a string of relevant articles).

deterrence is an example of operant conditioning: The goal is to use negative consequences like fines and time in prison to prevent people from repeating problematic behaviors. The use of observational learning techniques is increasingly widespread, commonly employed through therapy and training techniques involving role-playing.<sup>64</sup> Learning through nonlinguistic means is a fundamental part of any social learning theory.

#### IV. CONCLUSION

People across cultures share surprisingly similar inclinations about which actions are blameworthy and deserve punishment, as well as the appropriate relative severity for punishment of these actions. But why? More than one theoretical account can incorporate and explain this empirical truth. Perhaps we observe cross-cultural similarities because people share a set of innate moral intuitions produced by common evolutionary forces. Perhaps people across cultures have learned similar core norms because these are the norms that have, over time, created the most societal efficiency and spread. It is incredibly difficult to disentangle these explanations vis-à-vis empirical evidence, as the two theoretical accounts largely yield similar predictions.

Yet, based on present evidence, social learning theory seems to provide a better explanation. First, the social learning theory is more parsimonious with respect to current data. While an evolutionary account adequately explains stable core norms, it must incorporate some form of social learning account to explain cross-cultural differences and cross-temporal differences in more peripheral norms. The social learning theory, however, accounts for both a set of stable core norms and changing peripheral norms by itself. Furthermore, social learning is a better fit for the data: In some of the areas in which people do differ in moral inclinations, the variance arguably comports more easily with the social learning account than an evolutionary account. Finally, it is easy to describe and test the mechanisms of social learning theory (conditioning and observational learning), and in fact there is already a mountain of psychological research empirically testing them. As it is more difficult to describe or test the mechanisms at work in the evolutionary explanation, social learning theory has the advantage of being more testable and

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64. See, e.g., Avery Zook II, *Social Learning Therapy: A Definition*, 23 PSYCHOTHERAPY 382, 382-83 (1986) (advocating the use of role-playing reinforcement as a useful tool of social learning therapy).

falsifiable. That said, the conclusion that social learning theory provides a more adequate explanation of shared views of social justice is emphatically restricted to the present evidence. Future evidence may help to disentangle evolutionary and social learning theories and provide support for an evolutionary view.