

CHAPTER 38



Moral Coherence Processes and Denial of Moral Complexity

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How do people deal with a morally complex and contradictory world?

Moral judgment is an intuitive phenomenon, best understood as a process of implicit meaning making that often results in the denial of moral complexity and the shaping of descriptive beliefs to be consistent with prescriptive intuitions.

In May 2015, legislators in Nebraska made headlines when they overrode their governor's veto of a bill to ban the death penalty, making capital punishment illegal in the state. Advocates for the ban argued that the death penalty is neither moral nor effective, "It's not pro-life, it's not limited government, and doesn't deter crime" ("Killing it," 2015). Nebraska Governor Pete Ricketts, on the other hand, argued that, in fact, capital punishment was both: "as a Catholic, I'm confident that [capital punishment] aligns with Catholic catechism and that this aligns with public safety" (Bellware, 2015).

What we find fascinating about debates like this is that the two opposing camps both believe they hit the rhetorical jackpot. Not only do both sides believe that their view of the death penalty has the moral high ground, but both also believe the evidence shows that their position would be most ef-

fective in improving the public good. Rather than recognizing the inherent moral trade-offs that have made capital punishment a divisive political issue for decades in the United States, both sides in Nebraska's recent flare-up believe they are in a win-win situation, with both morality and the facts clearly on their side.

Scholars have long recognized individuals' tendency to mold seemingly contradictory information about their social world into a coherent whole (Cooper, 2007). Moral judgment, we suggest, is no different, and in this chapter we explore how a desire for moral coherence can lead to the denial of moral complexity and encourage people to shape their descriptive understanding of the world to fit their prescriptive understanding of it. Moreover, we argue that people's tendency to conflate moral and practical good plays a crucial role in exacerbating political conflict

by leading individuals and groups with differing moral values to hold differing factual beliefs as well.

Historical Context

Leon Festinger's (1957) seminal volume on cognitive dissonance theory reflected a deeper *Zeitgeist* in psychology, recognizing that humans are fundamentally motivated to simplify and organize their social worlds (Abelson, 1968). Over the years, new theories have challenged, amended, or extended specific aspects of Festinger's original treatment (e.g., Bem, 1972; Harmon-Jones, Amadio, Harmon-Jones, 2009; Simon, Snow, & Read, 2004; Steele, 1988), but all embrace the core notion that individuals strive to construct an internally consistent world in which beliefs and feelings about oneself and others fit together coherently.

The desire for cognitive consistency can motivate rational, evidence-based reasoning, such as when individuals adjust a general belief based on incoming factual information relevant to that belief. But the popularity of cognitive consistency theories has flowed primarily from their prediction of motivated or "backward" forms of reasoning in which normative decision processes are, in effect, reverse engineered to produce the coherent pattern of beliefs that people desire. Cognitive dissonance theory, for example, rose in prominence above its many theoretical competitors largely because of a series of ingenious experiments demonstrating how the normative process of attitudes guiding behavior could be reversed, producing counterintuitive effects in which behavior seemed to guide attitudes instead (e.g., Aronson & Mills, 1959; Festinger & Carlsmith, 1959).

Research on explanatory coherence processes explicitly incorporates this notion of multidirectional influence into theories of cognitive consistency (Read, Vanman, & Miller, 1997; Thagard, 2004). Drawing inspiration from work on neural networks and parallel constraint satisfaction processes (Simon, Pham, Le, & Holyoak, 2001), coherence-based models adopt a dynamic view of consistency seeking in which beliefs, feelings, goals, and actions mutually influence each other and are adjusted iteratively

toward a point of maximal internal consistency or "coherence." That is, a coherence perspective depicts people as striving to organize and integrate available information in a way that includes both "rational" bottom-up influences (e.g., adjusting conclusions to fit facts) and less rational top-down ones (e.g., adjusting facts to fit conclusions). Coherence was originally conceived of in terms of the logical consistency between belief elements, but later work has conceptualized coherence more broadly, recognizing that people do not merely favor beliefs that fit together logically but are consistent at an affective or evaluative level as well (Simon, Stenstrom, & Read, 2015; Thagard, 2006).

Importantly, the idea that individuals adjust beliefs to maintain a coherent and comforting view of the world has not been lost on researchers interested in moral reasoning. Struck by people's inclination to blame victims of misfortune for their own fate, Melvin Lerner (Lerner & Simmons, 1966; Lerner, 1980) traced this tendency to a core desire to live in a just world—a world where people get what they deserve and deserve what they get. Unfortunately, maintaining belief in a world of just deserts often requires people to adjust attributions of blame and responsibility such that victims seem to deserve the misfortunes that befall them (Bieneck & Krahé, 2011; Kleinke & Meyer, 1990; Lerner & Miller, 1978).

At a broader level, the social intuitionist view of moral judgment posits a similar tendency to recruit beliefs that support moral feelings (Haidt, 2001, 2012). Building on the philosophy of Hume (1740/1985) and the psychology of Zajonc (1980), the intuitionist view of moral judgment argues that moral evaluation is not the principled affair envisioned in the theories of Kohlberg (1969) and Turiel (1983). Rather, moral evaluations most typically result from "gut" reactions that people support post hoc by recruiting principles consistent with their moral intuitions in order to explain and justify them to others (Haidt, Koller, & Dias, 1993).

Theoretical Stance

Our conceptualization of moral coherence processes builds on this prior work and can be described in three key assertions.

Moral Judgments Are Subject to Coherence Pressures

There is little reason to assume that moral and nonmoral judgments involve fundamentally different psychological processes. In particular, there is good reason to expect moral judgment to be highly susceptible to the motivated reasoning processes that have been well documented across a wide variety of social judgments (Ditto, Pizarro, & Tannenbaum, 2009; Kunda, 1990). Moral judgments are inherently evaluative; they are judgments about whether acts (and the people who engage in them) are good (morally) or bad (morally). Moral reasoning is never value-neutral; moral judgment *is* moral evaluation. Moreover, moral evaluation is a particularly important kind of evaluation for both individuals and social groups. Likely due to the crucial role of moral evaluation in promoting cooperative group behavior (Fehr & Gächter, 2002; Haidt, 2012; Henrich et al., 2006), few topics inflame passions like questions of right and wrong, and few things drive our impressions of others more than their moral virtues and moral failings. In short, morality is something that people think about often and care about deeply (Hofmann, Wisneski, Brandt, & Skitka, 2014; Skitka, Bauman, & Sargis, 2005), and so it should be little surprise that moral judgments are fertile ground for motivated, coherence-based reasoning.

Incoherence Is a Frequent Feature of Moral Evaluation

A coherent moral view is one in which the moral quality of actors and their acts matches the moral quality of the outcomes they produce. But the potential for moral incoherence is high because of two complexities in the relation between the morality of actors/acts and the morality of outcomes.

Complexity 1: Moral Stands

The acts people perceive as most moral are not always the acts that produce the best consequences. Classic moral dilemmas, for example, typically pit consequentialist intuitions, in which the act that produces the best consequences seems most moral, against deontological ones, in which acts

are judged as moral or immoral in and of themselves, independent of their consequences. Consider the footbridge variation of the famous trolley dilemma. Most people faced with this dilemma respond that pushing a large man in front of an oncoming train is immoral, even when sacrificing this one life would save the lives of many others (Thomson, 1985). This notion that certain acts (and objects) are “sacred” or “protected” from normal cost–benefit calculations is seen by many as an essential aspect of moral thinking (Atran, Axelrod, & Davis, 2007; Baron & Spranca, 1997; Bartels & Medin, 2007; Tetlock, 2003), and it forms the basis for the kinds of principled moral stands that people typically see as both admirable and inspirational, even when the outcomes they produce are less than ideal.

Complexity 2: Moral Culpability

Despite our preference for a morally just world in which only bad acts result in bad outcomes and bad things only happen to bad people, morally bad outcomes do not necessarily imply either a morally culpable actor or a morally deserving victim. An act is only itself morally bad if the consequences are something the actor intended, caused, and controlled (Malle & Knobe, 1997; Shaver, 1985). If a driver’s brakes fail, causing the death of an innocent pedestrian, the outcome is tragic, but no moral shadow is cast upon the driver as long as the brake malfunction is judged to be “accidental” (i.e., the driver did not intend, cause, or have control over the mechanical failure). Similarly, being struck by a runaway car should rationally have no implications for the deceased pedestrian’s moral status.

Coherence Pressures Shape Factual Beliefs to Support Moral Intuitions

How, then, do people respond to what is often a morally incoherent world? Over a half century of psychological research suggests that mental conflict of this kind is unstable and tends to initiate cognitive processes that resolve or minimize feelings of inconsistency (Abelson, 1968; Festinger, 1957; Read et al., 1997). Interestingly, however, the notion that people strive to resolve feelings of moral conflict, just as they strive to reduce

other forms of cognitive inconsistency, is not well recognized in contemporary research on moral judgment. For example, in research involving moral dilemmas such as the footbridge problem, individuals are faced with a no-win choice between endorsing a morally distasteful act (e.g., killing an innocent man) and rejecting that act and with it the compelling logic of a favorable cost–benefit analysis (e.g., one casualty is better than five). The clear (if implicit) assumption in this research tradition is that individuals struggle their way to either a deontological or a consequentialist conclusion, and then simply live with the unavoidable downside of their either–or decision (cf., Greene et al., 2004).

A coherence perspective, however, predicts instead that people should struggle to *resolve* the conflict between deontological and consequentialist intuitions (Ditto & Liu, 2011). Because the implicit nature of moral intuitions makes them difficult to change, coherence pressures should operate primarily to bring beliefs about the costs and benefits of a given action in line with an individual's gut moral reactions. Thus, an individual experiencing strong moral distaste toward pushing an innocent man to his death might inflate the moral costs of that action (e.g., vividly imagine the pain and suffering the act would inflict on the individual and his loved ones) and minimize the moral benefits (e.g., reconsider the likelihood that a single man is actually large enough to stop the train from killing the others on the tracks). This type of “motivated consequentialism” (Liu & Ditto, 2013) would incline people toward coherent, conflict-free moral beliefs in which the act that feels right morally is also the act that produces the most favorable practical consequences.

A similar process should operate in judgments of moral culpability. If an individual's behavior results in consequences perceived as immoral (e.g., harm to other persons, animals, the environment), a coherence perspective predicts that observers will be most comfortable if they can blame that individual for those bad consequences (i.e., the bad consequences did not occur randomly but were caused by a malevolent actor or a deserving target). Because moral blame requires that actors be held responsible for their behavior, coherence pressures should operate to adjust descriptive beliefs about

the actor's intentions, desires, and level of control in a way that supports an attribution of blame. Similarly, if an individual is the victim of bad consequences, there should be some desire to see that victim as deserving of those consequences.

Overall, a desire for coherent patterns of moral beliefs works to dampen down moral complexity and promote a morally consilient worldview in which the morality of actors and acts matches the consequences they produce. Coherence processes often produce normatively appropriate judgments, such as evaluating acts as more moral to the extent that they produce morally beneficial outcomes or attributing greater moral blame to actors who intend and desire morally bad outcomes. But they can also motivate backward forms of reasoning in which descriptive beliefs about the positivity or negativity of outcomes, or about an individual's degree of intention or control over his or her behavior, are altered in ways that support moral intuitions and motivations.

Evidence

Our own research on moral coherence processes has focused primarily on people's tendency to coordinate beliefs about the morality of acts with beliefs about the consequences of those acts. An extensive literature on motivated judgments of culpability and control in moral evaluation, however, also supports the moral coherence perspective. In the following sections, we first review evidence for moral coherence processes in these two domains before identifying several other moral judgment phenomena that can be subsumed under the moral coherence banner.

Coherence and Consequences

In our initial studies of moral coherence, we sought to directly examine whether people tend to deny morally complex views of acts and their consequences and instead construct a reality in which moral and factual beliefs fit together. In one study (Liu & Ditto, 2013), we surveyed over 1,500 participants concerning their moral beliefs about four controversial issues (capital punishment, embryonic stem cell research, enhanced interrogation, and condom educa-

tion for high school students). We first asked for evaluations of the “inherent” (i.e., deontological) morality of relevant policies; that is, to what extent an act is morally bad or good independent of its consequences (e.g., the death penalty is morally wrong *even if it prevents violent crime*). We then asked a series of questions assessing factual beliefs about the costs and benefits surrounding these issues (e.g., the deterrent efficacy of capital punishment, the likelihood of wrongful convictions). Judgments across all four issues showed an identical pattern. Although moral feelings about the issues varied substantially across people, individual participants seldom experienced these controversial issues as inherently dilemmic. Rather, a strong and consistent relation was found for judgments about each issue, such that the more an act was seen as inherently immoral, the more participants expected it to produce few benefits and substantial costs.

Other data support the robustness of this pattern. We have found the identical pattern of morality-consequences coordination in judgments about global warming, marijuana use, vegetarianism, casual sex, and same-sex marriage. With same-sex marriage, for example, the more participants believed it was inherently morally right, the more they believed that legalizing same-sex marriage would confer economic benefits and the more they disagreed that it would open legal avenues for other nontraditional marriages, such as polygamy. The same pattern also holds when individuals judge artificial moral scenarios, such as the footbridge dilemma. Compared with people who believed that pushing the large man onto the tracks was morally acceptable, people who found it inherently immoral to sacrifice one life to save others also believed that sacrificing the man would result in a lower probability of success at stopping the trolley and that the man’s pain would be more severe (Liu & Ditto, 2013). What is notable about all of these findings is how few people acknowledge a complicated moral world in which morally good acts can have negative trade-offs. Instead, most of us seem to experience a simpler, more coherent moral world in which the acts we see as most moral are also the acts we believe yield the best outcomes.

One might argue that the findings above simply reflect people as good consequential-

ists, that those who see the death penalty as morally wrong believe it is wrong *because* they believe it has few benefits and many costs. In order to directly test the key moral coherence proposition that moral intuitions actually shape factual beliefs, we devised an experimental design in which moral intuitions were manipulated and their effect on cost–benefit beliefs examined (Liu & Ditto, 2013). We measured participants’ moral and factual beliefs about capital punishment before and after they read an essay advocating either for the inherent morality or inherent immorality of capital punishment. Importantly, the essays contained only purely deontological arguments for or against the death penalty, with neither essay including any mention of capital punishment’s potential costs or benefits. The essays successfully changed moral evaluations of capital punishment; those reading the anti-capital punishment essay came to see the death penalty as more immoral, and those reading the pro-capital punishment essay came to see the death penalty as more moral. More crucially, the essays also changed participants’ beliefs about the effectiveness of the death penalty, even though no information about effectiveness was included in the essays. As predicted, participants tipped toward seeing capital punishment as inherently immoral also moved toward believing that it had greater costs (e.g., innocents were more likely to be executed) and fewer benefits (e.g., it was unlikely to prevent crime), whereas those encouraged to see capital punishment as inherently moral moved toward believing it had greater benefits and fewer costs. This effect is not limited to capital punishment. Ames and Lee (2015) found that people’s moral intuitions about enhanced interrogations shaped their interpretations of facts. Participants read a scenario in which a terrorist plot was foiled thanks to coerced and noncoerced information from an interrogation. Participants who believed enhanced interrogations are morally acceptable also thought the coerced information was more valuable than noncoerced information.

In sum, these studies demonstrate across a wide variety of real and artificial moral dilemmas that people perceive a strong connection between moral goodness and practical effectiveness and that, consistent with the logic of moral coherence, people alter

their factual beliefs about the costs and benefits of actions to fit their moral evaluation of those actions.

Coherence and Culpability

Moral evaluations also involve descriptive beliefs about the extent to which actions are intended, caused, and controlled by the actor. The normative principle that people should receive blame only for behavior that they intend, cause, and control is well represented in both the legal system and the judgments of everyday people (Aspinwall, Brown, & Tabery, 2012; Shariff et al., 2014). But a wealth of research demonstrates that people engage in the reverse inference process as well: When motivated to blame and punish others, people construct morally culpable agents by adjusting their descriptive beliefs about intention, causation, and control.

Infants as young as 6 months old attribute more agency for bad outcomes than for good ones (Hamlin & Baron, 2014), and a similar asymmetry has been found repeatedly in studies on adults' attributions of intention. Research on the "side-effect effect," for example, demonstrates that incidental effects of identical actions are perceived as more intended when those side effects are morally bad (e.g., harmful to the environment) than when they are morally good (e.g., helpful to the environment; Knobe, 2003; Knobe & Burra, 2006; Leslie, Knobe, & Cohen, 2006; Pettit & Knobe, 2009).

People who perform morally harmful actions are also perceived as having more control over and being more causally responsible for outcomes compared with those who perform morally ambiguous or positive actions (Alicke, 2000; Cushman, Knobe, & Sinnott-Armstrong, 2008; Phillips & Knobe, 2009). In one clever demonstration of this effect, a young man involved in a traffic accident was seen as more causally responsible for the accident when he was rushing home to hide a vial of cocaine from his parents than when he was rushing home to hide their anniversary present (Alicke, 1992).

Importantly, the desire to assign responsibility for immoral actions can extend to the human capacity for moral responsibility in general. Clark et al. (2014) found that exposure to the immoral actions of others

led people to increase not only their belief that those specific actions were freely chosen but also their belief that all of humankind is capable of free action. In one example, students who believed a fellow classmate had cheated on an exam reported higher belief on a measure of free will belief than students not informed of a cheating incident. Even when people are told to assume a completely deterministic universe, they will absolve an individual of moral responsibility for morally neutral acts but insist that a person committing a morally heinous act (e.g., murdering his family) is still morally responsible for that action (Nichols & Knobe, 2007).

In sum, research on judgments of culpability provides strong support for the operation of coherence processes in moral judgment. In a coherent world, morally bad outcomes only result from morally bad acts, and people adjust their beliefs about blame, responsibility, and control to fit this pattern.

Additional Evidence Consistent with Moral Coherence

In this section we briefly review several other lines of research in moral psychology that are consistent with a moral coherence perspective.

Outcome Bias

Highly related to research on moral culpability is a separate literature on outcome bias in moral judgment (Allison, Mackie, & Messick, 1996; Baron & Hershey, 1988; Gino, Shu, & Bazerman, 2010; Mazzocco, Alicke, & Davis, 2004; Walster, 1966). People's tendency to use the consequences of acts to judge their morality is both a feature of moral reasoning—it is the foundational normative principle underlying a consequentialist moral ethic—and a bug—in that it leads to irrational patterns of judgment such as identical acts being evaluated differently depending on the severity of their consequences. Walster (1966), for example, gave participants identical descriptions of a driver whose parked car accidentally rolled backward down a hill, but manipulated the severity of the consequences. The driver was judged more harshly (more careless and more responsible) when the very same ac-

tion fortuitously had minor consequences (it hit a tree stump and dented the fender) than when the consequences were more serious (it rolled into a store, injuring two people). This pattern is robust (Mazzocco et al., 2004) and nicely demonstrates the kind of multidirectional influence captured by the coherence perspective. In our original work on motivated cost–benefit analyses (Liu & Ditto, 2013), people infer the severity of consequences from moral evaluations of the action. The outcome bias shows the opposite pattern of influence (the morality of an action is inferred from the severity of its consequences).

Dyadic Completion

The dyadic view of morality championed by Gray and colleagues (Gray, Waytz, & Young, 2012; Gray & Wegner, 2009) posits a process of post hoc belief construction that is very similar to our broader view of moral coherence. Gray argues for a fundamental dyadic template underlying all moral judgments in which one individual (the agent) acts in a way that intentionally harms or helps a second individual (the patient). If either component of this dyadic template is not readily available (i.e., there is no obvious agent or patient), people construct them through a process Gray calls dyadic completion. That is, exposure to harmed patients (e.g., victims of a natural disaster) motivates the construction of a culpable agent (e.g., God; Gray & Wegner, 2010), and exposure to agents or acts perceived as morally offensive (e.g., masturbation) motivates the construction of patients who have been harmed (e.g., the masturbator him- or herself; Gray, Schein, & Ward, 2014).

Intentional Harm

Several studies have shown that people perceive intentional acts as having more extreme consequences than unintentional acts (Ames & Fiske, 2013; Gray, 2012), a pattern consistent with a moral coherence perspective (the worse the actor is judged morally, the worse the consequences of his or her actions should be). People give higher dollar estimates for intentional damages than unintentional ones (Ames & Fiske, 2013),

and participants told that a man left a restaurant without paying his bill on purpose remembered the total bill being higher than did participants who were told the man did it by accident (Pizarro, Laney, Morris, & Loftus, 2006). Similarly, Gray (2012) found that shocks hurt less, massages seem more pleasurable, and candy tastes sweeter when the shocking, massaging, and candy giving is said to be well rather than ill intentioned.

Biased Assimilation

A long line of research documents people's tendency to derogate factual information that conflicts with their moral values (e.g., Ames & Lee, 2015; Lord & Taylor, 2009). People treat scientific evidence that supports morally distasteful policies as less valid than identical evidence that supports more morally acceptable policies (e.g., Lord, Ross, & Lepper, 1979) and downplay the seriousness of issues (e.g., climate change) surrounding policies that clash with moral world views (e.g., government regulation of emission levels; Campbell & Kay, 2014; Kahan, Braman, Slovic, Gastil, & Cohen, 2007; Kahan, Jenkins-Smith, & Braman, 2011). When people cannot defend their moral beliefs by dismissing research or downplaying the severity of problems, they often resort to framing their beliefs as not amenable to scientific study (Friesen, Campbell, & Kay, 2015; Munro, 2010). These strategies allow an individual to maintain a coherent moral worldview in which one's moral beliefs are supported (or at least not contradicted) by scientific evidence.

Additional Evidence Needed to Support Moral Coherence

Although a wealth of research in moral psychology is subsumable under the label of moral coherence, less research has been done to test its predictions directly and specifically. In particular, additional experimental research would help to better understand the causal relation between moral intuitions and cost–benefit beliefs. Ideally, this work would examine the relation across multiple moral issues and various methods of manipulating moral intuitions and motivations. Research on moral coherence could

also build on research examining coherence processes in other domains (e.g., evaluations of legal evidence), which has sometimes used experimental designs in which judgments are assessed at multiple time points to track iterative changes in belief elements over time (e.g., Simon et al., 2001; Simon et al., 2015), a key prediction of coherence-based models.

Another important focus for future research should be identifying important moderators and boundary conditions of moral coherence processes. Liu and Ditto (2013), for example, identified three consistent moderators of the relation between moral evaluation and factual beliefs. Greater moral conviction about an issue, greater self-perceived knowledge about the issue, and greater political conservatism were all found to be associated with a “tighter” coordination between moral and factual beliefs. Identifying moderators is helpful both practically (to understand the ecological conditions under which one would expect research findings to apply and not apply) and theoretically (moderators often provide hints about the nature of underlying psychological processes).

Finally, moral coherence makes a number of interesting predictions that can be explored about everyday phenomena in which prescriptive and descriptive judgments might become intertwined. Do people judge the attractiveness of moral villains and moral exemplars differently? How about the objective humor of a morally distasteful versus morally neutral joke? Will people evaluate products from morally admirable companies as more effective (or of better quality generally) than identical products from companies seen in a more negative moral light?

Conclusion

Morality is about hard choices. Moral decisions often involve situations in which something bad must be done to produce something good, and they frequently confront individuals with dilemmas about doing the “right” thing, when doing the “wrong” thing would be easier or even produce a better outcome. The moral coherence processes we have described explain how people make difficult moral choices easier by rejecting this complexity in favor of a simpler, more

coherent world in which the morality of actors, acts, and outcomes align.

Moral coherence processes have both theoretical and practical implications. Theoretically, moral coherence challenges the field’s prevailing hydraulic view of consequentialist and deontological judgment (Ditto & Liu, 2011; Liu & Ditto, 2013). Like the intuitionist view of moral judgment from which it derives, our moral coherence view suggests that, rather than reasoning their way to moral conclusions using either deontological or consequentialist logic, people’s moral justifications are guided by visceral reactions about rightness or wrongness (Haidt, 2001). As such, rather than choosing *either* a deontological or consequentialist path to a moral evaluation—the view endorsed either implicitly or explicitly by virtually all contemporary research in moral psychology—a moral coherence view suggests that people should be inclined to embrace any justification that coheres with and supports their moral intuitions, whether that justification is a broad deontological principle, information about consequences, or both. As Baron and Spranca (1997) cleverly noted, “people want to have their non-utilitarian cake and eat it too.” Our data confirm that people seldom advocate a solely deontological position but, rather, support their seemingly principled views with motivated consequentialist crutches.

At the practical level, the desire for moral coherence can perturb how people ascribe moral culpability. One unfortunate example is a common tendency to see victims of rape, poverty, and other misfortunes as partly responsible for their own circumstances (Lerner, 1980; Ryan, 1971). But moral coherence can affect judgments about perpetrators as well. A wealth of research now shows that the more morally repugnant an act, the more intention and control is attributed to the perpetrator (Alicke, 2000; Clark et al., 2014). This may help explain why decisions about whether to try young defendants as adults often seem more a function of the abhorrence of the crime than of factors related to their ability to comprehend and control their actions (Ghetti & Redlich, 2001).

Finally, moral coherence processes also help make sense of the immense challenges facing fruitful bipartisan cooperation in the

corrosive, hyperpartisan atmosphere of contemporary American politics. Liberals and conservatives have well-documented differences in their moral sensibilities that present challenges to political compromise (e.g., Graham et al., 2013), but it often seems as though liberals and conservatives have different factual realities as well. Whether it is the existence of anthropogenic climate change, or whether capital punishment deters future crime, liberals and conservatives often bring to the discussion their own quite different sets of facts. Our desire for a morally coherent world can lead to a false alignment of prescriptive and descriptive beliefs that can exacerbate conflict in morally diverse societies. It is difficult enough to resolve differences of moral opinion, but when differing moral beliefs affect the interpretation of science, evidence, and facts, bridging moral divides becomes exponentially more challenging.

REFERENCES

- Abelson, R. P. (1968). Psychological implication. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg, & P. H. Tannenbaum (Eds.), *Theories of cognitive consistency: A sourcebook* (pp. 112–139). Chicago: Rand McNally.
- Alicke, M. D. (1992). Culpable causation. *Journal of Personality and Social Psychology*, 63, 368–378.
- Alicke, M. D. (2000). Culpable control and the psychology of blame. *Psychological Bulletin*, 126, 556–574.
- Allison, S. T., Mackie, D. M., & Messick, D. M. (1996). Outcome biases in social perception: Implications for dispositional inference, attitude change, stereotyping, and social behavior. *Advances in Experimental Social Psychology*, 28, 53–94.
- Ames, D. L., & Fiske, S. T. (2013). Intentional harms are worse, even when they're not. *Psychological Science*, 24, 1755–1762.
- Ames, D. R., & Lee, A. J. (2015). Tortured beliefs: How and when prior support for torture skews the perceived value of coerced information. *Journal of Experimental Social Psychology*, 60, 86–92.
- Aronson, E., & Mills, J. (1959). The effect of severity of initiation on liking for a group. *Journal of Abnormal and Social Psychology*, 59, 177–181.
- Aspinwall, L. G., Brown, T. R., & Tabery, J. (2012). The double-edged sword: Does bio-mechanism increase or decrease judges' sentencing of psychopaths? *Science*, 337(6096), 846–849.
- Atran, S., Axelrod, R., & Davis, R. (2007). Sacred barriers to conflict resolution. *Science*, 317, 1039–1040.
- Baron, J., & Hershey, J. C. (1988). Outcome bias in decision evaluation. *Journal of Personality and Social Psychology*, 54(4), 569–579.
- Baron, J., & Spranca, M. (1997). Protected values. *Organizational Behavior and Human Decision Processes*, 70, 1–16.
- Bartels, D. M., & Medin, D. L. (2007). Are morally-motivated decision makers insensitive to the consequences of their choices? *Psychological Science*, 18, 24–28.
- Bellware, K. (2015, May 26). Nebraska Gov. Pete Ricketts vetoes bill that would repeal the death penalty. *Huffington Post*. Retrieved from www.huffingtonpost.com/2015/05/26/nebraska-death-penalty-veto_n_7445592.html.
- Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1–62). New York: Academic Press.
- Bieneck, S., & Krahé, B. (2011). Blaming the victim and exonerating the perpetrator in cases of rape and robbery: Is there a double standard? *Journal of Interpersonal Violence*, 26, 1785–1797.
- Campbell, T. H., & Kay, A. C. (2014). Solution aversion: On the relation between ideology and motivated disbelief. *Journal of Personality and Social Psychology*, 107(5), 809–824.
- Clark, C. J., Luguri, J. B., Ditto, P. H., Knobe, J., Shariff, A. F., & Baumeister, R. F. (2014). Free to punish: A motivated account of free will belief. *Journal of Personality and Social Psychology*, 106, 501–513.
- Cooper, J. (2007). *Cognitive dissonance: Fifty years of a classic theory*. Thousand Oaks, CA: SAGE.
- Cushman, F., Knobe, J., & Sinnott-Armstrong, W. (2008). Moral appraisals affect doing/allowing judgments. *Cognition*, 108(1), 281–289.
- Ditto, P. H., & Liu, B. (2011). Deontological dissonance and the consequentialist crutch. In M. Mikulincer & P. Shaver (Eds.), *The social psychology of morality: Exploring the causes of good and evil* (pp. 51–70). Washington, DC: American Psychological Association.
- Ditto, P. H., Pizarro, D. A., & Tannenbaum, D. (2009). Motivated moral reasoning. In D. M. Bartels, C. W. Bauman, L. J. Skitka, & D. L. Medin (Eds.), *The psychology of learning and motivation* (Vol. 50, pp. 307–338). Burlington, MA: Academic Press.

- Fehr, E., & Gächter, S. (2002). Altruistic punishment in humans. *Nature*, 415(6868), 137–140.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, 58(2), 203–210.
- Friesen, J. P., Campbell, T. H., & Kay, A. C. (2015). The psychological advantage of unfalsifiability: The appeal of untestable religious and political ideologies. *Journal of Personality and Social Psychology*, 108, 515–529.
- Ghetti, S., & Redlich, A. D. (2001). Reactions to youth crime: Perceptions of accountability and competency. *Behavioral Sciences and the Law*, 19, 33–53.
- Gino, F., Shu, L. L., & Bazerman, M. H. (2010). Nameless + harmless = blameless: When seemingly irrelevant factors influence judgment of (un)ethical behavior. *Organizational Behavior and Human Decision Processes*, 111, 102–115.
- Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral foundations theory: The pragmatic validity of moral pluralism. *Advances in Experimental Social Psychology*, 47, 55–130.
- Gray, K. (2012). The power of good intentions: Perceived benevolence soothes pain, increases pleasure, and improves taste. *Social Psychological and Personality Science*, 3, 639–645.
- Gray, K., Schein, C., & Ward, A. F. (2014). The myth of harmless wrongs in moral cognition: Automatic dyadic completion from sin to suffering. *Journal of Experimental Psychology: General*, 143, 1600–1615.
- Gray, K., Waytz, A., & Young, L. (2012). The moral dyad: A fundamental template unifying moral judgment. *Psychological Inquiry*, 23, 206–215.
- Gray, K., & Wegner, D. M. (2009). Moral typecasting: Divergent perceptions of moral agents and moral patients. *Journal of Personality and Social Psychology*, 96, 505–520.
- Gray, K., & Wegner, D. M. (2010). Blaming God for our pain: Human suffering and the divine mind. *Personality and Social Psychology Review*, 14, 7–16.
- Greene, J. D., Nystrom, L. E., Engell, A. D., Darley, J. D., & Cohen, J. D. (2004). The neural bases of cognitive conflict and control in moral judgment. *Neuron*, 44, 389–400.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834.
- Haidt, J. (2012). *The righteous mind: Why good people have diverging beliefs about others and what is right*. New York: Pantheon.
- Haidt, J., Koller, S. H., & Dias, M. G. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology*, 65, 613–628.
- Hamlin, J. K., & Baron, A. S. (2014). Agency attribution in infancy: Evidence for a negativity bias. *PLOS ONE*, 9(5), e96112.
- Harmon-Jones, E., Amodio, D. M., & Harmon-Jones, C. (2009). Action-based model of dissonance: A review, integration, and expansion of conceptions of cognitive conflict. *Advances in Experimental Social Psychology*, 41, 119–166.
- Henrich, J., McElreath, R., Barr, A., Ensminger, J., Barrett, C., Bolanyatz, A., . . . Ziker, J. (2006). Costly punishment across human societies. *Science*, 312, 1767–1770.
- Hofmann, W., Wisneski, D. C., Brandt, M. J., & Skitka, L. J. (2014). Morality in everyday life. *Science*, 345(6202), 1340–1343.
- Hume, D. (1985). *A treatise of human nature*. London: Penguin. (Original work published 1740)
- Kahan, D. M., Braman, D., Slovic, P., Gastil, J., & Cohen, G. L. (2007). *The second national risk and culture study: Making sense of—and making progress in—the American culture war of fact*. Harvard Law School Program on Risk Regulation (Research Paper No. 08–26). Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1017189.
- Kahan, D. M., Jenkins-Smith, H., & Braman, D. (2011). Cultural cognition of scientific consensus. *Journal of Risk Research*, 14, 147–174.
- Killing it: Nebraska's ban is another sign of the decline in support for the death penalty. (2015, May 30). *The Economist*. Retrieved from www.economist.com/news/united-states/21652277-nebraskas-ban-another-sign-decline-support-death-penalty-killing-it.
- Kleinke, C., & Meyer, C. (1990). Evaluation of rape victims by men and women with high and low beliefs in a just world. *Psychology of Women Quarterly*, 4, 343–353.
- Knobe, J. (2003). Intentional action and side-effects in ordinary language. *Analysis*, 63, 190–193.
- Knobe, J., & Burra, A. (2006). The folk concepts of intention and intentional action: A cross-cultural study. *Journal of Cognition and Culture*, 6(1), 113–132.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347–489). Chicago: Rand McNally.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108, 480–498.

- Lerner, M. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Press.
- Lerner, M., & Miller, D. (1978). Just world research and the attribution process: Looking back and ahead. *Psychological Bulletin*, 85, 1030–1051.
- Lerner, M. J., & Simmons, C. H. (1966). Observer's reaction to the "innocent victim": Compassion or rejection? *Journal of Personality and Social Psychology*, 4, 203–210.
- Leslie, A. M., Knobe, J., & Cohen, A. (2006). Acting intentionally and the side-effect effect: Theory of mind and moral judgment. *Psychological Science*, 17, 421–427.
- Liu, B. S., & Ditto, P. H. (2013). What dilemma?: Moral evaluation shapes factual beliefs. *Social Psychological and Personality Science*, 4, 316–323.
- Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37, 2098–2109.
- Lord, C. G., & Taylor, C. A. (2009). Biased assimilation: Effects of assumptions and expectations on the interpretation of new evidence. *Social and Personality Psychology Compass*, 3(5), 827–841.
- Malle, B. F., & Knobe, J. (1997). The folk concept of intentionality. *Journal of Experimental Social Psychology*, 33(2), 101–121.
- Mazzocco, P. J., Alicke, M. D., & Davis, T. L. (2004). On the robustness of outcome bias: No constraint by prior culpability. *Basic and Applied Social Psychology*, 26, 131–146.
- Munro, G. D. (2010). The scientific impotence excuse: Discounting belief-threatening scientific abstracts. *Journal of Applied Social Psychology*, 40, 579–600.
- Nichols, S., & Knobe, J. (2007). Moral responsibility and determinism: The cognitive science of folk intuitions. *Nous*, 41, 663–685.
- Pettit, D., & Knobe, J. (2009). The pervasive impact of moral judgment. *Mind and Language*, 24(5), 586–604.
- Phillips, J., & Knobe, J. (2009). Moral judgments and intuitions about freedom. *Psychological Inquiry*, 20, 30–36.
- Pizarro, D. A., Laney, C., Morris, E. K., & Loftus, E. F. (2006). Ripple effects in memory: Judgments of moral blame can distort memory for events. *Memory and Cognition*, 34, 550–555.
- Read, S. J., Vanman, E. J., & Miller, L. C. (1997). Connectionism, parallel constraint satisfaction processes, and gestalt principles: (Re)introducing cognitive dynamics to social psychology. *Personality and Social Psychology Review*, 1, 26–53.
- Ryan, W. (1971). *Blaming the victim*. New York: Pantheon.
- Shariff, A. F., Greene, J. D., Karremans, J. C., Luguri, J. B., Clark, C. J., Schooler, J. W., ... Vohs, K. D. (2014). Free will and punishment: A mechanistic view of human nature reduces retribution. *Psychological Science*, 25, 1563–1570.
- Shaver, K. G. (1985). *The attribution of blame: Causality, responsibility, and blameworthiness*. New York: Springer-Verlag.
- Simon, D., Pham, L. B., Le, Q. A., & Holyoak, K. J. (2001). The emergence of coherence over the course of decision making. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 27, 1250–1260.
- Simon, D., Snow, C. J., & Read, S. J. (2004). The redux of cognitive consistency theories: Evidence judgments by constraint satisfaction. *Journal of Personality and Social Psychology*, 86, 814–837.
- Simon, D., Stenstrom, D. M., & Read, S. J. (2015). The coherence effect: Blending cold and hot cognitions. *Journal of Personality and Social Psychology*, 109, 369–394.
- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 8, 895–917.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. *Advances in Experimental Social Psychology*, 21, 261–302.
- Tetlock, P. E. (2003). Thinking about the unthinkable: Coping with secular encroachments on sacred values. *Trends in Cognitive Science*, 7, 320–324.
- Thagard, P. (2004). *Coherence in thought and action*. Boston: MIT Press.
- Thagard, P. (2006). *Hot thought: Mechanisms and applications of emotional cognition*. Cambridge, MA: MIT Press.
- Thomson, J. J. (1985). The trolley problem. *Yale Law Journal*, 94, 1395–1415.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge, MA: Cambridge University Press.
- Walster, E. (1966). Assignment of responsibility for an accident. *Journal of Personality and Social Psychology*, 3, 73–79.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35, 151–175.