

Commentary

DOI:

Bazerman and Greene

In Favor of Clear Thinking

¹Department of Psychology, Harvard University, Cambridge, MA

Corresponding Author: Max H. Bazerman, Baker Library, 453 Soldiers Field Road, Boston, MA 02163

Email: mbazerman@hbs.edu

In Favor of Clear Thinking

Incorporating Moral Rules Into a Wise Cost-Benefit Analysis—Commentary on Bennis, Medin, & Bartels (2010)

Max H. Bazerman¹ and Joshua Greene¹

Abstract

Bennis, Medin, and Bartels (2010, this issue) have contributed an interesting article on the comparative benefit of moral rules versus cost-benefit analysis (CBA). Many of their specific comments are accurate, useful, and insightful. At the same time, we believe they have misrepresented CBA and have reached a set of conclusions that are misguided and, if adopted wholesale, potentially dangerous. Overall, they offer wise suggestions for making CBA more effective, rather than eliminating CBA as a decision-making tool.

Keywords

XXXXXXXXXX

Bennis, Medin, and Bartels (2010, this issue; BMB for the rest of the article) argue persuasively that laboratory experimentalists should not assume that study participants accept the problems presented to them as we intended. They note that psychological research can be used to understand what alternative formulations of the problem might be present in the minds of study participants. BMB also make it clear that a full-blown cost-benefit analysis (CBA)¹ is not necessary for every decision (e.g., what clothes Bill Gates should select each morning). Insightful decision analysts would agree (e.g., Hammond, Keeney, & Raiffa, 1999). BMB also highlight that bad decision analysis is harmful; again, good decision analysts would concur. Finally, BMB highlight the need to extend and replicate research to respond to alternative explanations other than those preferred by the experimenter, including those that come from thinking about the phenomenology of the study participant and moral rules. From there, BMB offer unjustifiable prescriptions for decision making. My disagreement with these recommendations is the basis of this response.

BMB make their argument against a straw man. They argue that CBA focuses on a deprived utility function in which the decision maker cares only about his/her own measurable, narrowly specified outcomes. In fact, no serious economist, decision analyst, or behavioral decision researcher in 2009 believes that decision makers are only entitled to this limited array of value. Contemporary decision analysis readily allows, incorporates, and encourages the consideration and valuation of fairness, the outcomes of others, symbolic acts, unintended consequences, precedent setting, and even moral rules (Bazerman & Moore, 2008; Hammond et al., 1999). Thus, the argument that people value issues other than outcomes simply has little

relevance to the value of CBA. This problem is connected to my disagreement with BMB on three issues, each of which are outlined in the following sections of this article.

CLOSED-WORLD ASSUMPTIONS, SCIENCE, AND THE RELEVANCE TO REAL-WORLD MORALITY

BMB criticize a variety of research streams that suggest the superiority of CBA on the grounds that the experiments in these streams use what BMB refer to as “closed-world assumptions.” In these problems, study participants are expected to use only the information presented in the laboratory problem when making their decisions. One example of a closed-world problem is the set of trolley problems described in BMB. They contrast the results of the bystander problem (often referred to as the switch problem) with those of the footbridge problem. Critical of the argument that people should only make utilitarian calculations based on CBA when deciding, BMB argue that study participants are factoring in valid concerns when they evaluate the two problems differently.

BMB assume that study participants add valid, useful, and insightful inputs to these problems. But participants could instead be allowing their emotions to take over in a manner that is inconsistent with their underlying preferences. Greene et al. (2009) show that the added information that study participants might have added to the bystander problem (the open-world additions) does not account for much of the difference between how study participants differentially respond. Rather, Greene, Sommerville, Nystrom, Darley, and Cohen (2001) provide fMRI evidence that the footbridge problem triggers processing in brain regions more closely associated with emotions. And, more recently, multiple studies have shown that patients with emotion-related neurological damage are dramatically more likely to make utilitarian

judgments (Ciaramelli, Muccioli, Ladavas, & di Pellegrino, 2007; Koenigs et al., 2007; Mendez, Anderson, & Shapira, 2005).

As BMB note, one explanation of the difference between the bystander problem and the footbridge problem is the directness of how the study participant affects the one individual who would be killed through action. In Paharia, Kassam, Greene, and Bazerman (in press), we developed a very different moral problem based on the directness hypothesis coupled with a story from August, 2005, in which Merck sold the rights to manufacture and market a cancer drug called Mustargen to Ovation Pharmaceuticals. In this story, soon after Merck sold Mustargen to Ovation, Ovation raised the price of the drug tenfold, without any investment in R&D or any other significant new costs. In addition, Merck continued to manufacture the drug for Ovation on a contract basis. If Merck had raised the price of the drug tenfold, it undoubtedly would have created a public-relations disaster. Ovation, by contrast, was too small and unknown for its actions to attract much attention; indeed, the public did not seem to hold Merck accountable for the huge price increase.

This led us to present the following problem to a group of study participants:

A major pharmaceutical company has a cancer drug that isn't profitable. The fixed costs are high and the market is small. But, the patients who do buy the drug really need it. The pharmaceutical currently makes the drug for \$2.50/pill (all costs included), and only sells it for \$3/pill. A price increase is unlikely to decrease the use of the drug, but will impose significant hardship on many users. How ethical would it be for the company to raise the price of the drug from \$3/pill to \$9/pill?

We presented a separate group with a similar problem. But instead of being asked to judge the ethicality of a direct price increase, they were told: "The major pharmaceutical X sold

the rights to a smaller pharmaceutical, *Y*, for \$12 million. In order to recoup costs, company *Y* increased the price of the drug to \$15/pill.”

In a between-subjects design, we found that when faced with only one or the other of these two problems, participants decided it would be more unethical for a company to raise the price of the drug from \$3/pill to \$9/pill than it would be for the company to sell off the drug to another firm with the knowledge that the other firm would raise the drug price to \$15/pill.

We argue that this finding reflects an error in participants’ moral judgment; we will provide evidence for this strong accusation at the end of this article. For now, we simply note that the trolley problem and other “closed-world” problems can be extremely useful for gaining insight into how people think about moral decisions in more realistic, open-world contexts.

GRAPPLING WITH DIFFICULT DECISIONS

BMB argue that CBA becomes a less appropriate decision-making tool as decisions become more complex and closed-world assumptions are violated. Yet BMB have simply identified (not for the first time) challenges to CBA that make its use more challenging. We find no evidence in BMB or elsewhere that following moral rules will generally lead to better outcomes than will careful attempts at a complex CBA. BMB’s arguments remind us of political debates in which Republicans try to inject biased CBAs, while Democrats try to block the use of CBAs. We argue for a more honest, sophisticated use of CBA that would incorporate the improvement strategies suggested by BMB and others.

One of BMS’s objections to CBA is that “values cannot be placed on a common scale, especially one that includes economic values” (p. xx). The problem is that if we do not try, we end up with an impoverished intuitive attempt to do the same. For example, even if we refuse to put a price on human life because doing so offends our moral principles, we inevitably set such

prices implicitly when we decide how much to spend on safety. By refusing to make “cold-hearted” cost-benefits calculations, we may simply sweep our problems under the rug and create greater suffering in the long run. Contrary to BMS’s referencing of Dawes (1979) for the superiority of moral rules over CBA, Dawes in fact argues that even a deprived decision-analytic technique will outperform intuition and the variety of arbitrary (including moral) rules that accompany intuition. Dawes (1979) notes that people will weight different attributes in any multiattribute decision; the only question is whether we want them to do so carefully or not. The goal of CBA is not perfection, but a better expected decision than the alternative provides.

A significant portion of BMB is devoted to arguing for the superiority of moral rules in the domain of experienced-based decision making (Hertwig, Barron, Weber, & Erev, 2004). Much of this argument is based on the biased inputs that decision makers seem to use in a CBA (Fox & Hadar, 2006). We join BMB in arguing against the use of decision analysis with known biased inputs. But BMB offers no evidence concerning the superiority of moral rules or other decision-making strategies in the domain of experienced-based decision making. We recommend that decision makers adjust their estimates to gain better inputs in a CBA or any other decision-analytic technique.

We also disagree with BMB’s argument that moral rules achieve better outcomes than do deliberation in multiparty settings. It is inappropriate to judge the quality of an individual’s decision based on a collective outcome lacking evidence that the individual attempted to maximize collective outcomes. If such evidence did exist, CBA would achieve the same cooperative result. BMB’s argument confuses the unit of analysis and offers no convincing support for the wisdom of using moral rules rather than CBA. The evidence they offer regarding the behavior of economics majors and noneconomic majors confuses undergraduate economics

training with a sophisticated CBA. Rather than a condemnation of CBA, what is needed is a prescriptive model that incorporates a realistic set of expectations of others and concern for other parties—which decision analysts have been writing about for over a quarter century (Raiffa, 1982). In sum, we agree with most of the challenges to CBA that BMB identify, but we view their critiques as a set of considerations that can contribute to more careful CBAs.

HOW DO WE GET TO WISE DECISIONS?

My core concern is that BMB's attempts to generate better decisions moves us in the wrong direction. There is a reason why decision analysis and behavioral decision research have had pronounced effects on professional schools, which explicitly strive to help students make better decisions. CBA is not perfect, for many of the reasons identified by BMB. But CBA needs to be compared with an alternative, and BMB's development of that alternative is limited. They offer a variety of alternative decision-making procedures, yet they provide little empirical evidence of their superiority and no guidance on how to select the best decision mode for a particular problem. (We assume that they would not advocate using CBA to make this decision.)

Policy decisions may be the most important set of decisions we make as a society. In this realm, moral rules often play an active and dysfunctional role. For example, consider the case of organ donation, as embodied in this problem from Bazerman, Baron, and Shonk (2001):

Which option do you prefer:

- a. If you die in an accident, your heart will be used to save another person's life. In addition, if you ever need a heart transplant, there will be a 90 percent chance that you will get the heart.

- b. If you die in an accident, you will be buried with your heart in your body. In addition, if you ever need a heart transplant, there will be a 45 percent chance that you will get the heart.

Weighing these two options using a rough CBA leads most people to choose Option A. Yet, the United States opts for an organ donation policy that looks more like Option B. Why? Policymakers fall victim to the moral rule of “do no harm”; as a result, thousands of citizens die each year. When legislators are asked whether they want to switch to a system that would make harvesting the default, far too many are affected by moral rules and forego the CBA prompted by the paired choice.

As reflected in the organ donation problem, ample research shows that joint evaluation (looking at two options simultaneously) results in more reflective decision making than the evaluation of separate options (Bazerman et al., 2001). In fact, joint consideration of options allows decision makers to better assess their reflective preferences so that they can determine whether moral rules are helping or moving them away from these preferences. Returning to the drug pricing problem above, Paharia et al. (in press) found that when a third group of participants was directly asked to compare the two options (\$9/pill, direct vs. \$15/pill, indirect), they focused on price and found the behavior that led to a price of \$15/pill to be more unethical. The typical way in which we make decisions—under separate consideration—leads us to overuse moral rules in a manner that is inconsistent with the more reflective set of preferences we would identify through joint consideration of options. And, we believe that this reversal between separate and joint preferences cannot be explained by people’s refusal to live by closed world assumptions.

Although we think that BMB’s attempt to reduce the prescriptive value of CBA is unfounded, their article has value. Rather than showing how moral rules are superior to CBA,

their article clarifies what moral rules tell us about building a more powerful CBA. BMB argue that most decision researchers take an overly narrow view of the consequences that decision makers take into account. BMB precisely clarify a multitude of issues that people care about beyond their narrowly specified outcomes. Good decision analysts pay attention to such potential misapplications of CBA, and we welcome another reminder.

¹In their article, BMB position themselves against the use of CBA. Our understanding is that their arguments apply to aspects of CBA, utility maximization, and decision analysis. To parallel BMB, we focus on CBA, but we believe the debate can be applied more broadly.

References

- Bazerman, M.H., Baron, J., & Shonk, K. (2001). *You can't enlarge the pie: Six barriers to effective government*. New York: Basic Books.
- Bazerman, M.H., & Moore, D. (2008). *Judgment in managerial decision making*. Hoboken, NJ: Wiley.
- Bennis, W.M., Medin, D.L., & Bartels, D.M. (2010). The costs and benefits of calculation and moral rules. *Perspectives in Psychological Sciences*, 5, xx–xx.
- Ciaramelli, E., Muccioli, M., Ladavas, E., & di Pellegrino, G. (2007). Selective deficit in personal moral judgment following damage to ventromedial prefrontal cortex. *Social Cognitive and Affective Neuroscience*, 2, 84–92.
- Dawes, R.M. (1979). The robust beauty of improper linear models in decision making. *American Psychologist*, 34, 571–582.

- Fox, C.R., & Hadar, L. (2006). "Decisions from experience" = sampling error + prospect theory: Reconsidering Hertwig, Barron, Weber, & Erev (2004). *Judgment and Decision Making*, *1*, 159–161.
- Greene, J.D., Cushman, F.A., Stewart, L.E., Lowenberg, K., Nystrom, L.E., & Cohen, J.D. (2009). Pushing moral buttons: The interaction between personal force and intention in moral judgment. *Cognition*, *111*, 364–371.
- Greene, J.D., Sommerville, R.B., Nystrom, L.E., Darley, J.M., & Cohen, J.D. (2001). An fMRI investigation of emotional engagement in moral Judgment. *Science*, *293*, 2105–2108.
- Hammond, J.S., Keeney, R.L., & Raiffa, H. (1999). *Smart choices*. Boston, MA: Harvard Business School Press.
- Hertwig, R., Barron, G., Weber, E.U., & Erev, I. (2004), Decisions from experience and the effect of rare events in risky choices. *Psychological Science*, *15*, 534–539.
- Koenigs, M., Young, L., Adolphs, R., Tranel, D., Cushman, F., Hauser, M., & Damasio, A. (2007). Damage to the prefrontal cortex increases utilitarian moral judgments. *Nature* *446*, 908–911.
- Mendez, M.F., Anderson, E., & Shapira, J.S. (2005). An investigation of moral judgment in frontotemporal dementia. *Cognitive and Behavioral Neurology*, *18*, 193–197.
- Paharia, N., Kassam, K.S., Greene, J.D. & Bazerman, M.H. (in press). Dirty work, clean hands: The moral psychology of indirect agency. *Organizational Behavior and Human Decision Processes*.
- Raiffa, H. (1982). *The art and science of negotiation*. Cambridge, MA: Harvard University Press/Belknap.

