The motivated use of moral principles

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Abstract

Five studies demonstrated that people selectively use general moral principles to rationalize preferred moral conclusions. In Studies 1a and 1b, college students and community respondents were presented with variations on a traditional moral scenario that asked whether it was permissible to sacrifice one innocent man in order to save a greater number of people. Political liberals, but not relatively more conservative participants, were more likely to endorse consequentialism when the victim had a stereotypically White American name than when the victim had a stereotypically Black American name. Study 2 found evidence suggesting participants believe that the moral principles they are endorsing are general in nature: when presented sequentially with both versions of the scenario, liberals again showed a bias in their judgments to the initial scenario, but demonstrated consistency thereafter. Study 3 found conservatives were more likely to endorse the unintended killing of innocent civilians when Iraqis civilians were killed than when Americans civilians were killed, while liberals showed no significant effect. In Study 4, participants primed with patriotism were more likely to endorse consequentialism when Iraqi civilians were killed by American forces than were participants primed with multiculturalism. However, this was not the case when American civilians were killed by Iraqi forces. Implications for the role of reason in moral judgment are discussed.

Keywords: moral judgment, motivated reasoning, consequentialism, deontology.

1   Introduction

Most people believe that harming innocent children is wrong, as is cheating on an exam or breaking a promise. More controversially, some people believe that abortion is wrong, that the death penalty is unjust, or that animals should not be killed and eaten. These moral judgments are unlike other social judgments in an important way. Not only do we believe that our moral judgments are correct, but we believe that (unlike our attitudes toward, say, chocolate ice cream) everyone else should agree with us. This has not only been pointed out by philosophers as a key component of moral beliefs (e.g., Hare, 1952), but also confirmed by psychologists as an important feature of lay moral intuition (Haidt, Rosenberg, & Hom, 2003; Skitka, Bauman, & Sargis, 2005; Turiel, 1998). However, a problem arises when defending moral judgments. Defending a moral judgment by appealing to our subjective preferences (e.g., "abortion is wrong because I don't like it") is unpersuasive, inasmuch it fails to provide a compelling reason why others should agree. Yet, as some philosophers have argued, moral claims seem to lack an obvious set of objective criteria to demonstrate their truth

(Mackie, 1977). These features make disagreement in the moral domain a tricky problem (Pizarro & Uhlmann, 2006; Sturgeon, 1994; Sunstein, 2005).

What individuals often do, however, is defend a specific moral judgment by appealing to a general moral *principle*. Principles are defined as general rules that can guide judgment across a wide variety of situations[1], making moral judgments appear to be less like *ad hoc* preferences and more like rational facts. In moral reasoning, a principle serves as a first step toward drawing a specific conclusion. Once there is agreement about a principle, assessing whether a specific moral claim is an instantiation of the principle is all that remains.

Of course, there has been significant debate within moral philosophy as to what principles should be endorsed (i.e., the most defensible normative ethic; e.g., Smart & Williams, 1973). One of the central debates in normative ethics has been between advocates of *consequentialism* and *deontology*. Consequentialism holds that acts are morally right or wrong to the degree that they maximize good consequences. Many deontologists, on the other hand, while accepting that consequences are im-

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[1]For the purposes of this paper, we take moral principles to mean explicit normative standards that participants, upon reflection, are willing to endorse. This definition can be contrasted with other ways in which the term moral principle is used, such as a description of the (often tacit) rules that actually do guide moral judgments (e.g., Cushman, Young, & Hauser, 2006).

portant, believe that there are constraints against certain actions independent of their consequences — some acts are wrong in-and-of themselves. These constraints generally include duties and obligations such as injunctions not to break promises, not to lie, and not to harm innocent others. The debate between these two camps has generated a number of well-known thought experiments where the two broad principles are pitted against each other in one moral decision (e.g., the "Trolley" and "Footbridge" dilemmas; Foot, 1967; Thompson, 1986). Adopting these scenarios for use in the laboratory, psychological research has suggested that lay persons find the distinction between consequentialist and deontological considerations meaningful (Greene, Somerville, Nystrom, Darley, & Cohen, 2001; Spranca, Minsk, & Baron, 1991). Indeed, research utilizing these scenarios has demonstrated that certain features of an act (e.g., whether the harm is direct or indirect) can reliably influence moral judgments to be consistent with either a consequentialist or a deontological moral ethic.

What we propose here, however, is that, even when utilizing scenarios that have been shown to reliably elicit consequentialist or deontological intuitions, people's moral judgments are often affected by a set of other motivations, such as the desire to protect their ideological beliefs. This is consistent with a large body of evidence showing that reasoning processes are heavily influenced by motivational factors, and that people are flexible in the principles they apply to justify their decisions (Bartels & Medin, 2007; Ditto & Lopez, 1992; Kunda, 1987; Ehrich & Irwin, 2005; Paharia & Deshpandé, 2009; Pyszczynski & Greenberg, 1987; Simon, Krawczyk, & Holyoak, 2004; Simon, Snow & Read, 2004).

2 Current studies

Political orientation and moral beliefs are deeply connected, particularly in the contemporary American political environment. As many scholars have argued, the so-called culture war between "Blue" (liberal) and "Red" (conservative) America often boils down to a difference in moral views (Haidt & Graham, 2007; Lakoff, 2002). In the current studies we sought to demonstrate the motivated use of moral principles by comparing the judgments of political liberals and conservatives to scenarios that either meshed or conflicted with their political leanings.[2]

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[2]In the present studies we used self-reported political orientation on the liberal-conservative continuum as a way of capturing differences in political beliefs. However, the terms "conservative" and "liberal" have had shifting meanings throughout the history of American politics. Furthermore, many scholars have argued persuasively that political beliefs are multidimensional, and we do not mean to imply political beliefs are reducible to a single, invariant dimension. Still, the liberal-conservative distinction does have predictive validity, explaining 85% of the variance

Anecdotal evidence of a seemingly flexible reliance on moral principles is not difficult to find in current political discourse. Many political conservatives, for example, have staked out a clear deontological position in their moral evaluation of embryonic stem cell research, arguing that the potential lives saved by any technology generated by this research do not justify the sacrificing of innocent (embryonic) life. In their moral assessments of the extensive civilian death toll caused by the invasion of Iraq, however, conservatives have been more consequentialist in tone, arguing that civilian casualties are a necessary cost to achieve a greater good. Many political liberals, on the other hand, have argued against the Bush Administration's decision to invade Iraq based (among other reasons) on a principled stance against US military involvement in the internal affairs of foreign countries. Such a principled non-interventionist stance was not evident in the favorable attitude of many liberals toward military intervention during the Clinton administration in their attempt to quell ethnic violence in Bosnia. In each of these cases it would seem as if the moral principle invoked to justify (or oppose) an action depends on how one feels about the individuals who are on the delivering and receiving end of that action.

The goal of the current studies was to examine people's moral judgments with a greater degree of experimental control so that stronger inferences could be drawn about the motivated and flexible use of moral principles. In order to do this, we first constructed scenarios designed to pit consequentialist and deontological principles against each other. While it is not always the case that these two ethical approaches conflict, using cases where participants must pick one principle over the other to arrive at a moral judgment provides a simple and clear measure of which principle an individual favors. We then created two versions of these scenarios that were carefully matched (based on findings from an initial pre-test) in their morally-relevant content (e.g., the sacrificing of innocent lives), but that differed in whether the deontological or consequentialist option was most consistent with politically liberal or conservative sensibilities. Finally, we asked participants to rate the scenarios along a series of scales designed to capture their reliance on consequentialist versus deontological principles. Our general prediction was that political partisanship would lead to a reliance on whichever general principle supported politically-consistent moral judgments. Selectively endorsing a general moral principle to support a desired moral conclusion would constitute evidence of motivated moral reasoning.

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in voting in Presidential elections over the past three decades (see Jost, 2006).

Table 1: Pre-test results

	Not Relevant (%)	Relevant (%)
Birthday	92	8
Weight	90	10
Race	87	13
Nationality	87	13
Gender	80	20
Health	51	49
Social Distance	46	54
Age	38	62

3 Pre-test: What characteristics count as morally relevant?

We first sought to establish the features participants explicitly endorsed as morally relevant or irrelevant with regards to *victims of harm*. To do this, students at the University of California, Irvine ($n = 238$) were presented with the following instructions:

> Moral philosophers argue and debate all sorts of things. One long-standing debate is whether harming other people is permissible if it promotes a greater good. For example, military leaders are often faced with this dilemma — going to war inevitably leads to civilian casualties, but not going to war can also potentially put many more innocent people at risk (such as by not capturing terrorists or dictators that would likely harm many innocent civilians in the future). Some people believe that certain acts, such as causing harm to innocent people, are never justified under any circumstances. Others believe that if the consequences are great enough, then even undesirable acts (such as harming other people) may be morally justified.
>
> While this issue is definitely debatable, there are also certain factors that come into play that may make it OK to harm others in certain situations. For example, some people believe that harming other people is usually wrong, but if someone is guilty of a serious crime (such as murder) then this should be taken into account when deciding to harm (such as giving the death penalty). We are interested in finding out if the following facts *should* reasonably influence a person's moral judgment in deciding whether to harm others in order to pro-

mote greater consequences. That is, what factors below should be considered when a person is making a moral judgment like the ones described above?

Participants were asked to respond either "yes" or "no" to each of the following features about the victim: race, nationality, gender, age, weight, health, social distance to the respondent, and the victim's date of birth. For each feature participants were also provided with an example to help make sense of question (e.g., for the race item, participants read, "The victim's race, such as if the victim was a White or Black person?").

As shown in Table 1, there was a wide range in participants' judgments of whether or not a feature should be morally relevant. The most irrelevant feature, with 92% of participants indicating so, was the victim's day and month of birth, and the least irrelevant feature (with only 38% of participants granting irrelevancy) was the victim's age. Of greatest interest for us were the items assessing the moral relevance of race and nationality. In both cases, the overwhelming majority of participants (87%) reported that these features were morally irrelevant. Furthermore, none of the item responses were reliably correlated with political orientation at the $p < .05$ level, suggesting that liberals and more conservative participants were not in strong disagreement about whether such features were morally relevant or irrelevant.

We take the results from this pre-test survey as an initial starting point for our motivated reasoning framework. Participants who differed in their political orientation overwhelmingly agreed that a victim's race or nationality should not be factored into their judgments about the appropriateness of consequentialism or deontology as a basis for making a moral judgment.

4 Study 1a: Trolley with a twist

In Study 1a we tested our hypotheses about the motivated and flexible use of moral principles using a modified version of the widely used footbridge dilemma. In this dilemma, an individual must decide whether or not to sacrifice one innocent person in order to save a group of people who will be killed by a trolley headed in their direction. This dilemma is often utilized in thought experiments by philosophers concerned with determining whether consequentialism is an appropriate normative ethical theory (Foot, 1967; Thompson, 1986), and has also been used in a number of psychological experiments on the nature of moral judgment (e.g., Cushman et al., 2006; Greene et al., 2001; Spranca, Minsk, & Baron, 1991).

It is known that there is a strong disdain among American college students and politically liberal Americans more generally for harboring feelings that may be considered prejudiced against Black Americans (Czopp & Monteith, 2003; Monin & Miller, 2001; Norton et al., 2004; Plant & Devine, 1998; Tetlock, Kristel, Elson, Green, & Lerner, 2000). Therefore, we varied the race of the characters in the scenarios to see whether this would influence participants' judgments concerning the appropriate moral action. As indicated in the pre-test, race is a variable that most of our sample deemed morally irrelevant when deciding to save lives.

4.1   Method

Participants. Eighty-eight undergraduate students at the University of California, Irvine participated for course credit.

Materials and procedure. Participants received one of two scenarios involving an individual who has to decide whether or not to throw a large man in the path of a trolley (described as large enough that he would stop the progress of the trolley) in order to prevent the trolley from killing 100 innocent individuals trapped in a bus.[3] Half of the participants received a version of the scenario where the agent could choose to sacrifice an individual named "Tyrone Payton" to save 100 members of the New York Philharmonic, and the other half received a version where the agent could choose to sacrifice "Chip Ellsworth III" to save 100 members of the Harlem Jazz Orchestra. In both scenarios the individual decides to throw the person onto the trolley tracks. While we did not provide specific information about the race of the individuals in the scenario, we reasoned that Chip and Tyrone were stereotypically associated with White American and Black American individuals respectively, and that the New York Philharmonic would be assumed to be majority White, and the Harlem Jazz Orchestra would be assumed to be majority Black.

All participants were then provided with the following items intended to assess endorsement of the general principle of consequentialism, on 7-point scales:
(1) "Is sacrificing Chip/Tyrone to save the 100 members of the Harlem Jazz Orchestra/New York Philharmonic justified or unjustified?" (1 = *completely unjustified*, 7 = *completely justified*)
(2) "Is sacrificing Chip/Tyrone to save the 100 members of the Harlem Jazz Orchestra/New York Philharmonic

moral or immoral?" (1 = *extremely immoral*, 7 = *extremely moral*)
(3) "It is sometimes necessary to allow the death of an innocent person in order to save a larger number of innocent people." (1 = *completely disagree*, 7 = *completely agree*)
(4) "We should never violate certain core principles, such as the principle of not killing innocent others, even if in the end the net result is better." (reverse coded; 1 = *completely disagree*, 7 = *completely agree*)
(5) "It is sometimes necessary to allow the death of a small number of innocents in order to promote a greater good." (1 = *completely disagree*, 7 = *completely agree*)

Finally, participants were asked to report their political orientation on a scale ranging from 1 (*very liberal*) to 5 (*very conservative*). Participants were on average politically left of center (*M* = 2.57).

4.2   Results and discussion

All of the dependent variables were highly correlated and were combined to form an index of consequentialism (Cronbach's α = .78). Higher scores indicated greater endorsement of consequentialism — that it was morally justified to sacrifice a human life in order to save the lives of many others.

We conducted a linear regression to test for both the independent and interactive effects of scenario condition and self-reported political orientation on endorsement of consequentialism. Scenario condition (-1 = Chip, 1 = Tyrone), political orientation (converted to standard units), and the interaction term were simultaneously entered as predictors in the model. There was one reliable lower-order effect: participants were less willing to endorse consequentialism when Tyrone Payton was sacrificed than when Chip Ellsworth III was sacrificed, *b* = $-.19$, *SE* = .09, *t*(84) = 2.24, *p* = .03. However, this was qualified by the expected condition x political orientation interaction, with liberals (but not relatively more conservative participants) showing differential endorsement of moral principles across scenarios, *b* = .20, *SE* = .09, *t*(84) = 2.26, *p* = .03 (see Figure 1). Specifically, liberals (defined as 1 *SD* below the mean; Aiken & West, 1991) were more likely to endorse a consequentialist justification when the victim had a stereotypically White name than when the victim had a stereotypically Black name, *b* = $-.40$, *SE* = .12, *t* = 3.27, *p* = .002. More conservative participants (1 *SD* above the mean) did not give reliably different endorsements of consequentialism across scenario versions, *b* = .01, *SE* = .13, *t* = .09, *p* = .93.

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[3]Typically, the footbridge dilemma involves a trade-off of 1 life in order to save 5 (and not 100). We increased the potential number of lives saved by making the consequentialist decision in order to get more variation in responses, as participants show a strong preference for the deontological decision in the original 1-for-5 version (Greene et al., 2005).
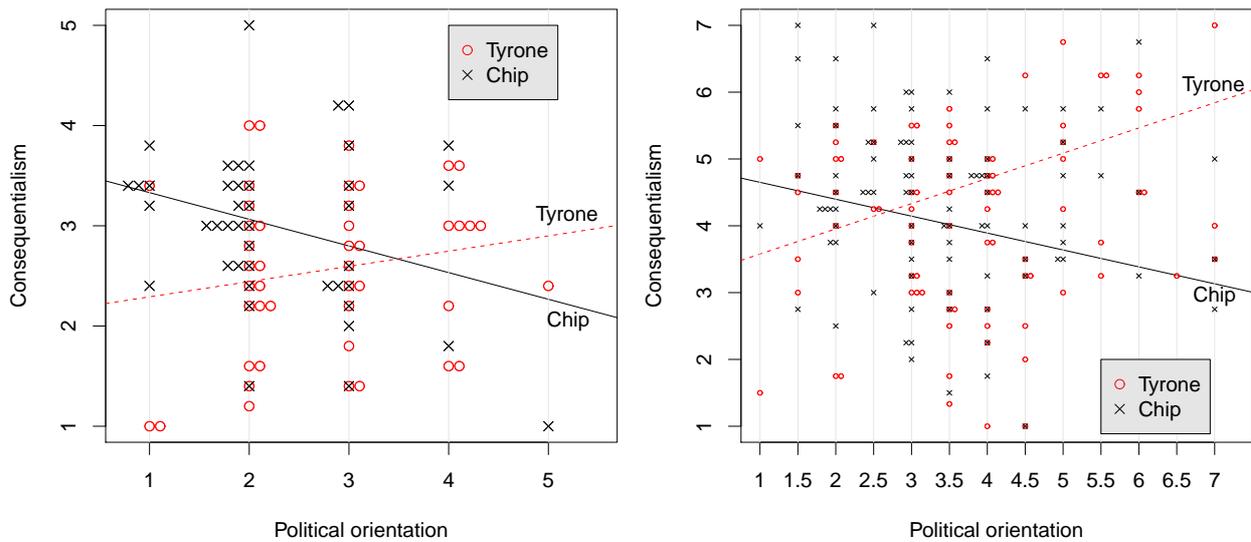
Figure 1: Results from Experiments 1a and 1b. Data points are "stacked" horizontally to indicate density. Lines are the best-fitting linear regressions for each group.

5 Study 1b: Race and the lifeboat dilemma

Study 1a confirmed our initial predictions about the motivated and flexible endorsement of moral principles, at least for political liberals. In Study 1b we attempted to replicate the basic finding with a scenario that did not rely on the explicit comparison between the single member of one race and 100 members of another race, thus offering a cleaner manipulation. To do this, we used a scenario that manipulated only the race of the individual to be sacrificed. In addition we added a follow-up question asking participants to infer the victim's race from their name, to directly examine whether cues about race were motivating differential use of moral principles. Finally, to collect further evidence that race was not seen to be morally relevant, we asked participants whether their responses would have been different if the target person were of another race. Even if participants agreed that race *should not* be factored into their moral judgments (as they indicated in our pre-test data), they still might be willing to admit such considerations unfortunately *do* influence their judgments. We expected to replicate the same pattern of motivated and flexible endorsements of moral principles as in Study 1a, and that participants would explicitly deny that race factored into their judgments.

5.1 Method

Participants. The sample included 176 participants, composed of Cornell University undergraduates (*n* = 96)

and adults from a public area in Southern California (*n* = 80). As described in greater detail below, participants in the community sample completed several additional measures not administered to the college student sample.

Materials and procedure. Participants read about an individual who must decide whether or not to throw a severely injured person (so injured that he would not survive) off of a crowded lifeboat in order to prevent the lifeboat from sinking, thereby drowning all of the individuals aboard. As in Study 1a, we indirectly manipulated the race of the person who was to be sacrificed — either an injured man named "Chip Ellsworth III" or an injured man named "Tyrone Payton."

Immediately after reading the scenario, participants responded to four questions assessing their endorsement of consequentialism. They were asked to rate, using 7-point scales, the items:

(1) "Is sacrificing Chip/Tyrone to save the other members on board acceptable or unacceptable?"

(2) "Is sacrificing Chip/Tyrone to save the other members on board moral or immoral?"

(3) "We should never violate certain core principles, such as the principle of not killing innocent others, even if in the end the net result is better."

(4) "It is sometimes necessary to allow the death of innocents lives in order to promote a greater good."

Participants also reported their political orientation for both social and economic issues on a scale ranging from 1 (*very liberal*) to 7 (*very conservative*). The social and economic items were combined to form an index of general political orientation (*r* = .63). Participants were on average slightly left of center (*M* = 3.59).

Additional measures. Participants in the community sample completed several additional measures. As a manipulation check, they were asked: "If you had to guess what race Chip Ellsworth III (Tyrone Payton) was, what would you guess?" The response options were White, Asian, Latino, Black, or Other. These participants were also asked in an open-response format whether they thought the race of the main character had influenced their judgment: "If Chip's (Tyrone's) race was different than what you imagined, do you think this fact would change the way you responded to the questions asked above?"

5.2   Results and discussion

There were no significant differences between the judgments of college students and the community sample, nor any interaction between sample population and study condition, so we collapsed across samples for our primary analyses. Further, the four main dependent variables were collapsed to form a single index of consequentialism (Cronbach's α = .75), with higher scores indicating greater endorsement of consequentialism.

We conducted a linear regression similar to that in Study 1a, with scenario condition, political orientation, and the interaction term simultaneously entered as predictors in the model. No reliable lower-order effects were found. However, the predicted condition x political orientation interaction was found, b = .12, SE = .06, $t(172)$ = 2.15, p = .03 (see Figure 2). Conceptually replicating Study 1a, liberals (1 SD below the mean) were more likely to endorse a consequentialist justification when Chip was sacrificed than when Tyrone was sacrificed, b = −.19, SE = .08, t = 2.43, p = .02. More conservative participants (1 SD above the mean) did not give reliably different endorsements of consequentialism for Chip and Tyrone, b = .05, SE = .08, t = .61, p = .54.

Participants in the community sample completed several additional measures. When asked to guess the race of the target character in the manipulation check, 79% of participants in the Chip condition believed that Chip was White, and 64% of those in the Tyrone condition believed that Tyrone was Black, χ^2 (4, n = 77) = 26.63, p < .001. Furthermore, the key interaction reported above remained statistically significant even when including only those participants who "passed" the manipulation check.

We also asked participants in the community sample if they would give different judgments had the victim been of a different race. The overwhelming majority (92% of participants) said they would not, and responses to this counterfactual question did not vary by scenario, χ^2 < .05, or by participants' political orientation, r = .10, p = .40. When asked directly, most participants stated that race was irrelevant to their moral judgments.

Across Studies 1a and 1b we found that self-identified political liberals and more conservative participants differed in their endorsement of moral principles when race was a contextual variable. In particular, political liberals tended to be more likely to endorse a consequentialist justification for sacrificing an innocent White man compared to sacrificing an innocent Black man. There are a number of possibilities as to why these effects were driven by the responses of our liberal participants. For one, the race of the victim may have simply been more salient to liberals than more conservative participants. We conducted an internal analysis to test this explanation. For those participants who were given the manipulation check item, we dummy coded their responses as 0 for "incorrect" responses and as 1 for "correct" responses (i.e., those who correctly or incorrectly reported Chip Ellsworth as Caucasian or Tyrone Payton as African American, respectively). Political orientation was not reliably associated with correct or incorrect responses to the manipulation check item, r = −.07, p = .50. Liberals were no more likely than comparatively conservative participants to report Chip Ellsworth as White or Tyrone Payton as Black, suggesting that race of the victim was equally salient to both conservative and liberal participants.

A more likely explanation is that antipathy toward anti-Black prejudice played a greater role in liberals' judgments. A recent meta-analysis by Jost, Glaser, Kruglanski and Sulloway (2003) indicated that one of the fundamental differences between liberals and conservatives lies in conservatives' greater tolerance for social inequality. Research on the moral foundations underlying liberal and conservative ideologies also suggests that fairness concerns are particularly acute for political liberals (Haidt & Graham, 2007), and that race is likely a key symbol evoking these concerns in contemporary America. As such, it is possible that our scenarios describing the sacrifice of a Black man simply held more motivational power for liberals than for comparatively conservative participants. Our Chip-Tyrone manipulation presented liberals with choices likely to alert their sensitivities to issues of racial inequality, and they responded more negatively when asked to sacrifice a Black life than a White life. Comparatively conservative participants, even if not overtly prejudiced, may simply have lacked these acute sensitivities regarding inequality, and responded in a more evenhanded fashion as a result. Regardless of the source of motivation, however, these results suggest that moral principles generally held to apply across situations can be selectively applied in order to fit a desired moral judgment.

6 Study 2: Endorsement of moral principles across multiple scenarios

Studies 1a and 1b demonstrated differences in the endorsement of consequentialism for political liberals based on the race of the individual to be sacrificed. But perhaps liberals would actually see nothing problematic with their responses across the two different scenarios. They may be naïve *particularists* — believing that there is no over-arching principle that should hold weight across all situations (Dancy, 1993, 2004). If so, they may feel comfortable applying different rules across different scenarios without violating their own normative beliefs. For instance, our liberal participants may believe that the life of a Black man actually should count for more than that of a White man (e.g., because of past injustices). While our pre-test data casts doubt on this hypothesis, this issue seemed important enough to warrant further investigation. The question concerning race in the initial survey, for example, might have been too general or vague to elicit reliable responses about participants' moral beliefs. In Study 2 we directly asked participants whether race *should* be a relevant input to the particular task that they had just completed.

Another way we sought to address this issue was to utilize a within-subjects design. Numerous prior investigations have contrasted judgments made under conditions of joint (i.e., within-subjects) versus separate (i.e., between-subjects) evaluations (e.g., Bartels, 2008). Much of what makes judgments under within-subjects (i.e., joint evaluation) conditions so interesting is that they reveal the factors that participants overtly allow to influence their judgments (for a review, see Hsee, Loewenstein, Blount, & Bazerman, 1999). Using this method in our studies allowed us to determine if participants believe that differences in such consequentialist responses are defensible. If so, then they should report differing responses in the Chip and Tyrone scenarios when given both scenarios in one session (just as they did in our between-subjects designs in Studies 1a and 1b). If, however, participants have a naïve belief that race should hold no weight, and that moral principles should be applied the same in both scenarios, then their responses to the first scenario they receive should be an effective predictor of their responses to the second scenario. For instance, if a liberal respondent endorses sacrificing Chip in the first scenario, then we would predict that person to respond similarly to the second scenario about Tyrone. Such a pattern would provide evidence that individuals believe that (a) the race of the characters in the scenarios is not relevant and (b) the application of moral principles should hold across scenarios if the only difference is the victim's race.

6.1 Method

Participants: Thirty-eight students at the University of California, Irvine participated in the study for course credit.

Materials and procedure. We used the same two versions of the dilemma presented in Study 1a — participants were asked to either sacrifice Chip Ellsworth III in order to save 100 members of the Harlem Jazz Orchestra, or to sacrifice Tyrone Payton in order to save 100 members of the New York Philharmonic. In order to determine whether individuals would explicitly alter their endorsement of consequentialism, we gave all participants both versions of the scenario, with order of scenario counterbalanced between subjects. Each scenario was presented on a separate page, and participants were instructed not to return to the previous scenario. After reading each version of the scenario, participants responded to the same set of items as before — asking if the action was justified or unjustified, if the action was moral or immoral, and whether they agreed or disagreed with two items describing general moral principles. As before, all items were assessed on 7-point scales.

On a separate page, participants then provided a written free response to a normative question about the role of race in moral judgments: "Do you think a person's race should be considered when deciding whether or not to sacrifice an innocent life in order to bring about a greater good? Finally, participants reported their political orientation for both social issues and economic issues on scales ranging from 1 (*Very Liberal*) to 7 (*Very Conservative*). Responses to the two political orientation items were combined to form a general index of political orientation ($r = .51$). Participants were on average politically left of center ($M = 3.57$).

6.2 Results and discussion

We hypothesized that (a) the basic pattern found in Study 1a would replicate, where liberals (but not comparably more conservative participants) would show differential endorsement of consequentialism to the first scenario, and (b) that all participants (including liberals) would be consistent in their subsequent endorsement of consequentialism for the second scenario.

To test this, we first computed an index of consequentialism by combining responses across both scenarios ($\alpha = .92$). We then entered endorsement of consequentialism into a general linear model, with scenario version (Chip vs. Tyrone), scenario order (Chip first vs. Tyrone first), self-reported political orientation, and all 2-way and 3-way interactions as predictor variables in the model. Order of scenario was treated as a between subjects variable and scenario version as a repeated measures variable in

Table 2: Mean consequentialism scores (in standardized units), for Study 2. The two columns on the left show scores for participants who first responded to the Tyrone scenario and then to the Chip scenario. The two columns on the right show scores for participants who responded to the scenarios in the opposite order.

	Tyrone → Chip		Chip → Tyrone	
Liberal	−.45	−.51	0.19	0.19
Conservative	0.50	0.26	−.18	−.10

the model. The two statistical results most relevant to our hypotheses were the 2-way scenario order x political orientation interaction and the lower-order effect of scenario version. For the interaction, we should expect a pattern of results similar to that found in Studies 1a and 1b. For scenario version, we should expect a null effect if participants believe that moral principles should be applied across scenarios, and a statistically significant effect if participants are naïve particularists (that is, if they are comfortable utilizing different moral rules across the two scenarios).

As expected, the scenario order x political orientation interaction was reliable, with liberals (but not more conservative participants) showing differential endorsement of moral principles between conditions, $F(1, 68) = 4.82$, $MSE = 1.77$, $p = .032$; the dependent variable was the combined response across both scenarios. Similar to the previous studies, liberals were less likely to endorse consequentialism if initially confronted with Tyrone Payton as the victim than if Chip Ellsworth III was the initial victim, $b = −.43$, $SE = .21$, $t = 2.00$, $p = .05$. Conservatives did not show differential endorsement between the initial two scenarios, $b = .25$, $SE = .21$, $t = 1.20$, $p = .24$.

The same model also found virtually no lower order effect for the within-subjects scenario version, contrary to the naïve particularism account, $F(1, 68) = .02$, $MSE = 1.77$, $p = .88$. Participants were extremely consistent in their judgments: the correlation between their endorsement of consequentialism in scenario 1 and scenario 2 was $r = .98$. Twenty-four of the 38 participants (63%) showed absolutely no difference in their within-subject judgments, and remaining participants showed only small discrepancies in their judgments between the two scenario versions. Finally, no reliable scenario version x political orientation interaction emerged, suggesting that both liberals and conservatives were not reliably different in within-subject consistency for the two scenarios, $F(1, 68) = .06$, $MSE = 1.77$, $p = .80$.

Table 2 illustrates the basic pattern of results. To facilitate interpretation, consequentialism scores are standardized — positive scores indicate higher endorsement of consequentialism and negative scores indicate lower endorsement of consequentialism (relative to the sample average). Again for ease of interpretation, we have also split liberals and conservatives into two groups (excluding any participants who responded "moderate" on the political orientation item). As Table 2 makes clear, liberals disfavored consequentialism if they first read that Tyrone Payton was sacrificed, but they also rejected consequentialism when subsequently reading about Chip Ellsworth. However, when liberal participants read about Chip first, the opposite pattern emerged: they showed relatively greater endorsement of consequentialism in the initial scenario, and also showed greater endorsement of consequentialism when subsequently reading about Tyrone. Conservatives showed the opposite pattern as liberals, but as noted earlier the between-subjects effect in conservative participants was non-significant.

Finally, in their open responses to the normative question concerning race, every participant indicated that race should not be used as a factor in making such judgments. This was exemplified by statements such as "No, race is unimportant in these matters unless you are a racist" "No, race should have no influence on whether or not one should be sacrificed. This decision should be purely based on means to the end goal" and "No... no one's life should be sacrificed intentionally, no matter what race they are."

In sum, Study 2 provided additional evidence that political orientation contributes to a selective use of moral principles. Moreover, this bias does not appear to be an explicitly chosen response to the manipulated features of our scenario (i.e., race). On the contrary, participants were highly consistent in their responses to the Chip and Tyrone versions when they received both versions, and explicitly rejected race as a relevant factor when directly asked.

7 Study 3: Military action, collateral damage, and political orientation

In Study 3, we sought to test our motivated moral reasoning hypothesis utilizing a scenario that was of more real-world import for our participants. We also sought a situation that would evoke conservative passions at least as strongly as liberal ones. The dilemma we chose to examine was one involving "collateral" deaths of innocent civilians in military conflicts. In many military operations, difficult moral decisions must be made about whether the possibility (or certainty) of innocent civilians inadvertently being killed is justified by the greater good that might be achieved by a military victory. This situ-

ation thus pits deontological and consequentialist ethics against one another, and in this way is similar to the footbridge dilemma used in Studies 1a and 2. For this study, we manipulated another feature that many would consider normatively irrelevant to moral judgment — the nationality of the innocent victims killed as the side-effect of the military attack. Harnessing motivations evoked by political feelings early in the Iraq War (when the study was conducted), we hypothesized that political conservatives, but not liberals, would find collateral damage more acceptable when the innocent civilians in question were Iraqis rather than Americans.

7.1 Method

Participants. One hundred forty-four undergraduates at the University of California, Irvine ($n = 46$) and at California State University, Fresno ($n = 98$) participated in the study for course credit.

Materials and procedure. Participants were given one of two scenarios where military leaders in Iraq initiated an action that foreseeably but unintentionally killed innocent civilians. Half of the participants received a version where American troops attacked Iraqi insurgents, and the other half received a version where Iraqi insurgents attacked American troops. The scenario described [American/Iraqi] leaders deciding to carry out an attack to stop key leaders of the [Iraqi insurgence/American military] in order to prevent future deaths of [Iraqi insurgents/American troops]. Both scenarios stated that while the decision-makers were aware of the possibility of innocent deaths, they reasoned that sometimes it is necessary to sacrifice innocent people for the sake of a greater good (in this case the saving of many future lives). The scenarios also specifically stated that the decision makers did not intend the death of any innocent civilians, but merely foresaw it as an unwanted consequence of their military actions.

Participants then indicated the extent they agreed with the military leaders' decision, whether they believed that the American/Iraqi leaders' decision was well-reasoned ("How well-reasoned was the position of the American [Iraqi] leaders?"), and how much they endorsed the consequentialist principle that was used by the military leaders to justify such action ("It is sometimes necessary to allow the death of a small number of innocents in order to promote a greater good," and "We should never violate certain core principles, such as the principle of not killing innocent others, even if in the end the net result is better"). All responses were indicated on 7-point scales.

Finally, we asked participants about their general political orientation on a scale from 1 (*Liberal*) to 7 (*Conservative*). Participants were on average right of center ($M = 4.31$).
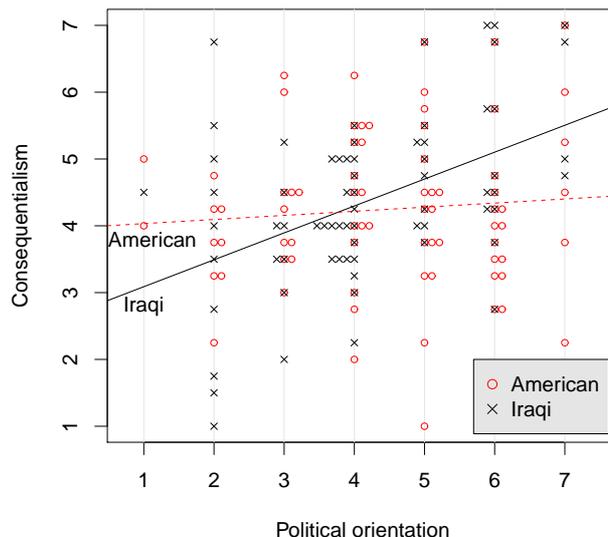

Figure 2: Results from Experiment 3. Data points are "stacked" horizontally to indicate density. Lines are the best-fitting linear regressions for each group.

7.2 Results and discussion

Because the scenarios contained a section where military leaders explicitly endorse consequentialism as a general principle, the items about participants' agreement with the action and the quality of the reasoning behind it were taken as an endorsement of consequentialism, along with the two general consequentialism items. All items were combined to form an index of consequentialism, with higher scores indicating greater endorsement (Cronbach's $\alpha = .75$).

We then conducted a linear regression to test for both the independent and interactive effects of scenario condition and self-reported political orientation on endorsement of consequentialism. Scenario condition ($-1 =$ Iraqi victims, $1 =$ American victims), political orientation (converted to standard units), and the interaction term were simultaneously entered as predictors in the model. There was one reliable lower-order effect: conservativism was positively associated with consequentialism, suggesting that political conservatives had a generally more permissible view of collateral casualties than did political liberals, $b = .35$, $SE = .10$, $t(140) = 3.58$, $p < .001$. However, this was qualified by the expected condition x political orientation interaction, with conservatives (and not liberals) showing differential endorsement of moral principles across scenarios, $b = -2.6$, $SE = .10$, $t(140) = 2.63$, $p < .01$ (see Figure 2). Specifically, conservatives (1 *SD* above the mean) were more likely to endorse consequentialist military action when the victims were Iraqi than when the victims were American, $b = -.35$, $SE = .14$, $t = 2.55$, $p = .01$. Liberals (1 *SD* below

the mean) did not give reliably different endorsements of consequentialism across scenario versions, $b = .16$, $SE = .14$, $t = 1.18$, $p = .24$.

Notably, in Study 3 the motivated use of moral principles was relatively more pronounced among the participants in our sample who were closer to the conservative ends of our scales than liberals (in contrast to Studies 1 and 2, where liberals tended to drive the effects). Conservative participants may simply have had a greater desire to support the Iraq war (particularly as this study was conducted during the early stages of the war when Republican support was still quite high), and were therefore particularly motivated to support consequentialism in the case where an American attack kills innocent Iraqi civilians. The results of Study 3 highlight the fact that both liberals and conservatives engage in the motivated and flexible use of moral principles.

8 Study 4: Political priming and military action

Across four studies, we have demonstrated that individuals' reliance on deontological versus consequentialist moral principles is affected by how those principles fit with the moral conclusions most consistent with their political orientation. Just as individuals have been found to selectively rely on general evaluative criteria that "happen" to put themselves or their ingroup in a positive light (Dunning et al., 1995; Uhlmann & Cohen, 2005), we have argued that political partisans selectively rely on general moral principles that favor ideologically preferred moral conclusions. But up to this point we have been forced to rely on the fact that individuals bring their moral biases with them, so to speak. While this is an appropriate way to examine the motivated use of moral principles, an ideal test of our hypothesis would be to manipulate an individual's favored moral judgments and demonstrate that this manipulation can lead to differences in endorsement of moral principles. In Study 4 we did this by priming participants with either patriotism or multiculturalism — values thought to be related to support for American troops versus Iraqi insurgents. Use of a priming procedure provides a test of the hypothesis that automatic, intuitive processes drive moral judgments, and are in turn justified by moral reasoning (Haidt, 2001; Haidt et al., 1993).

8.1 Method

Participants. Ninety-two undergraduates at the University of California, Irvine participated in the study for course credit.

Materials and procedure. Participants were randomly assigned to one of two priming conditions, *patriotic* or *multicultural*. Participants were primed utilizing a sentence unscrambling procedure (Srull & Wyer, 1979; Bargh, Chen, & Burrows, 1996). All participants were asked to unscramble 11 sentences and remove one word that did not belong in each of the sentences. One group of participants received 6 neutral sentences, and 5 sentences that contained words pertaining to patriotism (i.e., *patriots, American, U.S.A., flag,* and *loyal*). The other group of participants received the same 6 neutral sentences, and 5 additional sentences that contained words pertaining to multiculturalism (i.e., *multicultural, include, diversity, equal,* and *minority*). Immediately following the sentence-unscrambling task, participants were asked to read the scenarios about military action in the Middle East utilized in Study 3. The study was thus a 2 (Primes: Patriotic vs. Multicultural) x 2 (Military scenario: American victims vs. Iraqi victims) between-subjects design. Following the scenarios, participants were asked to judge the actions of the military leaders by responding to the same items used to assess consequentialism in Study 3.

Finally, participants were asked about their political orientation on a scale from 1 (*Liberal*) to 7 (*Conservative*). Participants were on average politically left of center ($M = 3.43$).

8.2 Results and discussion

All items were first combined to form an index of consequentialism (Cronbach's $\alpha = .67$) and analyzed with a 2 (Prime: patriotism vs. multicultural) x 2 (Scenario: Iraqi victims vs. American victims) between-subjects analysis of variance (ANOVA). The only significant effect was a Prime x Scenario interaction showing that participants responded to the military scenarios differently depending on whether they were primed with patriotism or multiculturalism, $F(1, 88) = 3.91$, $MSE = 1.11$, $p = .05$. For the Iraqi victims scenario, participants primed with patriotism were more likely to endorse consequentialist military action than were participants primed with multiculturalism ($M = 4.17$, $SD = 0.77$ vs. $M = 3.59$, $SD = 0.86$), $t(41) = 2.26$, $p < .05$, $d = 0.71$. No reliable difference was found between patriot and multicultural primes in the American victims scenario, ($M = 3.60$, $SD = 1.24$ vs. $M = 3.93$, $SD = 1.20$), $t < 1$.

There was a nonsignificant trend for participants in the patriotic prime condition to report slightly greater political conservatism than participants in the multicultural prime condition (Ms = 4.30 and 4.71, SDs = 1.16 and 1.23, respectively), $t(90) = 1.56$, $p = .12$. However, the priming x scenario interaction remained significant even when participants' political orientation was included as a covariate, $F(1, 87) = 3.88$, $MSE = 1.12$, $p = .052$, and

political orientation did not moderate the effects of the priming manipulation, Fs < 1.35. We leave it to future research to more thoroughly investigate whether primed concepts can reliably influence self-reported political orientation.

9   General discussion

Across five studies we provided evidence that people flexibly endorse moral principles that support judgments consistent with their political inclinations. In each study, we presented participants with dilemmas where a small number of innocent lives could be sacrificed to save many more, a classic framework for pitting deontological against consequentialist principles. Across all studies, how participants resolved those dilemmas depended on whether sacrificing the innocent lives meshed with their political leanings.

Consistent with the strong antipathy against anti-Black prejudice among political liberals, in Studies 1a and 1b we found that liberals were less willing to endorse the killing of an innocent person on consequentialist grounds when the name of the individual suggested he was Black than when it suggested he was White. Study 2 demonstrated that liberals' biased application of moral principles, when made salient in a within-subjects design, was eliminated. When given both the Chip and Tyrone scenarios, participants were strikingly consistent in their use of consequentialist or deontological principles, such that their responses on the second scenario almost always mirrored those in the first. This suggests that participants explicitly believed that the principles they were invoking were general enough to apply regardless of the victim's race.

In Study 3 we found that conservatives were more likely to condone the killing of innocent civilians in a military attack when those civilians were Iraqis killed by Americans rather than Americans killed by Iraqis, while liberals did not demonstrate such a flexible set of responses. Finally, in Study 4 we primed participants with either patriotism or multiculturalism, and found that, analogous to the effects on self-reported political ideology in Study 4, participants primed with patriotism (compared to those primed with multiculturalism) were more likely to accept collateral damage when Iraqi civilians were killed by American forces, but not when American civilians were killed by Iraqi forces.

Taken together, these findings provide evidence that motivation can influence not only our descriptive beliefs about how the world is (Dunning & Cohen, 1992; Kunda, 1987; Norton et al., 2004; Simon, 2004; Simon et al., 2004; Uhlmann & Cohen, 2005) but also prescriptive beliefs about how the world *ought* to be. More specifically, our results offer clear experimental support for the kind of motivated moral reasoning processes predicted by the social intuitionist model (Haidt, 2001). While a number of studies have demonstrated experimentally that intuitions can drive moral judgments (e.g., Greene et al., 2001; Wheatley & Haidt, 2005), and other work has offered evidence of *post hoc* moral rationalizations using an interview paradigm (Haidt, 2001; Haidt, Koller, & Dias, 1993), the current studies utilized techniques from the motivated reasoning literature to manipulate participants' preferred moral conclusions, and observed how selective endorsement of moral principles emerged to support those conclusions. In Studies 1–3 this was accomplished using participants' pre-existing political inclinations, but Study 4 produced a similar pattern through direct manipulation of ideological attitudes in the political domain. The use of a subtle, extensively validated priming manipulation (Bargh et al., 1996; Dijksterhuis & Bargh, 2001; Srull & Wyer, 1979) to produce differences in moral reasoning makes for especially convincing evidence of intuitionism in moral judgment. Study 4 is a direct demonstration of how subtle processes can influence what seems, on the face of it, to be an act of deliberative moral judgment (i.e., the endorsement and application of general moral principles).

Rather than being moral rationalists who reason from general principle to specific judgment, it appears as if people have a "moral toolbox" available to them where they selectively draw upon arguments that help them build support for their moral intuitions. While the present studies do not imply that general principles never play a direct, *a priori* role in moral judgment, they do suggest that moral judgments *can be* influenced by social desires or motivations, and that moral principles *can be* rationalizations for other causes of the judgment. Sometimes principles are used in an impartial manner. The disturbing implication of recent research, however, is that we have no easy way of verifying whether the principles we passionately invoke for our moral judgments are truly guiding our judgment in the unbiased fashion we think they are.

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