

Intergroup Threat and Outgroup Attitudes

Macro-Level Symbolic Threat Increases Prejudice Against Gay Men

Marco Brambilla¹ and David A. Butz²

¹University of Milano-Bicocca, Milan, Italy, ²Morehead State University, Morehead, KY, USA

Abstract. Two studies examined the impact of macrolevel symbolic threat on intergroup attitudes. In Study 1 ($N = 71$), participants exposed to a macrosymbolic threat (vs. nonsymbolic threat and neutral topic) reported less support toward social policies concerning gay men, an outgroup whose stereotypes implies a threat to values, but not toward welfare recipients, a social group whose stereotypes do not imply a threat to values. Study 2 ($N = 78$) showed that, whereas macrolevel symbolic threat led to less favorable attitudes toward gay men, macroeconomic threat led to less favorable attitudes toward Asians, an outgroup whose stereotypes imply an economic threat. These findings are discussed in terms of their implications for understanding the role of a general climate of threat in shaping intergroup attitudes.

Keywords: gay men, prejudice, intergroup threat, societal crises

Extensive research over the last decades has revealed the importance of perceived threat in shaping intergroup attitudes (for a review, see Riek, Mania, & Gaertner, 2006). In this regard, studies have been directed at identifying the various types of threats and their cognitive, affective, and behavioral outcomes. One of the most promising approaches in this domain is intergroup threat theory (Stephan, Ybarra, & Morrison, 2009), according to which realistic and symbolic threats can simultaneously account for the prediction of intergroup attitudes. Whereas realistic threat refers to threats to the welfare of the ingroup, including its political and economic power as well as group safety, symbolic threat relates to perceiving the outgroup as threatening the ingroup's worldview due to perceived group differences in values, standards, beliefs, and morality (Stephan & Renfro, 2002; Stephan & Stephan, 2000).¹ Further supporting this view, the sociofunctional threat-based approach distinguished the threats to group-level resources (akin to realistic threat) from the threats to group integrity (akin to symbolic threat) (Cottrell & Neuberg, 2005).

Based on such distinctions, it has been shown that social

groups elicit qualitatively different levels of realistic and symbolic threat. For instance, gay men and lesbians are mostly seen as a source of symbolic threat due to a perceived association between homosexuality and amoral behaviors (see Cottrell & Neuberg, 2005). Indeed, homosexuals are perceived as violating moral values about "appropriate" sexual behavior as well as family values (Madon, 1997; Vescio & Biernat, 2003). In contrast, Asian Americans are perceived as competent and therefore evoke economic threat due to the possibility that members of this group would be at an advantage over other groups in securing economic resources (Lin, Kwan, Cheung, & Fiske, 2005; Maddux, Galinsky, Cuddy, & Polifroni, 2008). In a similar vein, low status groups such as welfare recipients are perceived as posing mostly an economic threat because they are viewed as subtracting basic resources from the whole community (Cuddy, Fiske, & Glick, 2008). These lines of work indicate that distinguishing between the types of threat outgroups pose provides insight into specific responses to outgroup members (Stephan & Stephan, 2000; Stephan, Ybarra, & Bachman, 1999; Tausch, Tam, Hew-

¹ In the original version of intergroup threat theory, labeled "integrated threat theory," two additional types of threats were included: negative stereotypes and intergroup anxiety (see Stephan & Stephan, 2000). However, further analyses indicated that negative stereotypes were better conceptualized as a predictor (Stephan et al., 2002) as well as a cognitive consequence (Riek et al., 2006) of symbolic and realistic threats. In a similar vein, intergroup anxiety seems to be an affective consequence of perceived threat, rather than another kind of threat (Butz & Yogeeswaran, 2011; Stephan et al., 2009).

stone, Kenworthy, & Cairns, 2007; for a review, see Stephan et al., 2009).

To date, much of the extant work on intergroup threat has addressed the consequences of threats elicited by specific groups. In other words, the classical social psychological threat theories argue that intergroup hostility arises within situations in which the threat is directly elicited by a specific nameable outgroup (Stephan et al., 2009). However, research has also revealed that the experience of threat may be diffuse and *unspecific* (Becker, Wagner, & Christ, 2011; Butz & Yogeeswaran, 2011). For instance, societal crises like economic downturns elicit feelings of unspecific and diffuse threat, resulting from social and political mechanisms that cannot be attributed to a specific agent (Becker et al., 2011; Butz & Yogeeswaran, 2011; See also Crotty, 2009).

Importantly, it has been shown that such forms of macrolevel threats unrelated to any particular group impact intergroup relations. Indeed, previous studies based on archival data suggest that a general climate of economic threat resulting from economic downturns heightens outgroup hostility (Hepworth & West, 1988; Hovland & Sears, 1940). More recently, using an experimental approach, Butz and Yogeeswaran (2011) demonstrated that macrolevel economic threat heightens prejudice against an ethnic group whose stereotype implies a threat to scarce employment opportunities (i.e., Asian Americans), but not against an ethnic group whose stereotype does not invoke a threat to economic resources (i.e., Black Americans). In a similar vein, Becker et al. (2011) showed that the general climate of economic threat elicited by the 2008 financial crisis increases prejudice toward scapegoats perceived as a source of realistic threat (i.e., Jews and Immigrants).

Taken together, these findings show that realistic threat unrelated to any particular group, particularly macroeconomic threat, does not lead to generalized outgroup prejudice, but rather prejudice targeted toward outgroups that are perceived to threaten economic resources. These findings thus extend prior social psychological threat theories that have mainly considered the consequences of threats evoked by specific groups (Riek et al., 2006; Stephan et al., 2009; see also Esses, Jackson, & Armstrong, 1998) by showing that macroeconomic threat leads to increased prejudice toward specific social groups.

In the present work, we extend prior research on the effects of diffuse and macrolevel threat by moving beyond realistic threat to investigate the role of symbolic threat unrelated to any specific group in responses to outgroup members. Although it has been shown that both realistic and symbolic threat exert an influence on intergroup relations (Riek et al., 2006; Stephan et al., 2009), no prior study has investigated the influence of macrosymbolic threat on intergroup relations. Indeed, societal crises that might elicit unspecific and diffuse threat involve not only economic and financial changes, but also changes and erosions of values, traditions, and moral habits (Bendle, 2002; Brooks, 2002; Stepin, 2009). Thus, to be able to fully understand

the consequences of societal crises on intergroup relations we need to broaden our understanding of the crises and consider both their economic and symbolic components. Further, given that prior work has concentrated only on macroeconomic forms of threat it is unclear whether the effects obtained represent findings that are unique to the context of macroeconomic threat and groups that threaten economic resources, or could be extended to other forms of unspecific threats. Thus, the present work adds to the literature by experimentally examining the implications of a general state of symbolic threat for responses to outgroup members.

Drawing from previous evidence showing that macroeconomic threat elicits prejudice only against outgroups whose preexisting stereotypes imply a threat to economic resources (Becker et al., 2011; Butz & Yogeeswaran, 2011), we anticipate that symbolic threat unrelated to any specific outgroup will lead to harsher intergroup attitudes, but only toward groups for which the content of their stereotypes implies a threat to values, morality and beliefs.

Study 1

Study 1 was designed as an initial test of our prediction that macrolevel symbolic threat increases prejudice only against outgroups for which the group stereotype implies a threat to an ingroup's values and beliefs. To do so, we conducted an experiment in which we primed a general state of symbolic threat unrelated to any particular outgroup by exposing participants to a fictitious editorial concerning the worsening of the values and traditions of their home country.

Following the procedure used by Butz and Yogeeswaran (2011), in order to show that symbolic threat in particular elicits outgroup prejudice, we included an additional threat condition explicitly nonsymbolic in nature (i.e., climate-change threat). Climate-change threat was intended as an explicitly noneconomic realistic threat that should evoke a threat to group safety and environmental resources. In support of the contention that a climate-change threat is explicitly noneconomic in nature, Butz and Yogeeswaran (2011) demonstrated that the threat of climate-change (i.e., global warming) did not increase participants' thoughts about the economy relative to a neutral (no threat) control condition.

In addition, to demonstrate that macrosymbolic threat led to harsher intergroup attitudes only toward groups stereotyped as a threat to values and traditions, participants reported their attitudes toward two distinct outgroups, i.e., gay men and welfare recipients. A large body of research supports the contention that gay men are perceived as a source of symbolic threat rather than a source of realistic threat due to the perception of moral contamination (see Cottrell & Neuberg, 2005; Cottrell, Richards, & Nichols, 2010; see also Stephan et al., 2009).

By contrast, welfare recipients elicit high levels of economic threat rather than symbolic threat, given that they are viewed as subtracting basic resources from the community without contributing to its welfare (see Cuddy et al., 2008). Accordingly, we predicted that the macrolevel symbolic threat compared to a nonsymbolic threat and a neutral condition would increase prejudice against gay men, but not against welfare recipients.

To ascertain whether gay men were considered as a stronger symbolic threat than welfare recipients, we conducted a pretest. Specifically, 14 students rated the extent to which gay men and welfare recipients were perceived as a threat to economic resources and a threat to values and traditions using 7-point scales (1 = *not at all*, 7 = *extremely*). We then computed a repeated measures analysis of variance. For these and all subsequent analyses, we report partial η^2 as a measure of effect size. As intended, gay men ($M = 4.28$, $SD = 1.77$) were perceived as higher in symbolic threat than welfare recipients ($M = 2.35$, $SD = 1.27$), $F(1, 13) = 13.38$, $p = .001$, $\eta_p^2 = .57$. By contrast, welfare recipients ($M = 3.78$, $SD = 1.36$) were perceived as a higher realistic threat than gay men ($M = 1.58$, $SD = .64$), $F(1, 13) = 36.63$, $p = .001$, $\eta_p^2 = .74$.

Method

Participants

A group of 71 heterosexual students (55 female, 16 male; $M_{\text{age}} = 23.08$, $SD = 5.93$) from a large university in Italy took part in the study.

Measures and Procedures

Participants were told that they would be taking part in two unrelated research projects. Ostensibly as part of a “reading comprehension” project participants were randomly assigned to either a symbolic threat prime condition in which they read an editorial describing a worsening of values and traditions in Italy, including identity loss, a nonsymbolic threat prime condition in which they read an editorial about the negative effects of climate change for Italy, including environmental pollution, or a neutral condition in which they read an editorial describing the Italian seacoasts (for the full text of the manipulations, see the Appendix). Notably, in manipulating the macrolevel symbolic threat we did not refer to any specific group. Accordingly, societal crises that might lead to a general state of symbolic threat and identity loss are based on complex causes involving economic, political, demographic, and social causes that cannot be attributed to a specific agent (Bendle, 2002; Brooks, 2002; Stepin, 2009). However, to ascertain that our manipulation did not lead participants to think about gay men directly, 12 students from a large university in Italy

($M_{\text{age}} = 22.50$, $SD = 0.87$) were asked to read the editorial and to freely write down their thoughts. None of them mentioned gay men, lesbians, or homosexuality after reading the text.

As a check of the efficacy of the experimental manipulations, after reading the editorial participants rated the extent to which the situation described in the editorial represents a threat to values and to the environment (i.e., “How likely is it that the situation described in the editorial represents a threat to our values and traditions?” and “How likely is it that the situation described in the editorial represents a threat to the environment?”; 1 = *not at all*, 7 = *extremely*). Next, seemingly as a part of an unrelated research project, participants anonymously reported their attitudes toward gay men and welfare recipients. Specifically, participants rated their support toward social policies concerning gay men and the rights of welfare recipients. Thus, participants indicated their support for government actions related to gay men (i.e., provides partner benefits to gay men couples; permits gay couples to adopt children; grants gay men couples the right to marry one another – Cronbach’s $\alpha = .73$) and welfare recipients (i.e., increases the right to free public health for welfare recipients; increases work-related rights for welfare recipients; enhances the assistance for training and education for welfare recipients – Cronbach’s $\alpha = .72$) using 7-point scales (1 = *strongly oppose*; 7 = *strongly favor*) (see Cottrell et al., 2010). The order of these last two measures was counterbalanced between participants, so that half of the participants first reported their support toward social policies concerning gay men and the other half first reported their support toward social policies concerning welfare recipients.² Finally, participants completed demographic questions before being thanked and debriefed.

Results and Discussion

Manipulation Check

To check the manipulation, we computed a 3 (Threat prime: symbolic vs. nonsymbolic vs. neutral) \times 2 (Threat scores: symbolic vs. environmental) ANOVA with the first factor varying between subjects and the second factor varying within subjects. As expected, the analysis revealed a significant threat prime by threat scores interaction, $F(2, 67) = 35.64$, $p = .001$, $\eta_p^2 = .51$. Pairwise comparisons showed that, in the symbolic threat condition, participants reported higher levels of symbolic threat ($M = 5.30$, $SD = 1.75$) than environmental threat ($M = 2.70$, $SD = 1.97$), $F(1, 67) = 43.29$, $p = .001$, $\eta_p^2 = .39$. Participants in the climate-change threat condition reported more environmental threat ($M = 5.84$, $SD = 0.83$) than symbolic threat ($M = 4.11$, $SD = 1.79$), $F(1, 67) = 24.93$, $p = .001$, $\eta_p^2 = .27$. Participants in the neutral condition did not reported more

² Preliminary analyses testing for order effects did not yield significant results. A similar pattern emerged in the second study, all $ps > .10$.

environmental threat ($M = 2.42$, $SD = 1.34$) than symbolic threat ($M = 1.75$, $SD = 1.04$), $F(1, 67) = 3.41$, $p = .069$, $\eta_p^2 = .04$. Although this difference was of marginal significance, it is important to note that participants reported higher levels of environmental threat in the climate-change threat condition, than in the symbolic threat condition, $F(1, 67) = 56.19$, $p = .001$, $\eta_p^2 = .47$, and neutral conditions, $F(1, 67) = 73.71$, $p = .001$, $\eta_p^2 = .52$, attesting to a successful manipulation. In a similar vein, participants reported higher levels of symbolic threat in the symbolic threat condition, than in the climate-change threat condition, $F(1, 67) = 6.62$, $p = .01$, $\eta_p^2 = .09$, and neutral condition, $F(1, 67) = 58.25$, $p = .001$, $\eta_p^2 = .46$.

Effects of Threat Manipulation

Next, we computed a 3 (Threat prime: symbolic vs. non-symbolic vs. neutral) \times 2 (Target group: gay men vs. welfare recipients) ANOVA with the first factor varying between subjects and the second factor varying within subjects.

The analysis did not yield a main effect of the threat prime, $F(2, 66) = 2.30$, $p = .12$, $\eta_p^2 = .06$. However, we found a main effect of the target group, $F(2, 66) = 30.25$, $p = .001$, $\eta_p^2 = .31$, indicating that overall attitudes toward welfare recipients were more favorable ($M = 6.09$, $SD = 1.34$) than attitudes toward gay men ($M = 5.12$, $SD = 1.55$).

More importantly, we found a threat prime by target group interaction effect, $F(2, 66) = 3.02$, $p = .05$, $\eta_p^2 = .09$. The threat prime had a significant effect on attitudes toward gay men, $F(2, 66) = 3.87$, $p = .02$, $\eta_p^2 = .11$, but did not influence attitudes toward welfare recipients $F(2, 66) < 1$, $p = .41$, $\eta_p^2 = .02$. Pairwise comparisons revealed that participants reported less support for gay rights in the symbolic threat condition relative to the neutral condition, $F(1, 66) = 5.95$, $p = .02$, $\eta_p^2 = .08$, and the climate-change threat condition, $F(1, 66) = 6.60$, $p = .02$, $\eta_p^2 = .08$. However, scores did not differ between the climate-change threat condition and the neutral condition, $F(1, 66) < 1$, $p = .91$, $\eta_p^2 = .001$.

In contrast, participants did not report less support for welfare recipients' policies in the symbolic threat relative to the neutral condition, $F(1, 66) = 1.24$, $p = .26$, $\eta_p^2 = .01$, and the climate-change threat condition, $F(1, 66) < 1$, $p =$

.96, $\eta_p^2 = .001$. Moreover, the scores did not differ between the climate-change threat condition and the neutral condition, $F(1, 66) = 1.47$, $p = .22$, $\eta_p^2 = .02$ (see Table 1).

Together, these findings show that macrolevel symbolic threat only impacts attitudes toward social policies concerning outgroups that are perceived to threaten the in-group's values and traditions.

Study 2

In Study 2 we aimed at integrating our basic hypothesis on the role of macrolevel symbolic threat in shaping outgroup attitudes with prior work on the effects of macroeconomic threat. Prior research successfully showed that macroeconomic threat increases prejudice against groups whose stereotypes implies a threat to scarce employment opportunities (Becker et al., 2011; Butz & Yogeeswaran, 2011). Extending prior work, in Study 1 we showed that a general state of symbolic threat compared to climate-change threat and a neutral condition decreased support for social policies toward a group whose stereotypes implies a threat to values (i.e., gay men) but not support for social policies toward a group whose stereotypes invoke a threat to economic resources (i.e., welfare recipients).

Integrating our findings with those of previous studies on macrolevel economic threat, in Study 2 we compared the effects of a general state of symbolic threat with the effects of macroeconomic threat. In other words, in Study 2 we aimed at considering in a single study the effect of both economic and symbolic crises on outgroup attitudes. Specifically, in Study 2 participants reported their attitudes toward gay men, a group perceived as a source of symbolic threat (Cottrell & Neuberg, 2005), and Asians, a group perceived as posing high levels of economic threat (see Lin et al., 2005; Maddux et al., 2008). In the second study we considered Asians rather than welfare recipients, in order to better compare our findings with prior work on macroeconomic threat that mostly considered Asians as a target group (Butz & Yogeeswaran, 2011).

In our first study, we used two different scales for assessing attitudes toward the different outgroups. In the current study, we used a more conventional approach assessing attitudes toward outgroups using the same items, namely, feeling thermometers. Although we acknowledge that this is a single-item measure, an extensive amount of studies have shown that feeling thermometers successfully capture intergroup attitudes (Haddock, Zanna, & Esses, 1993; Harwood, Paolini, Joyce, Rubin, & Arroyo, 2011; Inbar, Pizarro, & Bloom, 2012; Tausch et al., 2007; Turner, Hewstone, Voci, & Vonofakou, 2008).

Accordingly, we predicted that the macrolevel symbolic threat would decrease the favorability of evaluations of gay men but not Asians. In contrast, macroeconomic threat should decrease the favorability of evaluations of Asians but not gay men.

Table 1. Support for gay men and welfare recipients' policy rights as a function of threat prime (Study 1)

Threat condition	Target group	
	Gay men	Welfare recipients
Climate change	5.46 (1.42) _b	5.93 (1.72) _a
Symbolic	4.38 (1.70) _a	5.95 (1.18) _a
Neutral	5.42 (1.24) _b	6.40 (0.94) _a

Notes. Means with different subscripts in a given column are significantly different at $p < .05$. Standard deviations are reported in parentheses.

To establish that Asians are perceived as a stronger economic threat than gay men and gay men are perceived as a stronger symbolic threat than Asians, the 14 participants who took part in the previously reported pretest also responded to items assessing threat evoked by Asians. Asians ($M = 4.51$, $SD = 1.82$) were perceived as higher in realistic threat than gay men ($M = 1.58$, $SD = 0.64$), $F(1, 13) = 47.18$, $p = .001$, $\eta_p^2 = .79$. By contrast, gay men ($M = 4.28$, $SD = 1.77$) were perceived as higher in symbolic threat than Asians ($M = 3.78$, $SD = 1.71$), $F(1, 13) = 3.96$, $p = .05$, $\eta_p^2 = .23$.

Method

Participants

Seventy-eight heterosexual non-Asian students not involved in the first study (47 female, 31 male; $M_{age} = 22.54$, $SD = 1.94$) from a large university in Italy took part in the study.

Measures and Procedures

Following Study 1, participants were told they would be participating in two unrelated studies beginning with a reading comprehension task. The study employed a 3 (Threat prime: symbolic vs. economic vs. neutral) \times 2 (Target group: gay men vs. Asians) mixed factorial design with the first factor varying between subjects and the second factor varying within subjects.

Participants were given 3 minutes to read an editorial describing either a deep deterioration of values and tradition in Italy, the negative effects (e.g., job losses, the housing industry collapse) of the recent financial crisis, or Italian seacoasts (see the Appendix). After reading the editorial, to check the efficacy of the experimental manipulations, participants rated the extent to which the situation described in the editorial represents a threat to values and to the economic system of Italy (i.e., "How likely is it that the situation described in the editorial represents a threat to our values and traditions"? and "How likely is it that the situation described in the editorial represents a threat to the Italian economic system"?; 1 = *not at all*, 7 = *extremely*).

Finally, participants anonymously rated their attitudes toward both gay men and Asians. Respondents indicated on a thermometer that ran from zero (0) to a hundred (100) degrees the extent to which they feel cold/warm toward gay men and Asians (see Haddock et al., 1993; Tausch et al., 2007). As in the first study, the order of the feeling thermometers was counterbalanced between participants. Finally, participants completed demographic questions before being thanked and debriefed.

Results and Discussion

Manipulation Check

To check the manipulation, we computed a 3 (Threat prime: symbolic vs. economic vs. neutral) \times 2 (Threat scores: symbolic vs. economic) ANOVA with the first factor varying between subjects and the second factor varying within subjects. As expected, the analysis revealed a significant threat prime by threat scores interaction, $F(2, 75) = 22.00$, $p = .001$, $\eta_p^2 = .23$.

Specifically, participants in the symbolic threat condition reported higher levels of symbolic threat ($M = 5.11$, $SD = 1.59$) than economic threat ($M = 3.57$, $SD = 1.77$), $F(1, 75) = 26.62$, $p = .001$, $\eta_p^2 = .28$. Participants in the economic threat condition reported more economic threat ($M = 5.64$, $SD = 1.19$) than symbolic threat ($M = 4.36$, $SD = 1.59$), $F(1, 75) = 17.98$, $p = .001$, $\eta_p^2 = .17$. Economic threat scores ($M = 1.46$, $SD = 1.63$) and symbolic threat scores ($M = 1.53$, $SD = 0.69$) did not significantly differ among participants in the neutral condition, $F(1, 75) < 1$, $p = .81$, $\eta_p^2 = .001$.

Further, participants reported higher levels of economic threat in the economic threat condition than in the symbolic threat, $F(1, 75) = 32.65$, $p = .001$, $\eta_p^2 = .29$, and neutral conditions, $F(1, 75) = 130.85$, $p = .001$, $\eta_p^2 = .63$. In a similar vein, participants reported higher levels of symbolic threat in the symbolic threat condition than in the economic threat condition, $F(1, 75) = 3.79$, $p = .05$, $\eta_p^2 = .05$, and neutral condition, $F(1, 75) = 99.40$, $p = .001$, $\eta_p^2 = .57$. Thus, as in Study 1, our manipulations were successful.

Effects of Threat Manipulation

We then computed a 3 (Threat prime: symbolic vs. economic vs. neutral) \times 2 (Target group: gay men vs. Asians) mixed ANOVA.

The analysis yielded a significant main effect of target group, $F(1, 72) = 7.04$, $p = .01$, $\eta_p^2 = .08$ indicating that overall attitudes toward gay men were more favorable ($M = 67.80$, $SD = 24.50$) than attitudes toward Asians ($M = 59.35$, $SD = 19.36$).

Moreover, we found a threat prime by target group interaction effect, $F(2, 72) = 8.61$, $p = .001$, $\eta_p^2 = .19$. The threat prime had a significant effect on attitudes toward gay men, $F(2, 72) = 6.42$, $p = .003$, $\eta_p^2 = .15$, and a marginal effect on attitudes toward Asians $F(2, 72) = 2.85$, $p = .06$, $\eta_p^2 = .07$. Pairwise comparisons showed that participants reported less favorable attitudes toward gay men in the symbolic threat relative to the neutral condition, $F(1, 72) = 9.44$, $p = .003$, $\eta_p^2 = .11$, and the economic threat condition, $F(1, 72) = 10.73$, $p = .002$, $\eta_p^2 = .11$. However, the economic threat condition did not increase prejudice against gay men relative to the neutral condition, $F(1, 72) < 1$, $p = .66$, $\eta_p^2 = .003$.

Table 2. Global attitudes toward gay men and Asians as a function of threat prime (Study 2)

Threat condition	Target group	
	Gay men	Asians
Economic	75.25 (19.08) _b	51.50 (18.57) _a
Symbolic	54.59 (28.58) _a	63.52 (17.47) _b
Neutral	73.57 (18.80) _b	63.04 (20.38) _b

Notes. Means with different subscripts in a given column are significantly different at $p < .05$. Standard deviations are reported in parentheses.

By contrast, participants reported less favorable attitudes toward Asians in the economic threat condition relative to the neutral condition, $F(1, 72) = 4.34, p = .04, \eta_p^2 = .06$, and the symbolic threat condition, $F(1, 72) = 4.64, p = .03, \eta_p^2 = .06$. However, the symbolic threat condition did not result in less favorable evaluations of Asians relative to the neutral condition, $F(1, 72) < 1, p = .92, \eta_p^2 = .001$ (see Table 2).

Taken together these latter findings showed that macroeconomic threat results in more negative attitudes toward Asians, while the general state of symbolic threat elicits negative attitudes toward gay men.

General Discussion

The present set of studies investigated the impact of symbolic threat unrelated to any specific group on outgroup attitudes. The results of two studies lend strong support for our hypothesis that macrolevel symbolic threat impacts attitudes toward outgroups for which the content of their stereotypes implies a threat to an ingroup's values, traditions and morality. In Study 1, symbolic threat unrelated to any specific group (vs. climate-change threat and a neutral condition) increased prejudice against gay men, an outgroup whose preexisting stereotypes imply a threat to values and morality, but not against welfare recipients, a social group whose stereotypes do not imply a strong threat to values.

In Study 2, integrating the findings of the first study with prior work on the role of macroeconomic threat, we showed that macrosymbolic threat increases prejudice against gay men, but not against Asians, a social group whose stereotypes imply a threat to scarce employment opportunities. In contrast, macroeconomic threat increased prejudice against Asians, but not against a social group whose stereotype implies a strong threat to values (i.e., gay men).

When considering the findings, it is important to note that the manipulations of threat did not contain any mention of a group responsible for the threat. Specifically, when manipulating the macrolevel symbolic threat we simply reported a fictitious editorial generally describing a worsening of values and traditions in Italy, without reference to any specific group or circumstances. Similarly, when manipulating the macroeconomic threat we reported only the

general financial effects of an economic crisis. Thus, despite the fact that societal and economic crises are based on complex causes involving economic, political, demographic, and social causes (Bendle, 2002; Brooks, 2002; Stepin, 2009), consciousness of such crises sharpens negative attitudes toward specific social groups. The choice of the group is not arbitrary; rather, it seems to depend on the content of the stereotype ascribed to outgroups. Thus, our findings indicate that unspecific threats provoked by societal crises become specific threats, increasing negative attitudes toward specific social groups whose stereotypes might lead people to believe that such groups have caused the crisis and the threats.

Taken together, these findings represent a valuable contribution to the role of intergroup threat in shaping group attitudes. Prior work successfully showed that macroeconomic threat increases negative attitudes toward groups perceived as a threat to the stability of the economic system (Becker et al., 2011; Butz & Yogeewaran, 2011). The current studies, however, provide novel evidence that prejudice may be directed against either outgroups that are perceived as a threat to economic resources or groups that are perceived as a threat to values and traditions, depending on which issues are made salient as core elements of the general state of threat (i.e., either the job system or the value system). Thus, the present work replicates and extends prior work on macrolevel threat and provides strong support for the emerging view that the unspecific threat elicited by societal crises increases prejudice only against specific groups for which the content of the group stereotype is relevant to the context of the macrolevel threat.

Our findings mesh well with recent evidence that macrolevel threat is particularly likely to heighten prejudice toward specific outgroups when individuals attribute blame to outgroups for causing the events (e.g., Becker et al., 2011). Although we did not find evidence that the symbolic threat manipulation automatically primed thoughts of outgroups that may be responsible for events, consciously considering one's attitudes toward such outgroups while responding to the attitude scales may have led participants to consider the extent to which outgroups are responsible for the events. In turn, consistent with Becker et al. (2011), heightening the saliency of such attributions of blame may have increased prejudice against outgroups. Thus, exploring the cognitive processes that contribute to prejudice resulting from macrolevel symbolic threat represents a promising direction for future research.

Further, our findings provide some interesting practical implications. Based on our data, in order to prevent societal crises from increasing intergroup hostility, politicians, opinion leaders, and the media should stress the complex nature of the societal crises, focusing on its political, economic, and demographical causes. This could help to avoid the tendency to identify specific groups as responsible for such events. In a similar vein, social interventions aimed at reducing prejudice should seriously take the potential effects of diffuse and unspecific threats into account. Partic-

ularly, we showed that societal crises may increase hostility, not only toward groups perceived as a source of economic threat, but also toward social groups perceived as symbolically threatening. Collectively, our evidence suggests that social interventions aimed at reducing intergroup tensions during societal crises should necessarily take into account a wide range of outgroups.

Because societal and economic crises are complex issues with multiple causes and a myriad of societal consequences (Bendle, 2002; Brooks, 2002; Stepin, 2009), it is possible that macrolevel symbolic and economic threats are not mutually exclusive. Evoking symbolic threats by leading participants to reflect upon changes in values may have unwittingly aroused thoughts about economic issues such as urbanization in Italy. Likewise, inducing a climate-change threat may have led participants to experience an economic threat due to potential economic implications of a changing climate and/or symbolic threat due to a cultural change related to climate issues, such as consideration of alternative energy sources. However, had the manipulations evoked multiple threats, it is likely that the prejudice effect would have extended to multiple outgroups. In contrast to this, the symbolic threat only increased prejudice in relation to an outgroup that threatened values (gay men) and not outgroups that threatened economic resources (welfare recipients and Asians). Moreover, the climate-change threat did not increase prejudice against an outgroup that threatened economic resources (welfare recipients).

Thus, although societal crises are multifaceted issues and the threat manipulations may not have been mutually exclusive, our findings on the implications of threats for specific outgroups support the idea that the threat manipulations were not evoking multiple types of threat to a similar degree. Nevertheless, one direction that would be interesting to take in further research would be to investigate the potential overlaps between different kinds of macrothreat and their impact on intergroup attitudes.

Additionally, we acknowledge that the symbolic threat manipulation may have introduced issues of temporal distance due to the reference to the past. Consistent with construal-level theory (e.g., Trope & Liberman, 2010), thinking about the past may have promoted an abstract representation of objects and events, which in recent work has been linked to increased activation and application of stereotypes about various social groups (e.g., McCrea, Wieber, & Myers, 2012). Thus, it is possible that the process by which the symbolic threat manipulation influenced outgroup attitudes involves an abstract mindset. However, to the extent that an abstract mindset resulted from the symbolic threat manipulation, one would expect the effects of the symbolic threat manipulation to extend to a range of stereotyped groups – and not be limited to a value-threatening outgroup as we observed in the current study. Nevertheless, future work should employ experimental conditions that are approximately equivalent in terms of temporal distance as well as measures of construal level to ascertain whether the use of abstract level of representation systematically varies across the experimental conditions.

We tested our hypothesis considering only gay men as a target group. This choice is due to the fact that prior work has consistently shown that gay men represent a high source of symbolic threat (see Stephan et al., 2009). Importantly, the experiments were conducted in Italy where prejudice and hostility toward gay men is widespread and higher than in other European countries (European Commission, 2008). Based on such evidence, our research contributed to further understanding the conditions that might increase hostility and tension toward a highly stigmatized group.

Moreover, by considering gay men as a target group we were able to interpret previous archival data in more detail. Indeed, prior work has not found a significant relationship between economic crises and hostility toward gay men and lesbians (Green, Glaser, & Rich, 1998). Our findings complement prior work showing that the diffuse threat elicited by societal crises might increase prejudice and hostility toward gay men, if the crisis is framed in terms of a decline of values and beliefs. Clearly, in order to increase the validity of our arguments, future research should extend our findings by going beyond gay men as a target group and by considering a wider range of symbolically threatening groups (e.g., religious groups).

In a similar vein, in Study 1 we employed an attitude measure defined by few items and in Study 2 by only one item. Even if previous studies showed that feeling thermometers successfully capture intergroup attitudes (see, Haddock et al., 1993; Tausch et al., 2007; Turner et al., 2008), we acknowledge that the anchors of such a measure (i.e., cold/warm) are closely associated with the stereotypes ascribed to several groups (see Cuddy et al., 2008). Thus, future studies could investigate the effects of a general state of symbolic threat considering a richer set of measures, such as implicit and behavioral responses.

Finally, future research should clarify whether specific variables moderate the path we found. For instance, drawing on Becker et al. (2011), it is possible that individual differences in blaming particular outgroups for causing changes to societal values moderate the influence of macrosymbolic threat on attitudes toward threatening outgroups. In addition, future work could explore whether specific motivational orientations closely linked to symbolic threat and realistic threat (such as Right-Wing Authoritarianism and Social Dominance Orientation, see Duckitt, 2001) moderate the path from macrolevel threat to outgroup prejudice.

References

- Becker, J. C., Wagner, U., & Christ, O. (2011). Consequences of the 2008 financial crisis for intergroup relations: The role of perceived threat and causal attributions. *Group Processes and Intergroup Relations, 14*, 871–885.
- Bendle, M. F. (2002). The crisis of “identity” in high modernity. *British Journal of Sociology, 1*, 1–18.
- Brooks, C. M. (2002). Religious influence and the politics of fam-

- ily decline concern; Trends, sources, and U. S. political behavior. *American Sociological Review*, 67, 191–211.
- Butz, D. A., & Yogeeswaran, K. (2011). A new threat in the air: Macroeconomic threat increases prejudice against Asian Americans. *Journal of Experimental Social Psychology*, 47, 22–27.
- Cottrell, C. A., & Neuberg, S. L. (2005). Different emotional reactions to different groups: A sociofunctional threat-based approach to “prejudice.” *Journal of Personality and Social Psychology*, 88, 770–789.
- Cottrell, C. A., Richards, D. A. R., & Nichols, A. L. (2010). Predicting policy attitudes from general prejudice versus specific intergroup emotions. *Journal of Experimental Social Psychology*, 46, 247–254.
- Crotty, J. (2009). Structural causes of the global financial crisis: A critical assessment of the “new financial architecture.” *Cambridge Journal of Economics*, 33, 563–580.
- Cuddy, A. C., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 61–149). San Diego, CA: Academic Press.
- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 41–113). San Diego, CA: Academic Press.
- Esses, V. M., Jackson, L. M., & Armstrong, T. L. (1998). Intergroup competition and attitudes toward immigrants and immigration: An instrumental model of group conflict. *Journal of Social Issues*, 54, 699–724.
- European Commission. (2008). *Eurobarometer. Discrimination in European Union: Perceptions, experiences and attitudes* (publication no. 296). Retrieved from http://ec.europa.eu/public_opinion/archives/ebs/ebs_296_en.pdf
- Green, D., Glaser, J., & Rich, A. (1998). From lynching to gay bashing: The elusive connection between economic conditions and hate crime. *Journal of Personality and Social Psychology*, 75, 82–92.
- Haddock, G., Zanna, M. P., & Esses, V. M. (1993). Assessing the structure of prejudicial attitudes: The case of attitude toward homosexuals. *Journal of Personality and Social Psychology*, 65, 1105–1118.
- Harwood, J., Paolini, S., Joyce, N., Rubin, M., & Arroyo, A. (2011). Secondary transfer effects from imagined contact: Group similarity affects the generalization gradient. *British Journal of Social Psychology*, 50, 180–189.
- Hepworth, J., & West, S. (1988). Lynchings and the economy: A time-series reanalysis of Hovland and Sears (1940). *Journal of Personality and Social Psychology*, 55, 239–247.
- Hovland, C., & Sears, R. (1940). Minor studies in aggression: Correlation of lynchings with economic indices. *Journal of Psychology*, 9, 301–310.
- Inbar, Y., Pizarro, D. A., & Bloom, P. (2012). Disgusting smells cause decreased liking of gay men. *Emotion*, 12, 23–27.
- Lin, M. H., Kwan, V. S. Y., Cheung, A., & Fiske, S. T. (2005). Stereotype content model explains prejudice for an envied outgroup: Scale of anti-Asian American stereotypes. *Personality and Social Psychology Bulletin*, 31, 34–47.
- Maddux, W. W., Galinsky, A. D., Cuddy, A. J. C., & Polifroni, M. (2008). When being a model minority is good . . . and bad: Realistic threat explains negativity toward Asian Americans. *Personality and Social Psychology Bulletin*, 34, 74–89.
- Madon, S. (1997). What do people believe about gay males? A study of stereotype content and strength. *Sex Roles*, 37, 663–685.
- McCrea, S. M., Wieber, F., & Myers, A. L. (2012). Construal level mindsets moderate self and social stereotyping. *Journal of Personality and Social Psychology*, 102, 51–68.
- Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, 10, 336–353.
- Stephan, W. G., Boniecki, K. A., Ybarra, O., Bettencourt, A., Ervin, K. S., Jackson, L. A., . . . Renfro, C. L. (2002). The role of threats in the racial attitudes of blacks and whites. *Personality and Social Psychology Bulletin*, 28, 1242–1254.
- Stephan, W. G., & Renfro, C. L. (2002). The role of threat in intergroup relations. In D. M. Mackie & E. R. Smith (Eds.), *From prejudice to intergroup emotions: Differentiated reactions to social groups* (pp. 191–207). New York, NY: Psychology Press.
- Stephan, W. G., & Stephan, C. W. (2000). An integrated threat theory of prejudice. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 23–46). Hillsdale, NJ: Erlbaum.
- Stephan, W. G., Ybarra, O., & Bachman, G. (1999). Prejudice toward immigrants. *Journal of Applied Social Psychology*, 29, 2221–2237.
- Stephan, W. G., Ybarra, O., & Morrison, K. R. (2009). Intergroup threat theory. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 43–61). Boca Raton, FL: Taylor & Francis.
- Stepin, V. S. (2009). New models of development and the problem of values. *Diogenes*, 56(2–3), 60–71.
- Tausch, N., Tam, T., Hewstone, M., Kenworthy, J. B., & Cairns, E. (2007). Individual-level and group-level mediators of contact effects in Northern Ireland: The moderating role of social identification. *British Journal of Social Psychology*, 46, 541–556.
- Trope, Y., & Liberman, N. (2010). Construal level theory of psychological distance. *Psychological Review*, 117, 440–463.
- Turner, R. N., Hewstone, M., Voci, A., & Vonofakou, C. (2008). A test of the extended intergroup contact hypothesis: The mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self. *Journal of Personality and Social Psychology*, 95, 843–860.
- Vescio, T. K., & Biernat, M. (2003). Family values and antipathy toward gay men. *Journal of Applied Social Psychology*, 33, 833–847.

Received March 19, 2012
 Final revision received July 12, 2012
 Accepted August 6, 2012
 Published online October 20, 2012

Marco Brambilla

University of Milano-Bicocca
 Department of Psychology
 Piazza dell'Ateneo Nuovo 1
 20126 Milan
 Italy
 E-mail marco.brambilla@unimib.it

Appendix

Threat Manipulations

Climate Change Threat (Study 1)

A recent ministerial survey (PIP_2010_SOY) revealed a gradual climate change in our country. Specifically, the survey reports that environmental pollution in Italy is among the leading causes responsible for the climate change. Greenhouse gases, which are the main cause of environmental pollution, are widespread.

Symbolic Threat (Study 1 and 2)

A recent ministerial survey (PIP_2010_SOY) reveals a gradual deterioration of both the values and traditions of our country. Specifically, the survey reports that Italians are losing their religious identity, and that most of the core values that defined our country in the past are becoming out

of date. In sharp contrast, new values and traditions are becoming widespread.

Economic Threat (Study 2)

A recent ministerial survey (PIP_2010_SOY) reveals a gradual deterioration of the economy and the finances of our country. Specifically, the survey reports that Italians are losing their jobs, and that there will be a housing industry collapse. Unemployment is becoming widespread.

Control (Study 1 and 2)

A recent ministerial survey (PIP_2010_SOY) reveals that Italians prefer to spend their holidays at the seaside rather than in the mountains. This trend does not concern just summer holidays, but also involves winter holidays. Therefore, trips to seaside resorts are becoming widespread.