Psychology and Constructivism in International Relations
AN IDEATIONAL ALLIANCE

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CHAPTER 7

Determinants of Security and Insecurity in International Relations: A Cross-National Experimental Analysis of Symbolic and Material Gains and Losses

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WHAT ARE THE FUNDAMENTAL determinants of security and insecurity in international affairs? International relations (IR) theorists are remarkably divided on this basic issue. Neorealists such as Ken Waltz have argued that threat is perceived solely as a function of material factors such as the balance of military power.1 Many liberal and constructivist theorists have countered that ideational, nonmaterial factors also drive threat perception.

Traditionally, the IR subfield of security studies focused solely on military force: its maintenance, threat of use, and actual use. The core assumption of mainstream scholarship in the subfield was that states are concerned primarily with the protection of their territory. The initial broadening of security studies to include topics such as economic, environmental, and energy securities shared the assumption that security is fundamentally about state survival or at least material well-being. What Bill McSweeney variously calls “objectivist” or “materialist” security studies parallels what John Ruggie has labeled “neo-utilitarian” IR theory: Mainstream structuralist (both neorealist and neoliberal) approaches assume that states are self-regarding, instrumental units that respond only to pre-given material interests.2

In contrast to these materialist, objectivist, and rationalist conceptions of security are ideational determinants of (in)security rooted in either psychology or various forms of constructivism. The last decade has witnessed the proliferation of new types of securities (from “societal security” to “human security” to “ontological security”)3 and types of security studies (from “constructivist” to “poststructural” to “critical” to “feminist”).4 While this new scholarship has pointed the subfield in very different directions, it has largely shared a desire to combat the mainstream view of security as mere animal survival. “Security is not synonymous with survival,” Ken Booth contends, noting that “one can survive without being secure.”5 Most in this camp are concerned with symbolic politics. For example, Jennifer Mintz defines ontological security as “security not of the body but of the self, the subjective sense of who one is.”6

While there has been much theorizing and some debate between the materialist and symbolic security studies camps, for the most part they operate in separate worlds with little interaction. Even determined attempts at dialogue have fallen flat. For example, a 2003 Review of International Studies forum that sought to bring American realism and the English school into dialogue produced excellent papers, but they largely failed to move beyond well-worn critiques of the other side. Dale Copeland complained that the English school lacks a theory and even causal argumentation.7 Richard Little lamented American realism’s reduction of classical realism to mere power politics, noting the failure of American realism to explain the post–Cold War persistence of unipolarity.8 Theoretic debate, in short, has become largely stagnant and stale.

Rather than plunge into the theoretic quagmire, this chapter approaches the debate from the bottom up, using experimental methods to seek a better empirical understanding of when, whether, and how material and symbolic politics matter for security and insecurity in international relations. As such, we join David Rousseau in using empirical research rather than pure theory to advance scholarly debate in this area.9 Providing experimental evidence rather than a new grand theory, this chapter lays an empirical foundation for the reintegration of the two currently polarized security studies camps.

In addition to addressing the material versus symbolic politics debate, our attention to symbolic politics addresses concepts shared by constructivism and political psychology. Each of these perspectives grants primacy to subjectivist rather than objectivist approaches to threat perception and affords an important place to ideational variables such as those that we examine in this study. Our empirical examination of feelings of anxiety and
pride speaks to identity politics, the purview of constructivism and psychology. We also explore the role of reputations and framing of domains of gain/loss, both of which are traditional domains of political psychology. By studying the role of anxiety and pride highlighting the emotional states that psychological IR has deemed important determinants of decision making, we join constructivists critical of rationalist approaches to international relations.10

One goal of this study, then, is to show the complementary nature of ideational or symbolic variables theoretically amenable to both psychology and constructivism. This study also demonstrates the possibility and desirability of employing experimental designs to study both material and symbolic variables.

We also offer an underutilized research design of cross-national experimentation for the study of ideational variables. Constructivist and social psychological concern with the cultural dimension of IR begs for cross-cultural study, yet it is rarely conducted. We demonstrate its utility within a rigorous empirical framework, permitting scholars to see just how much culture matters in affecting perceptions and behavior in the realm of international politics. We begin with study design and then turn to the results and a discussion of their implications for material and ideational IR theory alike.

**METHOD AND DESIGN**

This project employs both experimental (random assignment) and quasi-experimental (natural groups) variables and between- and within-subject designs. Our two (domain) by two (frame) by two (level) by two (nation) factorial design is complex, with sixteen conditions (figure 1). It thus requires a large sample size. But this complexity allows for the analysis of four key issues (domain, frame, level, and nation) underlying the security studies debate regarding the fundamental determinants of (in)security in international affairs.

Rose McDermott has argued that "experiments offer a unique opportunity to make a clear causal argument . . . which is why [experiments have] been differentially adopted by the hard sciences, psychology, and behavioral economics as the gold standard method of choice."11 We concur and believe that experiments should be more widely adopted in a political sci-

![Fig. 1. A 2 (domain) by 2 (frame) by 2 (level) by 2 (nation) 16 condition research design. (Notes: a = between subjects variable; b = within subjects variable; c = natural group, quasi-experimental variable.)](image)

cence that seeks to explain the causes of human behavior. Because of the random assignment of our American and Chinese subjects to our experimental conditions, we feel confident that the results we obtained were caused by our four independent variables, a claim that is more difficult to make in correlational designs.

**Domain and Frame: Material and Symbolic Gains and Losses**

The core of our design is an experimental two by two involving domain (material/symbolic) and frame (gains/losses). This portion of the design is a pure between-subjects experiment, with student participants randomly assigned to one of four conditions: (1) material gain, (2) material loss, (3) symbolic gain, and (4) symbolic loss.

The polarized debate in security studies can be captured with a pair of diametrically opposing hypotheses:

Hypothesis 1a. Materialist: Security and insecurity are a matter of physical well-being.
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The second dimension of the core experimental two by two is frame: Is the scenario framed as one of gains or losses? Prospect theory is likely the most widely applied psychological theory in the political psychology of international relations. The issue of framing has thus been widely studied in IR, and we hope that our experiments will contribute to this literature. However, our core interest is not in prospect theory’s focus on the asymmetry of gains and losses—that is, how losses hurt more than comparable gains feel good. Instead, we are primarily interested in potential interactions between frame and domain. Assuming that gains promote security and losses promote insecurity, we instead ask whether symbolic and material gains generate comparable amounts of security. Similarly, do material or symbolic losses generate more insecurity? Given its exploratory nature, our hypothesis is not directional:

Hypothesis 2. Material and symbolic gains and losses will produce differing levels of (in)security.

Gain and loss are operationalized within our scenarios with minimal alterations to reduce the likelihood of extraneous issues influencing our dependent measures. For example, the shelter scenario begins with “Your house was completely destroyed by a flood. Winter is approaching . . .” and food (“You live with your family in the countryside and live off of the vegetables that you grow on the family farm . . .”). The safety level addressed economic (“You are considering investing all of your family’s savings in a stock . . .”) and physical (“You are walking through the downtown section of a major city and are confronted by a large man with a knife . . .”) security. Together, these four items composed the material condition.

Maslow’s love/belonging level was operationalized with scenarios focusing on love (“You have been dating your boy/girlfriend for over three months and realize that you love him/her. You decide to take a risk and tell him/her that you love him/her . . .”) and belonging (“It’s the end of your senior year in college, and you decide to throw a party to celebrate with your friends . . .”). The esteem level was operationalized with scenarios about prestige (“During your senior year at high school, you decide to apply to a very well-regarded university . . .”) and reputation (“During your second year at university, you decide to pledge a popular social club . . .”). Together, these four items composed the symbolic condition.

Level: Individual and International Securities

Alexander Wendt has asserted that “states are people too.” Whether we agree with Wendt about the ontological status of the state, it is clear that both the materialist and symbolic security studies camps generally rely on
an analogy with individual human needs. Materialists assume that like individuals, states prioritize survival or at least relative physical well-being. Symbolic analysts posit that states, again like individuals, are driven by higher human needs for belonging and esteem. Both camps thus appear to share the anthropomorphizing assumption that

Hypothesis 3. The dynamics of security and insecurity are the same at the individual and international levels.

To put this hypothesis to the test, we added a third variable, level, to our design. It has two conditions, individual and international. We operationalize level by adding a parallel set of scenarios at the international level to the individual-level scenarios. In the material domain, the international scenarios involve environmental security (pollution problems caused by another state), energy security (competition between states for oil reserves), economic security (relative national economic growth rates), and military security (advances in out-group missile technologies). In the symbolic domain, the international scenarios involve love (international esteem for the national popular culture), belonging (spread of national language use on the Internet), prestige (predicted medal count at the coming 2008 Beijing Olympics), and reputation (popularity of president at a UN General Assembly speech).

As with the individual scenarios, all the international scenarios have both gain and loss versions. For example, the energy security international material scenario reads (with gain/loss modifications italicized), “A U.S./Chinese oil company has just purchased monopoly rights to drill in the two largest oil fields in Africa, beating out a Chinese/U.S. company. Energy experts predict a dramatic increase/decrease in U.S. energy security over the next ten years.” Similarly, the prestige international symbolic scenario reads, “Sports analysts now predict that the United States/China will double the Chinese/American medal count at the 2008 Beijing Olympics. In their view, the United States/China will be the only sports superpower in the twenty-first century.” The full list of individual- and international-level scenarios appears in appendix A.

Unlike the domain and frame variables, which are between-subjects variables, level is a within-subjects variable. A student randomly assigned to the symbolic loss condition, for example, would first read and answer ques-

tions about the four individual-level symbolic loss scenarios and then do the same for the four international-level symbolic loss scenarios. Each student, in other words, would read and respond to questions about a total of eight scenarios, four each at the individual and international levels.

**Nation: China and the United States**

The final independent variable in our two by two by two by two design is nation (United States/China). In our view, it is no longer tenable to generalize about universal psychological dynamics without cross-national samples. There is simply too much evidence of cross-national variation in psychological processes to justify such an approach today. However, while the now well-established field of cross-cultural psychology has empirically demonstrated a wide variety of cross-national differences, it has not adequately explained their origins. Indeed, “cross-cultural” psychology is in a way a misnomer, as it appears to imply that the psychological differences uncovered are “cultural” in origin. In fact, the bulk of the evidence in the field points to differences into which one is socialized or that one learns simply as the result of spending time in a particular national/regional/cultural context.

China and the United States have been chosen as our two national cases for two reasons. First, from a foreign policy perspective, United States–China relations are arguably the most important state-to-state relations of the twenty-first century. Many Americans are ambivalent about China’s rise and the challenge that it poses to American preeminence in world affairs. Many Chinese, for their part, fear American “hegemony” and its perceived efforts to “contain” China. The relationship suffers from a lack of mutual trust. The paucity of substantive knowledge about the dynamics of security and insecurity in U.S.-China relations and the subject’s importance to twenty-first-century world peace justify the choice of the United States and China as our cases.

Second, from a theoretical perspective, the idea of a Chinese obsession with “face” persists today and has a direct bearing on the issue of symbolic and material gains and losses. The Chinese, both Western and Chinese sources repeatedly tell us, are culturally predisposed to be sensitive to issues of face. At the same time, Americans supposedly disregard face in favor of more objective calculations of material self-interest.
Hypothesis 4. The Chinese are more sensitive to symbolic gains and losses than are Americans, and Americans are more sensitive to material gains and losses than are Chinese.

We are skeptical of this view, believing that both Chinese and Americans are sensitive to both symbolic and material politics. To put hypothesis 4 to the test, however, we first adapted the original English-language survey to the Chinese perspective. For example, in the Chinese version, the material gain condition of the energy scenario read, “A Chinese oil company has just purchased monopoly rights to drill in the two largest oil fields in Africa, beating out a U.S. company.” This statement reverses the words Chinese and U.S. from the U.S. material gain condition, thus making the content of the U.S. material gain version the same as the Chinese material loss condition and the U.S. material loss the same as the Chinese material gain. We then translated the adapted survey into Chinese and then back-translated it to ensure comparability. All of the English- and Chinese-language scenarios are available in appendix B.

Dependent Measures: Anxiety and Pride

Each of the eight scenarios was followed by a battery of emotional response items. Each was on a 1 (strongly disagree) to 7 (strongly agree) Likert scale. At its most fundamental level, security means the absence of concern or anxiety. We therefore constructed an anxiety score by averaging the self-reported responses to the “I feel worried” and “I feel afraid” items. This focus on the specific negative emotion of anxiety has the additional benefit of joining a growing literature in the study of American politics that seeks to distinguish between the negative emotions of anxiety and anger.18

Davis Bobrow has perceptively noted that “threat centered work provides rich ground for security dilemma spirals of action and reaction, measure and countermeasure.”19 He thus urges that the study of threats be balanced with the study of opportunities. To balance our negative anxiety measure with a more positive one, we decided to supplement it with a single-item positive measure, “I feel proud.” Pride and honor, furthermore, have been the subject of increasing theoretic and empirical attention in the international relations literature.20

Participants and Method

Because our two by two by two by two design entailed sixteen conditions, and we desired at least 30 students per condition (actual M = 32.56), a sample of 521 university students (284 female, 215 male, and 22 who did not indicate their gender) was recruited to participate in the study on a voluntary basis in the spring of 2006. Of this sample, 240 were Americans at a state university in Colorado and 281 were Chinese at a state university in Beijing. Participants ranged in age from 17 to 32 (Median age = 20), and a t-test revealed that the American students (M = 20.58, SD = 4.44) were only slightly older than the Chinese students (M = 19.88, SD = 2.23), t = 2.27, p = .024.

By utilizing real-world United States–China scenarios but doing so with student samples, our design situated itself in a space between a pure minimal in-group laboratory setting and the real world. It thus suffers from many of the same limitations as both pure minimal in-group work (e.g., external validity issues) and natural-setting real-world work (e.g., internal validity issues). In our opinion, however, this middle ground is ideal for initial exploratory analyses. On the external validity issue, our student samples, while certainly not representative of all Chinese and Americans, illustrate underlying psychological processes that are largely relative, not absolute, in nature. Whether our findings are generalizable to broader populations is an empirical question to be addressed in future research.

We tested the Chinese and American participants in fifteen-minute sessions. The experimenter told participants that the purpose of the study was to assess their reactions to eight scenarios. After assuring participants that their responses would be kept anonymous, the experimenter administered survey packets. Participants filled out a series of questionnaires individually. After completing the packet, participants were thanked for their participation, debriefed (i.e., informed that none of the scenarios that they had read were real), and released. The ethical standards of the American Political Science Association and American Psychological Associations were strictly followed during data collection and analysis.

RESULTS

We will not attempt the dizzying task of analyzing a four-way interaction. Instead, we begin with the U.S. data and a series of two-way domain-by-

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analyses of variance (ANOVAs), examining in sequence individual- and international-level anxiety and then repeating the analysis with pride. We then bring in the Chinese data to explore three-way domain by frame by nation ANOVAs, again examining in sequence individual- and international-level anxiety and repeating the analysis with pride. The individual- and international-level scenarios are always treated separately because they are a within-rather than between-subjects factor.

**Anxiety and Pride as a Function of Level, Domain, and Frame**

To analyze the impact of domain and frame on anxiety and pride, we first created composite dependent variables. For anxiety, we first created a mean of participants’ responses to the two items “I feel worried” and “I feel afraid” for each scenario. We then aggregated these means at the individual and international levels separately for the symbolic and material groups, resulting in adequate alphas of .79, .76, .79, and .78 for the individual material (four items), individual symbolic (four items), international material (four items), and international symbolic (three items) conditions, respectively. The symbolic and material pairs were then combined to create a single individual anxiety variable and a single international anxiety variable. The same process of measure construction was repeated for pride, yielding adequate to excellent alphas of .77, .90, .90, and .89, respectively.

A two-way factorial ANOVA on American participants’ individual-level anxiety scores revealed main effects of material/symbolic and gain/loss as well as a statistically significant interaction. Gain/loss was both statistically significant, $F(1,218) = 196.79, p < .001$, and had a massive effect size ($\eta_p^2 = .47$), with losses generating much more anxiety than gains. Gain/loss thus serves as an excellent internal validity check, clearly demonstrating that our manipulations worked. Material/symbolic, $F(1,218) = 92.272, p < .001$, also had a very large (though smaller than gain/loss) effect size of $\eta_p^2 = .30$, with material scenarios generating more anxiety than symbolic ones. (See table 1 for the means and standard deviations.) Finally, the interaction of gain/loss and material/symbolic was statistically significant, $F(1,218) = 18.14, p < .001$, with a medium effect size, $\eta_p^2 = .08$. As the left graph in figure 2 shows, the material loss condition generated the highest levels of anxiety, followed by symbolic loss, material gain, and symbolic gain. That material losses generated the most anxiety is consistent with a rationalist view that would emphasize relative gains and a focus on the material realm. However, the finding that symbolic gains reduced anxiety more than did material gains supports the symbolic politics position.

Moving from the individual to the international levels, a two-way factorial ANOVA on American participants’ international-level anxiety scores again revealed main effects of material/symbolic and gain/loss as well as a statistically significant interaction. This time, however, the relative effect sizes were reversed, with material/symbolic, $F(1,216) = 92.03, p < .001$, having an effect size, $\eta_p^2 = .30$, almost double that of gain/loss, $F(1,216) = 42.43$.
p < .001, $\eta^2_p = .16$. While the effect sizes of material/symbolic remained largely unchanged when moving from the individual ($\eta^2_p = .30$) to international levels ($\eta^2_p = .30$), the gain/loss effect size dropped dramatically from $\eta^2_p = .47$ to $\eta^2_p = .16$. As the right graph in figure 2 shows, our American subjects appear to have been decidedly more concerned about personal than national gains or losses. The interaction was also statistically significant, $F(1, 1216) = 35.95, p < .001$, and had a large effect size, $\eta^2_p = .14$.

Combining these results, two patterns emerge. First, overall, American participants reported much lower levels of anxiety in response to the international-level scenarios than to the individual-level scenarios. They are much more sensitive to the personal than to the national. Second, the symbolic loss condition at the international level begs for explanation, lower than even the material gain condition. Either the American participants are genuinely unconcerned about symbolic threats to their nation, or there is a presentation effect whereby they pretend (to themselves and/or to others) that they are unconcerned.

Moving on from the negative emotion of anxiety to the positive emotion of pride, we ran a two-way factorial ANOVA on American participants' individual-level pride scores, again finding main effects of gain/loss, material/symbolic, and a statistically significant interaction. The effect size ($\eta^2_p = .71$) of gain/loss, $F(1, 1222) = 54.42, p < .001$, was massive, with gains ($M = 4.89, SD = .09$) generating much more pride than did losses ($M = 1.09, SD = .09$). This again serves as a "manipulation check," demonstrating that our scenarios did indeed work. Material/symbolic, $F(1, 1222) = 38.89, p < .001$, had a much smaller but still large effect size ($\eta^2_p = .15$), with symbolic scenarios ($M = 3.83, SD = .09$) generating significantly more pride than did material scenarios ($M = 3.05, SD = .09$). The interaction, $F(1, 1222) = 22.62, p < .001$, had a medium to large effect size ($\eta^2_p = .09$), with symbolic gains ($M = 5.57, SD = .12$) generating the most pride, followed by material gains ($M = 4.21, SD = .13$) and the two loss conditions, ($M = 2.08, SD = .12$ and $M = 1.89, SD = .13$ for symbolic and material losses, respectively). At the personal level, American students drew more pride from symbolic than material gains, while symbolic and material losses appeared to hurt about the same.

Moving to the international level, a final two-way ANOVA revealed main effects of both of our factors but not of their interaction. The effect size ($\eta^2_p = .22$) of gain/loss, $F(1, 221) = 60.74, p < .001$, was the largest, with gains ($M = 4.18, SD = .12$) generating much more pride than losses ($M = 2.78$, $SD = .13$). Material/symbolic, $F(1, 221) = 15.44, p < .001$, had a smaller but still moderate effect size ($\eta^2_p = .07$), with symbolic scenarios ($M = 3.83, SD = .12$) generating significantly more pride in American accomplishments than did material scenarios ($M = 3.12, SD = .13$).

The individual- and international-level data on pride are thus strikingly similar. At both levels, Americans reported greater pride in the symbolic than the material scenarios and at comparable absolute levels.

Anxiety and Pride as a Function of Level, Domain, Frame, and Nation

Do these findings travel across nations? To find out, we added the Chinese data to our database and ran a series of three-way ANOVAs. The first, with individual-level anxiety as our dependent measure, revealed the main effects of gain/loss and material/symbolic but not of nation. Losses ($M = 5.173, SD = .075$) again produced more anxiety than did gains ($M = 3.35, SD = .07$), $F(1, 495) = 302.68, p < .001$. And material scenarios ($M = 4.84, SD = .07$) produced more anxiety than symbolic ones ($M = 3.68, SD = .074$), $F(1, 495) = 121.88, p < .001$. The effect size of gain/loss ($\eta^2_p = .38$) was about twice that of material/symbolic ($\eta^2_p = .20$). The $p$ value for nation ($p = .49$) was not even close to statistical significance, however. None of the two-way interactions was statistically significant. The three-way interaction of nation, domain, and frame was statistically significant, $F(1, 495) = 12.66, p < .001$, but not in any obviously meaningful way, and the effect size, $\eta^2_p = .03$, was on the small side. The mean overall levels of anxiety were also very close for the United States ($M = 4.27, SD = 1.54$) and China ($M = 4.18, SD = 1.64$), suggesting that no method effect impacted the results. In terms of individual-level scenarios, in short, the evidence is overwhelming that Chinese and American respondents' self-reports of anxiety did not differ significantly.

When we ran a second three-way ANOVA on international anxiety, however, moderate national differences did emerge. Overall, Chinese participants ($M = 3.54, SD = 1.63$) reported higher levels of anxiety after reading the international scenarios than the American students ($M = 3.03, SD = 1.45$) did. There were main effects of gain/loss, material/symbolic, and nation (all $ps < .001$), with effect sizes of $\eta^2_p = .18$, .15, and .03, respectively. All the interactions were significant as well, although the effect sizes were small. The means and standard deviations are displayed in table 2. The three way domain-by-frame-by-nation interaction was significant, $F(1, 492) =$
11.78, \( p = .001 \). Figure 3 reveals that although the overall effect size, \( \eta^2 = .02 \), is on the small side, the Chinese participants reported much more anxiety in the international symbolic loss condition than the U.S. participants did. Less clear, however, is whether this is evidence of heightened Chinese concern about losses of international face or of depressed U.S. scores, with Americans claiming not to care about symbolic losses at the international level.

Turning to the positive emotion of pride, a three-way ANOVA at the individual level revealed main effects of gain (\( M = 4.74, SD = .08 \)) over loss (\( M = 1.91, SD = .08 \)), \( F(1,499) = 632.08, p < .001, \eta^2 = .56 \), symbolic (\( M = 3.64, SD = .079 \)) over material (\( M = 3.01, SD = .08 \)), \( F(1,499) = 31.49, p < .001, \eta^2 = .06, \) and nation, \( F(1,499) = 3.95, p = .05 \), although the effect size for the latter, \( \eta^2 = .01 \), was very small. The only statistically significant interaction was gain/loss and material-symbolic, \( F(1,499) = 25.88, p < .001, \eta^2 = .05 \). Both American and Chinese students reported significantly more pride in personal symbolic gains (\( M = 5.35, SD = .11 \)) than in material gains (\( M = 4.14, SD = .11 \)), with symbolic losses (\( M = 1.94, SD = .11 \)) and material losses (\( M = 1.88, SD = .12 \)) virtually indistinguishable.

Our final three-way ANOVA was on pride at the international level. There were main effects of both gain/loss, \( F(1,497) = 275.61, p < .001 \), and material-symbolic, \( F(1,497) = 12.73, p < .001 \), although the effect size of the latter, \( \eta^2 = .03 \), was dwarfed by that of the former, \( \eta^2 = .36 \). Although there was no main effect of nation, there was a statistically significant interaction, \( F(1,497) = 41.83, p < .001 \), between nation and frame, with a substantial effect size of \( \eta^2 = .08 \). As displayed in figure 4, compared to the Americans, Chinese reported both higher levels of pride with national gains (China \( M = 5.18, SD = .13 \); U.S. \( M = 4.18, SD = .14 \)), and lower levels of pride with national losses (China \( M = 1.99, SD = .13 \); U.S. \( M = 2.78, SD = .15 \)). Indeed, subtracting losses scores from gains scores reveals that Chinese participants (3.19 difference) were more than twice as affected by national gains and losses as the American participants (1.4 difference) were.

**Fig. 3.** International anxiety as a function of nation, domain, and frame

**Fig. 4.** International pride as a function of nation and frame

**TABLE 2. Means and Standard Deviations of International Anxiety Levels by Nation, Domain, and Frame**

<table>
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DISCUSSION

With these results in hand, we are now in position to return to our original hypotheses. Is security a matter of physical survival, or does it depend on feelings of belonging? The mixed results presented here provide partial support for both the materialist hypothesis (1a) and the symbolic hypothesis (1b). At both the individual and international levels, the material scenarios generated much more anxiety than the symbolic scenarios did, supporting the materialist camp. However, as revealed in both figures 1 and 2, depressed anxiety scores at the international level in the symbolic loss condition clearly indicate that the symbolic scenarios had an impact, although it is unclear whether the American respondents were genuinely unconcerned or whether a presentation effect was involved.

Pride was another matter entirely. At both the individual and international levels, American respondents reported more pride in response to symbolic than to material scenarios. And unlike with anxiety, there was no drop-off in absolute levels of pride when shifting from the individual to international levels. Americans drew as much pride from their nation’s symbolic gains as from personal social achievements. This evidence clearly supports the symbolic politics camp.

Did frame and domain interact? The evidence presented here unequivocally supports nondirectional hypothesis 2 that material and symbolic gains and losses produce varying levels of (in)security. Of the four ANOVAs conducted on the U.S. data, only one, on international pride, did not yield a statistically significant domain-by-frame interaction. The other three produced statistically significant results for the interaction, all at the $p < .001$ level. The effect sizes, furthermore, were moderate to large. In general, material losses produced the most anxiety, while symbolic gains produced the most pride.

Are the dynamics of security and insecurity the same at the individual and international levels? Our data suggests that hypothesis 3 cannot be maintained: scenarios set at the individual and international levels produce significant differences in anxiety and pride. This is particularly clear in figure 2, where the shift from the individual to the international levels produced a notable decrease in American reports of anxiety, particularly in the symbolic loss condition. Conversely, Americans reported similar levels of pride at the individual and international levels.

Finally, do cross-national differences exist in the determinants of (in)secu-

Turity in international relations? Specifically, are the Chinese more sensitive to symbolic gains and losses than are Americans, and are Americans more sensitive to material gains and losses than are the Chinese? Our evidence is mixed but revealing. At the individual level, American and Chinese students were virtually indistinguishable when it came to their self-reports of anxiety and pride in response to symbolic and material gain and loss scenarios. This suggests that scholars should be wary of Orientalist and Occidentalist notions of deep cultural differences rooted in individual personality.

National differences did emerge, however, when we shifted from individual to international scenarios. As figure 3 reveals, Americans reported much lower levels of anxiety in response to national symbolic losses than did the Chinese. And as figure 4 shows, Chinese were more than twice as sensitive to gain/loss as Americans were with regard to national pride.

Two broad questions arise from these striking international findings, each with related subsidiary questions. First, were the Chinese levels high, or were the American levels low? Are our experimental results evidence of a Chinese oversensitivity to the plight of their nation, an excessive concern with China’s international face? Or are they evidence that Americans can more easily disassociate themselves from the fate of their nation or can kid themselves into believing that they don’t care? Further experimental work is needed to clarify these issues.

Second, what causes these differences? Are they a product of the distinction between individualist and collectivist cultures, such that the Chinese have more of their psychological well-being invested in the good of their national group? Or are they the product of the current balance of material power, such that Americans have less to be anxious about or take pride in at the international level, confident in U.S. global preeminence? The Chinese, by contrast, may be anxious simply because they are confronting the reality of an American “hegemon” that wavers in its view of China’s rise.

CONCLUSION

In The Tragedy of Great Power Politics, John Mearsheimer contends that the anarchical structure of the international system forces states into a perpet-

ual quest for power and hegemony, “to better their chances of survival.”23

Naeem Inayatullah and David Blaney, by contrast, contend that “the deep-
est motivation for human contact" in general and international relations in particular is not survival but "self-knowledge." 24

While these offensive realist and critical constructivist positions may appear irreconcilable, we have demonstrated that each tells a vital part of the story. Our experiment clearly demonstrates that the juxtaposition of material and symbolic determinants of security and insecurity is a false dichotomy. By beginning to reveal when the material politics analysts are right and when the symbolic politics scholars are correct, we hope to begin a process of dialogue and perhaps even reintegration between these two polarized camps. There is simply too much at stake for security studies scholars to continue talking past one another.

Theoretically, we also have demonstrated one way that constructivists and political psychologists can be ideational allies. Both advocate attention to the identities of national actors in world politics. And both oppose the narrow rationalism of much mainstream structuralist IR, whether of the neorealist or neoliberal variety. But as this experiment has shown, attention to symbolic politics does not necessitate the complete dismissal of material politics. Indeed, experimental methods provide one way that constructivists and political psychologists can work together to overcome traditional disciplinary divides.

Appendix A: Individual Level Scenarios

Note: gain/loss portions are underlined.

Material gain/loss

1. Shelter. Your house was completely destroyed by a flood. Winter is approaching. Since you have no other resources, the government is paying for your family to stay in government housing and has just announced that it will extend its disaster housing program for another six months / is terminating its disaster program and will evict your family.

2. Food and water. You live with your family in the countryside and live off the vegetables that you grow on the family farm. A large chemical plant has just been built nearby, and a new road allows you better access to the market where you can sell your produce and purchase fertilizers to increase your yield / the water that irrigates your fields has just turned black, killing your crops.

Economic security. You are considering investing all of your family's savings in a stock. You choose not to consider other investments—meaning that if you do not invest in this particular stock, your savings will remain unchanged. You decide to invest in the stock for a year and you double your money, enabling your family to live comfortably / lose all of it and your family faces extreme financial difficulties for the foreseeable future.

4. Physical security. You are walking through the downtown section of a major city and are confronted by a large man with a knife. You quickly dial 911 on your cell phone, and a SWAT team shows up and captures him. It turns out that you have helped the police to apprehend a violent fugitive who had been on the run since escaping prison a week earlier / but he stabs you and you are paralyzed from the waist down.

Symbolic gain/loss

1. Love. You have been dating your boy-/girlfriend for over three months and realize that you love him/her. You decide to take a risk and tell him/her that you love him/her. He/She responds by saying that he/she loves you too / doesn't love you anymore and wants to break up.
China created a massive chemical cloud that followed the jet stream across the Pacific Ocean and has poisoned the air along the U.S. West Coast. Many people have been forced to flee their homes.

2. **Energy.** A U.S./Chinese oil company has just purchased monopoly rights to drill in the two largest oil fields in Africa, beating out a Chinese/U.S. company. Energy experts predict a dramatic increase/decrease in U.S. energy security over the next ten years. Ten years ago, a Chinese company successfully bought an American oil company, and the Chinese-owned oil company is now the largest oil producer in Africa. The U.S. and China will have to share the oil fields.

3. **Economics.** According to BBC, a group of prominent economists predicts that over the next ten years, the U.S. economy will continue to grow while China's economy will continue to grow while the U.S. economy will slow down. Economists predict a dramatic increase/decrease in U.S. economic security over the next ten years.

4. **Military.** The Pentagon announced that it has successfully developed a new generation of Patriot missiles that will be able to intercept China's newest missile. PLA successfully tested its Dongfeng long-range intercontinental ballistic missile, which has a range capable of delivering nuclear warheads to the East Coast of the U.S.

Appendix B: International Level Scenarios

Note: gain/loss portions are undefined.

Material gain/loss

1. **Pollution.** China recently closed several massive pollution generating factories in China's northeast that had been contributing to air pollution on the U.S. West Coast. West Coast residents, according to a congressional report, have since experienced a significant improvement in the quality of their air. A recent chemical plant explosion in northeast China.

Symbolic gain/loss

1. **Love.** South Koreans are increasingly choosing to study in the U.S./China, rather than China/the U.S. Korean survey research indicates that
young Koreans are increasingly drawn to American/Chinese values and love American/Chinese popular culture.

According to Internet World Stats, the percentage of people worldwide using English/Chinese on the Internet is increasing, while the percentage using Chinese/English is declining. Many young people increasingly feel that they are part of an ever-expanding English/Chinese speaking global community.

Sports analysts now predict that the U.S./China will double the Chinese/American medal count at the 2008 Beijing Olympics. In their view, the U.S./China will be the only sports superpower in the 21st century.

A UN spokesman has just announced that U.S. president Bush and not Chinese president Hu Jintao or Chinese president Hu Jintao will be the featured speaker at the next UN General Assembly session. The decision was the result of an overwhelming vote in the U.N. General Assembly last week.

Notes