

Thinking about Russia: Plausible pasts and probable futures

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This paper uses both correlational and experimental methods to explore the power of counterfactual cognitions about the past to constrain judgments about the future as well as policy preferences. Study 1 asked 47 specialists on the Soviet Union to assess both the plausibility of controversial counterfactuals and the probability of controversial conditional forecasts. The results reveal deep ideological schisms, with liberals much more likely than conservatives to believe that Stalinism was not inevitable, that the Cold War could have ended earlier, and that Gorbachev might have succeeded in democratizing the Soviet Union if he had been a better tactician, among others. Reactions to these counterfactuals proved to be highly predictive of positions that experts in early 1992 endorsed concerning the advisability of ‘shock therapy’, expanding NATO eastward, and economic aid to Russia. Study 2 manipulated the salience and plausibility of counterfactual scenarios concerning (a) why the Cold War ended as it did, and (b) how close the US and USSR came to nuclear war. Changes in the counterfactual scenarios that non-experts endorsed produced significant changes in their policy preferences in the direction suggested by the salient counterfactual. Experts, however, were unswayed, often generating counter-arguments against dissonant counterfactuals. Taken together, the studies show that assumptions about what happened in the missing control conditions of history are highly subjective, largely theory-driven and profoundly consequential.

Observers of world politics frequently draw causal conclusions, but they rarely have the means of decisively testing these conclusions (Fearon, 1991; Tetlock & Belkin, 1996). The relevant control groups exist—if indeed ‘exist’ is even the right word—only in the imaginations of observers, who must rely on speculative counterfactual constructions of how history would have unfolded if Churchill rather than Chamberlain had been Prime Minister during the Munich crisis (could we have averted World War II?) or if the US had moved more aggressively against Soviet silos during the Cuban missile crisis (could we have triggered World War III?).

Counterfactual histories should not be dismissed, however, as an idle or whimsical exercise in social science fiction (cf. Polsby, 1980); counterfactual conclusions often appear to be tightly coupled to the policy preferences that the elite endorse. For

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instance, partisans of the Reagan administration have tended to view the counterfactual claim that 'absent Reagan's policies, the Soviet Union would not have collapsed nearly as quickly and peacefully as it did' as self-evidently true (Pipes, 1993). Critics of the Reagan administration, by contrast, have tended to view the same counterfactual as transparently false (Garthoff, 1987).

The confidence often displayed in these opposing counterfactual claims is especially striking in view of the fact that both partisans and critics of the Reagan administration were largely, if not completely, taken by surprise by the events that did transpire. Many pro-Reagan observers subscribed to a rigidly essentialist view of the Soviet polity (that led them to dismiss Gorbachev's reforms as merely a bid for a breathing spell before resuming the central expansionist thrust of Soviet foreign policy). Many anti-Reagan observers—who now dismiss his policies as causally irrelevant—once warned that those policies were bringing the world dangerously close to the precipice of nuclear war (White, 1984).

Counterfactual thought experiments are an issue of central methodological and epistemological concern to students of international relations and comparative politics (Fearon, 1991, 1996; Ferguson, 1997; Tetlock & Belkin, 1996). Causal arguments in any historical discipline ultimately hinge on people's ability to make sound inferences about how events would have unfolded if someone or something had responded differently from how he, she or it actually did (Fogel, 1964). Thought experiments can also, however, be approached from a purely cognitive-science perspective as complex information-processing phenomena. And a growing body of research of this sort has shed new light on both the structure and function of counterfactual cognizing (e.g. Boninger, Gleicher, & Strathman, 1994; Kahneman & Miller, 1986; Markman, Gavanski, Sherman, & McMullen, 1995; Roese, 1994; Roese & Olson, 1995; Wells & Gavanski, 1989).

For example, psychologists have devoted considerable attention to the types of events that stimulate counterfactual cognitions. Of the infinity of possible events from the past that one could mentally 'undo' or mutate, which events does one choose (cf. Kahneman & Miller, 1986)? Research suggests that people are especially likely to 'undo' abrupt or unexpected deviations from the routine or status quo (Hilton, 1990; Hilton & Slugoski, 1986; Kahneman & Miller, 1986; Miller, Taylor, & Buck, 1991). In political history, these deviations often take the form of assassinations, leadership shifts and revolutions (Kiser & Levi, 1996).

A second issue that has received empirical scrutiny concerns the inferences people make about what could, might or would have happened in various possible worlds. Once a causal antecedent for mental manipulation has been selected, what rules or procedures does one use to judge the hypothesized consequences as probable or improbable (cf. Turner, 1996)? Research suggests a host of potential cognitive and motivational biases may be at work here (for review, see Roese & Olson, 1995). For instance, counterfactual thinking is often heavily theory-driven: people often rely on existing beliefs about causal forces to fill in what would have happened in hypothetical worlds. Counterfactual thinking also tends to be guided by motivational forces: people tend to mutate past events in such a way as to undo negative outcomes, leading to an asymmetry in the generation of counterfactual alternatives to positive and negative events (Taylor, 1991). And counterfactual thinking may also

be shaped by more general wishes and hopes: people may often find it dissonant to concede that they 'missed an opportunity' or to acknowledge that events were out of anyone's ability to control or foresee.

In addition to exploring which antecedents people choose to mutate and how they determine the likely outcome of that mutation, psychologists have also devoted a great deal of attention to the consequences of counterfactual thinking. For the most part, psychologists have concluded that counterfactual cognitions are quite consequential. The beliefs people form about what could or would have happened in the past define the lessons they draw from history and constrain the expectations they form about the future (Kahneman & Miller, 1986; Roese & Olson, 1995). As a result, counterfactual cognitions not only reflect the operations of causal schemata (e.g. individual leaders make a difference, reassurance is usually more effective in dealing with adversaries than deterrence), but they also reinforce the operations of those schemata by filling in missing counterfactual data points with schema-consistent 'observations', creating an imaginary supportive database.

This view of the level of impact of counterfactual cognitions is far from universal, however. In fact, a recurring point of controversy in historical disciplines is whether counterfactual reasoning is consequential or epiphenomenal. Sceptics argue that although people may frequently pontificate on 'what would or could or might have happened', such airy speculation has little or no connection to their expectations for the future or plans for action (Strassfield, 1992). To be blunt, counterfactualizing is but a form of historical navel-gazing (Fisher, 1970).

An alternative but equally dismissive view depicts counterfactual cognitions as merely *post hoc* justifications for what one already plans to do for other reasons. People (perhaps especially policy elites) make politically convenient assumptions about what would have happened in possible worlds. It should come as no surprise from this standpoint that partisans of the Reagan administration were quick to embrace the counterfactual proposition that 'If Reagan had not upped the geostrategic pressure on the Soviet Union, the Soviet leadership would never have been so accommodating in the late 1980s', and debunkers of the Reagan administration were equally quick to embrace the equally counterfactual proposition that 'If the US had pursued less confrontational policies in the early 1980s, the Soviet Union would have been every bit as, and perhaps more, accommodating than it actually was'.

This paper reports two studies that examine the political consequences of 'counterfactualizing'. The first study does so in a correlational fashion. Sovietologists have long argued over the 'what ifs' of Russian and Soviet history. Drawing on key counterfactual controversies in the discipline (see e.g. Breslauer, 1996), several hypothesized turning points are identified and experts are asked to judge: (1) the mutability of the target event (how easy or difficult is it to imagine a specific counterfactual alternative to what actually occurred?); and (2) the conditional probability of subsequent events taking a different course given the specified mutation of the target event. In addition, links between backward temporal reasoning and experts' policy preferences were examined.

Experts were also asked in early 1992 to assess the likelihood of possible futures of the newly declared Russian Republic under various contingencies. Possible

courses of action were identified that key political actors might take and experts were requested to judge the probability of each course being adopted and to estimate the conditional probability of various consequences given that one or another course had been adopted.

This design permitted three questions to be addressed. First, the way individual experts (all of whom were presumably drawing on the same set of historical facts) determined the plausibility of various counterfactual scenarios was examined. Their assessments of particular mutations of historical antecedent conditions, their assessments of proposed consequences of those mutations, and their judgments of the overall plausibility of the counterfactual assertions were all observed. Secondly, experts' assessments of the plausibility of various conditional forecasts were explored, again broken down into their component parts (antecedent conditions and antecedent-consequence linkages). Finally, the connections between the perceived plausibility of various counterfactual assertions and experts' policy preferences were examined.

Study 2 moved to an experimental design in which the salience of various counterfactual scenarios was manipulated and the impact of these manipulations on policy preferences was explored among experts and non-experts. Participants were told that recently declassified Soviet archives have shed new light on various aspects of the Cold War. Participants in four different experimental conditions were then exposed to distinct sets of evidence, each of which had implications for particular counterfactual scenarios involving the US and Russia. The impact of this new evidence on policy preferences was explored, as well as the mediating role of the perceived plausibility of relevant counterfactual scenarios.

Through both correlational and experimental methods, then, the current research explored how people judge the plausibility of counterfactual scenarios and conditional forecasts, and what impact those judgments have on their policy preferences and ideas about what should be done in the future.

STUDY 1

Method

Participants

The expert sample consisted of 47 specialists in Russian history and the Soviet Union who were employed either at major universities in the US, Canada and Western Europe or in agencies of the US government in the spring and summer of 1992 (within seven months of the dissolution of the Soviet Union). All experts held at least baccalaureate degrees, all but three held master's degrees, and 34 held doctoral degrees.

Procedure

Experts were given a questionnaire that asked them to make three sets of judgments. First, they judged the plausibility of several 'What if...?' scenarios of Russian history. These scenarios included: 'If World War I had not occurred, the Bolshevik Revolution never would have succeeded'; 'If Lenin had lived 10 years longer, the Bolshevik regime would have evolved in a much less repressive direction than it did'; 'If Stalin had been deposed as head of the Communist Party in the early 1930s, the Soviet Union would have moved to a kinder, gentler form of communism 50 years earlier than it did'; 'If Malenkov

had prevailed in the post-Stalin succession struggle, the Cold War would have thawed in the 1950s'; 'If Brezhnev had died 10 years earlier, his successors would have been even more repressive than he was'; 'If Gorbachev had suddenly died at the same time as Chernenko, the Communist Party would have moved in a much more conservative direction than it did'; 'If Reagan had not adopted so tough a posture toward the Soviet Union in the early 1980s, the Soviets would not have been as accommodating'; 'If Gorbachev had timed and planned his reforms more shrewdly, he could have presided over a reformed and democratic federation of the former Soviet republics'.

For each counterfactual assertion, experts judged: (1) how easy or difficult it was to imagine the antecedent condition (e.g. Stalin being deposed) occurring instead of what actually happened (e.g. Stalin prevailing); (2) how easy or difficult it was to imagine the identified consequences (e.g. kinder, gentler communism 50 years earlier) occurring instead of what actually happened (e.g. mass purges and murder) given that the counterfactual antecedent did occur; and (3) overall, how persuasive or compelling they found the proposition. Experts made the first two judgments on 9-point scales anchored by the end points of 1 = 'extremely hard to imagine' and 9 = 'extremely easy to imagine', with 5 serving as the mid-point 'moderately difficult to imagine'. The third judgment was made on a similar 9-point scale, ranging from 1 = 'not at all persuasive' to 9 = 'extremely persuasive', with 5 as the mid-point 'moderately persuasive'.

Experts then judged the plausibility of conditional forecasts about possible futures of the new Russian Republic (judgments obtained between March and July 1992). These conditional forecasts included: 'If Yeltsin implements the advice of the advocates of economic "shock therapy", the Russian economy will begin to improve dramatically in the next five years'; 'If the Russian economy does not start to improve in the next five years, the Russian government will revert back to dictatorship'; 'If Russia reverts to dictatorship, it will move quickly to bring "lost territories" under its control'; 'If the US and its allies are forthcoming with economic aid, Russia will emerge as a relatively prosperous country'; 'If the US and its allies move quickly to expand NATO eastward, the net effect will be to prevent future expansionist attempts by Russia'.

Experts were asked to judge the likelihood of the antecedent conditions for each forecast occurring ($p(A)$ and $p(\neg A)$) as well as the probability of the predicted consequence occurring or not occurring given that the antecedent occurs ($p(C/A)$ and $p(\neg C/A)$) and given that the antecedent does not occur ($p(C/\neg A)$ and $p(\neg C/\neg A)$). Experts were reminded that $p(A)$ and $p(\neg A)$ referred to mutually exclusive and exhaustive sets of events and, as such, should sum to 1, as should $p(C/A)$ and $p(\neg C/A)$, and $p(C/\neg A)$ and $p(\neg C/\neg A)$. Each of these judgments was made on a scale ranging from 0 = 'completely certain event will not happen' to 1 = 'completely certain event will happen', with a mid-point of .5 = 'completely uncertain'.

Experts then responded to a set of questions that probed their beliefs about causality ('Individual leaders frequently have a decisive influence on world affairs' and 'Chance plays a profoundly important role in history'), economic systems ('Unregulated capitalism creates too much inequality', 'I believe that there is a viable third path between capitalism and communism', and 'Command economies are hopelessly inefficient and can never be made to work for sustained periods of time'). Each of these judgments was made on a scale ranging from 1 = 'strongly disagree' and 9 = 'strongly agree', with a mid-point of 5 = 'unsure'. Finally, participants reported their own political ideology ('Overall, across all issues, where would you locate yourself on a conservatism-liberalism scale of political opinion?') on a scale ranging from 1 = 'very conservative' to 9 = 'very liberal', with a mid-point of 5 = 'moderate'.

Results

Ideology

The three items designed to assess general attitudes toward economic systems were averaged together, along with participants' ideological self-placements, to form an overall index of political ideology. This four-item scale had very high internal consistency ($\alpha = .95$). Participants were divided into liberals and conservatives based on their scores on this ideology index: those with scores lower than 5 were

considered to be conservatives and those with scores higher than 5 were considered to be liberals.¹

Ideology as predictor of counterfactual judgments

To assess the impact of political ideology on perceived plausibility of the counterfactual assertions, a series of analyses of variance was conducted using ideology as the independent variable and assessments of each component of the counterfactual assertions (i.e. the plausibility of the antecedent occurring, the plausibility of the consequence occurring given that the antecedent occurred, and the overall plausibility of the counterfactual) as dependent variables.² Ideology proved to be a very strong predictor of conditional judgments (the plausibility of a consequence occurring given that a particular antecedent condition occurred). As columns 5–8 of Table 1 reveal, liberals and conservatives differed significantly in their evaluations of seven of the eight conditional judgments.

Conservatives were more likely than liberals to see: (1) the Bolshevik revolution as mutable by ‘undoing’ World War I ($M_s = 6.93$ and 4.97 ; $F(1,45) = 24.67$, $p < .001$); (2) the receptiveness of Brezhnev’s successor as mutable by undoing the date of Brezhnev’s death ($M_s = 5.67$ and 5.09 ; $F(1,45) = 3.96$, $p = .05$); and (3) Soviet accommodation in the late 1980s as mutable by undoing Reagan’s policies ($M_s = 6.53$ and 4.38 ; $F(1,45) = 22.02$, $p < .001$). Conservatives were less likely than liberals to see: (1) kinder, gentler communism emerging as a result of either delaying Lenin’s demise by 10 years ($M_s = 3.20$ and 5.63 ; $F(1,45) = 37.59$, $p < .001$) or a Communist Party that dismissed Stalin in the early 1930s ($M_s = 2.93$ and 5.28 ; $F(1,45) = 23.16$, $p < .001$); (2) an earlier end to the Cold War if Malenkov had prevailed in the post-Stalin succession struggle ($M_s = 3.20$ and 5.56 ; $F(1,45) = 26.10$, $p < .001$); and (3) a longer political life for the Soviet state had Gorbachev been a better tactician ($M_s = 3.80$ and 5.47 ; $F(1,45) = 15.54$, $p < .001$). Judgments of only one conditional judgment proved not to be associated with experts’ ideological orientations—the consequences of Gorbachev being passed over for appointment as General Secretary of the Party in 1985 ($F(1,45) = .01$, n.s.).

By contrast, ideology was a much weaker predictor of the ‘mutability’ of historical antecedents (see columns 1–4 of Table 1). In only two cases did liberals and conservatives rate the plausibility of mutations in specific antecedent conditions differently: liberals found it less plausible than conservatives that World War I could have been averted ($M_s = 5.28$ and 6.33 ; $F(1,45) = 4.81$, $p < .05$), but more plausible that Stalin could have been deposed by the CPSU in the late 1920s or early 1930s ($M_s = 5.41$ and 2.87 ; $F(1,45) = 28.11$, $p < .001$).

Interestingly, the relation between ideology and judgments of how persuasive or compelling the counterfactual assertions closely mirrored the relation between

¹ None of the participants fell exactly at the mid-point of the ideology index, so every participant could be assigned to an ideological category.

² In addition to the analyses of variance reported here and in Study 2, a series of ordinary least squares regressions was also conducted using ideology as a continuous independent variable. The results of those analyses were virtually identical to the ANOVA results reported here.

Table 1. Perceived plausibility of antecedents, consequences and overall counterfactual assertions among liberals and conservatives

	Mean ratings: plausibility of antecedent				Mean ratings: plausibility of consequences				Mean ratings: overall plausibility					
	Liberals		Conservatives		Liberals		Conservatives		Liberals		Conservatives		<i>F</i>	<i>p</i>
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>				
Counterfactual														
1. If no WWI, no Bolshevik revolution.	5.28 (.25)	6.33 (.44)	4.81	.03	4.97 (.21)	6.93 (.36)	24.67	< .01	5.25 (.29)	6.93 (.42)	10.59	< .01		
2. If Lenin had lived 10 years longer, Bolshevism would have been less oppressive.	6.88 (.21)	6.60 (.34)	.52	.48	5.63 (.21)	3.20 (.35)	37.59	< .01	5.56 (.25)	3.40 (.47)	20.38	< .01		
3. If Stalin deposed as CPSU leader in early 1930s, kinder, gentler communism.	5.41 (.30)	2.87 (.29)	28.11	< .01	5.28 (.28)	2.93 (.37)	23.16	< .01	5.69 (.30)	2.53 (.34)	41.34	< .01		
4. If Malenkov had prevailed in post-Stalin succession struggle, early thaw to Cold War in 1950s.	5.19 (.21)	5.27 (.28)	.05	.83	5.56 (.27)	3.20 (.35)	26.10	< .01	5.56 (.23)	3.07 (.50)	27.31	< .01		
5. If Brezhnev had died 10 years earlier, his successor would have been more receptive.	6.28 (.18)	6.27 (.30)	.00	.97	5.09 (.15)	5.67 (.27)	3.96	.05	5.25 (.18)	5.80 (.35)	2.38	.13		
6. If Gorbachev had not succeeded Chernenko, the CPSU would have moved in a more conservative direction than it did.	5.00 (.29)	5.47 (.32)	.95	.34	6.38 (.19)	6.40 (.27)	.01	.94	6.44 (.17)	6.13 (.32)	.86	.36		
7. If Reagan had not adopted so tough a posture <i>vis-à-vis</i> the USSR, the USSR would have been less accommodating.	5.16 (.16)	4.60 (.54)	1.62	.21	4.38 (.27)	6.53 (.34)	22.12	< .01	4.06 (.31)	6.87 (.35)	29.31	< .01		
8. If Gorbachev had been a better tactician, the USSR would have survived in some form.	5.13 (.21)	4.73 (.33)	1.57	.31	5.47 (.21)	3.80 (.43)	15.54	< .01	5.28 (1.18)	3.13 (.38)	35.22	< .01		

Notes: Ratings of plausibility were made on 9-point scales where higher scores reflected greater perceived plausibility. The *F* statistics and *p* values reported above are from analyses of variance comparing the mean ratings of liberals and conservatives. All of these comparisons had 1 degree of freedom in the numerator and 45 degrees of freedom in the denominator. Standard errors are presented in parentheses.

ideology and plausibility of the consequences (see columns 9–12 of Table 1). When making general assessments of the plausibility of various possible worlds, then, experts seemed to be more influenced by their (ideologically charged) perceptions of the plausibility of the specified consequences than by their perceptions of the plausibility of the mutated antecedents.

These results are consistent with the view that there is a substantial ideological component to counterfactual reasoning. Ideology seems to play some role in shaping the perceived mutability of historical antecedents, and a much greater role in shaping judgments of the causal impact of mutating antecedents in one fashion or another (i.e. the ‘connecting principles’ for linking antecedents to consequences).

Ideology as predictor of conditional-forecast judgments

As with historical counterfactuals, ideology proved a more powerful predictor of conditional judgments (probability of A given B) than of judgments of the likelihood of specific antecedent events (probability of B). Table 2 reveals that, for all five forecasts, ideology emerged as a significant or marginally significant predictor of the likelihood of specified consequences given the antecedents. Ideology was less consistently associated with judgments of the likelihood of antecedents, but even here, the association was significant or marginally significant for three of the five judgments.

With respect to conditional judgments, conservatives were much more likely than liberals to believe that: (1) ‘shock therapy’ could stimulate economic recovery ($M_s = .69$ and $.33$; $F(1,45) = 48.11$, $p < .001$); (2) Russia could easily revert to dictatorship if economic recovery fails to occur soon ($M_s = .77$ and $.65$; $F(1,45) = 7.39$, $p < .01$); (3) Russia would try to regain control over its lost territories if it reverts to dictatorship ($M_s = .75$ and $.67$; $F(1,45) = 2.77$, $p = .1$); and (4) future Russian expansionism could be deterred by expanding NATO eastward ($M_s = .67$ and $.38$; $F(1,45) = 32.19$, $p < .001$). By contrast, liberals were more likely than conservatives to believe that Russia would be relatively prosperous within 10 years if the West provided economic aid ($M_s = .59$ and $.29$; $F(1,45) = 36.68$, $p < .001$). With respect to probability estimates for antecedent conditions within conditional forecasts, conservatives were more likely than liberals to see little chance of dramatic economic recovery ($M_s = .53$ and $.37$; $F(1,45) = 15.96$; $p < .001$); to see a large risk of Russia reverting to dictatorship ($M_s = .65$ and $.58$; $F(1,45) = 3.25$, $p < .08$); and to see good prospects for an early eastward expansion of NATO ($M_s = .61$ and $.48$; $F(1,45) = 4.39$, $p < .05$).

The portrait that emerges here should be a familiar one. Conservatives see nothing inevitable about the Bolshevik revolution (viewing it as a nasty historical accident) but something deeply inevitable about the legacy of Lenin and Stalin: mass murder, economic deprivation, political oppression, and geopolitical expansion. It is hard for conservatives to imagine anything good spontaneously emerging out of the Soviet system and this suspicion lingers into their assessments of the new Russian Republic which they fear will be economically sluggish, politically unstable and brimming with irredentist ambitions. Liberals are less convinced that the Bolshevik revolution was the most recent pivotal point in Russian history. They see more fluidity and

Table 2. Perceived plausibility of antecedents and consequences of conditional forecasts among liberals and conservatives

Conditional forecast	Mean ratings: probability of antecedent			Mean ratings: probability of consequence given that antecedent occurred		
	Liberals	Conservatives	<i>F</i> <i>p</i>	Liberals	Conservatives	<i>F</i> <i>p</i>
1. If Yeltsin follows Sachsian shock therapy, Russian economy will improve dramatically.	.49 (.04)	.48 (.05)	.05 .83	.33 (.03)	.69 (.05)	48.11 < .01
2. If Russian economy does not improve dramatically in next five years, Russia will revert to dictatorship.	.37 (.03)	.53 (.02)	15.96 < .01	.65 (.02)	.77 (.04)	7.39 < .01
3. If Russia reverts to a dictatorship, it will attempt to regain control over its lost territories.	.58 (.02)	.65 (.04)	3.25 .08	.67 (.02)	.75 (.05)	2.77 .10
4. If the West is forthcoming with aid, Russia will be relatively prosperous in 10 years.	.49 (.03)	.43 (.04)	.99 .33	.59 (.03)	.29 (.04)	36.68 < .01
5. If US and allies expand NATO eastward soon, net effect will be to deter future expansionism by Russia.	.48 (.04)	.61 (.05)	4.39 .04	.38 (.03)	.67 (.04)	32.19 < .01

Notes: Ratings of probability were made on scales ranging from 0 (meaning that the event had 0 probability of occurring) to 1 (meaning that the event was certain to occur). The *F* statistics and *p* values reported above are from analyses of variance comparing the mean ratings of liberals and conservatives. All of these comparisons had 1 degree of freedom in the numerator and 45 degrees of freedom in the denominator. Standard errors are presented in parentheses.

possibility: much hinges on the life expectancies of key individuals, on political struggles for power, and on the policies that the powerful opt to pursue. Accordingly, there is less tendency in prospective judgments to assume that Russia is an inherently expansionist country that needs to be deterred and more tendency to assume that it is a normal country that needs assistance to restore its economy, stabilize its polity, and rejoin the international community.

Counterfactual beliefs as predictors of policy preferences

To assess the impact of endorsing various counterfactual scenarios on related policy preferences, an index of counterfactual beliefs was created by averaging together the overall perceived plausibility (ratings of overall, how persuasive or compelling each counterfactual assertion was) of the counterfactual scenarios. Counterfactuals 2, 3, and 4 were reverse scored so that for each counterfactual assertion lower scores always reflected the belief that mutations of various causal antecedents could have resulted in a less expansionist Russia and higher scores reflected a rejection of such counterfactualizing ($\alpha = .78$).³ This variable was then dichotomized, coding those scores below the scale mid-point as 0 and those above the mid-point as 1, and this dichotomous variable was used as the independent variable in a series of analyses of variance predicting various policy preferences.⁴

The perception that mutations of various antecedent conditions could have resulted in a less expansionist Russia was a strong predictor of a number of policy preferences. Participants who endorsed this notion were much less supportive of rapidly dismantling communism via ‘shock therapy’ than were participants who perceived Russia as inherently aggressive ($M_s = 3.20$ and 5.52 ; $F(1,44) = 18.95$, $p < .001$). They were also less supportive of the eastward expansion of NATO ($M_s = 3.87$ and 6.00 ; $F(1,44) = 18.58$; $p < .001$). In contrast, these participants were significantly more supportive of economic aid to Russia. This was true of unconditional aid ($M_s = 4.60$ and 3.00 ; $F(1,44) = 8.74$; $p < .01$), as well as aid conditional on the basis of economic reform ($M_s = 6.74$ and 5.22 ; $F(1,44) = 12.56$, $p < .001$).

Discussion

The results of Study 1 are consistent with the hypothesis that experts rely extensively on ideological beliefs and causal schemata to fill in missing counterfactual data points from history. They are also consistent with the notion that the ‘data’ generated by these ideologically charged counterfactual cognitions are used to construct beliefs about the future and policy preferences. The correlational nature of these data, however, precludes drawing strong causal conclusions about the associations observed in Study 1. Although counterfactual cognitions may indeed constrain what

³ Unlike the other counterfactual scenarios, which refer to changes in an antecedent condition that may have resulted in a less aggressive, expansionist Russia, the eighth counterfactual addressed a completely unrelated matter—the survival of the USSR if Gorbachev had been a better tactician. Because this last counterfactual scenario is conceptually distinct from the others, it was not included in the overall scale.

⁴ Three participants fell exactly at the mid-point of this scale and were dropped from the analyses reported here.

experts think will happen in the future and what should be done in the present, as suggested above it is also possible that they instead play a secondary justificatory role, serving merely to rationalize policy preferences, not to determine them. To more directly address the issue of causation, the authors moved to an experimental design in Study 2.

In Study 2, plausibility of counterfactual cognitions was manipulated rather than measured, and its impact on policy preferences was examined. Experts and non-experts on American–Soviet relations were presented with evidence that had implications for the likelihood of various counterfactual occurrences involving the US and Russia during the Cold War. They then judged the plausibility of the counterfactual scenarios, and they expressed their views on a number of related foreign policy issues. The impact of the new evidence on policy positions, and the mediating role of the perceived plausibility of particular counterfactual scenarios, was examined separately for experts and non-experts.

STUDY 2

Method

Participants

Study 2 was conducted with two sets of participants. The first set included non-experts in the domain of foreign policy and was composed of 110 undergraduate psychology students at the University of California, Berkeley, who participated in the study as part of a classroom demonstration of ‘processes of political thought’. The expert sample included 59 graduate students and professionals with expertise in security issues, American–Soviet relations or Soviet studies. Completing the experimental task took, on average, about 15 min.

Procedure

Participants were presented with questionnaires that began by noting that, ‘as a result of the collapse of communism and the willingness of the Russian government to declassify previously secret documents, we have learned a lot about how the former Soviet Union made decisions on sensitive issues like the command and control of nuclear missiles and the use of military force abroad.’ At this juncture, participants who had been randomly assigned to the control condition were simply asked to assess the plausibility of four counterfactual scenarios that specified alternative paths history might have taken: (1) ‘If there had been even a minor electrical glitch in the system the Russians created for controlling the launch of their nuclear weapons, one or more missiles could easily have been launched at the United States’; (2) ‘Humanity came much closer to the accidental nuclear war than most people realize’; (3) ‘If Americans had not taken a tough stand against Soviet aggression, the Soviet leadership would not have been so willing to accommodate American concerns’; and (4) ‘If American leaders had not repeatedly reassured the Soviet Union of their peaceful intentions, the Soviet leadership would never have been so willing to accommodate American concerns.’ Control participants also reported their thoughts about the two propositions concerning how close the US and USSR came to war and the two propositions concerning the impact of various aspects of American policy on how and why the Cold War ended as it did. Finally, participants reported their political ideology on a scale ranging from 1 = ‘very conservative’ to 9 = ‘very liberal’, with a mid-point of 5 = ‘moderate’.

Experimental manipulations. In addition to the control condition, there were four experimental conditions. Participants assigned to the ‘proximity of nuclear war’ condition were informed, prior to judging the plausibility of the counterfactual scenarios and reporting their thoughts, that some

investigators believe that recent discoveries in old Soviet archives show that the world came very close to accidental nuclear war. The Soviet Union relied on a cumbersome complex and unreliable launch-on-warning system for controlling their massive arsenal of nuclear warheads. For example, the radar warning system could easily have been activated by the overflight of a lost aircraft, a stray flock of birds or a blown-out fuse in a key control panel. If any of these minor incidents had occurred at the wrong moment, the probability would have been very high that nuclear missiles would have been launched at the US.

Participants in a third condition were told that, on the basis of recently discovered Soviet archives, some investigators believe that the US and Soviet Union never came close to accidental nuclear war. The Soviet Union relied on a very complex and reliable system for controlling their massive arsenal of nuclear warheads. This system contained many checks and balances so that it was extremely unlikely that the launch of missiles could be activated by an unverified object on a radar screen or by a commander who happened to go crazy. Even if a number of things went wrong all at the same time, the probability would have been very low that nuclear missiles would have been launched at the US.

In the fourth and fifth conditions, participants' beliefs were manipulated about whether the Cold War would have ended so quickly had it not been for some aspect of American policy toward the Soviet Union. In the fourth condition, participants were told that new evidence supports the counterfactual proposition that the Cold War never would have ended had it not been for the hard-line policies of the Reagan administration. These participants were informed that: 'some investigators have recently claimed to have discovered confidential minutes of the Politburo (the supreme decision-making body of the Soviet Communist Party) that suggest that the only reason the Russians gave up on their plans for expanding their influence was because they ran into such steely resistance.' Participants in the fifth condition were told of new evidence supporting the counterfactual proposition that the Cold War would not have ended so quickly had it not been for the efforts of many American leaders to persuade Soviet leaders that the US had peaceful intentions. These participants received information identical to the previous experimental condition, except that, in this case, the information pointed to the efficacy of policies of reassurance.

Dependent variables. The dependent variables fell into three categories: (1) assessments of the perceived plausibility of the four counterfactual assertions (regarding the possibility of an accidental war, the proximity of nuclear war, the efficacy of America's hard-line stance, and the efficacy of America's strategy of reassurance); (2) content analyses of thoughts that participants reported about the evidence presented to them; and (3) participants' policy preferences designed to assess beliefs about what the US should do to cope with the potential threats of accidental nuclear war and future Russian expansionism.

Assessments of the plausibility of counterfactual assertions consisted of participants' reactions to the following statements: 'If one or two minor things had gone wrong with the command and control system that the Soviet Union relied upon for defending its nuclear weapons, it is very likely that one or more missiles would have been automatically launched at the United States'; 'Humanity came much closer to accidental nuclear war than most people realize'; 'If American leaders had not taken a tough stand against Soviet aggression, the Soviet leadership would not have been so willing to accommodate American concerns'; 'If American leaders had not repeatedly assured the Soviet Union of their peaceful intentions, the Soviet leadership would not have been so willing to accommodate American concerns.' Participants rated the plausibility of each counterfactual claim on 9-point scales ranging from 1 = 'extremely implausible' to 9 = 'extremely plausible', with a mid-point of 5 = 'somewhat plausible'.

The content analyses of thoughts classified reactions to the two counterfactual claims bearing on nuclear war and the two counterfactuals bearing on deterrence vs. reassurance into three broad evaluative categories (negative, neutral, positive) and broke down the negative reactions into three subtypes of counter-arguments of challenges to: the reliability of the evidence (e.g. was it planted?); representativeness of the evidence (e.g. has it been taken out of context?); and the character and qualifications of the investigators (e.g. are people who advance claims of this sort scholars or political advocates?). With respect to the proximity of nuclear war counterfactuals, 'positive' thoughts affirmed the likelihood of nuclear war; 'negative' thoughts denied that 'we ever came close' to such a war; and 'neutral' thoughts expressed uncertainty or the need for additional information. With respect to the controversy over influence tactics, 'positive' thoughts affirmed the value of deterrence or denied the efficacy of reassurance in ending the Cold War; 'negative' thoughts did the opposite; and 'neutral'

thoughts expressed uncertainty, the need for additional information, or the need for both 'carrots and sticks'. Two hypothesis-blind coders reached 71% agreement on their first pass through the data and, after discussion with the principal investigator, reached 92% agreement.

The policy-preference questions focused on the following issues: 'The United States should give high priority to constructing a ballistic missile defense system that would protect our country from incoming enemy missiles'; 'The United States should give high priority to preventing the proliferation of nuclear weaponry to unstable and hostile governments'; 'The United States should give high priority to entering into arms control negotiations that reduce the number of nuclear missiles that both we and others possess'; 'The United States should work closely with its European allies to expand NATO eastward (including former communist countries in an alliance of free countries to prevent future Russian expansionism)'; 'The United States should work closely with other countries to give financial aid to Russia and to help integrate that country quickly into the world economy'; and 'The United States should regard Russia more as a potential adversary than as a potential friend.' Participants responded to all the policy-preference questions on 9-point scales ranging from 1 = strongly agree to 9 = strongly disagree, with the mid-point labelled 'neither agree nor disagree'.

Results

Impact of persuasive inductions on counterfactual beliefs

To assess the impact of the experimental manipulations on assessments of the relevant counterfactuals, analyses of variance were conducted using experimental condition as the independent variable and perceived plausibility of the various counterfactual assertions as dependent variables in separate analyses. Planned contrasts were conducted, comparing each experimental condition to the control condition. The analyses were conducted separately for non-experts and experts.

Table 3 shows that the persuasive messages did have the expected effect on perceived plausibility of counterfactual assertions among non-experts: participants in each experimental condition rated the relevant counterfactuals as significantly more plausible than did participants in the control condition. For example, non-experts presented with evidence supporting the efficacy of a hard-line American approach to the Soviet Union found it much more plausible than participants in the control condition that if it had not been for the tough US bargaining position, the USSR would not have been so accommodating ($M_s = 6.27$ and 3.91 ; $t(105) = 5.08$, $p < .001$). These same participants also found it significantly *less* plausible than participants in the control condition that if it had not been for tension reduction efforts of American leaders, the USSR never would have been willing to accommodate American concerns ($M_s = 4.50$ and 5.59 ; $t(105) = 2.34$, $p < .05$). Non-experts provided with evidence of the efficacy of reassurance, however, found it more plausible than control participants that the USSR would not have been so accommodating if it were not for the tension reduction strategies by the US ($M_s = 6.23$ and 5.59 ; $t(105) = 2.85$, $p < .05$).

The persuasive inductions designed to manipulate the 'proximity of nuclear war' counterfactuals also had the intended effects on non-experts. As Table 3 shows, non-experts provided with evidence that the Soviet nuclear command and control system was riddled with potentially disastrous flaws were more likely to believe that the world came precariously close to nuclear war ($M_s = 7.32$ and 5.23 ; $t(105) = 4.67$, $p < .001$), whereas participants presented with evidence that the Soviet system contained numerous safeguards were much more likely to see that threat as having been quite remote ($M_s = 4.23$ and 5.23 ; $t(105) = 1.96$, $p < .05$).

Table 3. Mean ratings of perceived plausibility of counterfactual assertions among non-experts

	Experimental prime condition				
	Control condition	Efficacy of hard-line	Efficacy of reassurance	Proximity of nuclear war	Safeguards against nuclear war
If minor malfunction in Soviet command, accidental launch.	5.27 (.37)	5.77 (.23)	5.41 (.31)	7.00 (.25)**	4.27 (.47)*
Came much closer to nuclear war than many realize.	5.23 (.35)	5.36 (.35)	5.50 (.25)	7.32 (.28)**	4.23 (.37)*
If not for tough bargaining, USSR less accommodating.	3.91 (.29)	6.27 (.36)**	3.46 (.39)	3.55 (.38)	4.18 (.34)
If not for tension reduction, USSR less accommodating.	5.59 (.28)	4.50 (.38)*	6.23 (.29)*	5.59 (.28)	5.18 (.36)

* $p < .05$; ** $p < .01$.

Note: Significance levels refer to t tests from planned contrasts comparing each experimental condition to the control condition. All of the t tests had 105 degrees of freedom. Standard errors are presented in parentheses.

It is noteworthy, however, that the persuasive inductions influenced the counterfactual cognitions of only non-experts. Experts were generally unmoved by the brief persuasive messages and in one case were moved in exactly the opposite direction from that advocated by the message (see Table 4).⁵

Impact of persuasive inductions on thoughts

For the most part, non-experts generated thoughts that were consistent with the evidence that had been presented to them regarding the proximity of nuclear war and the efficacy of deterrence (see Table 5). Participants presented with evidence of the efficacy of America's hard-line stance against the Russians generated significantly more positive thoughts about the effectiveness of deterrence than participants in the control condition ($M_s = 1.55$ and $.46$; $t(105) = 4.36$, $p < .001$). They also generated fewer negative thoughts about the effectiveness of deterrence ($M_s = .41$ and $.96$;

⁵ The expert sample was roughly half the size of the non-expert sample, raising the possibility that reduced statistical power may account for the failure to find significant effects of the experimental manipulations. However, as the means in Table 4 indicate, even the direction of the effects were not in the predicted direction for the expert sample: in six of the eight key comparisons between experimental conditions and the control condition, the pattern of means is the reverse of what had been predicted, in one case significantly so. Clearly, the failure to obtain significant results is not because of reduced statistical power.

Table 4. Mean ratings of perceived plausibility of counterfactual assertions among experts

	Experimental prime condition				
	Control condition	Efficacy of hard-line	Efficacy of reassurance	Proximity of nuclear war	Safeguards against nuclear war
If minor malfunction in Soviet command, accidental launch.	5.33 (.58)	5.67 (.51)	6.00 (.46)	5.50 (.42)	5.73 (.33)
Came much closer to nuclear war than many realize.	6.83 (.44)	5.25 (.41)**	5.92 (.34)	5.00 (.48)**	6.00 (.38)
If not for tough bargaining, USSR less accommodating.	4.83 (.56)	4.67 (.61)	5.25 (.55)	4.75 (.52)	4.64 (.47)
If not for tension reduction, USSR less accommodating.	5.17 (.58)	5.42 (.53)	5.00 (.54)	4.92 (.43)	4.55 (.61)

* $p < .05$; ** $p < .01$.

Note: Significance levels refer to t tests from planned contrasts comparing each experimental condition to the control condition. All of the t tests had 54 degrees of freedom. Standard errors are presented in parentheses.

$t(105) = 2.64$, $p = .01$). Participants who had been presented with evidence of the efficacy of America's policy of reassurance, however, generated significantly more negative thoughts about the efficacy of deterrence than participants in the control condition ($M_s = 1.64$ and $.96$; $t(105) = 2.51$, $p < .02$) and significantly more challenges to the evidence regarding deterrence ($M_s = 1.64$ and $.00$; $t(105) = 7.49$, $p < .001$).

Similarly, participants presented with evidence that Russia's military control system was complex and unreliable generated significantly more positive thoughts about the proximity of nuclear war than participants in the control condition ($M_s = 1.36$ and $.73$; $t(105) = 2.44$, $p < .02$). In contrast, participants who had been presented with evidence of Russia's extensive safeguards against accidental launches challenged the notion that the US and Russia came close to nuclear war significantly more often than participants in the control condition ($M_s = .95$ and $.00$; $t(105) = 4.98$, $p < .001$).

The thoughts generated by experts, however, were essentially unaffected by the experimental manipulations. Expert participants in the experimental conditions differed from their control condition counterparts only in the degree to which they challenged the counterfactual assertions (see Table 6). These challenges did not differ by experimental condition. For example, expert participants in the proximity of

Table 5. Mean cognitive responses to the persuasive inductions among non-experts

	Experimental prime condition				
	Control condition	Efficacy of hard-line	Efficacy of reassurance	Proximity of nuclear war	Safeguards against nuclear war
Positive thoughts about the efficacy of deterrence.	.46 (.14)	1.55 (.17)**	.36 (.12)	.14 (.07)	.36 (.12)
Negative thoughts about the efficacy of deterrence.	.96 (.17)	.41 (.13)**	1.64 (.21)*	.64 (.17)	.55 (.14)†
Challenges to the efficacy of deterrence evidence.	.00 (.15)	.50 (.14)**	1.64 (.21)**	.64 (.18)**	.55 (.14)**
Positive thoughts about the proximity of nuclear war.	.73 (.17)	1.00 (.15)	1.27 (.16)*	1.36 (.17)*	.59 (.16)
Negative thoughts about the proximity of nuclear war.	.68 (.16)	.59 (.14)	.55 (.14)	.32 (.10)	.95 (.19)
Challenges to the proximity of nuclear war evidence.	.00 (.13)	.59 (.14)**	.55 (.14)**	.32 (.10)**	.95 (.19)**

† $p < .10$; * $p < .05$; ** $p < .01$.

Note: Significance levels refer to t tests from planned contrasts comparing each experimental condition to the control condition. All of the t tests had 105 degrees of freedom. Standard errors are presented in parentheses.

nuclear war condition and the safeguards condition both generated challenges to the notion that the US and Russia came close to war ($t(54) = 5.00, p < .001$; $t(54) = 4.28, p < .01$, respectively). Similarly, participants in the hard-line condition and those in the reassurance condition both generated challenges to the efficacy of deterrence ($t(54) = 3.06, p < .01$; $t(54) = 4.24, p < .001$, respectively). These results seem to suggest that experimental manipulations did not have their intended effects on the perceived plausibility of the various counterfactual assertions because expert participants rejected the information presented to them.

Impact of prior dispositions on thoughts

Consistent with the results of Study 1, political ideology proved to be a significant predictor of the thoughts that participants generated in response to counterfactual scenarios concerning the efficacy of deterrence vs. reassurance. Among experts and non-experts alike, politically conservative participants generated significantly more

Table 6. Mean cognitive responses to persuasive inductions among experts

	Experimental prime condition				
	Control condition	Efficacy of hard-line	Efficacy of reassurance	Proximity of nuclear war	Safeguards against nuclear war
Positive thoughts about the efficacy of deterrence.	1.17 (.31)	1.42 (.29)	1.67 (.38)	1.25 (.39)	1.27 (.24)
Negative thoughts about the efficacy of deterrence.	1.17 (.30)	1.50 (.31)	1.33 (.36)	1.17 (.30)	.73 (.24)
Challenges to the efficacy of deterrence evidence.	.17 (.27)	1.33 (.31)**	1.83 (.42)**	.58 (.23)	.40 (.16)
Positive thoughts about the proximity of nuclear war.	1.08 (.22)	1.42 (.19)	1.50 (.19)	1.17 (.17)	1.27 (.27)
Negative thoughts about the proximity of nuclear war.	.50 (.18)	.67 (.22)	.50 (.15)	.83 (.17)	.73 (.14)
Challenges to the proximity of nuclear war evidence.	.00 (.15)	.33 (.14)*	.33 (.14)*	.83 (.17)**	1.00 (.23)**

* $p < .05$; ** $p < .01$.

Note: Significance levels refer to t tests from planned contrasts comparing each experimental condition to the control condition. All of the t tests had 54 degrees of freedom. Standard errors are presented in parentheses.

positive thoughts about counterfactuals that supported the efficacy of deterrence than liberals ($M_s = 2.35$ and $.89$; $F(1,42) = 25.70$, $p < .001$; and $M_s = .94$ and $.46$; $F(1,82) = 4.64$, $p = .01$ for experts and non-experts, respectively). Conservatives also generated significantly fewer negative thoughts about these counterfactuals than liberals ($M_s = .53$ and 1.70 ; $F(1,42) = 14.43$, $p < .001$; and $M_s = .47$ and 1.13 ; $F(1,82) = 11.81$, $p < .01$ for experts and non-experts, respectively). Ideology proved not to be a predictor of cognitive responses to the counterfactual scenarios concerning how close the US and Russia came to nuclear war: liberals and conservatives did not differ in their cognitive responses to these counterfactual scenarios.

Impact of persuasive inductions on policy preferences

Experimental condition was also used as an independent variable predicting participants' policy preferences. As expected, the experimental manipulations did influence support for condition-relevant policies among non-experts (see Table 7).

Table 7. Mean endorsement of policy positions among non-experts

	Experimental prime condition				
	Control condition	Efficacy of hard-line	Efficacy of reassurance	Proximity of nuclear war	Safeguards against nuclear war
High priority to strategic defence against missiles.	4.73 (.30)	5.36 (.35)	4.86 (.29)	5.55 (.43)†	4.77 (.29)
High priority to arms control to reduce missiles.	5.73 (.28)	4.95 (.22)*	5.64 (.28)	6.45 (.31)†	5.86 (.33)
High priority to non-proliferation.	6.14 (.26)	6.50 (.26)	6.27 (.30)	7.05 (.34)*	6.32 (.20)
Endorsement of deterrence.	4.55 (.36)	5.82 (.40)*	3.82 (.43)	4.00 (.34)	4.73 (.36)
Endorsement of foreign aid.	4.91 (.36)	4.68 (.43)	6.41 (.35)**	5.45 (.35)	5.41 (.31)

† $p < .1$; * $p < .05$; ** $p < .01$.

Note: Significance levels refer to t tests from planned contrasts comparing each experimental condition to the control condition. All of the t tests had 105 degrees of freedom. Standard errors are presented in parentheses.

Non-experts primed to believe in the efficacy of the US's hardline approach, for example, were more supportive of deterrence efforts and less supportive of arms control than participants in the control condition ($M_s = 5.82$ and 4.55 ; $t(105) = 2.36$, $p < .03$; and $M_s = 4.95$ and 5.73 ; $t(105) = 2.16$, $p < .04$, for deterrence and arms control, respectively). By contrast, non-experts primed to believe that the US came precariously close to a nuclear war tended to be more supportive of arms control ($M_s = 6.45$ and 5.73 ; $t(105) = 1.73$, $p < .10$), strategic defence ($M_s = 5.55$ and 4.73 ; $t(105) = 1.71$, $p < .10$) and non-proliferation ($M_s = 7.05$ and 6.14 ; $t(105) = 2.11$, $p < .05$), than participants in the control condition. Only one of the four experimental manipulations—that which stressed how remote the likelihood of nuclear war had been—failed to produce subsequent changes in relevant policy preferences of non-experts. Because the experimental manipulations failed to sway the expert participants, it is not surprising that the manipulations also had no impact on their policy preferences.

Table 8. Mediation tests

Condition	Policy preference	Proposed mediator	Unstandardized regression coefficient of condition predicting policy preference	Unstandardized regression coefficient of condition predicting policy preference controlling for proposed mediator
New evidence of the complexity and unreliability of the Soviet launching system.	High priority given to non-proliferation.	Perceived plausibility of the counterfactual 'Humanity came much closer to accidental nuclear war than most people realize'.	.91**	.49
	High priority given to arms control to reduce missiles.	Perceived plausibility of the counterfactual 'Humanity came much closer to accidental nuclear war than most people realize'.	.73*	.23
New evidence of efficacy of US hard-line approach.	Deterrence.	Perceived plausibility of the counterfactual 'If Americans had not taken a tough stand against Soviet aggression, the Soviet leadership would not have been so willing to accommodate American concerns'.	1.30**	.14
	Low priority given to arms control to reduce missiles.	Perceived plausibility of the counterfactual 'If Americans had not taken a tough stance against Soviet aggression, the Soviet leadership would not have been so willing to accommodate American concerns'.	-.77*	-.08
New evidence of efficacy of US efforts to reassure Soviet leaders of America's peaceful intentions.	Foreign aid.	Perceived plausibility of the counterfactual 'If American leaders had not repeatedly reassured the Soviet Union of their peaceful intentions, the Soviet leadership would not have been so willing to accommodate American concerns'.	1.50**	.53

* $p < .05$; ** $p < .01$.

Did counterfactual cognitions mediate the impact on policy preferences?

Following the procedures outlined by Baron and Kenny (1986), a series of ordinary least squares regression analyses was conducted to test the possibility that changes in counterfactual beliefs mediated the relation between the experimental manipulations and subsequent policy preferences. Baron and Kenny suggested that four conditions must hold in order to establish mediation. First, the independent variable must affect the proposed mediator; secondly, the proposed mediator must affect the dependent variable; thirdly, the independent variable must affect the dependent variable; and finally, the impact of the independent variable on the dependent variable must drop when the proposed mediator is included in the regression equation. Although perfect mediation requires that the relation between the independent variable and the dependent variable drop to zero when the proposed mediator is included in the equation, Baron and Kenny (1986) suggest that a significant reduction in the magnitude of the effect is sufficient to establish at least partial mediation.

To conduct these regression analyses, four dummy variables were constructed representing the comparison between each experimental condition and the control condition. The proposed mediating counterfactual was then regressed on the appropriate condition dummy variable. Next, the relevant policy preference was regressed on the appropriate counterfactual. Finally, the policy preference was simultaneously regressed on the proposed mediating counterfactual and the condition dummy variable. To the extent that the impact of the experimental condition on the policy preference is significantly reduced when the relevant counterfactual has been entered into the equation, the counterfactual can be said to mediate the relation between the manipulation and the policy preference.

The results of these analyses suggested that the observed relations between experimental manipulations and policy preferences were indeed mediated by changes in the perceived plausibility of policy-relevant counterfactual beliefs. As Table 8 indicates, when the relevant counterfactual beliefs were included in the relevant regression equations, previously significant expected effects of the experimental manipulation on policy preferences dropped to non-significance.⁶

GENERAL DISCUSSION

Taken together, the two studies underscore the importance of counterfactual reasoning in political psychological analyses of belief systems. The correlational data on experts reveal assumptions about 'what might have been' to be central to how experts think about possible futures for the Russian Republic and about how the Russian government should cope with the daunting challenges confronting it in the immediate aftermath of the collapse of communism in 1992. The experimental data on non-experts demonstrate that inducing change in counterfactual beliefs about the

⁶ The reverse pattern of causation was also explored: evidence was sought that the impact of the experimental manipulations on the relevant counterfactuals may have been mediated by their effects on policy preferences. No evidence of this was found. In every case but one, the impact of the experimental manipulation on the relevant counterfactual remained highly significant when controlling for policy preferences, suggesting that policy preferences did not mediate the observed relation.

past can influence policy prescriptions. Counterfactual beliefs should not be dismissed, as some sceptics have done, as merely epiphenomenal rationalizations for policy stands that people would have adopted anyway.

The experimental data also show that: (1) experts with well-articulated belief systems were less easily swayed by dissonant counterfactuals than were non-experts; and (2) they were less swayed, in part, because of their greater motivation and ability to generate counter-arguments against dissonant counterfactuals. It was not uncommon for experts to wonder who the sources of the information were, how they derived their conclusions, and whether they had an ideological or strictly scholarly agenda. (Whether experts were excessively sceptical or non-experts excessively gullible is, of course, a tricky judgment call.)

Evidence of greater susceptibility to changes in counterfactual beliefs among non-experts relative to experts in the current investigation resonates with findings within the attitude strength literature. According to a growing body of research, people who possess a great deal of information about a topic are better able to generate cogent counter-arguments to persuasive messages, rendering them less susceptible to attitude change (e.g. Visser, 1998; Wood, 1982). In much the same way, experts also appear to be better able than non-experts to defend their beliefs about what would have happened in the missing control conditions of history, rendering their counterfactual beliefs less susceptible to change.

In addition to reinforcing findings within the attitude strength literature, the fact that the experimental manipulations produced changes in the relevant counterfactual beliefs among non-experts but not among experts also lends credence to the interpretation of Study 2. If experts and non-experts alike had modified their counterfactual beliefs in accordance with the information provided to them, one might suspect that demand characteristics, and not genuine changes in counterfactual beliefs, were responsible for the correspondence between experimental condition and endorsement of the relevant counterfactual assertions. But because demand characteristics were presumably constant across levels of expertise, differential rates of change in response to the experimental manipulation can more confidently be attributed to differences between experts and non-experts in their inherent susceptibility to change in this domain. These findings provide at least indirect validation of the counterfactual belief measures.

Further validation is evident in the fact that the impact of the experimental manipulations was not limited to the counterfactual assertions that were explicitly referred to in the experimental materials but extended to other related counterfactuals as well. For example, providing non-experts with evidence of the efficacy of the hard-line stance taken by the US against Russia during the Cold War influenced not only their beliefs about what would have happened if the US had not taken such a tough stance, but also their beliefs about the efficacy of reassurance strategies. Had participants' endorsements of the various counterfactual assertions been driven solely by demand characteristics, one might have expected to see effects only on those counterfactual assertions that directly referred to the information presented in the experimental manipulations. This, too, provides indirect validation of the counterfactual belief measures.

Although both studies reveal thinking about politically contentious counter-

factuals to be largely theory-driven, there are some noteworthy qualifications. In Study 1, it was found that ideological preconceptions were strong predictors of conditional probability judgments (if this antecedent condition had been true, then this consequence would have followed) but significantly weaker predictors of the perceived mutability of the antecedent (how difficult is it to imagine that this antecedent could have taken this form?). The sharp shift in the impact of ideology on antecedent–consequence judgments vs. mutability of antecedent judgments suggests that counterfactual reasoning may be comprised of two relatively distinct components. One component involves assessing the plausibility that a particular antecedent condition might have unfolded in a different way than it actually did. The other involves assessing the plausibility of particular antecedent–consequence connections: given that a new antecedent condition occurred, how likely is it that the specified consequence would have followed?

The first component—assessing whether it is reasonable to suppose history could have been redirected by altering the antecedent—is only occasionally influenced by ideological preconceptions (as was the case for eponymous historical figures like Stalin, whom liberals found it easy to ‘mentally remove’ but whom conservatives saw as a defining feature of the Soviet system). By and large, liberals and conservatives agree about the ‘abnormality’ and hence mutability of events like assassination attempts, plane accidents and intemperate remarks in decision-making groups. They agree on how easy it is to mentally ‘undo’ these low base-rate and improbable events because they share many assumptions about how the social and physical worlds work and they rely on similar rules of thumb (such as availability of scenarios) in judging the plausibility of counterfactual conjectures (cf. Kahneman & Miller, 1986).

The second component of counterfactual reasoning—inferring what would have happened had the antecedent taken another form—triggers the sharpest ideological polarization of opinion. Many liberal and social democratic observers of the political scene firmly believe that the Soviet experiment did not have to lead to Stalinist terror and Brezhnevist corruption; if only one could prolong the life of Lenin or shorten the life of Stalin or replace Brezhnev, one would wind up with a relatively humane, efficient, and even democratic socialist system. Many conservatives dismiss such counterfactual speculation as nostalgic nonsense. Remove Stalin or Brezhnev and Stalinism or Brezhnevism remain under other names. The second stage of counterfactual reasoning extrapolates value-laden political schemata into the subjunctive-conditional unknown.

Evidence that ideological predispositions had the most impact on this second component of counterfactual reasoning is perhaps not surprising. Judgments about the mutability of a particular event are tightly constrained by reality and must be reconciled with a host of surrounding historical factors leading up to and reinforcing the event. Speculations about the likely consequences of mutating a particular historical event, however, are considerably less constrained by reality, and as a result they are more susceptible to the biasing impact of ideological predispositions. These results are consistent with evidence in other domains suggesting that motivational biases are most pronounced when reality constraints are minimal (e.g. Ditto & Lopez, 1992; Kunda, 1990).

In Study 2, evidence was again found of theory-driven inferences. The more well-articulated one's belief system, the more likely one was to resist historical discoveries that carried dissonant counterfactual implications. Study 2 does, however, bring clearly into focus both the advantages and disadvantages of being relatively ideologically aschematic. The positive value spin is that the less politically informed, opinionated and sophisticated participants were more open-minded and more willing to accept discoveries in declassified Soviet archives that run counter to their initial ideological predispositions; the negative value spin is that the less-informed are simply gullible, easy prey to manipulators of mass opinion.

Finally, the data mesh nicely with the burgeoning social cognition literature on the consequences of counterfactual reasoning. Counterfactual cognitions—beliefs that people often hold with great confidence about empirically inaccessible possible worlds—appear to influence a vast array of social judgments, including emotional reactions (Landman, 1987), blame assignment (Macrae & Milne, 1992; Miller & McFarland, 1986), assessments of causality (Wells & Gavanski, 1989), and both accident and victim compensation (Miller, Turnbull, & McFarland, 1990). To that list can now be added foreign policy preferences. Beliefs about ballistic missile defence, nuclear deterrence and the expansion of NATO into Eastern Europe are grounded in no small measure in assumptions about what would or could or might have happened in hypothetical worlds involving shifts in the identities of national leaders or accidents in nuclear command and control systems. Counterfactual worlds may indeed be metaphysical fictions, but mental representations of those worlds are profoundly consequential.

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