"Elective Affinities": On the Psychological Bases of Left-Right Differences

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Psychology Press
Taylor & Francis Group

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Drawing on the concept of "elective affinities" from the writings of Johann Wolfgang von Goethe and Max Weber, I seek to articulate a scientific framework for understanding psychological receptiveness to ideological messages. More specifically, I summarize converging lines of research that link basic personality, cognitive, motivational, and even physiological processes to ideological differences between left and right. I also discuss situational factors such as the presence of threat that increase the affinity for political conservatism through its effect on "cognitive narrowing." These findings and many others suggest that, contrary to Wildavsky (1989) and other skeptics, ideology is a meaningful force in people's lives and that it may be rooted in fundamental psychological antinomies, including preferences for stability versus change, order versus complexity, familiarity versus novelty, conformity versus creativity, and loyalty versus rebellion. Directions for further research are also discussed.

Key words: political orientation, ideology, liberalism, conservatism, religion, uncertainty, threat.

I often think it's comical
How Nature always does contrive
That every boy and every gal
That's born into the world alive
Is either a little Liberal
Or else a little Conservative!

Gilbert & Sullivan (1882, Iolanthe, Act II)

Definitions of political ideology abound, and—given the controversies that invariably swarm the topic—it seems wise to start with a definition that is relatively generic and unobjectionable, such as

> a set of ideas, beliefs, opinions, and values that (1) exhibit a recurring pattern, (2) are held by significant groups, (3) compete over providing and controlling plans for public policy, and (4) do so with the aim of justifying, contesting or changing the social and political arrangements and processes of a political community. (Freeden, 2003, p. 32)

A definition such as this makes clear that there are many possible ideologies, not just ideologies of the left, right, and center. It also suggests that political ideologies can be subjected readily to the kinds of social, cognitive, and motivational analyses favored by psychologists to explain how and why some individuals and groups *justify* whereas others *contest* existing

"social and political arrangements" (e.g., see Jost, 2006; Jost & Hunyady, 2005).

In this article, I focus on the ideological distinction between left and right and its psychological underpinnings. My focus is this not because I think that *all* political ideologies can be neatly reduced to their address on a single bipolar dimension, but because the Left–Right distinction has been the single most useful, popular, and parsimonious way of classifying political ideology in the Western world for 200 years and counting (e.g., Bobbio, 1996; Corbetta, Cavazza, & Roccato, in press; Laponce, 1981). As it turns out, it is also tremendously helpful for distinguishing between those who justify versus contest existing arrangements (i.e., the status quo).

Already we have arrived at our first controversy. A surprisingly numerous and austere group of sociologists and political scientists have doubted the utility of the Left–Right distinction. Shils (1954), for one, mocked it as "rickety," "spurious," and "obsolete." Along similar lines, Lasch (1991) argued that "old political ideologies have exhausted their capacity either to explain events or to inspire men and women to constructive action" (p. 21). But, like a phoenix rising from the ashes, the Left–Right distinction simply will not die (Jost, 2006).

Feldman (2003) took a more methodological approach than Shils (1954), Lasch (1991), and others in alleging that "a unidimensional model of

ideology is a poor description of political attitudes for the overwhelming proportion of people everywhere" (p. 477). Indeed, several multidimensional models have been proposed (e.g., Conover & Feldman, 1981; Eysenck, 1954/1999; Kerlinger, 1984), but none of these alternatives has received unequivocal support, and none (so far) has delivered a "knock-out punch" to the traditional Left–Right conception (see Jost, Federico, & Napier, 2009, for a review). In my view, it remains "a powerful summary tool" (Campbell, Converse, Miller, & Stokes, 1960/1965, p. 111) that "provides an economical mode of discourse" (Tedin, 1987, p. 67). *I would go even further: if the Left–Right distinction did not exist, scholars of ideology would need to invent its equivalent.*

Origins of the Left–Right Distinction in the French Revolution (and Reactions to It)

The Left–Right distinction originates—literally and symbolically—with the French Revolution that lasted at least a decade beginning in 1789. The political use of the spatial metaphor was generalized from the seating arrangements of the French Assembly at the time of the Revolution: Those who supported the ancient regime (the Church, the Crown, and the aristocracy) sat on the right side of the chamber, while those who opposed the regime and sympathized with the revolutionaries sat on the left (Laponce, 1981).[1] Subsequently, the "right-wing" label came to represent political views that are conservative, supportive of the status quo, and hierarchical in nature. This "side" was epitomized by the writings of Edmund Burke (1790/1987), whose philosophical conservatism led him to condemn the "spirit of innovation" and urge his British compatriots to "look backward to [the authority of] their ancestors" rather than turning to revolution (p. 30; see also Pocock, 1987; Viereck, 1956; White, 1950).

"Left-wing" views, on the other hand, came to be associated with progressive social change and egalitarian ideals, as in the liberal traditions of Jeremy Bentham, John Stuart Mill, and many others, or the more radical socialist tradition of Karl Marx (Bobbio, 1996; Laponce, 1981; Viereck, 1956). Those on the left decried the "wisdom-of-our-ancestors fallacy" that they perceived in the thinking of their ideological opponents. Marx (1852/1977), for instance, wrote that the revolution the world needed "cannot draw its poetry from the past, but only from the future," and

only after stripping away "all superstition in regard to the past" (p. 302).[2] Thus, in the French Revolution and its aftermath, leftists and rightists differed not only in their degree of enthusiasm for *liberté*, *fraternité*, and *egalité*, but also in their more general attitudes toward the past, present, and future. Whereas Burke venerated ancient customs as sacred, Marx famously declared that, "The tradition of all the dead generations weighs like a nightmare on the brain of the living" (p. 300).

Core Aspects of the Left–Right Distinction

Disagreements over a great many specific issues, which we consider peripheral to the left-right distinction, have come and gone (see Jost, 2006). Yet historical continuity exists with respect to two core aspects: *Advocating versus Resisting Social Change, and Accepting versus Rejecting Inequality* (Jost, Glaser, Kruglanski, & Sulloway, 2003a, 2003b). These two ideological aspects tend to be intertwined because of the fact that in European history traditional arrangements tended to be hierarchical (i.e., unequal), and most social change movements over the past several centuries have pushed for greater equality in the social, economic, or political spheres.

As Lipset and Raab (1978) pointed out:

Right wing has been defined basically in terms of *preservatism*; the left wing in terms of *innovation*. More particularly, the preservatism of the right wing has to do with maintaining or narrowing lines of power and privilege; the innovation of the left wing has to do with broadening lines of power and privilege. (p. 19)

The central tenets of left and right survived the Transatlantic crossing, but Americans have come to settle on the terms *liberal* and *conservative*. Thus, Campbell, Converse, Miller, and Stokes (1960/1965) characterized conservatives as "reluctant to disturb the existing order of relationships," as compared with liberals who see "room for improvement in the product of social and political process through change in these relationships" (p. 111).

That Left–Right differences in support versus opposition to egalitarian social change have been observed

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[1]Laponce (1981) also observed that for many centuries in Europe (even before the French Revolution) the right was regarded as the "side of God" and was "universally associated with the notion of privilege, dominance, and sacredness" (p. 10).

[2]In denying that meaningful Left–Right differences exist with respect to attitudes about social change, Greenberg and Jonas (2003) wrote that "all political movements borrow from the past in some way. At the very least, leftists rely on the long-dead Karl Marx, and often on a myth of prehistoric egalitarian communalism" (p. 377). It seems to me that this comment ignores the relentlessly forward-looking character of Marxist thought (and ideology)—or what the conservative sociologist Robert Nisbet (1973) referred to as "the unmistakably, profoundly, and undeviatingly revolutionary character of Marx's own mind" (p. 282). The contrast between Marx and Burke with respect to their attitudes concerning tradition and custom, as in the quotes assembled above, seems too striking to overlook.

so consistently throughout the Western world since the time of the French Revolution strikes me as such an astounding fact about human behavior that I experience bewilderment when others—whose work I respect and appreciate—deny the significance of the Left–Right distinction (see also Jost, 2006). In 1986, for example, the President of the American Political Science Association, Aaron Wildavsky, used much of his convention address to attack the bipolar conception of political orientation:

> The left–right distinction is beset with contradictions. Hierarchical cultures favor social conservatism, giving government the right to intervene in matters of personal morality. Thus egalitarians may support intervention in the economy to reduce economic differences but not intervention in social life to maintain inequality. . . . A division of the world into left and right that is equally inapplicable to the past and to the present deserves to be discarded. Efforts to read back the left–right distinction in U.S. history, for instance, succeed only in making a hash of it. In the early days of the republic egalitarians pursued their objectives through severe restrictions on central government because they then regarded the center as monarchical, that is, hierarchical. Nowadays, after decades of dispute and struggle, they regard the federal government as a potential source for increasing equality. *Their egalitarian objectives remain constant* [italics added], but their beliefs about what will be efficacious instruments of policy vary according to the conditions of the times. (Wildavsky, 1989, p. 33)

But Wildavsky's conceptual confusion is more apparent than real, and he seems to answer his own question about what leftists want, namely social and economic *equality* (rather than governmental intervention, which should be considered a peripheral aspect of the left–right distinction). That is, leftist strategies for achieving egalitarian goals (and rightist strategies for achieving the opposite) certainly are sensitive to pragmatic considerations, and their enthusiasm for governmental intervention depends crucially upon the consequences of that intervention for the degree of equality or inequality in society. The idea that leftists are motivated by a desire for big government is a rhetorical invention of the political right, and leftists have lost considerable political ground by failing to dispel the claim.

Wildavsky (1989) also rejected the notion that left–right differences have anything to do with advocating versus resisting social change (see also Greenberg & Jonas, 2003):

> The division of the political universe into liberals and conservatives, when based on innate tendencies toward change, is bound to be misleading because historical context alters whatever the various political cultures wish to preserve. . . . In a rich analysis of differences and similarities among left-wing and right-wing activists, McCloskey [*sic*] and Chong conclude that "thus, paradoxically, despite its patriotic fervour, spokesmen of the radical right are profoundly antagonistic to the status quo" (1985, pp. 346–7). It is paradoxical if conservatism is identified with resistance to change but not if *desire for change depends on perceived distance from desired behavior*. . . . What kind of changes we want depends not nearly so much on our predispositions toward change per se, *as if the destination did not matter*, but on the gap between desired and actual power relationships. (pp. 33–4)

In this passage, Wildavsky (1989) caricatures the long-standing notion, which can be traced back to Burke (1790/1987), if not earlier, that conservatism is associated with the ideological preservation of the status quo (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Campbell et al., 1960/1965; Jost et al., 2003a, 2003b; Kerlinger, 1984; Lipset, 1960; Lipset, Lazarsfeld, Barton, & Linz, 1954/1962; Viereck, 1956). Of course, it would be absurd to suggest that liberals are *always* in favor of change—"as if the destination did not matter"—or that conservatives are *always* against it.[3] But no one, to my knowledge, has ever argued this. It should be enough for us to grant that the "desire for change depends on perceived distance from desired behavior" and note that the *preferred degree of equality (or inequality) in society constitutes a major (if not the major) constraint on whether specific changes are desired by the political left, right, or center.*

The problem is that Wildavsky's (1989) analysis—like that of Greenberg and Jonas (2003), who claimed that "it is clear from records of history and current political events that conservatives often want change" (p. 377)—obscures the fact that many of the "changes" preferred by right-wing conservatives are either incremental (and therefore attempts to forestall the demand for more radical changes) or retrograde (or perhaps "restorative") in nature. As Lipset and Raab (1978) observed, "The political program of conservatism . . . may indeed change adaptively from time to time" (p. 19), but it "is the axis of preservatism which most essentially and invariably distinguishes 'Left Wing' from 'Right Wing'" (p. 20). Thus, many conservatives today strive to repeal or otherwise replace the social security system created during the New Deal, undermine the separation of Church and State, eliminate welfare and affirmative action programs, overturn the *Roe v. Wade* Supreme Court decision, and so on. In addition to flouting philosophical disputes originating

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[3]Even Edmund Burke (1790/1987) wrote that "a state without the means of some change is without the means of its conservation." As Viereck (1956) noted, "The Burkean . . . does come to terms with the reality of inevitable change. But he does so without the liberal's optimism and faith in progress" (p. 12).

with Burke, Marx, and their contemporaries over the issue of social change, the position taken by Wildavsky (1989) and Greenberg and Jonas (2003) that leftists and rightists are equally desirous of change ignores a veritable mountain of psychological data documenting major differences between liberals (or leftists) and conservatives (or rightists) with respect to their degree of openness to novelty, innovation, stimulation, excitement, diversity, and change in general (Altemeyer, 1998; Amodio, Jost, Master, & Yee, 2007; Barnea & Schwartz, 1998; Carney, Jost, Gosling, & Potter, 2008; Chirumbolo, 2002; Ekehammar, Akrami, & Gylje, 2004; Feather, 1984; Gerber, Huber, Raso, & Ha, 2008; Gosling, Rentfrow, & Swann, 2003; Jost et al., 2003a, 2003b; Kemmelmeier, 2007; Kruglanski, 2004; Levin & Schalmo, 1974; McClosky & Chong, 1985; McCrae, 1996; Riemann, Grubich, Hempel, Mergl, & Richter, 1993; Rokeach, 1960; Sidanius, 1978; Stenner, 2005; Trapnell, 1994; Van Hiel & Mervielde, 2004; Wilson, 1973).

Psychological Bases of Left–Right Differences

Implicit Preferences for Stability Versus Change and Hierarchy Versus Equality

The evidence shows rather convincingly that differences between liberals and conservatives concerning the two core aspects of left–right ideology are neither superficial nor attributable to self-presentational strategies alone. Jost, Nosek, and Gosling (2008), for instance, found that self-reported political orientation not only predicts explicit attitudes about the importance of tradition and hierarchy versus social change and equality; it also predicts implicit, or automatic, associations to a considerable degree. In several studies employing the Implicit Association Test (IAT), which is a reaction time measure that captures the strength with which certain attitude objects are automatically associated with positive or negative evaluations (Greenwald, McGhee, & Schwartz, 1998), Jost, Nosek, and Gosling (2008) gauged thousands of respondents' implicit preferences for values such as *tradition* versus *progress*, *conformity* versus *rebelliousness*, *order* versus *chaos*, *stability* versus *flexibility*, and *traditional values* versus *feminism*.

Results revealed that although participants on average showed implicit preferences for *order* over *chaos* and *conforming* over *rebellious*, the magnitude of these preferences increased with the participant's degree of self-reported conservatism. Furthermore, liberals on average showed implicit preferences for *flexible* over *stable* and *progress* over *tradition*, whereas conservatives showed weaker or opposite preferences. That is, contemporary American conservatives tended to follow Burke (1790/1987) in assuming that "good order is the foundation of all good things." The largest

difference in implicit attitudes between liberals and conservatives emerged for the comparison that included both of the core dimensions (resistance to change and acceptance of inequality), namely, *traditional values* versus *feminism*. Whereas conservatives implicitly favored *traditional values*, liberals favored *feminism*.

Jost, Nosek, and Gosling (2008) also investigated the relationship between political orientation and implicit intergroup attitudes—measured with the use of racial and other group-based IATs—and found that at an implicit (as well as explicit) level liberals hold significantly more egalitarian attitudes than do conservatives (see also Jost, Banaji, & Nosek, 2004; Nosek, Banaji, & Jost, 2009). In every case, liberals were significantly less likely than conservatives to exhibit implicit preferences for advantaged over disadvantaged groups, such as *straight* over *gay*, *White* over *Black*, *light skin* over *dark skin*, and "*others*" over *Arabs*. The findings concerning implicit preferences—especially when taken in conjunction—are telling, because they suggest that Left–Right differences stem from very basic psychological proclivities or, alternatively, that adopting a specific ideology leads people to internalize a host of extremely general attitudes concerning stability versus change and hierarchy versus equality. Either possibility seems interesting and potentially important.

"Top-Down" Versus "Bottom-Up" Approaches to the Study of Ideological Differences

Why *are* some people drawn to conceptual ideals such as progress, change, equality, and flexibility, as well as liberal or leftist belief systems, whereas others are drawn to order, stability, tradition, maintenance of the status quo, and conservative or rightist belief systems? At least until very recently, most sociologists and political scientists focused on "top-down" processes such as political leadership, party politics, and especially mass media communication, that is, the ways in which political elites strategically influence the attitudes of ordinary citizens (e.g., Feldman, 1988; Hinich & Munger, 1994; Poole & Rosenthal, 1997; Sniderman & Bullock, 2004; Zaller, 1992). The construction and dissemination of discursive contents by political elites is undoubtedly an important part of the story of ideology, but it cannot possibly be the whole story.

Psychologists are in a better position than sociologists and political scientists to address "bottom-up" processes such as cognitive and motivational needs and tendencies that influence an individual's *receptiveness* to specific ideological positions. As Adorno et al. (1950) noted long ago, an individual's belief system "reflects his [or her] personality and is not merely an

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aggregate of opinions picked up helter-skelter from the ideological environment" (p. 176). A growing body of evidence, which was reviewed by Jost et al. (2009), reveals that Left–Right ideological stances reflect, among other things, the influences of heredity, childhood temperament or personality, and both situational and dispositional variability in social, cognitive, and motivational needs to reduce uncertainty and threat.

Heritability and Childhood Origins of Left–Right Differences

Psychologists and behavioral geneticists have been studying the heritability of social and political attitudes for years (e.g., Bouchard et al., 2003; Eaves & Eysenck, 1974; Olson, Vernon, Harris, & Jang, 2001; Tesser, 1993). Nevertheless, an article by Alford, Funk, and Hibbing (2005) presenting evidence of this kind caused a stir when it appeared in the *American Political Science Review*. Based on studies comparing fairly large samples of identical and fraternal twins who had been reared apart in the United States and Australia, the authors concluded that as much as 40 to 50% of the statistical variability in ideological opinions could be attributed to genetic factors. Intriguingly, heritability estimates for ideological opinions exceeded those observed for political partisanship, casting doubt on the commonly held notion that specific issue positions are derived primarily (or even entirely) from identification with political parties. It is important to keep in mind, however, that results from twin studies such as these do not mean that there is a gene for political orientation per se. A more likely explanation is that there are basic psychological predispositions that are partially heritable and that can contribute to individuals' preferences for liberal or conservative ideas (see also Olson et al., 2001)—but only if the individuals are exposed to a suitably wide range (or "menu") of political ideas.

A longitudinal study by Block and Block (2006) is also noteworthy because it suggested that childhood personality characteristics can predict political attitudes 20 years later. Specifically, these researchers found that preschool children who were rated independently by their teachers as more self-reliant, energetic, resilient, impulsive, and gregarious eventually became more liberal than their peers at age 23. By contrast, preschool children who were characterized as feeling easily victimized and offended, indecisive, fearful, rigid, and inhibited ended up being more conservative at age 23. Although it would be next to impossible to control or measure all of the potentially relevant "third variables" over the course of a 20-year period, this study does suggest that a correspondence exists between psychological characteristics (even in early childhood) and political orientation in adulthood.

Data such as these make Gilbert and Sullivan (1882), as quoted in the epigram for this article, look downright prescient. Jost et al. (2009) suggested that correspondences such as these occur because ideologies serve epistemic, existential, and relational motives or functions. That is, they offer certainty, security, and solidarity, but *different ideologies do not necessarily satisfy these motives in the same way or to the same extent*. To illustrate how people could sort themselves into various ideological groups, we drew on the metaphor of "elective affinities," which was the title of an Enlightenment-era novel by Johann Wolfgang von Goethe.

The Concept of "Elective Affinities"

Goethe's (1809/1966) work invites its readers to consider an analogy between the formation and dissolution of chemical bonds and the compelling forces that bring people together or thrust them apart. One of the novel's chief protagonists, the Captain, provocatively explains his understanding of chemistry to Charlotte, the wife of his friend: "The tendency of those elements which, when they come into contact, at once take hold of, and act on one another, we call 'affinity'" (p. 39). The brilliant sociologist Max Weber, whose vast erudition extended to the novels of Goethe (Howe, 1978), picked this very same concept of "elective affinity" (*Wahlverwandtschaft*) to characterize the link between *ideas* (or belief systems) and *interests* (or needs), that is, the "selective process" by which "ideas and their publics . . . find their affinities" (Gerth & Mills, 1948/1970, p. 63; see also Howe, 1978; Kalberg, 1994; Lewins, 1989). From a Weberian perspective, then, "people can be said to 'choose' ideas, but there is also an important and reciprocal sense in which *ideas choose people* [italics added]" (Jost et al., 2009, p. 14).

Jost et al. (2009) proposed that the metaphor of "elective affinities" remains useful for describing the forces that unite belief systems with individuals and groups who are prone to receive them. In fact, there is probably an even broader set of interests or needs than is recognized in Weberian sociology that leads people to embrace certain ideologies, including psychological needs that may lead people to embrace ideologies that are not necessarily in their objective self-interest (as determined on the basis of their social class, race, religion, sex, etc.). It seems clear that psychology has an essential part to play if we are ever to understand what Silvan Tomkins (1963) called the "love affair of a loosely organized set of feelings and ideas about feelings with a highly organized and articulate set of ideas" (p. 389). To this end, my colleagues and I have sought to identify a constellation of epistemic, existential, and relational motives that can explain why "certain people—once they are exposed to certain political ideas—'stick' with those ideas (and the ideas stick with them)" (Jost et al., 2009, p. 14).

A Model of Political Ideology as Motivated Social Cognition

Jost et al. (2003a, 2003b) suggested that ideological differences emerge at least in part because of *psychological* reasons and set out to review dozens of studies going back to the 1950s that had investigated cognitive and motivational style differences that covaried with political orientation. The crux of the theoretical argument was an argument about "elective affinities." I have already noted that—since the time of the French Revolution—conservative (or rightist) ideology has differed from liberal (or leftist) ideology in two major ways: first in its general preference for stability and order over social change, and second in its relative acceptance of social and economic forms of inequality (or hierarchy) as natural and/or legitimate (see also Jost, 2006).

We hypothesized that these conservative preferences for stability and hierarchy would be enhanced whenever motivations to reduce uncertainty and threat were heightened for either chronic (dispositional) or temporary (situational) reasons (see Figure 1). This is because stability and hierarchy appear to provide reassurance and structure inherently, whereas social change and equality imply greater chaos and unpredictability. Of importance, we suggest that people may be psychologically unwilling or unable to embrace the unpredictability associated with social change and increased equality when they are feeling threatened or experiencing aversive levels of uncertainty (see also Thorisdottir & Jost, 2009). It follows from this analysis that the attractiveness of conservative leaders and opinions should be strengthened when needs to reduce uncertainty and threat are relatively high, and the attractiveness of liberal leaders and opinions should be strengthened when these needs are low.

To investigate this general theoretical model, Jost et al. (2003b) reviewed studies published between 1958 and 2002 involving 88 different research samples from 12 different countries, including countries with a strong history of socialism (and even communism). Altogether, there were more than 22,000 individual cases or participants, with samples as diverse and statistically representative as could be found in the research literature. Endorsement of political ideology (liberalism–conservatism) was operationalized in three major ways in studies included in the meta-analytic review. First, we investigated instruments emphasizing resistance to change, including the Wilson-Patterson C-scale (see Wilson, 1973) and the right-wing authoritarianism scale (see Altemeyer, 1998). Second, we included measures emphasizing acceptance of inequality, including Sidanius and Pratto's (1999) social dominance orientation scale and Jost and Thompson's (2000) economic system justification scale. Third, there were also direct self-report indicators of political orientation, including ideological self-placement, party affiliation, and opinions on specific issues. The empirical findings were highly consistent across these three different types of measures.

Consistent with the theoretical model, the results of Jost et al.'s (2003b) meta-analysis revealed that—aggregating across dozens of studies carried out by many different research teams—the motivation to reduce uncertainty was indeed correlated with political orientation. Specifically, intolerance of ambiguity and stronger personal needs for order, structure, and closure were all positively associated with conservatism (or negatively associated with liberalism). Integrative complexity, openness to new experiences, and tolerance for uncertainty were all positively associated with liberalism (or negatively associated with conservatism). Similarly, again aggregating across many
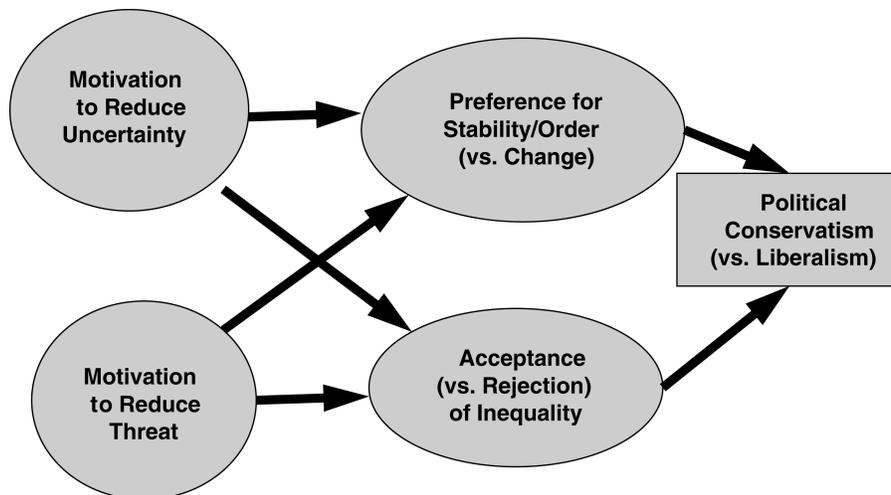

Figure 1. A schematic illustration of the theory of ideology as motivated social cognition.

different studies, the data revealed that greater fear of threat and loss, death anxiety, and exposure to system threat were all positively associated with conservatism (or negatively associated with liberalism), and low self-esteem was very weakly associated with conservatism.

What About Ideological Extremity?

Skeptics of the notion that a clear correspondence exists between psychological and ideological propensities typically claim that extremists of the left and right possess highly similar psychological profiles. This suggestion was made years ago by critics of *The Authoritarian Personality* (such as Eysenck, 1954/1999, and Shils, 1954), and it was renewed by Greenberg and Jonas (2003) in a published critique of Jost et al.'s (2003b) theory of ideology as motivated social cognition. In response, Jost et al. (2003a) noted that the data for 13 of the studies included in the meta-analysis were presented in such a way that one could distinguish between support for (a) the hypothesis that there is a special affinity between the contents of conservative versus liberal ideology and underlying needs to reduce uncertainty and threat and (b) the extremity hypothesis, which suggests that the psychological characteristics should be the same for people adhering to any equivalently extreme ideology (whether Right or Left).

Jost et al. (2003a) evaluated the degree of empirical support that existed for each of these two hypotheses with respect to several different measures of uncertainty avoidance (or, in some cases, closed-mindedness vs. open-mindedness). The notion that there is an affinity between political conservatism and relatively "closed" belief systems was initially rejected then later embraced by Milton Rokeach (1960), one of Adorno et al.'s (1950) many critics. More than 40 years later, the evidence continues to suggest that Rokeach was correct to change his mind. Jost et al. (2003a) found that all 13 of the studies from the meta-analysis indicated that a linear relationship exists between political orientation and closed-mindedness.

Specifically, as participants become more conservative (ranging from extreme left/liberal to extreme right/conservative), their scores on uncertainty avoidance, intolerance of ambiguity, dogmatism, and mental rigidity increase more or less monotonically. The pattern for 6 of the 13 studies indicated that there was *also* an effect of ideological extremity, such that in these studies extreme leftists were more closed-minded than were moderate leftists and moderate leftists were more closed-minded than centrists, but extreme rightists were more closed-minded than extreme leftists and moderate rightists were more closed-minded than moderate leftists. *There was absolutely no evidence for the extremity hypothesis that leftists and rightists would be equally closed-minded after taking into account distance from the political center.*

At the same time, there are inherent limitations of a meta-analytic approach, and these were addressed in a follow-up article by Jost et al. (2007). For one thing, the individual data sets included in the meta-analysis did not contain both uncertainty and threat management variables, so it was not possible to determine whether they contribute independently and equivalently to political orientation or if one type of variable is more important than the other. Furthermore, given that Jost et al. (2003a, 2003b) were relying primarily on previously published articles, they were dependent on how the original authors had chosen to report their results. As a result, they had a limited ability to rule out the alternative hypothesis suggested by Greenberg and Jonas (2003) that heightened needs to manage uncertainty and threat would be associated with becoming more ideologically extreme in either direction, left or right. Finally, some of the measures of political orientation that were included in the meta-analysis made it difficult to distinguish cleanly between political conservatism and authoritarianism (Crowson, Thoma, & Hestevold, 2005), so it seemed preferable to measure participants' own self-reported placement on a liberalism–conservatism scale as the dependent variable.

To address these theoretical and methodological limitations of previous research, Jost et al. (2007) conducted three studies using structural equation methods in Texas, Massachusetts, and New York. Specifically, they created second-order latent variables of uncertainty avoidance and threat management based on multiple scale indicators of each. To estimate uncertainty avoidance, we administered items pertaining to intolerance of ambiguity, openness, and need for order (e.g., Webster & Kruglanski, 1994). To estimate threat management, we administered items from Duckitt's (2001) perceptions of a dangerous world scale, along with other items gauging feelings of system threat (e.g., likelihood of economic depression, terrorist attacks). In this way, Jost et al. (2007) were able to investigate the simultaneous effects of needs to manage uncertainty and threat on both liberalism–conservatism and ideological extremity, adjusting for the effects of the other.

The results were highly consistent across the various samples, despite geographical, political, and other differences. In all three studies, uncertainty avoidance and threat management each contributed independently and significantly to political conservatism, *accounting for between 28 and 38% of the statistical variance in self-reported political orientation*. Furthermore, these paths remained significant after adjusting for ideological extremity, that is, the respondent's distance from the political center (or the scale midpoint). When uncertainty avoidance and threat management were used to predict political extremity (rather than

political orientation), there was no evidence in any of the three studies that heightened epistemic or existential needs were associated with increased extremity. Rather, uncertainty avoidance was associated with the holding of centrist (as well as politically conservative) views, and threat management was unrelated to extremity. Thus, it seems quite clear that (a) *a special affinity exists between epistemic and existential needs to manage uncertainty and threat and political conservatism*, and (b) *there is no evidence that liberals and conservatives are psychologically equivalent with respect to epistemic and existential motivation* after adjusting for ideological extremity, as has often been claimed.

Elective Affinities Between Religiosity and Right-Wing Orientation

Viereck (1956, p. 16) observed, "Conservatism is usually associated with some traditional and established form of religion, whether as a credo to believe literally or as a framework historically valuable." He also noted that "after 1789, its appeal redoubled for those craving security in an age of chaos." Along these lines, Jaime Napier and I applied the theory of political ideology as motivated social cognition to better understand the apparent affinity between religiosity and right-wing orientation. We have found, using data from the 2000 World Values Survey, that in North America (United States, Canada, Mexico, and Puerto Rico), religiosity and right-wing orientation are correlated at approximately .3. This is approximately as strong a correlation as the one between education and income in this data set, which is to say that it is quite a substantial correlation. However, when we entered variables measuring psychological needs to manage uncertainty and threat into the model, we found that *both types of needs predict religiosity and right-wing orientation*. Furthermore, the empirical relationship between religiosity and right-wing orientation was eliminated, suggesting that needs to manage uncertainty and threat explain (or account for) the affinity between religiosity and right-wing orientation.

We observed similar patterns, sometimes a bit stronger, and sometimes a bit weaker, in other regions around the world, including South America (despite a strong tradition of left-wing "liberation theology") and both Eastern and Western Europe. These findings are important first because they *replicate the basic findings from the Jost et al. (2003a, 2003b) meta-analysis using nationally and internationally representative samples from the World Values Survey*. Second, they indicate that the model of ideology as motivated social cognition is useful for understanding religious ideology as well as political ideology, and especially the apparent affinity between religiosity and right-wing orientation.

Evidence From "Political Neuroscience"

If you accept that there are clear differences, as I have been arguing, between liberals and conservatives in terms of personality, cognitive-motivational style, and behavioral self-report measures, then it should not be surprising that such differences can also be detected at the level of neurocognitive functioning. But, interested parties frequently are surprised, so I hasten to describe two studies from the newly emerging subdiscipline of "political neuroscience." The first is an experiment conducted by Amodio et al. (2007) in which liberals and conservatives were brought into the laboratory and electrodes were attached to their scalps so that it would be possible to measure their event-related potentials (i.e., brain waves) while they completed a Go/No-Go task on the computer.

The Go/No-Go task trains participants to develop a dominant or habitual response pattern, because they are instructed to press a certain response key every time a given stimulus (such as the letter *M*) appears, and this stimulus appears on the strong majority of trials. Then every once in a while, a different stimulus (such as the letter *W*) appears, and participants are required to override their habitual responses and respond flexibly by pressing a different key, as fast as they can. This task gauges "conflict monitoring ability," that is, sensitivity to potentially conflicting pieces of information and the ability to regulate or control potentially conflicting response tendencies. We measured neurological activity in the Anterior Cingulate Cortex because this region of the brain is known to be implicated in conflict-monitoring, self-regulation, and cognitive control (e.g., Botvinick, Braver, Barch, Carter, & Cohen, 2001).

There were several instructive results from this experiment. First, conservatives made significantly more errors of commission, falsely responding "Go" on the No Go trials, than did liberals. That is, they were more likely to stick with the habitual (or dominant) response tendency, even when a different kind of response was called for. Second, liberals showed significantly greater conflict-related neural activity when response inhibition was required (i.e., on No-Go trials). Third, the differences in patterns of brain activation were localized to the Anterior Cingulate Cortex. In sum, then, the study by Amodio et al. (2007) provided the first evidence that the kinds of cognitive, motivational, and behavioral differences between liberals and conservatives that have been observed for decades (e.g., Jost et al., 2003a, 2003b) are instantiated at the level of neurological functioning. However, this evidence does not mean that brain differences *cause* people to become liberal or conservative, as some are quick to assume. It is also possible that specific ideologies lead people to think in certain ways, and that as a result our brains come to process information somewhat differently as

a result. But the findings from this study and one other do suggest that *ideological differences are more than skin deep.*

According to Oxley et al. (2008), physiological responses to threat are correlated with political orientation. Specifically, the researchers found that research participants in Nebraska who held especially conservative attitudes about a wide range of issues—including military spending, the death penalty, the Iraq War, school prayer, gay marriage, abortion rights, gun control, immigration, and other issues—were more physiologically sensitive to threatening visual stimuli (e.g., a spider crawling on a human face) than were people who held especially liberal attitudes concerning these issues. Differences were observed with respect to two extremely common measures of threat sensitivity, namely changes in skin conductance and more pronounced eye blinks in response to the presentation of threatening images. Thus, the *physiological evidence to date is highly consistent with the behavioral and self-report data reviewed by Jost et al. (2003a, 2003b) concerning ideological differences in responding to both uncertainty and threat.*

Situational Factors Affecting Ideological Outcomes

In this article, I have so far emphasized individual differences in psychological or physiological characteristics that are assumed to be relatively stable over time. The strength and consistency of these findings, I think, is hard to dismiss. However, it is important to make clear that "elective affinities" are not all personality based. There are also situational triggers of "liberal shift" and "conservative shift," and many of these can be linked to variability in epistemic and existential motivation (Jost, 2006; Jost, Nosek, & Gosling, 2008; see also Bryan, Dweck, Ross, Kay, & Mislavsky, in press). In particular, a great many studies have now demonstrated that *highly threatening circumstances tend to increase one's affinity for politically conservative leaders and opinions.*

Effects of Increasing Threat on Political Orientation

Ralph Waldo Emerson once wrote, "Men are conservatives when they are least vigorous, or when they are most luxurious. They are conservatives after dinner." The social science literature suggests that—on the contrary—men (and women) are conservatives when they are most threatened . . . or *least* relaxed! Willer (2004), for instance, performed time-series analyses and found that every time the Bush administration elevated the "terror alert" levels during their first term, public approval ratings of President Bush and his conservative economic policies soared. Bo-

nanno and Jost (2006) conducted a longitudinal study of high-exposure survivors—people who were in or near the World Trade Center buildings on the morning of 9/11—and found that 38% reported becoming more politically conservative in the 18 months following the terrorist attacks, which was more than three times as many people who said that they had become more liberal during that same period. Terror management researchers, too, have shown in a litany of experimental studies that subliminal or supraliminal primes that remind people of death, terrorism, 9/11, and related stimuli (simply by flashing words on a computer screen or asking people to think or write about any of these topics) caused liberals as well as conservatives to increase their levels of support for President Bush and his agenda (e.g., Cohen, Ogilvie, Solomon, Greenberg, & Pyszczynski, 2005; Landau et al., 2004).

In an experiment carried out by Jost, Fitzsimons, and Kay (2004), research participants completed a "current affairs survey" regarding seven political issues tapping liberal versus conservative opinions on issues such as taxation, same-sex marriage, and stem cell research. Before answering these questions about their political attitudes, half of the participants were primed with images evoking death (such as a Dead End street sign, a chalk outline of a human body, and an image of a funeral hearse) with the use of a task in which participants were asked to match words and corresponding pictures as quickly as they could. The other half were primed with images evoking pain (e.g., a bee sting removal, a dentist's chair, and a bandaged arm), which is a control condition often used in research on terror management theory.

Jost, Fitzsimons, and Kay (2004) found that regardless of party affiliation, people who were primed with death imagery endorsed more conservative opinions overall than did people who were primed with control images depicting pain. This finding was particularly important because it was the first to demonstrate that mortality threats increase support for conservative opinions as well as leaders, thereby ruling out the possibility that such effects are due solely to an increased preference for "charismatic leadership," which is one explanation that terror management theorists have suggested (e.g., Cohen et al., 2005). Thorisdottir and Jost (2009), too, conducted a series of experiments demonstrating how and why threat increases participants' affinity for politically conservative ideology (see also Nail et al., in press).

Closed-Mindedness Mediates the Effect of Threat on Political Conservatism

One of these experiments in particular sheds light on the psychological process of "cognitive narrowing" that appears to underlie the effect of heightened existential motivation on political attitudes. Thorisdottir and Jost (2009) manipulated a subjective sense of

high versus low threat by asking people to indicate their level of agreement with questions about terrorism, such as "I worry that terrorists might strike anytime anywhere in the United States" on a 9-point scale with endpoint labels ranging either from *somewhat* to *a great extent* (in the high threat condition) or from *not at all* to *somewhat* (in the low threat condition). That was the only manipulation—the scale *labels*; the items themselves were the same. Afterward, participants completed items from the "closed-mindedness" subscale of Webster and Kruglanski's (1994) need for cognitive closure scale and then placed themselves on an 11-point scale of political orientation.

Sample items from the closed-mindedness subscale include: "I dislike questions which could be answered in many different ways," "I do not usually consult many different options before forming my own view," and "I feel irritated when one person disagrees with what everyone else in a group believes." It may be worth pointing out that Webster and Kruglanski (1994) developed and labeled these items and subscales years ago, after consulting various measures of dogmatism and intolerance of ambiguity, in an entirely apolitical context. That is, the items were not generated or labeled to make conservatives "look bad," as some critics have insinuated (e.g., Haidt & Graham, 2007; Shermer, 2008), and it is important to remember that respondents in all of these studies are always free to answer the questions however they would like (see also Chatard, Selimbegović, & Konan, 2008, and Kemmelmeier, 2008, on the relationship between political orientation and cognitive abilities and intellectual performance). Indeed, many conservatives take pride in being confident, decisive, and unyielding to persuasive attempts.

Results from the Thorisdottir and Jost (2009) experiment indicated that participants did indeed score higher on closed-mindedness when they completed the terrorism questionnaire with high threat (vs. low threat) labels. Being randomly assigned to the high threat (scale-labeling) condition also led participants to rate themselves as more conservative (or less liberal) on the ideological self-placement item. Furthermore, closed-mindedness statistically mediated the effect of threat on conservatism, suggesting that cognitive narrowing in response to threat explains (at least in part) the increased affinity for conservative rhetoric and ideology. This work provides the most direct evidence to date that short-term as well as long-term needs to reduce uncertainty and threat play a significant role in determining ideological outcomes, even temporary ideological outcomes.

Relational Motives Underlying Political Orientation

To this point I have emphasized the role of epistemic and existential motives underlying political orientation, but there is good reason to think that relational motives play an important role as well (Hardin & Conley, 2001; Jost et al., 2009). To begin with, there is a vast research literature on political socialization, which indicates that ideological beliefs are frequently transmitted from parents to offspring, especially if bonds within the family are close and if both parents are politically engaged and share similar beliefs (see Sears & Levy, 2003, for a review). It is also clear that peer and reference groups influence one's political orientation, as Newcomb (1943) demonstrated more than 60 years ago at Bennington College. Relational influences on ideology are strongest in late adolescence and early adulthood, and their effects tend to persist as long as one's social context does not change dramatically (Alwin, Cohen, & Newcomb, 1991).

Jost, Ledgerwood, and Hardin (2008) demonstrated that it is also possible to examine the ideological effects of situational variability in relational goals or motives in the laboratory. Specifically, we preselected participants who reported having one liberal parent and one conservative parent. Months after the pretesting session—in a completely different context, and without making any reference to the earlier session or to their parents' political attitudes—these participants were randomly assigned to write a short essay about either a positive or a negative interaction with either their mother or father. Afterward, participants completed two types of "system justification" scales to measure their degree of ideological allegiance to the status quo.

Results indicated that the valence of participants' imagined interactions did not make a difference, but it did matter whether they wrote about the liberal parent or the conservative parent. Participants scored significantly higher on both general and economic system justification—that is, they showed more support for the societal status quo—after thinking about either a positive or a negative encounter with their conservative parent, in comparison with their liberal parent (see Jost, Ledgerwood, & Hardin, 2008, for details). This pattern of results suggests that—in addition to serving epistemic and existential needs—ideologies can serve relational needs to attain shared reality with significant others. Indeed, this need for shared reality may explain why many people find it so painful and confusing when a major ideological dispute breaks out between them and their closest friends or family members (see also Hardin & Conley, 2001).

Concluding Remarks

With respect to the "elective affinities" framework proposed by Jost et al. (2009), I have suggested that the study of ideology will benefit from a deeper appreciation of its "bottom-up" motivational substructure. This term is meant to capture epistemic, existential, and relational motives that affect the likelihood that

certain individuals and groups will be attracted to specific ideological messages that constitute the "top-down" discursive superstructure communicated by political elites (e.g., Zaller, 1992). Presumably, top-down and bottom-up processes meet somewhere in the middle, suggesting an interaction between the style and contents of ideological messages and the psychological predispositions and other characteristics of message recipients (see McGuire, 1985). This has yet to be demonstrated empirically, but it seems highly promising as a topic for future research.

With respect to contemporary political debate and the resurgence of Left–Right ideological conflict—I find the conclusion nearly inescapable that things have changed surprisingly little in 200 years. In fact, it could be argued that all of the major themes of today's "culture wars"—including conflicts over scientific versus religious forms of decision making, traditional versus "nontraditional" family values and arrangements, and whether equality of social and economic outcomes (as well as opportunities) should be considered a societal ideal—can be traced back to fundamental rifts that opened up around the time of the French Revolution. It would seem impossible to understand the historical longevity of core ideological differences between the left and right without turning to psychology. Thus, following Tomkins (1963), my colleagues and I have argued that right and left may be grounded in basic antinomies of human nature (see also Jost, 2006; Jost, Nosek, & Gosling, 2008).

That is, human beings desire—from time to time and to varying extents—both stability and change, order and complexity, familiarity and novelty, and conformity and creativity; these fundamental human polarities manifest themselves in the political world as right and left. No doubt a similar impression led John Stuart Mill (1859/2001) to declare that "a party of order or stability, and a party of progress or reform, are both necessary elements of a healthy state of political life" (p. 45). In the United States in early 2009, many of the distant relatives of Mill (and Marx) may take some solace in the feeling (whether justified or not) that the health of our democracy may be returning slowly after a decidedly one-sided era in which the balance was nearly lost.

Note

This article is based on a lecture delivered at Princeton University on October 14, 2008, in the "Dilemmas of Inequality" lecture series associated with the Joint Degree Program in Social Policy. There I benefited from extremely helpful discussions with John Darley, Susan Fiske, Katherine Newman, and Stacey Sinclair, among many others. An earlier version was presented at the International Congress of Psychology meeting in Berlin in July 2008, where I received feedback and inspiration from Gian Vittorio Caprara,

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