Political Ideology: Its Structure, Functions, and Elective Affinities

John T. Jost,1 Christopher M. Federico,2 and Jaime L. Napier1

1Department of Psychology, New York University, New York, New York 10003; 2Departments of Psychology and Political Science, University of Minnesota, Minneapolis, Minnesota 55455; email: john.jost@nyu.edu, federico@umn.edu, jnapier@nyu.edu

Key Words
political orientation, motivated social cognition, system justification, authoritarianism

Abstract
Ideology has re-emerged as an important topic of inquiry among social, personality, and political psychologists. In this review, we examine recent theory and research concerning the structure, contents, and functions of ideological belief systems. We begin by defining the construct and placing it in historical and philosophical context. We then examine different perspectives on how many (and what types of) dimensions individuals use to organize their political opinions. We investigate (a) how and to what extent individuals acquire the discursive contents associated with various ideologies, and (b) the social-psychological functions that these ideologies serve for those who adopt them. Our review highlights “elective affinities” between situational and dispositional needs of individuals and groups and the structure and contents of specific ideologies. Finally, we consider the consequences of ideology, especially with respect to attitudes, evaluations, and processes of system justification.
Contents
INTRODUCTION .................. 308
WHAT IS AN IDEOLOGY? .......... 308
    Basic Definitions ............... 309
    Overcoming the Historical Tension Between Critical and Value-Neutral Approaches .... 309
THE DIMENSIONAL STRUCTURE OF POLITICAL ATTITUDES .......... 310
    The Traditional Notion of a Single Left-Right Dimension ........ 310
    Multidimensional Models of Ideology ......................... 312
    Reconciling Unidimensional and Multidimensional Approaches ... 313
CONTENTS OF IDEOLOGIES AND THEIR SOCIAL PSYCHOLOGICAL FUNCTIONS ............ 315
    From the Top Down: Elite Construction and Dissemination of the Discursive Superstructure ........ 315
    From the Bottom Up: Psychological Origins of the Motivational Substructure ........ 317
SOCIAL AND POLITICAL CONSEQUENCES OF IDEOLOGY .................. 323
    Effects on the Evaluations of Issues, Parties, Candidates, and Other Attitude Objects ...... 324
    Effects on Implicit and Explicit Intergroup Attitudes ........... 325
    Ideology as a System-Justifying Device ....................... 326
CONCLUDING REMARKS ............. 327

INTRODUCTION
Goethe’s (1809/1966) Enlightenment-era novel, Elective Affinities, invites the reader to consider parallels between the law-governed manner in which chemical elements combine and separate and the forces of attraction and repulsion in human social relationships. In an early passage foreshadowing clandestine affairs, one of the major characters, who has been boning up on chemistry textbooks, explains his fascination with the chemical reaction (pp. 39–44): “[I]t really looks as though one relation had been deliberately chosen in preference to another,” so much so that “we believe these elements capable of exercising some sort of willpower and selection, and feel perfectly justified using the term ‘elective affinities’!” Sociologist Max Weber later picked Goethe’s 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 Lewins 1989).

We think that the metaphor of elective affinities remains a promising one for conceiving of the forces of mutual attraction that exist between the structure and contents of belief systems and the underlying needs and motives of individuals and groups who subscribe to them. These forces of attraction—or, in the language of Tomkins (1963), “ideoaffective resonances”—are the focus of our review. In rendering a social psychological analysis of this subject matter, we identify a set of relational motives, epistemic motives, and existential motives that help to explain why certain people—once they are exposed to certain political ideas—stick with those ideas (and the ideas stick with them). In doing so, we assume that ideological outcomes result from a combination of top-down socialization processes and bottom-up psychological predispositions.

WHAT IS AN IDEOLOGY?
Ideology has been dubbed “the most elusive concept in the whole of social science”
Basic Definitions

We are inclined to begin instead with a simple, general, and hopefully uncontroversial textbook definition of political ideology, such as that offered by Erikson & Tedin (2003), namely a “set of beliefs about the proper order of society and how it can be achieved” (p. 64; see also Adorno et al. 1950, Campbell et al. 1960/1965, Kerlinger 1984). Denzau & North (1994/2000) suggest something similar, except that they also highlight the role of social groups or collectivities (see also Parsons 1951): “ideologies are the shared framework of mental models that groups of individuals possess that provide both an interpretation of the environment and a prescription as to how that environment should be structured” (p. 24). If one accepts that ideology is shared, that it helps to interpret the social world, and that it normatively specifies (or requires) good and proper ways of addressing life’s problems, then it is easy to see how ideology reflects and reinforces what psychologists might refer to as relational, epistemic, and existential needs or motives (Jost et al. 2008a). These are the major sources of elective affinities that we focus on in this review.

Specific ideologies crystallize and communicate the widely (but not unanimously) shared beliefs, opinions, and values of an identifiable group, class, constituency, or society (Freedon 2001, Knight 2006). Ideologies also endeavor to describe or interpret the world as it is—by making assertions or assumptions about human nature, historical events, present realities, and future possibilities—and to envision the world as it should be, specifying acceptable means of attaining social, economic, and political ideals. To the extent that different ideologies represent socially shared but competing philosophies of life and how it should be lived (and how society should be governed), it stands to reason that different ideologies should both elicit and express at least somewhat different social, cognitive, and motivational styles or tendencies on the part of their adherents (see also Jost 2006).

Overcoming the Historical Tension Between Critical and Value-Neutral Approaches

Philosophers and social scientists have long disagreed about whether to embrace a critical, even judgmental tone in describing and analyzing ideologies or, alternatively, to adopt a more value-neutral posture (Jost et al. 2008b, Knight 2006). The former, more critical tradition descends from the writings of Marx & Engels (1846/1970), who regarded ideology (in contrast to science) as a potentially dangerous form of illusion and mystification that typically serves to conceal and maintain exploitative social relations. Along these lines, Mannheim (1936) depicted certain ideologies as “more or less conscious disguises of the real nature of a situation” (p. 55). Habermas (1989), too, treated ideology as a form of “systematically distorted communication,” and this characterization remains common in certain circles of social theorists. The pejorative cast of ideology survives to some extent in social psychological theories of social dominance and system justification (Jost et al. 2004a, Sidanius & Pratto 1999).

However, most empirical research in sociology, psychology, and political science reflects an ostensibly value-neutral conception, according to which “ideology” refers indiscriminately to any belief system, that is, to any “configuration of ideas and attitudes in which the elements are bound together by some form of constraint or functional interdependence” (Converse 1964, p. 206). In this tradition of scholarship, ideology is treated as a “relatively benign organizing device” (Knight 2006, p. 622), and its

Elective affinity: force of mutual attraction involving the structure and contents of belief systems and the motives of their adherents

Relational motives: the desire to affiliate and establish interpersonal relationships; a need for personal or social identification, solidarity with others, and shared reality

Epistemic motives: the drive to reduce uncertainty, complexity, or ambiguity; cognitive preference for certainty, structure, order, and/or closure

Existential motives: the drive to manage threatening circumstances; a personal search for security, self-esteem, and meaning in life

System justification: motivation to defend, bolster, and justify the status quo; tendency to view current social arrangements as fair, legitimate, and desirable
cognitive function of structuring political knowledge and expertise is emphasized. Researchers tend to conclude that members of the public are ideological only to the extent that they hold attitudes that are stable, logical, coherent, consistent, and relatively sophisticated or knowledgeable (e.g., Converse 2000; Feldman 1988, 2003; Kinder 1998; but see Gerring 1997 and Jost 2006, p. 657, for accounts that put more conceptual space between constructs of ideology and sophistication).

Insights that emerge from critical and value-neutral inquiries have frequently been juxtaposed and assumed to be incompatible with one another, and scholars from the two traditions seem rarely (if ever) to communicate with one another. However, we propose that these two approaches are not mutually exclusive insofar as the same belief systems can simultaneously serve multiple (i.e., epistemic, existential, and relational) functions. That is, we propose that a given ideology can reflect both genuine (and even highly accurate) attempts to understand, interpret, and organize information about the political world as well as conscious or unconscious tendencies to rationalize the way things are or, alternatively, the desire for them to be different (e.g., Jost et al. 2003b,c). In this review, we summarize theory and research bearing on a host of social psychological variables, some of which would be expected to increase (or decrease) ideological coherence, stability, and sophistication, whereas others would be expected to increase (or decrease) ideological distortion, rationalization, and obfuscation.

**THE DIMENSIONAL STRUCTURE OF POLITICAL ATTITUDES**

One of the perennial questions asked by social and political psychologists concerns the structure of ideology, that is, the manner and extent to which political attitudes are cognitively organized according to one or more dimensions of preference or judgment (e.g., Converse 2006, Duckitt 2001, Eagly & Chaiken 1998, Eysenck 1954/1999, Feldman 2003, Kerlinger 1984). Most researchers assume that ideology is represented in memory as a kind of schema—i.e., a learned knowledge structure consisting of an interrelated network of beliefs, opinions, and values (Fiske et al. 1990, Hamill et al. 1985, Judd & Krosnick 1989, Lau & Redlawsk 2001; see also Erikson & Tedin 2003, Kinder 1998). However, disagreement persists concerning the number of dimensions that are employed (or required) to organize the contents of the ideological schema of the ordinary citizen. In this section of the review, we summarize the highlights of this debate.

**The Traditional Notion of a Single Left-Right Dimension**

Since the time of the French Revolution, ideological opinions have been classified most often in terms of a single left-right dimension. This usage derives from the fact that late-eighteenth-century supporters of the status quo sat on the right side of the French Assembly hall and its opponents sat on the left. In the United States and elsewhere, it is becoming increasingly common to substitute “liberal” and “conservative” for “left” and “right,” respectively, and this equation expresses well the long-lasting ideological divide concerning preferences for change versus stability, which goes back at least as far as 1789. Much of the ideological conflict over change versus the status quo, therefore, pertains to age-old disputes concerning the proper role of hierarchy, authority, and inequality (Bobbio 1996, Burke 1790/1987).

This formulation of the left-right distinction and many others contain two interrelated aspects, namely (a) advocating versus resisting social change (as opposed to tradition), and (b) rejecting versus accepting inequality (Jost et al. 2003b,c). This bipartite definition should be relatively noncontroversial (but see Greenberg & Jonas 2003), and it accords with numerous characterizations of the left and right offered by political scientists (e.g., Erikson & Tedin 2003, p. 65; Lipset & Raab 1978, p. 19; McClosky & Zaller 1984, p. 189; Rathbun 2007, pp. 382–383). Left-wing and right-wing respondents alike in the United
States, Germany, and the Netherlands associated the right with such terms as “conservative,” “system maintenance,” “order,” “individualism,” “capitalism,” “nationalism,” and “fascism,” and they associated the left with “progressive,” “system change,” “equality,” “solidarity,” “protest,” “opposition,” “radical,” “socialism,” and “communism” (Fuchs & Klingemann 1990, pp. 213–214). The two core aspects of the left-right dimension (attitudes concerning change versus stability and equality versus inequality) are correlated for historical reasons owing to the fact that over the past several centuries, Western societies have become more egalitarian in terms of human rights and liberties, economic distribution, and the dispersion of political power. In some cases, social and economic equality increased gradually, and in other cases it occurred because of revolutionary events, which were often resisted or opposed by conservatives and those identified with the right (e.g., Burke 1790/1987, Hirschman 1991, Lipset & Raab 1978; see also Nosek et al. 2009).

Scholars typically agree on the historical and philosophical significance of the left-right distinction, and it is clear that “political elites” in government, party and activist organizations, the media, and academia make relatively easy and frequent use of this dimension in political discourse and decision-making (e.g., Jennings 1992, McCarty et al. 2006, McClosky & Zaller 1984, Poole & Rosenthal 1997). Nevertheless, the work of Converse (1964) generated considerable skepticism about whether ordinary citizens actually use the specific ideological contents associated with left and right to organize their political attitudes (e.g., Bishop 2005; Converse 2000; Feldman 1988, 2003; Fiorina 2005; Kinder 1998). A related concern is whether a single survey item that asks participants to place themselves on a left-right continuum is theoretically and methodologically useful (Knight 1999). To address these perennially tricky questions, Jost (2006) revisited the strong claim that ordinary citizens are truly “innocent of ideology” and found, among other things, that ideological self-placement was an extremely strong predictor of voting intentions in the American National Election Studies between 1972 and 2004. This comport with other evidence that ideology affects even modestly informed citizens’ political attitudes (Abramowitz & Saunders 2008, Barker & Tinnick 2006, Erikson & Tedin 2003, Feldman 2003, Jacoby 1991, Knutsen 1995, Layman & Carsey 2002). Although it is clear that people are far from perfect in their use of abstract ideological concepts, most citizens can and do use a subset of core values or principles that, for all intents and purposes, may be considered ideological in the sense of being broad postures that explain and justify different states of social and political affairs (e.g., Feldman 1988; Feldman & Steenbergen 2001; Goren 2004; Jost et al. 2003b,c; Lavine et al. 1997; McCann 2008; Peffley & Hurwitz 1985; Rathbun 2007).

Jost et al. (2003b,c) proposed that these two core aspects of the left-right ideological dimension are rooted in a set of interrelated epistemic, existential, and relational needs or motives. That is, the dimensional structure and attitudinal contents of liberalism and conservatism were theorized to stem, at least in part, from basic social psychological orientations concerning uncertainty and threat (see also Jost 2006, Jost et al. 2007). This argument is derived from the work of Adorno et al. (1950), Allport (1954), Rokeach (1960), Tomkins (1963), Wilson (1973), and others. Consistent with an integrated theoretical framework, a meta-analytic review of 88 studies (Jost et al. 2003b,c) conducted in 12 countries between 1958 and 2002 confirmed that both situational and dispositional variables associated with the management of threat and uncertainty were empirically related to political orientation. Specifically, death anxiety, system instability, fear of threat and loss, dogmatism, intolerance of ambiguity, and personal needs for order, structure, and closure were all positively associated with conservatism. Conversely, openness to new experiences, cognitive complexity, tolerance of uncertainty, and (to a small extent) self-esteem were all positively associated with liberalism. Subsequent research has shown that—at both implicit and explicit levels of
SYMBOLIC AND OPERATIONAL ASPECTS OF POLITICAL IDEOLOGY

Since the time of the pioneering work of Free & Cantril (1967), scholars of public opinion have distinguished between symbolic and operational aspects of political ideology (Page & Shapiro 1992, Stimson 2004). According to this terminology, “symbolic” refers to general, abstract ideological labels, images, and categories, including acts of self-identification with the left or right. “Operational” ideology, by contrast, refers to more specific, concrete, issue-based opinions that may also be classified by observers as either left or right. Although this distinction may seem purely academic, evidence suggests that symbolic and operational forms of ideology do not coincide for many citizens of mass democracies. For example, Free & Cantril (1967) observed that many Americans were simultaneously “philosophical conservatives” and “operational liberals,” opposing “big government” in the abstract but supporting the individual programs comprising the New Deal welfare and regulatory state. More recent studies have obtained impressively similar results; Stimson (2004) found that more than two-thirds of American respondents who identify as symbolic conservatives are operational liberals with respect to the issues (see also Page & Shapiro 1992, Zaller 1992). However, rather than demonstrating that ideological belief systems are multidimensional in the sense of being irreducible to a single left-right continuum, these results indicate that, in the United States at least, leftist/liberal ideas are more popular when they are manifested in specific, concrete policy solutions than when they are offered as ideological abstractions. The notion that most people like to think of themselves as conservative despite the fact that they hold a number of liberal opinions on specific issues is broadly consistent with system-justification theory, which suggests that most people are motivated to look favorably upon the status quo in general and to reject major challenges to it (Jost et al. 2004a).

Multidimensional Models of Ideology

The left-right model of ideological structure has parsimony on its side and has fared surprisingly well in terms of theoretical utility and empirical validity (Benoit & Laver 2006, Bobbio 1996, Campbell et al. 1960/1965, Carney et al. 2008, Fuchs & Klingemann 1990, Jacoby 1991, Jost 2006, Knight 1999, Knutsen 1995, Tomkins 1963). Nevertheless, a number of authors have argued that more than one dimension is needed to illuminate the structure of most citizens’ political attitudes (e.g., Conover & Feldman 1981, Kerlinger 1984, Kinder 1998, Peffley & Hurwitz 1985; see also sidebar Symbolic and Operational Aspects of Political Ideology). We review some of the most influential multidimensional models here.

Are liberalism and conservatism orthogonal dimensions? A prominent challenge to the unidimensional approach comes from those who argue that left and right represent two independent, unipolar dimensions rather than opposite ends of a single bipolar dimension (e.g., Conover & Feldman 1981, Kerlinger 1984). Exploratory and confirmatory factor analyses suggest that evaluations of “liberal” and “conservative” attitude objects often load onto different latent variables and that these variables are at least somewhat independent of one another. However, it should be noted that measures of liberalism and conservatism are seldom if ever truly uncorrelated. For instance, after many years of attempting to develop scales that would measure liberalism and conservatism as orthogonal dimensions, Kerlinger (1984, pp. 224–226) found that respondents’ scores on his liberalism scale (which combined a motley set of items concerning civil rights, racial equality, socialized medicine, labor...
unions, equality of women, birth control, love, and human warmth) remained stubbornly correlated at –0.20 with scores on his conservatism scale (which combined sundry items pertaining to religion, church, business, profits, authority, law and order, moral standards, and manners). Even more decisively, subsequent factor-analytic studies revealed that latent variables corresponding to evaluations of liberals and conservatives do indeed exhibit a strong negative relationship after accounting for non-random measurement error attributable to response format (Federico 2007, Green 1988, Sidanius & Duffy 1988).

Social and economic dimensions of political ideology. A number of studies suggest that attitudes concerning social or cultural issues are factorially distinct from attitudes concerning economic issues (Duckitt et al. 2002, Evans et al. 1996, Layman & Carsey 2002, Lipset 1960, Saucier 2000, Shafer & Claggett 1995, Stenner 2005). Some researchers have gone further and suggested that these “social” and “economic” dimensions are basically orthogonal. For instance, it is possible for people to be socially liberal and economically conservative (i.e., “libertarian”) or to be socially conservative and economically liberal (i.e., “populist”), although neither of these groups are large (e.g., Zaller 1992, p. 27). Recent work by Napier & Jost (2008b) on “working class authoritarianism” suggests that people who are low in socioeconomic status are more likely to be drawn to right-wing ideology because of largely social or cultural issues, whereas people who are high in socioeconomic status are more likely to be drawn to right-wing ideology because of economic reasons (see also Lipset 1960). Nonetheless, both social and economic forms of conservatism were positively associated with right-wing orientation in the 19 countries investigated. Benoit & Laver (2006, pp. 134–135), too, found that social and economic dimensions of ideology were positively intercorrelated in 41 of the 44 nations they examined. Thus, although the social and economic dimensions of political ideology may be distinct in conceptual and factor-analytic terms, it is rare for them to be completely orthogonal.

Drawing in part on the distinction between social and economic dimensions of ideology, Duckitt et al. (2002) articulated a dual-process model of ideology that posits two different motivational foundations. Specifically, they argued that an individual’s social dominance orientation (SDO; Sidanius & Pratto 1999) is connected to a view of the world as a ruthless competitive jungle in which power struggles are endemic, whereas an individual’s degree of right-wing authoritarianism (RWA; Altemeyer 1998) reflects a view of the world as dangerous and threatening and therefore necessitating a sense of security and social order in society (see also Schwartz & Boehnke 2004). Consistent with Duckitt’s formulation, research indicates that SDO scores tend to predict economic conservatism better than social conservatism, whereas RWA scores tend to predict social conservatism better than economic conservatism (Duckitt 2006, Duriez et al. 2005, Sibley et al. 2007). Nevertheless, it is important to bear in mind that SDO and RWA scores are positively correlated, even if they are not so highly intercorrelated as to be redundant variables (Altemeyer 1998, Jost et al. 2003b, Sidanius & Pratto 1999, Weber & Federico 2007, Whitley 1999).

Reconciling Unidimensional and Multidimensional Approaches

At this point in our review, we would do well to ask why evaluations of liberalism and conservatism are in fact negatively intercorrelated and why social and economic forms of political ideology are positively intercorrelated (see also sidebar Is “Tough-Mindedness” Orthogonal to Political Orientation?). The answers, clearly, pertain to the structure of left-right ideology, that is, its role in organizing a wide range of individual attitudes and opinions (Converse 1964, 2000, 2006; Federico & Schneider 2007). But where does ideological structure come from (when it comes)? The disciplines differ, at least in terms of emphasis, in how they approach this
IS “TOUGH-MINDEDNESS” ORTHOGONAL TO POLITICAL ORIENTATION?

Based on historical observations that left-wing and right-wing extremists have at times adopted equivalently intolerant methods and orientations in attempting to realize their political goals, some scholars have proposed that in addition to the left-right dimension of ideological content there exists a second, content-free dimension of psychological style (e.g., Greenberg & Jonas 2003, Shils 1954). For example, Eysenck (1954/1999) argued for a tough-mindedness versus tender-mindedness dimension that was allegedly independent of the left-right dimension. Rokeach (1960, 1973) similarly suggested that dogmatism, which he linked to the devaluation of freedom, was in principle distinguishable from the left-right dimension, which was yoked to the value of equality. However, both of these efforts failed to produce convincing evidence that the two proposed dimensions were orthogonal. That is, scales of tough-mindedness and dogmatism may be distinguishable from left-right measures in factor analyses, but scores on the psychological variables are nonetheless correlated with political attitudes, so that those on the right are indeed more tough-minded and dogmatic than those on the left, at least in Western nations (Jost et al. 2003b,c; Stone & Smith 1993). For example, Jost (2006, p. 664) reported a correlation of 0.27 between political liberalism and scores on the tender-mindedness facet of the agreeableness subscale of the Big Five personality instrument. Similarly, a meta-analysis by Jost et al. (2003b,c) revealed that the correlation between liberalism-conservatism and measures of dogmatism and intolerance of ambiguity was substantial (weighted mean $r = 0.34$).

**Top-down processes:** acquisition of political attitudes through exposure to ideological bundles that are socially constructed by political elites

**Bottom-up processes:** underlying psychological needs and motives that influence an individual’s receptiveness to specific ideological positions

Political scientists generally focus on top-down processes such as political leadership and party politics (Fiorina 2005, Poole & Rosenthal 1997, Sniderman & Bullock 2004, Zaller 1992), that is, the ways in which attitudes are “organized into coherent structures by political elites for consumption by the public” (Feldman 1988, p. 417). Psychologists, by contrast, are more likely to consider bottom-up cognitive and motivational processes that lead citizens to develop ideological belief systems that possess at least some degree of dimensional structure (Adorno et al. 1950, Jost 2006, Judd & Krosnick 1989, Lavine et al. 1997, Tomkins 1963). We propose that by integrating complementary insights concerning these top-down and bottom-up processes, it may be possible to reconcile seemingly contradictory positions and findings concerning the dimensionality of political ideology.

Given the assumed interaction between top-down and bottom-up processes, it seems reasonable to suggest that specific elements (or dimensions) of political ideology are more likely to be collapsed into a single left-right dimension for those who are most highly engaged in political activity, that is, those who are high in both ability and motivation. This is consistent with formal theories of electoral competition and decision-making, which imply that an unconstrained issue space—one in which positions on different issues and value priorities are not organized or bundled together—imposes excessive informational demands on voters (Federico 2007, Hinich & Munger 1994, Lau & Redlawsk 2001). That is, relying on left-right ideological cues should make it easier for those political actors who are sufficiently motivated and cognitively sophisticated to deduce candidates’ positions on various issues, to simplify the process of matching their own preferences up with optimal candidates (by reducing the number of dimensions on which matching must occur), and to increase confidence about how candidates will behave once elected (e.g., see Lavine & Gschwend 2006).

Consistent with this argument, research shows that symbolic and operational forms of ideology are more likely to be congruent for those who are highly informed about and/or engaged in politics (Bennett 2006, Converse 1964, McClosky & Zaller 1984, Sniderman et al. 1991, Zaller 1992). Similarly, evaluations of liberal and conservative attitude objects are more likely to reflect unidimensionality for those who are high in education and political expertise (Sidanius & Duffy 1988) and the motivation to evaluate political objects (Federico & Schneider 2007). Furthermore, attitudes on both social and economic issues are more stable, intercorrelated, and dimensionally structured for elected officials in comparison with ordinary citizens (Jennings 1992, Poole & Rosenthal...
There is also evidence that heightened political competition increases the pressure to structure political attitudes according to a single left-right dimension. For example, cross-national comparisons reveal that the basic motivational dimensions linked by Duckitt and colleagues (2002) to SDO and RWA are more strongly correlated in countries with established systems of political competition between left-wing and right-wing parties (Duriez et al. 2005). Similarly, periods of elevated partisan conflict seem to produce more tightly constrained issue agendas (Bennett 2006, Fiorina 2005, Hetherington 2001, McCarty et al. 2006), and over time, cross-cutting ideological agendas are assimilated to the single left-right dimension (Layman & Carsey 2002, Stimson 2004). Thus, while it may be possible to distinguish multiple ideological dimensions, there are social, cognitive, and motivational needs to effectively coordinate party activities, reduce informational demands on citizens, and tap into basic differences in value orientations; all of these factors would be expected to pull for a simpler, more parsimonious dimensional structure, especially for those who are both knowledgeable about and engaged in political matters. In other words, by incorporating both top-down and bottom-up processes, it is possible to understand why ideological attitudes are at least sometimes structured according to a left-right dimension as well as when (and why) they are not.

CONTENTS OF IDEOLOGIES AND THEIR SOCIAL PSYCHOLOGICAL FUNCTIONS

Treating ideology as an interrelated set of attitudes, values, and beliefs with cognitive, affective, and motivational properties implies that ideologies can (and should) be analyzed both in terms of their contents and their functions (Abelson 1988; Adorno et al. 1950; Ball & Dagger 1991; Campbell et al. 1960/1965; Jost 2006; Jost et al. 2003b,c; Lewins 1989). That is, ideology can be thought of as having both a discursive (socially constructed) superstructure and a functional (or motivational) substructure. The discursive superstructure refers to the network of socially constructed attitudes, values, and beliefs bound up with a particular ideological position at a particular time and place (Jost et al. 2003c). Defined in this way, the discursive superstructure can be thought of as a "social representation" (Moscovici 1988) that guides political judgment in a top-down schematic fashion and is typically transmitted from political elites to the public at large (Zaller 1992). The functional substructure refers to the ensemble of social and psychological needs, goals, and motives that drive the political interests of ordinary citizens in a bottom-up fashion and are served by the discursive contents of ideology (Jost 2006, Jost et al. 2003b). We propose that the nature of the relationship between top-down and bottom-up processes is characterized by elective affinities: "Ideas, selected and reinterpreted from the original doctrine, do gain an affinity with the interests of certain members of special strata; if they do not gain such an affinity, they are abandoned" (Gerth & Mills 1948/1970, p. 63).

From the Top Down: Elite Construction and Dissemination of the Discursive Superstructure

Just as political elites such as elected officials, party leaders, and media representatives can help to impose structure by simplifying the political environment, they can also strongly influence the specific contents of a political ideology, that is, its discursive superstructure (e.g., Converse 2000, Layman & Carsey 2002, McClusky & Zaller 1984, Sniderman et al. 1991). Prominent examples include the leadership role of Lyndon Johnson and his successors in urging supporters of the Democratic party to embrace liberal civil rights legislation to assist racial and ethnic minorities (e.g., Sears et al. 2000) as well as the relatively strong influences.
that politicians, journalists, and other intellectuals have over the public’s degree of acceptance of their nation’s involvement in war (Berinsky 2007, Zaller 1992). In these cases and others, Zaller (1992) concludes that “exposure to elite discourse appears to promote support for the ideas carried in it” (p. 11).

**The communication process.** The socially shared content of a discursive superstructure, that is, its specific bundling of attitudes, values, and beliefs, presumably results from both communicative and strategic forms of interaction between partisan elites and their followers (Graber 2004, Habermas 1989, Hinich & Munger 1994, Zaller 1992). This is the sense in which, as Sniderman & Bullock (2004) put it, “political institutions do the heavy lifting” (p. 351). Most likely, this allows a relatively small and unrepresentative group of political operatives to wield a disproportionate amount of influence, as commentators both within and without the Marxist tradition have long noted (e.g., Eagleton 1991, Habermas 1989, Mannheim 1936, Weber 1922/1946, Zaller 1992, Zelditch 2001). The worry persists, in other words, that the “ideas of the ruling class are in every epoch the ruling ideas” (Marx & Engels 1846/1970). As we shall see below, a number of contemporary social psychological approaches have updated and expanded this focus on the system-justifying nature of ideological content, taking into account bottom-up as well as top-down processes (e.g., Converse 1964, 2000, 2006; Sniderman et al. 1991; Zaller 1992). However, in most contemporary societies, there are political elites on the left as well as the right, and they, too, are capable of shaping the discursive superstructure (e.g., Hinich & Munger 1994). That is, the ideological bundles or packages that are socially constructed by political elites can be seen as “anchoring” both ends of the left-right spectrum, thereby arraying the options on an ideological “menu” from which members of the mass public select their voting and other preferences (Sniderman & Bullock 2004).

More specifically, the content associated with different ideological positions is absorbed by members of the mass public who take cues from those elites who share their basic partisan or ideological orientations (Converse 1964, 2000, 2006; Sniderman et al. 1991; Sniderman & Bullock 2004; Zaller 1992). This raises the question of how successful elites are in spreading their ideological messages to the public at large.

**The moderating role of citizens’ cognitive abilities and motivation.** Following Campbell et al. (1960/1965) and Converse (1964), evidence suggests that some citizens are more able and/or willing than others to learn the contents of the discursive superstructure as defined by political elites (e.g., Bennett 2006, Delli Carpini & Keeter 1996, Federico & Schneider 2007, Federico & Sidanius 2002, Judd & Krosnick 1989, Sniderman et al. 1991, Zaller 1992). Decades of research suggest that the majority of the population exhibits a relatively low level of knowledge about the specific discursive contents of liberal and conservative ideologies, a relative inability and/or unwillingness to understand political conflict in strictly liberal-conservative terms, and a relatively low level of ideological consistency (or constraint) in their attitudes toward many different issues (e.g., Converse 2000, Dalton 2003, Stimson 2004). Even at the level of broad moral postures, value conflict seems to be more common than a high degree of consistency among potentially competing values (Feldman 2003, Jacoby 2006, Kuklinski et al. 2001, Tetlock 1986). These findings suggest that most citizens do not learn the contents of various ideologies in all their glorious detail, but the findings should not be taken as a sign that people in general are utterly devoid of ideological commitment or understanding (e.g., Billig 2003, Gamson 1992, Lane 1962). As Lane (1962) put it, “the common man has a set of emotionally charged political beliefs” that “embrace central values and institutions” and are “rationalizations of interests (sometimes not his own)” that “serve as moral justifications for daily acts and beliefs” (pp. 15–16). In this sense, most people possess “latent” if not “forensic”
ideologies (see also Jost 2006). More specifically, even those who are relatively uninterested or uninformed about politics do exhibit at least some understanding of the core aspects of liberal-conservative differences (Federico & Schneider 2007; Feldman 1988, 2003; Goren 2001; Knutsen 1995; Peffley & Hurwitz 1985). Evidence of ideological reasoning—or perhaps a better word is commitment—is substantially clearer concerning core attitudes pertaining to social change and egalitarianism as compared with more peripheral attitudes (Anderson & Singer 2008, Carmines & Layman 1997, Conover & Feldman 1981, Eagly et al. 2004, Goren 2004, Jost 2006, Jost et al. 2008b, McClosky & Zaller 1984, Rathbun 2007). Moreover, familiarity with the discursive superstructure is easier to detect in the general public once survey-based measurement error is taken into account (e.g., Achen 1975, Zaller 1992; but see Converse 2000, 2006).

The main factor governing the mass acquisition of ideological content seems to be attention to and comprehension of information flowing from political elites (Bennett 2006; Converse 2000, 2006; Kuklinski et al. 2001; Lau & Redlawsk 2001; Lupia et al. 2000). Highly engaged political experts—those possessing relatively well-developed political schemas that can be used to assimilate new information—are most likely to receive, process, and use such information (e.g., Erikson & Tedin 2003, Fiske et al. 1990, Hamill et al. 1985, Lavine et al. 1997, Luskin 1990, Zaller 1992). There is evidence that motivation matters in addition to cognitive abilities. Studies show that individuals with a high need to evaluate, that is, a chronic tendency to form opinions and judge things as either good or bad (Bizer et al. 2004), are also more likely to acquire and use discursive ideological content (Federico 2004, 2007; Federico & Schneider 2007). This last line of work suggests that researchers would do well to consider a wider range of motives that affect citizens’ receptiveness to ideological messages.

**From the Bottom Up: Psychological Origins of the Motivational Substructure**

Political scientists tend to acknowledge that dispositional characteristics of ordinary citizens should affect their ability and motivation to absorb ideological messages conveyed by political elites, but the focus, as discussed above, is generally on variables such as political involvement, sophistication, and expertise (e.g., Zaller 1992). Psychologists have proposed a wider variety of personality and individual difference variables that should affect not only one’s degree of exposure to mass media but also one’s ideological proclivities (see Jost et al. 2003b). Thus, Adorno et al. (1950) pointed out that an individual’s belief system “reflects his personality and is not merely an aggregate of opinions picked up helter-skelter from the ideological environment” (p. 176; see also McClosky 1958, Tomkins 1963, Wilson 1973). Although research on personality and political orientation fell out of favor for many years, there are clear indications that interest has revived in bottom-up psychological processes contributing to ideological outcomes (e.g., Barker & Tinnick 2006, Block & Block 2006, Caprara 2007, Carney et al. 2008, Jost et al. 2008b, Kemmelmeier 2007, Leone & Chirumbolo 2008, Ozer & Benet-Martinez 2006, Sidanius & Pratto 1999, Stenner 2005, Thornhill & Fincher 2007, Van Hiel & Mervielde 2004, Weber & Federico 2007). Ultimately, a psychological perspective is needed to address the pesky question raised by Sniderman & Bullock (2004, p. 353), namely “why are some disposed to a liberal or broadly left political outlook while others are disposed to a conservative or broadly right orientation?”

A growing body of evidence suggests 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. For instance, Alford and colleagues (2005) compared samples of identical and fraternal twins in the United States and Australia and estimated that as much as 40% to 50% of the statistical variability in ideological opinions (but not political partisanship) was attributable to genetic factors (see also Bouchard et al. 2003, Carmen 2007). Jost (2006) proposed that the heritability of a set of basic cognitive, motivational, and personality orientations could account for the heritability of political attitudes (see Olson et al. 2001 for evidence of this kind). Alford & Hibbing (2007) downplayed this possibility on the basis of a study that turned up relatively weak correlations between Big Five measures of personality and political attitudes (but see Carney et al. 2008).

A longitudinal study by Block & Block (2006) is noteworthy because it suggests that childhood personality characteristics 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, relatively undercontrolled and dominating, and more likely to develop close relationships were more liberal than their peers at age 23. By contrast, preschool children who were characterized as feeling easily victimized and offended, indecisive, fearful, rigid, inhibited, vulnerable, and relatively overcontrolled were more conservative at age 23. Although it is not possible to rule out certain confounding factors associated with the location of the study (Berkeley, California), these results should not be dismissed, in part because they are very consistent with the results of a meta-analytic review that summarized data from 12 countries over a 44-year period (Jost et al. 2003b,c). The findings from that review and from subsequent research suggest that at least three major classes of psychological variables comprise the motivational substructure of political ideology: epistemic, existential, and relational motives (see Figure 1).

**Epistemic motives: ideology offers certainty.** It has been suggested that ideology “serves as a guide and compass through the thicket of political life,” that is, it addresses a number of epistemic needs, such as explanation, evaluation, and orientation (Ball & Dagger 1991, pp. 1–2). We should not be surprised to learn, then, that psychological variables pertaining to the management of uncertainty predict both reliance on ideology in general and endorsement of specific policy positions, such as support for the Iraq War (e.g., Federico et al. 2005; Golec & Federico 2004; Jost et al. 2003b,c, 2007). For example, studies conducted in several countries demonstrate consistently that individuals who score higher on the Need for Cognitive Closure scale, which measures the motivation to “seize and freeze” on beliefs that offer simplicity, certainty, and clarity, are significantly more likely to hold conservative or right-wing attitudes (Jost et al. 2003b, pp. 358–359; see also Chirumbolo et al. 2004, Leone & Chirumbolo 2008, Van Hiel et al. 2004). Moreover, some evidence suggests that people who score high on the need to evaluate (i.e., to render a good/bad judgment) are more likely to gravitate toward conservative ideology (Bizer et al. 2004), whereas those who score high on the Need for Cognition scale, which measures enjoyment of thinking, are more likely to gravitate toward liberal ideology (Sargent 2004). These findings and others support the notion that an elective affinity exists between epistemic motives to reduce uncertainty and political conservatism (Jost et al. 2007).

Consistent with the idea that some people are more aware of the discursively constructed menu of political options than others and that such awareness allows people to select the ideology that is right for them, the relationship between epistemic motives (e.g., need for cognitive closure) and ideological self-placement is stronger among political experts and those who are more interested in politics (e.g., Federico & Goren 2009, Kemmelmeier 2007). The fact that ideologies exhibit, at least for some citizens, properties of cognitive schemata—such as hierarchical organization and spreading activation of construct
accessibility—provides yet another kind of evidence that they are serving epistemic functions associated with comprehension, explanation, and prediction (Fiske et al. 1990, Hamill et al. 1985).

Given that nearly everyone wants to achieve at least some degree of certainty, is it possible that conservatism possesses a natural psychological advantage over liberalism? Although answering this question is obviously fraught with challenges, several lines of research suggest that this might be the case. First, a series of experiments by Skitka et al. (2002) demonstrated that “the default attributional position is a conservative response,” insofar as both liberals and conservatives are quick to draw individualistic (rather than system-level) conclusions about the causes of poverty, unemployment, disease, and other negative outcomes, but only liberals correct their initial response, taking into account extenuating circumstances. When a distraction (or cognitive load) is introduced, making it difficult for liberals to engage in correction processes, they tend to blame individuals for their fate to the same degree that conservatives do. Skitka et al. (2002) therefore concluded, “It is much easier to get a liberal to behave like a conservative than it is to get a conservative to behave like a liberal” (p. 484; see also Kluegel & Smith 1986, Skitka 1999). Research by Crandall & Eidelman (2007) takes this general line of reasoning even further, showing that a host of everyday variables associated with increased cognitive load and/or increased need for cognitive closure, such as drinking alcohol, lead people
to become more politically conservative. Both of these lines of research are consistent with the notion that conservative styles and opinions are generally simpler, more internally consistent, and less subject to ambiguity, in comparison with liberal styles and opinions (e.g., Jost et al. 2003b,c; Rokeach 1960; Tetlock 1983, 2007). A third reason to suggest that conservatism enjoys a psychological advantage over liberalism comes from research on system justification, which suggests that most people (including liberals) are motivated to adapt to and even rationalize aspects of the status quo, that is, to develop and maintain relatively favorable opinions about existing institutions and authorities and to dismiss or reject the possibility of change, especially in its more radical forms (Jost et al. 2004a). Studies show that justifying the status quo serves the palliative function of increasing positive affect, decreasing negative affect, and making people happier in general, but it also undermines support for social change and the redistribution of resources (Jost & Hunyady 2002, Napier & Jost 2008a, Wakslak et al. 2007).

Nevertheless, some people are motivated by sensation-seeking, novelty, curiosity, and openness to new experiences, and they are significantly more likely than others to embrace politically liberal and leftist opinions and causes (for a review, see Jost et al. 2003b, pp. 356–357; see also Jost et al. 2007). Of the Big Five personality dimensions, openness is most strongly predictive of political orientation, with liberals scoring consistently higher than conservatives (Carney et al. 2008, Jost 2006, Stenner 2005). The only other Big Five dimension that consistently correlates with political orientation (in U.S. and other samples) seems to be conscientiousness. Conservatives generally score higher than others do on conscientiousness-related motives and themes, especially needs for order, structure, and discipline. These personality differences emerge even in nonpolitical contexts. For instance, the bedrooms and offices of conservatives contain more items relating to openness, such as travel books, music, and art supplies (Carney et al. 2008).

Work summarized by Caprara & Zimbardo (2004) focuses on the importance of perceived similarities between the personality characteristics of voters and would-be political leaders (see also McCaul et al. 1995). For instance, they find that Italian citizens are more likely to support politicians and parties whose images are consistent with citizens’ own self-images, so that center-right voters prefer candidates who are seen as conscientious and energetic, whereas center-left voters prefer candidates who are seen as open and friendly (Caprara & Zimbardo 2004, p. 586). Although more research is needed to investigate interactions between psychological and other characteristics of leaders and followers, insights derived from the “congruency model” suggest new ways of identifying the occurrence of elective affinities in the area of political psychology.

Existential motives: ideology offers security. According to terror management theory (TMT), ideologies—or “cultural worldviews,” in the argot of TMT—serve the existential function of allowing people to symbolically transcend the threat induced by the uniquely human awareness of one’s own mortality (Greenberg et al. 1997, Pyszczynski et al. 1999, Solomon et al. 2004). That is, political and other belief systems are seen as assisting people in the motivated belief that they are persons of value in a meaningful universe that transcends the finite self, thereby providing a sense of existential security. Consistent with this claim, a vast experimental literature demonstrates that making research participants aware of their own mortality leads them to hew more closely to established belief systems and identities. For example, mortality salience appears to produce greater patriotism and hostility toward critics of one’s nation, a stronger endorsement of the unique validity of one’s own religion, stronger support for traditional gender norms, greater attention to established norms of procedural fairness, increased levels of stereotyping,
and a generally stronger preference for aggressive responses to individuals and groups who are perceived as threatening to the cultural worldview (for a review, see Pyszczynski et al. 1999; see also Arndt et al. 2002, Schimel et al. 1999, van den Bos et al. 2005).

Jost et al. (2004b) proposed that an elective affinity exists between psychological needs to minimize threat—including threat arising from death anxiety—and conservative ideology. Accordingly, they found that priming liberals, moderates, and conservatives with thoughts of death produced an across-the-board increase in issue-based conservatism. Such a result is consistent with the meta-analysis of Jost et al. (2003b), which showed that fear of death, system threat, and perceptions of a dangerous world were all positively associated with the holding of conservative attitudes (see also Weber & Federico 2007; but see Greenberg & Jonas 2003 for a different position). Jost et al. (2007) replicated an earlier finding that conservatives score higher than liberals do on a dispositional measure of death anxiety; in three studies they also ruled out the possibility that needs to manage uncertainty and threat are associated with ideological extremity in general rather than with political conservatism in particular.

In fact, a barrage of recent studies suggests that existential motives to cope with anxiety and threat lead disproportionately to conservative outcomes. Experimental studies conducted shortly before the 2004 presidential election revealed that although college students favored Democratic challenger John Kerry in the control condition, they showed a preference reversal following exposure to mortality salience primes, supporting Republican President George W. Bush instead (Cohen et al. 2005, Landau et al. 2004). Ullrich & Cohrs (2007) showed in several experiments that threatening stimuli (such as frightening movie clips) elicit a temporary increase in closed-mindedness (measured as one facet of the Need for Cognitive Closure scale) and that increased closed-mindedness was associated with an affinity for conservative (and certainty-oriented) policies and opinions.

Another psychological variable suggesting that existential concerns about safety, security, and threat management underlie left-right ideological differences is that of emotional disgust. Recent studies show, for instance, that conservatives score higher than do liberals on dispositional measures of disgust sensitivity and as well as Republicans reported "conservative shifts" in the 18 months following the attacks (Bonanno & Jost 2006).

Consistent with all of these findings, the research literature on right-wing authoritarianism shows that highly threatening situations are frequently (but not always) associated with ideological shifts to the right. For example, archival research suggests that the appeal of conservative and right-wing leaders and policies is enhanced during periods of high social, economic, or political threat (Davis & Silver 2004, Doty et al. 1991, McCann 2008, Willer 2004). Presumably, this is because threat encourages people to embrace social and political attitudes that offer "relatively simple yet cognitively rigid solutions" to questions of security (Bonanno & Jost 2006, p. 311), and these types of solutions are more likely to resonate with the cognitive and rhetorical styles of those on the political right than the left (Jost et al. 2003b,c, Tetlock 2007; see also sidebar Mortality Salience, Authoritarianism, and Selective Exposure to Political Information). Along these lines, a doctoral dissertation by Thorisdottir (2007) demonstrated in several experiments that threatening stimuli (such as frightening movie clips) elicit a temporary increase in closed-mindedness (measured as one facet of the Need for Cognitive Closure scale) and that increased closed-mindedness was associated with an affinity for conservative (and certainty-oriented) policies and opinions.

To date, more research has been conducted on cognitive differences between liberals and conservatives (e.g., Jost et al. 2003b,c; Skitka et al. 2002; Tetlock 1983, 2007) than on emotional differences, but it seems likely that emotional differences also exist (e.g., Tomkins 1961). A recent study by Leone & Chirumbolo (2008) suggests, for instance, that leftists are more likely to exhibit emotional approach, whereas rightists are more likely to exhibit emotional avoidance.
MORTALITY SALIENCE, AUTHORITARIANISM, AND SELECTIVE EXPOSURE TO POLITICAL INFORMATION

An experiment by Lavine et al. (2005) revealed that a mortality salience manipulation led high (but not low) authoritarians to selectively expose themselves to information in a manner that was consistent with their position on capital punishment. This finding suggests that not everyone responds to threatening stimuli in the same manner (see also Davis & Silver 2004, Stenner 2005). It is important to point out, however, that low authoritarians did not show greater open-mindedness (or a decrease in selective exposure) following mortality salience priming (Lavine et al. 2005, p. 232). Lavine et al. (2005) concluded their article by emphasizing elective affinities, that is, “interactions between dispositional motivational needs and cognitive styles on one hand, and exigencies of the social and political environment on the other” (p. 240). Specifically, they suggested that those who tune into “the now ubiquitous format of one-sided (generally right-wing) talk radio (e.g., Rush Limbaugh, Sean Hannity, Michael Savage, Bill O’Reilly)” are motivated not merely by chronic anger and resentment but that “viewers’ preferences for one-sided vs ‘fair and balanced’ formats are at least partly a function of perceived environmental threat” (p. 240).

that disgust sensitivity predicts specific policy opinions on issues such as abortion as well as prejudicial intergroup attitudes (Hodson & Costello 2007, Inbar et al. 2008). Given the apparent link between disgust and moral judgment (Haidt 2001), these differences could help to explain why conservatives tend to value purity and to be more moralistic than liberals in sexual and other cultural domains (Haidt & Graham 2007, Jarudi et al. 2008, Skitka et al. 2002). If this reasoning is correct, political and other messages that elicit disgust reactions should benefit conservatives disproportionally, much as threat-related messages seem to help conservatives and hurt liberals.

Relational motives: ideology offers solidarity. A vast research literature on political socialization, reviewed by Sears & Levy (2003), indicates that ideological beliefs are likely to be transmitted from parents to children, especially if both parents have similar beliefs and discuss politics frequently (Jennings & Niemi 1981) and if bonds within the family are close (Davies 1965). Similarly, peer and reference groups also exert a reasonably strong influence on left-right self-placement (Alwin et al. 1991; see Jost et al. 2008a for a brief review). These relational influences on ideological outcomes are strongest in late adolescence and early adulthood, that is, while personal identity is still in the process of development (Alwin 1993, Sears & Levy 2003). Moreover, consistent with other work on social influence, the resulting identifications tend to persist as long as one’s relational context does not change markedly (e.g., Alwin et al. 1991).

It seems likely that some passive forms of learning and social influence are involved in the transmission of social and political attitudes from parents to offspring and from peer to peer, but the possibility also arises that more active forms of influence occur, and these are likely to involve relational motives for social identification, affiliation, and/or the attainment of shared reality (e.g., Baumeister & Leary 1995, Fiske 2004, Hardin & Higgins 1996, Tajfel & Turner 1986). For instance, Jost et al. (2008a) found that students whose parents were ideologically divergent scored higher on a measure of system justification after writing about either a positive or a negative interaction with their more conservative parent, suggesting that an implicitly activated desire to bond with close others can have ideological consequences. Thus, loyalty, friendship, social comparison, and perceived social support are central to developing and sustaining political conviction (Abelson 1988, p. 269). Furthermore, Gerber et al. (2008) found that exerting social pressure (by informing registered voters that their neighbors would know whether or not they voted) increased turnout substantially.

The study of relational motives has the capacity to shed light on the factors that affect whether or not the discursive superstructure developed by partisan elites becomes a shared social representation (or stereotype) that penetrates public consciousness (e.g., Billig 2003, Denzau & North 1994/2000,
At present, very little solid research exists in this area. However, we do know that important reference groups—including those based on race, ethnicity, gender, social class, political party, and religious affiliation—are used as cues for political judgment and behavior by citizens at nearly every level of political sophistication (e.g., Bartels 2000, Campbell et al. 1960/1965, Conover & Feldman 1981, Eagly et al. 2004, Hamill et al. 1985, Lau & Redlawsk 2001, Rahn 1993, Snidman et al. 1991). A number of studies suggest that party leaders are capable of instigating political polarization and bringing about “conflict extension” in the electorate (Hetherington 2001, Layman & Carsey 2002). Cohen (2003) demonstrated that people are more likely to endorse a given policy position when they believe that it was proposed by their own political party than when the same policy was seen as part of the opposing party’s agenda.

There is also some evidence that ideological affinities flow from group identification and realistic group interest (Bobo 1999, Campbell et al. 1960/1965, Snidman et al. 2004). In general, the perception of collective self-interest does influence ideological preferences when group identification is relatively salient, with members of low-status and low-power groups tacking slightly to the left, especially on economic issues (Bobo 1999, Kluegel & Smith 1986, Lipset 1960, Napier & Jost 2008b). However, this effect is not a simple or reflexive one: Not everyone adopts group-interested (or group-justifying) ideological positions. In fact, for some members of disadvantaged groups, relational needs to express solidarity with one’s own kind may be countered (or trumped) by system-justifying tendencies that serve epistemic or existential needs—or perhaps relational needs tied to other social relationships (e.g., see Henry & Saul 2006, Jost et al. 2003d, Lane 1962). Thus, the effect of group interest, while present, is rarely total (see also Sears & Funk 1991).

Although it is abundantly clear that processes associated with social identification, partisanship, and group interest can exert political influence in both liberal and conservative directions (e.g., Bartels 2000, Cohen 2003, Green et al. 2002), Jost et al. (2008a) speculated that—as with epistemic and existential motives—some relational motives could favor conservative outcomes in general. This is broadly consistent with the commonly held notion that conservatives are especially likely to value tradition, conformity, social order, and consensual adherence to rules, norms, and conventions (e.g., Altemeyer 1998, Conover & Feldman 1981, Feldman 2003, Haidt & Graham 2007, Jost 2006). It is also consistent with the assumption that it is generally easier to establish common ground with respect to the status quo than with respect to its many possible alternatives and to communicate effectively by transmitting messages that are relatively simple and unambiguous rather than reflecting the kind of complex, nuanced, and perhaps ambivalent cognitive and rhetorical styles that seem to be more common on the political left than the right (see Jost et al. 2008a). On the other hand, Caprara & Zimbardo (2004) observed that leftists were more concerned about friendliness and agreeableness than were rightists in Italy, and Carney et al. (2008) found in a study of nonverbal interaction styles that liberals were more expressive and smiled more frequently than did conservatives, suggesting that under these circumstances liberals possessed a higher degree of relational motivation.

SOCIAL AND POLITICAL CONSEQUENCES OF IDEOLOGY

Thus far, our review has focused on the dimensional structure and discursive contents of left-right ideology as well as its motivational antecedents or functional substructure. However, much evidence suggests that acquisition of the
discursive superstructure—which requires both exposure to the ideological menu communicated by institutional elites as well as the ability and motivation to absorb the messages—has important downstream social and political consequences (see Figure 1). We review some of these below.

Effects on the Evaluations of Issues, Parties, Candidates, and Other Attitude Objects

Perhaps the most obvious consequence of ideological orientation is its influence on political attitudes and behaviors such as voting. Many studies have shown that those who identify as liberal tend to adopt issue positions that are conventionally recognized as left-of-center, evaluate liberal political figures more favorably, and vote for candidates of the left, whereas those who identify as conservative tend to adopt positions that are right-of-center, evaluate conservative political figures more favorably, and vote for candidates of the right (e.g., Conover & Feldman 1981, Evans et al. 1996, Federico & Schneider 2007, Jacoby 1991, Kerlinger 1984, Knutsen 1995, Lavine & Gschwend 2006, Zaller 1992). In fact, ideology and partisanship (which typically has an ideological thrust) are among the strongest and most consistent predictors of political preferences (e.g., see Erikson & Tedin 2003, Jacoby 1991, Jost 2006).

Moreover, left-right differences in evaluative preferences emerge in many areas outside the realm of formal politics. For instance, Jost et al. (2008b) found that self-identified liberals were significantly more favorable concerning foreign films, big cities, poetry, tattoos, and foreign travel, whereas conservatives were more favorable concerning fraternities and sororities, sport utility vehicles, drinking alcohol, and watching television (see also Carney et al. 2008, Jost 2006). Findings such as these strengthen the case that ideological divides are, among other things, personality divides, but the direction of causality is still unknown. We suspect that ideological identifications both reflect and reinforce social and personal preferences, styles, and activities, but this is speculative and requires empirical confrontation using experimental and longitudinal research designs.

At a higher level of abstraction, ideology also predicts citizens’ general value orientations, with leftists exhibiting greater egalitarianism and openness to change than rightists (Evans et al. 1996; Federico & Sidanius 2002; Feldman 1988, 2003; Jost 2006; Kerlinger 1984; Peffley & Hurwitz 1985; Rokeych 1973; Sidanius & Pratto 1999). Interestingly, many of these patterns are observable at the level of automatic or implicit attitudes as well. For example, in studies employing the Implicit Association Test, liberals on average displayed implicit (as well as explicit) preferences for words such as “flexible,” “progress,” and “feminism,” whereas conservatives preferred their opposites, namely “stable,” “tradition,” and “traditional values” (Jost et al. 2008b). Ideological self-placement also has important effects on justice judgments and attributions for social stratification, with conservatives emphasizing principles of equity, ability, effort, and meritocracy as well as adopting a more punitive stance and being more likely to make internal attributions for others’ outcomes in life in comparison with liberals (e.g., Altemeyer 1998, Kluegel & Smith 1986, Skitka 1999, Skitka et al. 2002, Sniderman et al. 1991). Haidt & Graham (2007) have suggested that the values of liberals and conservatives are rooted in distinct moral foundations, such that conservatives are more likely to incorporate ingroup, authority, and purity concerns in rendering moral (or perhaps moralistic) judgments.

Thus, heterogeneous research programs yield the common conclusion that ideological commitments are robust predictors of a wide range of attitudes, preferences, judgments, and behaviors. Nevertheless, it should be noted that—as with respect to the structure and contents of ideological beliefs—the downstream consequences of ideology are not readily observable at all levels of political
sophistication (e.g., Converse 2000, 2006). Once again, factors concerning the ability and motivation to use the discursive contents of ideology moderate its effects on other social and political outcomes (e.g., Erikson & Tedin 2003, Kemmelmeier 2007, Kinder 1998, Zaller 1992). At the same time, one tenet of the psychological perspective on ideology that we take in this review is that people may behave in ideologically meaningful ways (or be affected by their own ideological proclivities) without necessarily being consciously or fully aware of the role of ideology in their lives, much as native speakers are generally capable of following grammatical or syntactical rules without being able to fully articulate them (see Jost 2006).

Effects on Implicit and Explicit Intergroup Attitudes

Ideological self-placement is strongly predictive of intergroup attitudes. More specifically, conservative and right-wing orientations are generally associated with stereotyping, prejudice, intolerance, and hostility toward a wide variety of outgroups, especially low-status or stigmatized outgroups (e.g., Altemeyer 1998, Duckitt et al. 2002, Federico & Sidanius 2002, Lambert & Chasteen 1997, Napier & Jost 2008b, Sidanius & Pratto 1999, Sidanius et al. 1996, Whitley 1999, Wilson 1973). The fact that conservatives express less-favorable attitudes than liberals express toward disadvantaged or stigmatized groups is not seriously disputed in social science research, although there is some debate about whether the differences are motivated by ingroup bias or a differential degree of commitment to individualism, traditionalism, meritocracy, and other conservative values (e.g., Sears et al. 1997, Sidanius et al. 1996, Sniderman et al. 2000).

It is important to note that differences between liberals and conservatives with respect to intergroup attitudes emerge even on implicit or nonconscious measures, suggesting that they are not attributable to differences in socially desirable responding (e.g., Cunningham et al. 2004; Jost et al. 2004a; Nosek et al. 2007, 2009). Some research suggests that conservatives are more likely to endorse traditional forms of racism, whereas liberals are more likely to show signs of subtle or aversive racism, indicating the presence of conflict between egalitarian ideals and biased impulses (Feldman & Huddy 2005, Nail et al. 2003). It is also worth noting that such affinities have likely been surmised already by political elites who are responsible for the contents of political advertisements. Research on political communication suggests that (a) conservative campaigns are more likely than liberal campaigns to play the “race card” (Mendelberg 2001), and (b) subtle (but nefarious) racial primes that visually or verbally link African Americans to crime or welfare tend to benefit conservative candidates and hurt liberal candidates (Valentino 1999, Valentino et al. 2002).

It is seldom pointed out explicitly that the effects of political orientation on ingroup-outgroup evaluations depend upon the status of the participant’s own group. That is, conservatism is typically correlated with ingroup favoritism for members of high-status groups, but it is frequently correlated with outgroup favoritism for members of low-status groups (e.g., Jost et al. 2004a, Levin et al. 2002). Thus, increasing political conservatism is associated with a stronger prostraight/antigay preference on implicit and explicit measures for heterosexuals and homosexuals alike (Jost et al. 2004a).

These findings suggest again that conservatism is a system-justifying ideology, insofar as it leads even members of disadvantaged groups to perpetuate the unequal status quo at the level of both implicit and explicit intergroup attitudes (Jost et al. 2008b).

The differences between liberals and conservatives with respect to intergroup attitudes are readily interpretable in light of our analysis of the functional substructure of ideology (i.e., in terms of epistemic, existential, and relational motives). For instance, research in social cognition demonstrates that people adopt stereotypes at least in part to conserve mental
resources and to impose order and structure on the social world (e.g., Macrae et al. 1996, Moskowitz 2005). We know that conservatives exhibit heightened needs to avoid ambiguity, novelty, uncertainty, and complexity and to achieve order, structure, and closure (Jost et al. 2003b,c), and this (in conjunction with a relative acceptance of inequality) may help to explain why stereotypes and prejudicial attitudes are more appealing to them than they are to liberals. The connection between rigid or dogmatic thinking styles and prejudice has long been noted (e.g., Rokeach 1960), as has the connection between intolerance of ambiguity and prejudice (e.g., Adorno et al. 1950, Allport 1954). The personal need for structure has also been associated with right-wing authoritarianism (Altemeyer 1998), negative attitudes toward gays and lesbians (Smith & Gordon 1998), and the formation of erroneous system-justifying stereotypes (Schaller et al. 1995). Similarly, the need for cognitive closure predicts stereotyping, prejudice, and right-wing authoritarianism (Kruglanski 2004), conservatism (Jost et al. 2003b), and racism (Van Hiel et al. 2004). Although it is impossible to establish directions of causality among these variables based upon the existing research literature, it seems clear that they are empirically linked.

Existential motives to avoid threat may also play a part in the relatively higher levels of prejudice and intergroup hostility observed among conservatives, as evidenced by terror management research showing that mortality salience increases stereotyping and prejudice (Schimel et al. 1999). Some studies suggest that mortality salience increases prejudice, but only in people who are already predisposed toward the holding of prejudicial attitudes (Greenberg et al. 1992). There is also evidence that threats to self-esteem increase stereotyping and prejudice (Allport 1954, Fein & Spencer 1997) and may be linked to political orientation (see Jost et al. 2003b for a review). Furthermore, the emotion of disgust is predictive of intergroup hostility and prejudice as well as political conservatism (Hodson & Costello 2007, Inbar et al. 2008, Talaska et al. 2008). Finally, it is relatively easy to see how relational needs to maintain solidarity with one’s ingroup could facilitate prejudice and discrimination against outgroup members (Tajfel & Turner 1986) as well as the sharing of ideologies that justify unequal treatment (Jost et al. 2008a).

Ideology as a System-Justifying Device

It should be clear by now that we regard ideology as not merely an organizing device or a shortcut for making heuristic judgments about various political objects; it is also a device for explaining and even rationalizing the way things are or, alternatively, how things should be different than they are. Thus, political ideologies typically make at least tacit reference to some social system, either as an affirmation or a rejection of it (Anderson & Singer 2008, Ball & Dagger 1991, Freedon 2001, Jost 2006, Knight 2006, Lipset & Raab 1978, Marx & Engels 1846/1970, Parsons 1951). As we have mentioned above, research on system justification theory suggests that most people—to varying degrees depending on epistemic, existential, and relational needs—engage in both conscious and nonconscious rationalization of the status quo through the use of spontaneous social judgments (e.g., stereotypes) and by latching onto pre-existing ideologies such as conservatism (Jost et al. 2004a, Lane 1962). These and other system-justifying mechanisms imbue social, economic, and political arrangements with fairness and legitimacy (Jost et al. 2003a,d; Kay et al. 2007; Major et al. 2002; Sidanius & Pratto 1999). From the point of view of political elites, system justification is beneficial insofar as it contributes to the stability of the social system and increases voluntary deference on the part of ordinary citizens (Tyler 2006).

The power of ideology to explain and justify discrepancies between the current social order and some alternative not only maintains support for the status quo, but also serves for its adherents the palliative function of alleviating
dissonance or discomfort associated with the awareness of systemic injustice or inequality (e.g., Jost & Hunyady 2002, Napier & Jost 2008a). The endorsement of system-justifying beliefs is associated with increased positive affect, decreased negative affect, and high personal satisfaction or contentment (Jost et al. 2005d, Kluegel & Smith 1986, Lerner 1980, Wakslak et al. 2007). In attempting to understand why conservatives report being happier than liberals, Napier & Jost (2008a) found that the association between political ideology and subjective well-being was explained to a significant degree by respondents’ differential tendencies to rationalize economic inequality in society. Furthermore, the happiness gap between conservatives and liberals in the United States was tied to the nation’s level of income inequality, so that as inequality has increased over the last 30 years, the subjective well-being of liberals has dropped more precipitously than has that of conservatives. Thus, it appears that system-justifying ideologies such as conservatism can “provide a kind of ideological buffer against the negative hedonic consequences of social and economic inequality” (Napier & Jost 2008a; see also Anderson & Singer 2008).

In sum, ideology can play an important role as a system-serving bundle of attitudes, values, and beliefs. However, as with respect to the organizing role of ideology, it is best to conclude with a few caveats about the reach of ideology as a system-justification device. Although system-justifying attitudes, values, and beliefs are widespread, they rarely diffuse or “work” completely, especially in large, highly complex societies and among those who are suspicious of and/or geographically distant from centers of power (e.g., Abercrombie et al. 1980; see also Sidanius & Pratto 1999). This opens the door to at least some degree of change and flux in social relations. Nevertheless, we think that it would be a mistake to underestimate the ideological significance of the human tendency to make a “virtue of necessity” by accepting and even celebrating features of the status quo; from this perspective, system-justification motivation appears to give conservatism a psychological head start over its more critical rivals.

CONCLUDING REMARKS

Our purpose in this article has been to review recent scholarship on political ideology as a social psychological phenomenon. We have endeavored to integrate insights derived from a variety of research programs addressing different levels of analysis and therefore distinctive facets of political ideology (see Figure 1). Given the resurgence of ideologically inspired conflict and polarization in the current era (e.g., Abramowitz & Saunders 2008, Jost 2006, Layman & Carsey 2002, Stimson 2004), it is our hope that this summary of existing research will not only help us to better understand the present but also point the way to a more constructive future. To succeed, we will need the continued engagement of the social scientific research community as a whole. For our own part, we have taken seriously the possibility first suggested by Adorno et al. (1950) that a “structural unity” exists between underlying psychological needs and ideological manifestations of those needs. Although contemporary researchers are much closer than were the members of the Frankfurt School to understanding the connections between the discursive superstructure of ideology and its motivational substructure, it is plain to see that we still do not know as much about these elective affinities as one would like. We take some solace in the possibility, however uncertain, that this review will inspire other researchers to join in the challenging task of identifying sound scientific principles that explain why certain individuals and groups choose particular constellations of ideas or, similarly, why some ideologies find deep resonance in the minds of some political actors but not others. Psychologically oriented investigations of ideological phenomena carry with them an inescapable limitation but also take on what many
would regard as a societal obligation of the highest order. As the authors of *The Authoritarian Personality* pointed out many years ago, “Knowledge of the psychological determinants of ideology cannot tell us what is the *truest ideology; it can only remove some of the barriers in the way of its pursuit*” (Adorno et al. 1950, p. 11). If there is a nobler or more difficult task than this for a political psychologist, we know not what it is.

**FUTURE ISSUES**

1. It is commonly assumed that political elites are the architects of ideology, but little research has examined the motivational processes involved in elite construction of the discursive superstructure. The range of epistemic, existential, and relational motives we have examined in this chapter are assumed to affect elites as well as mass publics, but existing research has been limited to purely strategic motives (e.g., the assembly of a winning party coalition; see Hinich & Munger 1994). Future research would do well to investigate the role of substructural motives (or functions) in the elite context, where actors are not only consumers of ideology but are also capable of bundling or packaging its contents in the first place (see Tetlock 1983 for an example).

2. Political scientists have generally assumed that the assembly of ideological packages by elites is at least somewhat arbitrary, so that ideologies are socially constructed by the repeated bundling of certain contents in order to gain electoral advantage (e.g., Sniderman & Bullock 2004). Our analysis in terms of elective affinities suggests that there are clear social psychological constraints on the types of attitudes, values, and beliefs that can be bundled together. This possibility was raised in early discussions of mass belief systems (e.g., Converse 1964, Rokeach 1960), but it has been largely ignored since then in favor of perspectives that focus almost exclusively on the role of elites in establishing conventional (but essentially arbitrary) discursive superstructures (e.g., Zaller 1992). Future work should address motivational (as well as cognitive) sources of constraint to explain how and why specific constellations of attitudes, values, and beliefs coalesce into relatively coherent (and sometimes incoherent, at least with respect to logical sophistication) ideological packages.

3. We have suggested that the metaphor of elective affinities, which is taken from the writings of Goethe (1809/1966), Weber (1922/1946), and Gerth & Mills (1948/1970), is an especially useful one because it aptly characterizes the forces of mutual attraction that bring people and ideas together. In other words, it highlights the fact that every ideological outcome arises from an interaction between top-down processes of socialization (or exposure) and bottom-up processes of need fulfillment. However, the concept is openly agnostic about (and therefore willfully imprecise concerning) directions of causality between top-down and bottom-up factors. We, like many others (e.g., Adorno et al. 1950, Allford et al. 2005, Lane 1962, Sniderman & Bullock 2004, Zaller 1992), assume that the contents of the discursive superstructure and the motives driving the functional substructure of ideology meet somewhere in the middle, but how this occurs has yet to be clearly and carefully documented. It would be particularly useful to identify interactions between top-down and bottom-up processes.
4. The metaphor of ideological menu dependence is consistent with our analysis of elective affinities, insofar as people must be exposed to a more-or-less complete range of options in order to be able to select an ideology that matches their psychological and other dispositions. This could also explain why the effects of personality on political orientation in the general population would be stronger in Western democratic nations (that offer at least some variability in the ideological menu) than in authoritarian and totalitarian regimes that restrict ideological alternatives (see Greenberg & Jonas 2003, Jost et al. 2003b). A related issue is whether there are important differences between Eastern and Western nations in the psychological underpinnings of political orientation (e.g., see Thorisdottir et al. 2007). In this review, we have taken a largely Western perspective, but it would be illuminating to conduct parallel investigations in Asian, African, and other cultural contexts.

5. We have said relatively little about rational choice models of political preferences, except to note that some (albeit modest) evidence supports the notion that individual and collective self-interest does influence ideological outcomes. It would be useful in future work to determine whether the kinds of epistemic, existential, and relational motives we have identified in this chapter are compatible or incompatible with rational actor models. For instance, to what extent is it rational (or congruent with self-interest) for people to embrace certain ideologies because they appear to satisfy their personal needs for cognition, evaluation, structure, or closure?

6. In this review and elsewhere, we have generally assumed that system justification motivation increases one’s affinity for conservative (versus liberal) ideology. This may be contingent upon one’s societal context, however. It is unclear whether system-justification motivation in Scandinavia, for instance, would be associated with increased or decreased support for high rates of taxation, universal health care coverage, state-sponsored childcare, tuition, and so on. Furthermore, it is at least conceivable that the two core aspects of left-right ideology (resistance to change and acceptance of inequality) are decoupled or even negatively correlated in socialist or communist regimes and that this could be due to the marshaling of system justification tendencies in support of egalitarian rather than hierarchical ideals.

**DISCLOSURE STATEMENT**

The authors are not aware of any biases that might be perceived as affecting the objectivity of this review.

**ACKNOWLEDGMENTS**

The writing of this chapter was supported in part by research awards to the first author by the New York University Center for Catastrophe Preparedness and Response (CCPR) and the National Science Foundation (Grant #BCS-0617558). We are grateful to Cara Jolly and Briehan Truesdell for administrative and other assistance with respect to this project as well as to the members of the Jost Lab at NYU for their input and inspiration. Finally, we thank Susan T. Fiske, György Hunyady, Lawrence J. Jost, Howard Lavine, and Tom R. Tyler for helpful suggestions and advice concerning prior drafts.
LITERATURE CITED
Allport GW. 1954. The Nature of Prejudice. Reading, MA: Addison-Wesley
Bobbio N. 1996. Left and Right. Cambridge, UK: Polity

330 Jost • Federico • Napier


Jost JT. 2006. The end of the end of ideology. Am. Psychol. 61:651–70


Ozer DJ, Benet-Martínez V. 2006. Personality and the prediction of consequential outcomes. Annu. Rev. Psychol. 57:400–21


Contents

Prefatory

Emotion Theory and Research: Highlights, Unanswered Questions, and Emerging Issues
Carroll E. Izard ................................................................. 1

Concepts and Categories

Concepts and Categories: A Cognitive Neuropsychological Perspective
Bradford Z. Mahon and Alfonso Caramazza .................................. 27

Judgment and Decision Making

Mindful Judgment and Decision Making
Elke U. Weber and Eric J. Johnson ........................................... 53

Comparative Psychology

Comparative Social Cognition
Nathan J. Emery and Nicola S. Clayton ...................................... 87

Development: Learning, Cognition, and Perception

Learning from Others: Children's Construction of Concepts
Susan A. Gelman ................................................................. 115

Early and Middle Childhood

Social Withdrawal in Childhood
Kenneth H. Rubin, Robert J. Coplan, and Julie C. Bawker .................. 141

Adulthood and Aging

The Adaptive Brain: Aging and Neurocognitive Scaffolding
Denise C. Park and Patricia Reuter-Lorenz .................................. 173

Substance Abuse Disorders

A Tale of Two Systems: Co-Occurring Mental Health and Substance Abuse Disorders Treatment for Adolescents
Elizabeth H. Hawkins ............................................................ 197
Therapy for Specific Problems
Therapy for Specific Problems: Youth Tobacco Cessation
Susan J. Curry, Robin J. Mermelstein, and Amy K. Sporer .................. 229

Adult Clinical Neuropsychology
Neuropsychological Assessment of Dementia
David P. Salmon and Mark W. Bondi ............................................ 257

Child Clinical Neuropsychology
Relations Among Speech, Language, and Reading Disorders
Bruce F. Pennington and Dorothy V. M. Bishop ............................. 283

Attitude Structure
Political Ideology: Its Structure, Functions, and Elective Affinities
John T. Jost, Christopher M. Federico, and Jaime L. Napier ............. 307

Intergroup relations, stigma, stereotyping, prejudice, discrimination
Prejudice Reduction: What Works? A Review and Assessment
of Research and Practice
Elizabeth Levy Paluck and Donald P. Green ............................... 339

Cultural Influences
Personality: The Universal and the Culturally Specific
Steven J. Heine and Emma E. Buchtel ......................................... 369

Community Psychology
Community Psychology: Individuals and Interventions in Community
Context
Edison J. Trickett ................................................................................ 395

Leadership
Leadership: Current Theories, Research, and Future Directions
Bruce J. Avolio, Fred O. Walumbwa, and Todd J. Weber ................. 421

Training and Development
Benefits of Training and Development for Individuals and Teams,
Organizations, and Society
Herman Aguinis and Kurt Kraiger .................................................. 451

Marketing and Consumer Behavior
Conceptual Consumption
Dan Ariely and Michael I. Norton .................................................... 475
Psychobiological Mechanisms

Health Psychology: Developing Biologically Plausible Models Linking the Social World and Physical Health
Gregory E. Miller, Edith Chen, and Steve Cole .............................................. 501

Health and Social Systems

The Case for Cultural Competency in Psychotherapeutic Interventions
Stanley Sue, Nolan Zane, Gordon C. Nagayama Hall, and Lauren K. Berger ........... 525

Research Methodology

Missing Data Analysis: Making It Work in the Real World
John W. Graham .............................................................................................. 549

Psychometrics: Analysis of Latent Variables and Hypothetical Constructs

Latent Variable Modeling of Differences and Changes with Longitudinal Data
John J. McArdle ............................................................................................... 577

Evaluation

The Renaissance of Field Experimentation in Evaluating Interventions
William R. Shadish and Thomas D. Cook ...................................................... 607

Timely Topics

Adolescent Romantic Relationships
William A. Collins, Deborah P. Welsh, and Wyndol Furman ................................ 631

Imitation, Empathy, and Mirror Neurons
Marco Iacoboni ............................................................................................... 653

Predicting Workplace Aggression and Violence
Julian Barling, Kathryn E. Dupré, and E. Kevin Kelloway .................................. 671

The Social Brain: Neural Basis of Social Knowledge
Ralph Adolphs ................................................................................................. 693

Workplace Victimization: Aggression from the Target's Perspective
Karl Aquino and Stefan Thau ........................................................................... 717

Indexes

Cumulative Index of Contributing Authors, Volumes 50–60 ............................... 743
Cumulative Index of Chapter Titles, Volumes 50–60 ........................................... 748

Errata

An online log of corrections to Annual Review of Psychology articles may be found at http://psych.annualreviews.org/errata.shtml
New From Annual Reviews:

Annual Review of Organizational Psychology and Organizational Behavior
Volume 1 • March 2014 • Online & In Print • http://orgpsych.annualreviews.org

Editor: Frederick P. Morgeson, The Eli Broad College of Business, Michigan State University

The Annual Review of Organizational Psychology and Organizational Behavior is devoted to publishing reviews of the industrial and organizational psychology, human resource management, and organizational behavior literature. Topics for review include motivation, selection, teams, training and development, leadership, job performance, strategic HR, cross-cultural issues, work attitudes, entrepreneurship, affect and emotion, organizational change and development, gender and diversity, statistics and research methodologies, and other emerging topics.

Complimentary online access to the first volume will be available until March 2015.

TABLE OF CONTENTS:

- An Ounce of Prevention Is Worth a Pound of Cure: Improving Research Quality Before Data Collection, Herman Aguinis, Robert J. Vandenberg
- Burnout and Work Engagement: The JD-R Approach, Arnold B. Bakker, Evangelia Demerouti, Ana Isabel Sanz-Vergel
- Compassion at Work, Jane E. Dutton, Kristina M. Workman, Ashley E. Hardin
- Constructively Managing Conflict in Organizations, Dean Tjosvold, Alfred S.H. Wong, Nancy Yi Feng Chen
- Coworkers Behaving Badly: The Impact of Coworker Deviant Behavior upon Individual Employees, Sandra L. Robinson, Wei Wang, Christian Kiewitz
- Delineating and Reviewing the Role of Newcomer Capital in Organizational Socialization, Talya N. Bauer, Berrin Erdogan
- Emotional Intelligence in Organizations, Stéphane Côté
- Employee Voice and Silence, Elizabeth W. Morrison
- Intercultural Competence, Kwok Leung, Soon Ang, Mei Ling Tan
- Learning in the Twenty-First-Century Workplace, Raymond A. Noe, Alena D.M. Clarke, Howard J. Klein
- Pay Dispersion, Jason D. Shaw
- Personality and Cognitive Ability as Predictors of Effective Performance at Work, Neal Schmitt
- Perspectives on Power in Organizations, Cameron Anderson, Sebastien Brion
- Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct, Amy C. Edmondson, Zhike Lei
- Research on Workplace Creativity: A Review and Redirection, Jing Zhou, Inga J. Hoever
- Talent Management: Conceptual Approaches and Practical Challenges, Peter Cappelli, JR Keller
- The Contemporary Career: A Work–Home Perspective, Jeffrey H. Greenhaus, Ellen Ernst Kossek
- The Fascinating Psychological Microfoundations of Strategy and Competitive Advantage, Robert E. Ployhart, Donald Hale, Jr.
- The Psychology of Entrepreneurship, Michael Frese, Michael M. Gielnik
- What Was, What Is, and What May Be in OP/OB, Lyman W. Porter, Benjamin Schneider
- Where Global and Virtual Meet: The Value of Examining the Intersection of These Elements in Twenty-First-Century Teams, Cristina B. Gibson, Laura Huang, Bradley L. Kirkman, Debra L. Shapiro
- Work–Family Boundary Dynamics, Tammy D. Allen, Eunae Cho, Laurenz L. Meier

Access this and all other Annual Reviews journals via your institution at www.annualreviews.org.
New From Annual Reviews:

**Annual Review of Statistics and Its Application**

*Volume 1 • Online January 2014 • http://statistics.annualreviews.org*

Editor: **Stephen E. Fienberg**, *Carnegie Mellon University*

Associate Editors: **Nancy Reid**, *University of Toronto*  
**Stephen M. Stigler**, *University of Chicago*

The *Annual Review of Statistics and Its Application* aims to inform statisticians and quantitative methodologists, as well as all scientists and users of statistics about major methodological advances and the computational tools that allow for their implementation. It will include developments in the field of statistics, including theoretical statistical underpinnings of new methodology, as well as developments in specific application domains such as biostatistics and bioinformatics, economics, machine learning, psychology, sociology, and aspects of the physical sciences.

**Complimentary online access to the first volume will be available until January 2015.**

**TABLE OF CONTENTS:**

- A Systematic Statistical Approach to Evaluating Evidence from Observational Studies, David Madigan, Paul E. Stang, Jesse A. Berlin, Martijn Schuemie, J. Marc Overhage, Marc A. Suchard, Bill Dumouchel, Abraham G. Hartzema, Patrick B. Ryan
- The Role of Statistics in the Discovery of a Higgs Boson, David A. van Dyk
- Brain Imaging Analysis, F. DuBois Bowman
- Statistics and Climate, Peter Guttorp
- Climate Simulators and Climate Projections, Jonathan Rougier, Michael Goldstein
- Probabilistic Forecasting, Tilmann Gneiting, Matthias Katzfuss
- Bayesian Computational Tools, Christian P. Robert
- Bayesian Computation Via Markov Chain Monte Carlo, Radu V. Craiu, Jeffrey S. Rosenthal
- Build, Compute, Critique, Repeat: Data Analysis with Latent Variable Models, David M. Blei
- Structured Regularizers for High-Dimensional Problems: Statistical and Computational Issues, Martin J. Wainwright
- High-Dimensional Statistics with a View Toward Applications in Biology, Peter Bühlmann, Markus Kalisch, Lukas Meier
- Next-Generation Statistical Genetics: Modeling, Penalization, and Optimization in High-Dimensional Data, Kenneth Lange, Jeannette C. Papp, Janet S. Sinsheimer, Eric M. Sobel
- Breaking Bad: Two Decades of Life-Course Data Analysis in Criminology, Developmental Psychology, and Beyond, Elena A. Erosheva, Ross L. Matsueda, Donatello Telesca
- Event History Analysis, Niels Keiding
- Statistical Evaluation of Forensic DNA Profile Evidence, Christopher D. Steele, David J. Balding
- Using League Table Rankings in Public Policy Formation: Statistical Issues, Harvey Goldstein
- Statistical Ecology, Ruth King
- Estimating the Number of Species in Microbial Diversity Studies, John Bunge, Amy Willis, Fiona Walsh
- Dynamic Treatment Regimes, Bibhas Chakraborty, Susan A. Murphy
- Statistics and Related Topics in Single-Molecule Biophysics, Hong Qian, S.C. Kou
- Statistics and Quantitative Risk Management for Banking and Insurance, Paul Embrechts, Marius Hofert

Access this and all other Annual Reviews journals via your institution at [www.annualreviews.org](http://www.annualreviews.org).