

Research Dialogue

The marketplace of ideology: “Elective affinities” in political psychology and their implications for consumer behavior

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Abstract

An abundance of research in political psychology demonstrates that leftists and rightists (or liberals and conservatives) diverge from one another in terms of: (a) personality characteristics; (b) cognitive processing styles; (c) motivational interests and concerns; (d) the prioritization of personal values; and (e) neurological structures and physiological functions. In this article, I summarize these findings and discuss some of their implications for persuasion, framing, and advertising; consumer choice, judgment, decision-making, and behavior; and customer satisfaction/dissatisfaction and politically motivated boycotts. I conclude that the theory and practice of consumer psychology will be enriched by taking into account ideological asymmetries and the ways in which human behavior both reflects and gives rise to left–right divergence in political orientation—not only in terms of beliefs, opinions, and values but also in terms of underlying psychological processes.

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“A clash of doctrines is not a disaster—it is an opportunity.”
([Alfred North Whitehead, 1925](#)).

Intellectual historians suspect that the left–right dimension—which is now ubiquitous in Western political life—has ancient origins pertaining to the concept of handedness. [Laponce \(1981\)](#), for instance, recounted that in Medieval Europe the right was regarded as the “side of God,” and “universally associated with the notion of privilege, dominance, and sacredness” (p. 10) as well as “liking for or acceptance of social and religious hierarchies” (p. 135). By contrast, the “gauche,” “sinister” left was associated with the “equalization of conditions through the challenge of God and prince” (p. 135).

The historical longevity of the left–right spatial metaphor in politics was practically assured by the French Revolution, which lasted from 1789 to 1799. Supporters of the ancient regime—which kept power in the hands of the monarchy,

the aristocracy, and the Church—sat on the right side of the French Parliament, whereas those who commiserated with the revolutionaries occupied the left of the chamber. From then on, the *right-wing* label has characterized ideological perspectives—such as those of Edmund Burke and Joseph de Maistre, who vigorously opposed the French Revolution, and those of Barry Goldwater, William F. Buckley Jr., and many others who resisted the New Deal and civil rights movements—that are conservative, supportive of the status quo, and protective of tradition and hierarchy. *Left-wing* views, by contrast, are associated with progressive social change and egalitarian ideals, as in political movements inspired by liberalism, socialism, and Marxism ([Bobbio, 1996](#); [Inglehart, 1989](#); [Noël & Thérien, 2008](#)).

My colleagues and I have drawn on historical and philosophical sources such as these to propose that there are two core attitudinal dimensions that separate left and right ([Jost, 2006, 2017](#); [Jost, Federico, & Napier, 2009](#); [Jost, Glaser, Kruglanski, & Sulloway, 2003a, 2003b](#); [Jost, Nosek, & Gosling, 2008](#)). The two dimensions are (a) advocating vs. resisting social change,

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and (b) rejecting vs. accepting inequality (or hierarchy), and they are intertwined—at least in the Western world—for historical reasons:

Liberal democracies were built in opposition to older, hierarchical orders, in the name of equality and individual rights. The shift in perspective was huge and difficult, because up to then inequality had been understood as the natural order of things. The family, the Church, social classes, even the animal kingdom were seen as hierarchies designed by God.

(Noël & Thérien, 2008, p. 17).

In seeking to understand why some people are drawn to conservative, rightist belief systems that emphasize tradition and hierarchy, whereas others are drawn to liberal, leftist belief systems that emphasize progress and equality, we have developed a theoretical model of political ideology as motivated social cognition. This approach belongs to an intellectual genealogy of “functional” perspectives (e.g., Smith, Bruner, & White, 1956), which assume that individuals hold the attitudes they do because they resonate with underlying needs, interests, and goals. In particular, our model is inspired by Max Weber’s account of *elective affinities*—the “selective process” by which “ideas and their publics” are bound together through forces of mutual attraction (Gerth & Mills, 1948/1970, p. 63; see also Jost et al., 2009).

The major insight is that people may be seduced by certain beliefs, opinions, and values because of social and psychological forces that are not necessarily salient or obvious to them. This way of thinking about political orientation and its relationship to social, cognitive, and motivational factors is compatible with Itamar Simonson’s (2008) notion that there exist relatively “stable, inherent preferences” that may remain dormant for long periods of time but nevertheless come into play once an individual is exposed to stimuli that were formerly unfamiliar. Ideological predispositions may help not only to explain the origins of individual differences in the specific contents of dormant preferences but also why some people are more eager than others to acquire certain types of experiences in the first place (e.g., Khan, Misra, & Singh, 2013).

When it comes to Western political life, most social scientists agree that the left–right dimension captures the “core currency of political exchange” (Noël & Thérien, 2008, p. 229). Nevertheless, there are still some political scientists who hold fast to Philip Converse’s (1964) skeptical notion (based on public opinion data from the 1950s) that, at least when it comes to American politics, most citizens are “little more than casual spectators”:

Parochial in interest, modest in intellect, and burdened by the demands and obligations of everyday life, most citizens lack the wherewithal and motivation to grasp political matters in a deep way. People are busy with more pressing things; politics is complicated and far away. Ideology is not for them.

(Kinder & Kalmoe, 2017, p. 3).

Despite the remarkable staying power of the assumption that ordinary citizens are devoid or “innocent” of ideology (see Jost, 2006), the evidence has been mounting for decades that the American public is highly divided—socially and psychologically as well as politically—over issues that may be readily understood in left–right terms (e.g., Pew, 2014). Ideological conflict and polarization, it should be noted, is far from unique to the United States. It has been shaping Latin American politics for many years (Moraes, 2015) and is on the rise in Europe once again (Groskopf, 2016). Optimists hold out hope that a scientific understanding of similarities and differences between leftists and rightists will eventually help to overcome destructive forms of ideological conflict and forge communication strategies that transcend purely parochial concerns (Hibbing, Smith, & Alford, 2014), but this is by no means assured.

In the field of political psychology, we have witnessed a virtual explosion in research over the last 15 years demonstrating that liberals and conservatives diverge from one another in terms of: (a) personality characteristics; (b) cognitive processing styles; (c) motivational interests and concerns; (d) the prioritization of personal values; and (e) neurological structures and physiological functions. In this target article, I briefly summarize the history of these five areas of research and underscore the major empirical conclusions that have emerged thus far. Although these research programs developed more or less independently, they tell a remarkably consistent story about psychological differences between the left and right. In the final section of the article, I speculate more freely about the implications of findings from political psychology for the theory and practice of persuasion, judgment, decision-making, consumer behavior, and ideological market segmentation.

Ideological differences in personality characteristics

The earliest accounts of personality differences between leftists and rightists focused on traits that are now associated with the syndrome of authoritarianism (Altemeyer, 2007). Members of the Frankfurt School—including Wilhelm Reich, Erich Fromm, and Theodor W. Adorno—sought to integrate the social-structural theories of Karl Marx with the psychodynamic sensibilities of Sigmund Freud. Thus, Fromm (1947) saw parallels between Freud’s description of the “anal character” and “conservative” tendencies focused on the “preservation of what had been acquired” and the attainment of “security ... based upon hoarding and saving.” Fromm associated the conservative personality type with a “pedantic orderliness” that could be “sterile and rigid” (Fromm, 1947, pp. 65–66), as well as positive characteristics such as being careful, methodical, practical, loyal, orderly, and tenacious.

Adorno the social theorist teamed up with research psychologists Else Frenkel-Brunswik, Daniel Levinson, and Nevitt Sanford to advance a psychodynamic explanation of how intense frustration brought on by World War I and the Great Depression eventually gave rise to the fascist conflagration throughout Europe. Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950) emphasized unresolved childhood conflicts

with parents who—for cultural and historical reasons—adopted especially harsh methods of discipline. These conflicts were aggravated by societal crises and led millions to place their confidence in strong, charismatic dictators such as Mussolini and Hitler while displacing hostility onto convenient scapegoats such as Jews, gypsies, leftists, and sexual minorities. The net result was a personality structure that was anti-democratic, rigid, conventional, hostile, xenophobic, and deferential to authority figures.

Twenty years later, Glenn Wilson (1973) sought to understand affective and emotional differences between liberals and conservatives in the context of earlier research on authoritarianism and intolerance of ambiguity. He argued that political orientation arose from genetic factors such as anxiety, stimulus aversion, and intelligence, as well as environmental factors, such as parental treatment, self-esteem, and social class. Longitudinal research reveals that children who are fearful and inhibited are indeed more likely to become conservative adults, especially if their parents emphasize the value of obedience (Block & Block, 2006; Fraley, Griffin, Belsky, & Roisman, 2012). Even in adulthood, societal phenomena that elicit strong feelings of uncertainty and threat—such as crime, terrorism, immigration, and social protest—tend to elicit a conservative shift in political attitudes (Berrebi & Klor, 2008; Bonanno & Jost, 2006; Craig & Richeson, 2014; Economou & Kollias, 2015; Green, Sarasin, Baur, & Fasel, 2015; Jost, Glaser, et al., 2003a; Schüller, 2015; Thórisdóttir & Jost, 2011; for a quantitative review, see Jost, Stern, Rule, & Sterling, 2017).

Most, if not all, of the personality characteristics associated with the left–right (or liberal-conservative) dimension in politics can be described parsimoniously using the conceptual framework of the “Big Five” model of personality, which provides a heuristic basis for classifying distinct, relatively non-overlapping personality dimensions (e.g., Ozer & Benet-Martinez, 2006). Carney, Jost, Gosling, and Potter (2008) pointed out that most of the traits featured in social and psychological accounts of political ideology from the 1930s to the 2000s correspond to one or more of the Big Five dimensions of openness to new experiences, conscientiousness, extraversion, agreeableness, and neuroticism (or emotional instability). As shown in Table 1, two personality dimensions clearly stand out from the others. Consistent with what social theorists have argued for nearly a century, we find that *openness* is higher on the left, whereas *conscientiousness* is higher on the right.

A meta-analysis by Sibley, Osborne, and Duckitt (2012) reviewed 73 studies of personality and political orientation—nearly all of which were carried out after 2000. Most studies were conducted in North America and Western Europe (as well as Poland, Turkey, Israel, and New Zealand) and in total they included more than 70,000 research participants. The evidence, whether based on surveys of university students (Carney et al., 2008), internet users (Nosek & Hansen, 2008), or nationally representative samples (Gerber, Huber, Doherty, Dowling, & Ha, 2010) is exceedingly clear. Openness and conscientiousness are the two personality dimensions that are most

Table 1

Personality Traits and “Big Five” Classifications Theorized to be Associated with Liberal (or Leftist) and Conservative (or Rightist) Political Orientation. This table is adapted from Carney, Jost, Gosling, and Potter (2008, p. 816; see also Edsall, 2012, p. 60).

Liberal/leftist	Conservative/rightist
Slovenly, ambiguous, indifferent (C–)	Definite, persistent, tenacious (C+)
Eccentric, sensitive, individualistic (O+)	Tough, masculine, firm (C+, A–)
Open, tolerant, flexible (O+)	Reliable, trustworthy, loyal (C+, A+)
Life-loving, free, unpredictable (O+, C–, E+)	Stable, consistent (C+, N–)
Creative, imaginative, curious (O+)	Rigid, intolerant (O–, A–)
Expressive, enthusiastic (O+, E+)	Conventional, ordinary (O–, C+)
Excited, sensation-seeking (O+, E+)	Obedient, conformist (O–, C+, A+)
Desire for novelty, diversity (O+)	Fearful, threatened (N+)
Uncontrolled, impulsive (C–, E+)	Xenophobic, prejudiced (O–, A–)
Complex, nuanced (O+)	Orderly, organized (C+)
Open-minded (O+)	Parsimonious, thrifty, stingy (C+)
Open to new experiences (O+)	Clean, sterile (C+)
Compassionate, empathic (A+)	Obstinate, stubborn (O–, C+, A–)
	Aggressive, angry, vengeful (A–)
	Careful, practical, methodical (O–, C+)
	Withdrawn, reserved (E–)
	Stern, cold, mechanical (O–, E–, A–)
	Anxious, suspicious, obsessive (N+)
	Self-controlled (C+)
	Restrained, inhibited (O–, C+, E–)
	Concerned with rules, norms (C+)
	Moralistic (O–, C+)
	Simple-minded, decisive (O–, C+)
	Closed-minded (O–)
	Conscientious (C+)
	Polite (A+)

O = “Openness to Experience”; C = “Conscientiousness”; E = “Extraversion”; A = “Agreeableness”; N = “Neuroticism”; + = “High”; – = “Low”.

strongly correlated with political orientation. Whereas openness is positively associated with liberal and leftist attitudes, conscientiousness—especially the facet of *orderliness*—is positively associated with the adoption of conservative and rightist attitudes. With respect to agreeableness, one facet (*compassion*) is associated with a liberal orientation, whereas another (*politeness*) is associated with a conservative orientation (Hirsh, DeYoung, Xu, & Peterson, 2010). No consistent ideological differences exist with respect to extraversion or neuroticism.¹

One potential shortcoming is that all of this evidence comes from subjective, self-report measures of personality traits. This means that the results could reflect ideological divergence with respect to self-perception and/or self-presentation, rather than genuine personality differences. To address this problem, Carney et al. (2008) explored more subtle, unobtrusive differences in nonverbal behavior, such as the “behavioral residue” that people leave behind in living and working spaces (see also Gosling, 2008). In one study, we investigated the relationship between political orientation and the personal belongings found

¹ Some researchers prefer the HEXACO model, which specifies six (rather than five) major factors of personality; they find that liberals score higher than conservatives on *honesty-humility* (Chirumbolo & Leone, 2010; Leone, Chirumbolo, & Desimoni, 2012).

in bedrooms (including rooms in private houses, apartments, dormitories, co-ops, fraternities, and sororities)—focusing especially on objects associated with openness and conscientiousness. Research assistants, who were unaware of the residents' ideological proclivities, coded a wide range of environmental stimuli using the Personal Living Space Cue Inventory, which involves both global assessments (e.g., “clean” vs. “dirty,” “well-lit” vs “dark”) and an inventory of specific content items (e.g., “ironing board,” “laundry basket”). Results, which are summarized in Table 2, revealed that liberals' bedrooms contained more art supplies, musical recordings, movie tickets, and items pertaining to travel, such as maps and travel documents, as well as a greater number and variety of books, including books about music, travel, feminism, and ethnicity. Conservatives' bedrooms included more organizational items, including event calendars and postage stamps, as well as conventional decorations such as American flags, sports memorabilia, and alcohol containers. Rooms occupied by conservatives were rated as somewhat more neat, clean, fresh, organized, and well-lit, and they were more likely to contain cleaning supplies and mending accessories such as laundry baskets and ironing boards.

Taken as a whole, the research literature in political psychology suggests that left–right ideological differences permeate the recesses of private—as well as public—life, including esthetic tastes, leisure activities, and consumption preferences (DellaPosta, Shi, & Macy, 2015), as well as

romantic interests and dating behavior (Eastwick, Richeson, Son, & Finkel, 2009; Klofstad, McDermott, & Hatemi, 2012). Even in terms of the “things they leave behind,” liberals are more open-minded in pursuit of novelty, creativity, curiosity, and diversity, whereas conservatives tend to be more conventional, neat, orderly, and organized (Carney et al., 2008). The relationship between openness and liberalism appears to be mediated by cultural exposure, so that individuals who are high in openness read more books, articles, and newspapers and see a greater number and variety of films and videos, and these forms of cultural exposure foster a more liberal political orientation (Xu, Mar, & Peterson, 2013). Consistent with personality differences in openness and conscientiousness, liberals listen to a wider range of musical forms and expose themselves to books and movies that may be considered “dark” or “alternative,” such as science fiction, horror movies, and cult films, whereas conservatives prefer more conventional forms of entertainment, such as soap operas, Westerns, romances, game shows, reality television, cop shows, war movies, action adventures, and sporting events (Xu & Peterson, 2017). The implications of these findings for the theory and practice of consumer psychology and marketing are truly legion.

Ideological differences in cognitive processing styles

One of the most enduring scientific controversies in political psychology pertains to the so-called “rigidity-of-the-right” hypothesis (Malka & Soto, 2015; Sidanius, 1985; Tetlock, 1989). The hypothesis is typically traced back to Adorno et al.'s (1950) pioneering work on the authoritarian personality, which demonstrated that intolerance of ambiguity, closed-mindedness, and dogmatism were associated not only with the endorsement of proto-fascistic statements but also with political-economic conservatism. Critics of *The Authoritarian Personality* have claimed that liberals and leftists are just as dogmatic and rigid as rightists and point out that left-wing regimes in the USSR, China, Cuba, and elsewhere embraced authoritarian tactics and ideas (e.g., Eysenck, 1954). From a psychological perspective, it is important to recognize that historical observations about totalitarian political regimes do not (and cannot) establish that—in the democratic “marketplace of ideas”—individuals who are drawn to liberal and conservative viewpoints are *equally* rigid, dogmatic, and closed-minded (Stone & Smith, 1993).

A meta-analytic review of studies conducted between 1958 and 2002 involving 88 research samples and over 22,000 research participants from 12 different countries produced consistent support for the rigidity-of-the-right hypothesis and no support for the alternative hypothesis that cognitive rigidity would be as prevalent on the left as the right (Jost, Glaser, et al., 2003a, 2003b). Specifically, intolerance of ambiguity and personal needs for order, structure, and closure were positively associated with conservative preferences, whereas integrative complexity, open-mindedness, and tolerance for uncertainty were positively associated with liberal preferences. Importantly, these findings have been replicated and extended in a subsequent meta-analysis based on larger samples of studies,

Table 2

Relationship between (self-reported) political conservatism of occupant and observers' ratings of several bedroom cues.

This table is adapted from Carney, Jost, Gosling, and Potter (2008, pp. 833–834).

	β	b (SE)
<i>Conservatives' bedrooms contained more</i>		
Sports-related decorations	.34**	.23 (.07)
Event calendars	.31**	.27 (.10)
Postage stamps	.30**	.29 (.11)
Presence of string/thread	.29*	.33 (.12)
Iron and/or ironing boards	.28*	.20 (.08)
Laundry baskets	.25*	.11 (.05)
Alcohol bottles/containers	.23*	.22 (.11)
Flags of the USA	.21+	.28 (.15)
<i>Liberals' bedrooms contained more</i>		
Travel books	-.21+	-.10 (.06)
Collections (e.g., stamps, action figures)	-.22+	-.09 (.05)
Tickets for/from travel	-.22+	-.21 (.11)
Music CDs	-.23*	-.28 (.14)
Books about ethnic topics	-.24*	-.13 (.06)
Movie tickets	-.25*	-.17 (.08)
Books about feminist topics	-.25*	-.24 (.11)
Books about music	-.25*	-.22 (.10)
Foreign/international maps	-.25*	-.14 (.06)
Books (in general)	-.25*	-.27 (.12)
Items of stationery	-.26*	-.27 (.12)
Art supplies	-.27*	-.12 (.05)
Variety of music	-.27*	-.34 (.14)
Variety of books	-.34**	-.40 (.13)

Not all items/ratings are shown in this table; see original article for a complete reporting of results. N 's range from 73 to 76 for all cues included here.

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed).

Table 3
Results of a meta-analysis investigating cognitive processing style variables associated with liberal (or leftist) and conservative (or rightist) political orientation. This table is based on results presented by Jost, Sterling, & Stern, in press, see figures and online tables).

Cognitive processing variable	Sample operationalization(s)	Number of tests	Countries Tested (<i>n</i>)	Result
Uncertainty tolerance	Esthetic preferences for complex art and poetry and disagreement with items like: “I can’t stand being taken by surprise.”	16	3	Liberals are more tolerant of uncertainty (effect sizes ranging from $-.07 \leq r \leq -.33$).
Intolerance of ambiguity	Agreement with items like: “A good job is one where what is to be done and how it is to be done are always clear.”	44	7	Conservatives are more intolerant of ambiguity (effect sizes ranging from $.20 \leq r \leq .26$).
Need for cognitive closure	Agreement with items like, “I usually make important decisions quickly and confidently.”	100	7	Conservatives are higher in need for closure (effect sizes ranging from $.19 \leq r \leq .23$).
Personal needs for order and structure	Agreement with items like: “It upsets me to go into a situation without knowing what I can expect from it.”	77	6	Conservatives are higher in needs for order/structure (effect sizes ranging from $.18 \leq r \leq .20$).
Integrative complexity	Objective content coding of speeches, decisions, and other forms of text.	40	4	Liberals are higher in integrative complexity (effect sizes ranging from $-.15 \leq r \leq -.19$).
Perceptual/cognitive rigidity	Objective behaviors such as the tendency to exclude non-prototypical examples from category classification	23	3	Conservatives are higher in rigidity (effect sizes ranging from $.32 \leq r \leq .38$).
Dogmatism	Agreement with items like: “There are two kinds of people in this world: those who are for the truth and those who are against the truth.”	77	7	Conservatives are higher in dogmatism (effect sizes ranging from $.48 \leq r \leq .51$).
Need for cognition	Agreement with items like: “I find satisfaction in deliberating hard and for long hours.”	40	2	Liberals are higher in need for cognition (effect sizes ranging from $-.09 \leq r \leq -.16$).

participants, and psychological variables (Jost, Sterling, & Stern, in press). Most of the studies included in the latter meta-analysis were conducted in North America and Western Europe, but some were conducted in Hungary, Poland, Turkey, and New Zealand. I have summarized the major results of this more recent analysis in Table 3.

Since 2006 there have been 16 studies (and 29 tests) of the hypothesis that—on objective measures such as the *cognitive reflection test*—liberals employ a more reflective, deliberative, and analytical (vs. intuitive) thinking style, in comparison with conservatives. As shown in Fig. 1, this hypothesis was upheld in 14 of 16 studies (involving a total of 17,598 individual participants), and the average effect size was statistically significant and negative, albeit modest in size. In the language of dual-process theories popularized by Kahneman (2011), conservatives seem to engage in more heuristic, automatic, stereotypical thinking, whereas liberals engage in more systematic, controlled, effortful thinking.

This difference is consistent with other evidence from the (Jost, Sterling, & Stern, in press) meta-analysis, which revealed that liberals scored higher than conservatives on *need for cognition* (sometimes referred to as *enjoyment of thinking*). As shown in Fig. 2, an ideological asymmetry in need for cognition was observed in 14 of 19 studies, and the average effect size was statistically significant. These findings are potentially useful for designing effective marketing campaigns, insofar as individuals who score higher on need for cognition engage in more systematic processing of persuasive messages, whereas those who score lower tend to engage in heuristic processing (Petty & Cacioppo, 1986).

Pennycook, Cheyne, Barr, Koehler, and Fugelsang (2015) observed that intuitive (vs. analytical) thinking styles and low need for cognition predicted the acceptance of statements that were extremely vague and yet superficially meaningful.

Following the philosopher Harry Frankfurt, they dubbed this outcome variable “receptivity to pseudo-profound bullshit” and measured it in terms of suggestibility to meaningless items such as: “Consciousness is the growth of coherence, and of us.”² Sterling, Jost, and Pennycook (2016) found that individuals who endorsed neoliberal, free market ideology (i.e., economic conservatism)—demonstrated a stronger reliance on intuitive, heuristic-based cognitive processing and were more receptive to bullshit. Another study yielded similar results: Those who identified as conservative and liked Donald Trump, Ted Cruz, and Marco Rubio were more susceptible to pseudo-profound bullshit than those who did not (Pfattheicher & Schindler, 2016). Taken as a whole, these findings may help to explain why the U.S. market for “fake news” is more lucrative on the political right than the left (Ingraham, 2016; Sydell, 2016). Rumors, misinformation, and conspiracy theories seem to spread more rapidly and extensively throughout conservative (vs. liberal) online social networks (e.g., Benkler, Faris, Roberts, & Zuckerman, 2017; Miller, Saunders, & Farhart, 2015).

There is, then, a great deal of evidence documenting liberal-conservative differences in cognitive processing styles, including uncertainty avoidance; intolerance of ambiguity; perceptual and cognitive rigidity; dogmatism; personal needs for order, structure, and cognitive closure; need for cognition; cognitive reflection; bullshit receptivity; and self-deception (see Jost, 2017; Jost, Sterling, & Stern, in press). As shown in Table 3, the results are quite consistent across subjective (self-report)

² A helpful reader pointed out that pseudo-profound bullshit may be quite common in consumer advertising and cited the Lincoln Motor Company commercials featuring Matthew McConaughey as one example. These advertisements have been memorably parodied by Jim Carrey (<https://www.youtube.com/watch?v=z3eN9u5N2Q4>) and Ellen DeGeneres (<https://www.youtube.com/watch?v=K69chHMtrS4>), among others.

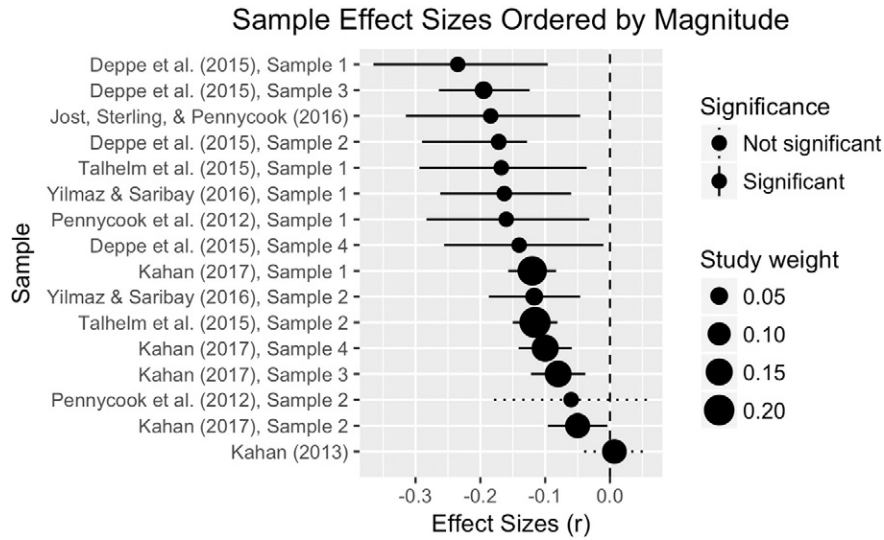


Fig. 1. Distribution of Average Effect Sizes for Studies Investigating the Hypothesis that Objective Performance on Cognitive Reflection Would Be Stronger Among Liberals than Conservatives. Source: This figure, which was prepared by Joanna Sterling, is revised and updated following Jost (2017, Fig. 9, p. 180). We thank Dan Kahan for providing us with data from four additional (unpublished) studies that are included for the first time here. In this figure, we have excluded results based on subjective (as opposed to objective) measures of cognitive reflection and analytical thinking. Overall, the unweighted ($r = -.13$) and weighted ($r = -.10$, 95% CI $[-.12, -.09]$) average effect sizes were negative and statistically significant (total unique $N = 17,598$).

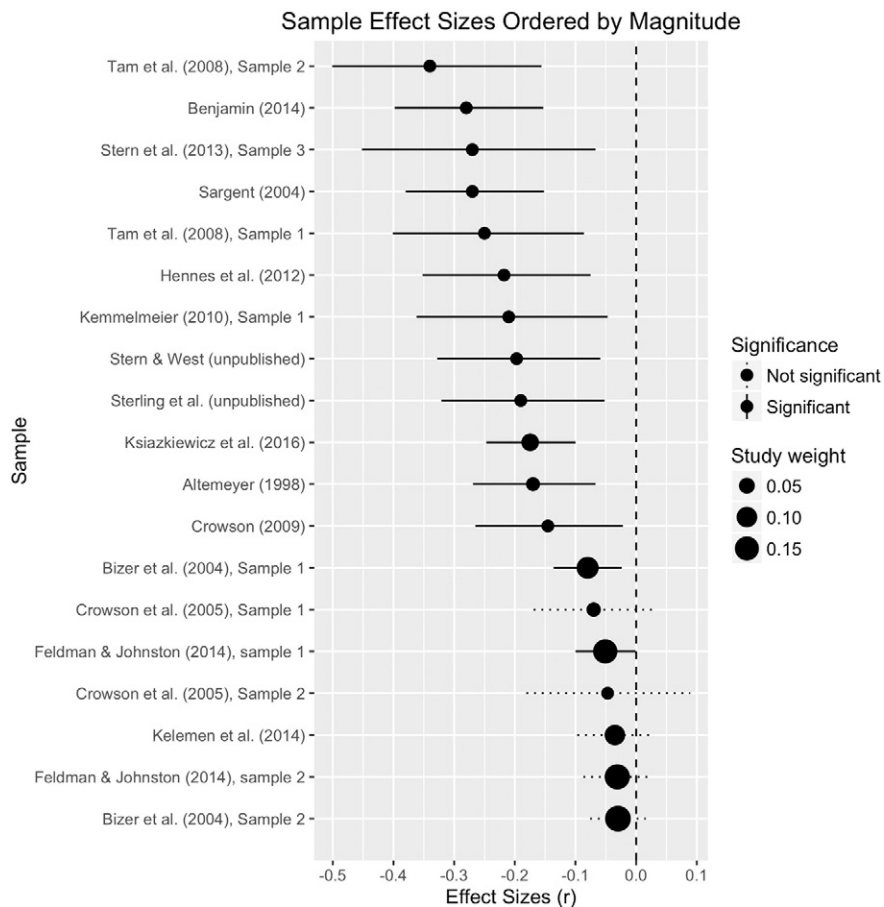


Fig. 2. Distribution of Average Effect Sizes for Studies Investigating the Hypothesis that Need for Cognition Would Be Stronger Among Liberals than Conservatives. Source: This figure, which was prepared by Joanna Sterling, is adapted from Jost (2017, Fig. 8, p. 179).

and objective (behavioral) measures of cognitive style. Experimental researchers have also directly manipulated cognitive style through inductions of mental distraction, cognitive load, time pressure, threat, and alcohol intoxication. These interventions seem to promote an affinity for hierarchy and/or conservative, right-wing opinions and labels (Eidelman, Crandall, Goodman, & Blanchar, 2012; Friesen, Kay, Eibach, & Galinsky, 2014; Hansson, Keating, & Terry, 1974; Lammers & Proulx, 2013; Rock & Janoff-Bulman, 2010; Rutjens & Loseman, 2010; Skitka, Mullen, Griffin, Hutchinson, & Chamberlin, 2002; Thórisdóttir & Jost, 2011; Van Berkel, Crandall, Eidelman, & Blanchar, 2015). Experiments such as these are extremely valuable because they demonstrate that a causal relationship exists between cognitive processing style, on one hand, and left–right ideological preferences, on the other.

Cichočka, Bilewicz, Jost, Marrouch, and Witkowska (2016) hypothesized that ideological differences in cognitive processing style would influence verbal behavior, such as preferences for nouns—which convey greater permanence, stability, and categorical perceptions—over other parts of speech, such as verbs and adjectives. For instance, noun phrases such as “Julia is a Jew” and “Mohammed is a Syrian” convey more in terms of inductive potential and social stereotyping, in comparison with similar adjective phrases such as “Julia is Jewish” and “Mohammed is Syrian” (Carnaghi et al., 2008). The hypothesis that political ideology would be related to grammatical preferences was upheld in three studies carried out in very different sociolinguistic contexts (Cichočka et al., 2016). In Poland, we observed that social conservatives exhibited stronger noun preferences than social liberals, and the need for structure mediated the effect of ideology on grammatical preferences. In a second study, conducted in Lebanon, social conservatism was associated with a preference for the use of nominal sentences in Arabic (which are comprised of nouns only) over verbal sentences (which include verbs and adjectives). In a third study, major speeches given by more conservative U.S. presidents were found to include a higher proportion of nouns, and this effect was related to integrative complexity. These findings were conceptually replicated by a linguistics blogger who compared radio addresses of Republican President George W. Bush in 2008 and Democratic President Barack Obama in 2010. He found that Bush used 17% more nouns than Obama, whereas Obama used more verbs, adverbs, and pronouns (Liberman, 2016). Few speakers are consciously aware of their own grammatical choices, so this work provides further evidence that ideological differences in cognitive processing style are not confined to subjective, self-report measures.

Ideological differences in motivational interests and concerns

The potency of political and religious ideologies highlights a fundamental conundrum about human motivation—one that deserves prominence in an age in which violence motivated by ideological extremism (especially right-wing extremism) appears to be on the rise in the U.S. and elsewhere (Lee,

Patterson, & Canon, 2015). How could people be so strongly inspired by a shared system of beliefs, opinions, and values that they are willing to kill or be killed? The novelist Arthur Koestler, who spent much of his early adulthood dodging Fascist and Communist dictatorships, wrote: “Even a cursory glance at history should convince one that individual crimes committed for selfish motives play a quite insignificant part in the human tragedy, compared to the numbers massacred in unselfish loyalty to one’s tribe, nation, dynasty, church, or political ideology” (Koestler, 1978, p. 14). It is a fact of human nature that people can be moved by abstract systems of belief to commit atrocities as well as astonishing feats of altruism. But what, specifically, is it about an ideology that renders it capable of motivating human behavior?

In seeking to explain the motivational potency of ideology, the perceptual psychologist William Dember (1991) emphasized the *epistemic* function of reducing uncertainty (see also Hogg, 2007). Others—like Ernest Becker (1973) and the proponents of terror management theory (Pyszczynski, Solomon, & Greenberg, 2003)—suggest that ideology is a powerful motivating force because it confers *existential* security: a way of keeping death anxiety at bay through psychological mechanisms of denial, rationalization, and “cultural defense.” Ideology also serves the *relational* function of bringing people together (often in contradistinction to their ideological adversaries) under the rubric of a common group categorization and a shared understanding of social reality (Hardin & Higgins, 1996). In an effort to integrate these various perspectives on the motivational functions of ideology, Jost et al. (2009) suggested that ideology inspires human activity because it draws on fundamental epistemic, existential, and relational needs. That is, political and religious belief systems offer the promise of certainty, security, and solidarity, although they may not address these needs in the same way or to the same extent.

Furthermore, my colleagues and I have proposed that system justification—which serves epistemic, existential, and relational needs—provides the “motivational glue” that holds the two dimensions of left–right ideology together (Jost, Federico, & Napier, 2013). To uphold traditional institutions and arrangements, conservatives are moved to defend extant inequalities as desirable, just, and necessary. Conversely, to bring about a more equal state of affairs, progressives are driven to criticize existing institutions and practices. Or, as Laponce (1981) put it: “Attachment to one’s privileges and to the hierarchical order is on the right; the desire to bring down that order is on the left” (p. 51). A number of studies demonstrate that epistemic, existential, and relational needs to reduce uncertainty, threat, and social discord are positively associated with the endorsement of conservative, system-justifying belief systems and negatively associated with the endorsement of progressive, system-challenging belief systems.

For instance, a study by Hennes, Nam, Stern, and Jost (2012) revealed that people who scored lower on need for cognition—that is, individuals who say that they do not enjoy thinking very much—and people who scored higher on death anxiety and the need to share reality with like-minded others

were more politically conservative and endorsed system-justifying beliefs more enthusiastically; were more likely to endorse conservative positions on issues such as climate change, health care reform, and immigration policy; and were more supportive of the Tea Party movement and less supportive of the Occupy Wall Street movement. Importantly, the effects of epistemic, existential, and relational motives on political attitudes were mediated by system justification (Hennes et al., 2012). These findings were conceptually replicated in the context of Argentina, where university students who scored higher on the need for cognitive closure, death anxiety, and the need to share reality were more likely to endorse system-justifying beliefs and identify themselves as right-wing (vs. left-wing). System justification mediated the effects of epistemic, existential, and relational motives on political orientation and support for conservative President Mauricio Macri (Jost, Langer, Badaan, et al., 2017).

As we will see later in this article, the fact that conservatives possess a stronger motivation than liberals do to defend and justify the societal status quo helps to explain a number of ideological differences in consumer behavior (Banfield, Kay, Cutright, Wu, & Fitzsimons, 2011; Cutright, Wu, Banfield, Kay, & Fitzsimons, 2011; Jung, Garbarino, Briley, and Wynhausen, 2017); Shepherd, Chartrand, & Fitzsimons, 2015). Over the years, there has been tremendous interest in the phenomenon of “status quo bias” (and related concepts such as loss and risk aversion) in behavioral decision theory (e.g., Kahneman, 2011; Moshinsky & Bar-Hillel, 2010; Thaler, 2015) and various applications in marketing, strategy, management, and organizational behavior (e.g., Chernev, 2004; Hartman, Doane, & Woo, 1991; Kim & Kankanhalli, 2009). This voluminous literature has yet to incorporate ideological factors—such as political conservatism, traditionalism, acceptance of inequality, and system justification motivation—which means that an opportunity exists to address this intellectual lacuna.

There is, moreover, mounting evidence that conservatives are quicker to apply group stereotypes and more likely to devalue individuals who deviate from the stereotype, in comparison with liberals (e.g., Stern, West, & Rule, 2015; see also Luguri, Napier, & Dovidio, 2012; Olivola, Sussman, Tsetsos, Kang, & Todorov, 2012). For example, conservatives are more likely than liberals to assume that men with stereotypically feminine facial features—such as long eyelashes, high cheekbones, and slender faces—are gay (Stern, West, Jost, & Rule, 2013). Liberals also take longer when asked to categorize individuals as gay or straight, suggesting that they may think more deeply about their judgments, in comparison with conservatives. Under cognitive load, however, liberals are as likely as conservatives to use gender-inversion cues when rendering sexual orientation judgments, presumably because they are unable to engage in a secondary process of stereotype correction (see also Skitka et al., 2002). Liberals are also less likely than conservatives to believe that gender-inversion stereotypes are valid cues about sexual orientation, and we observed that this ideological difference in beliefs about the utility of stereotyping was mediated by the need for cognition (see Fig. 3).

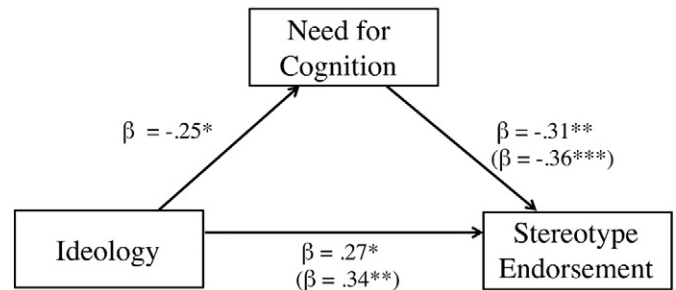


Fig. 3. The Effect of Political Ideology on the Endorsement of Gender-Inversion Stereotypes about Gay Men as Mediated by Need for Cognition. Note: This figure, which was prepared by Chadly Stern, is adapted from Stern, West, Jost, and Rule (2013, Study 3). Numerical entries are standardized coefficients based on a statistical model in which attitudes toward gay men and social contact with gay men were also included as covariates. Values in parentheses represent direct relationships, and values without parentheses represent relationships when all variables were included in the model. * $p < .05$, ** $p < .01$, *** $p < .001$.

Krosch, Berntsen, Amodio, Jost, and Van Bavel (2013) identified another ideological asymmetry—one that pertains to reliance on the principle of “hypodescent” in racial categorization, which implies that multiracial individuals are categorized according to their most socially subordinated group membership. In three studies, we demonstrated that political conservatives exhibited a lower statistical threshold than liberals for classifying ambiguous, mixed-race faces as “Black.” The effect of ideology on stereotyping in this case was mediated not by epistemic motivation but by system justification and the acceptance of inequality. We hypothesized that insofar as conservatives are more motivated to maintain racial divisions that are part of their own national system (as opposed to those that are not), the relationship between conservatism and hypodescent would be stronger when U.S. participants classified mixed-race faces that they believed were American (vs. Canadian). As illustrated in Fig. 4, conservatives exhibited a lower threshold for categorizing racially ambiguous faces as Black when they were judging American, but not Canadian, faces. This finding suggests that racial categorization is affected by the system-justifying motivation to uphold traditional racial divisions that are part of the historical legacy of the United States—a motivation that is stronger among conservatives than liberals.

Stern et al. (2015) investigated the hypothesis that conservatives would not only rely more heavily on stereotypes but would also be more likely than liberals to evaluate negatively those individuals who deviate from the stereotype. Thus, in one study they observed that conservatives evaluated masculine-looking gay men less favorably than feminine-looking gay men, whereas liberals displayed no differences in evaluation. In another study, the researchers created a novel stereotype in the laboratory, informing participants that members of one (fictional) social group typically had moles on their face, whereas members of another group did not. Conservatives subsequently evaluated counter-stereotypical exemplars more negatively than stereotypical exemplars, but liberals did not. This ideological asymmetry occurred only when participants expected to encounter these groups again in the near future,

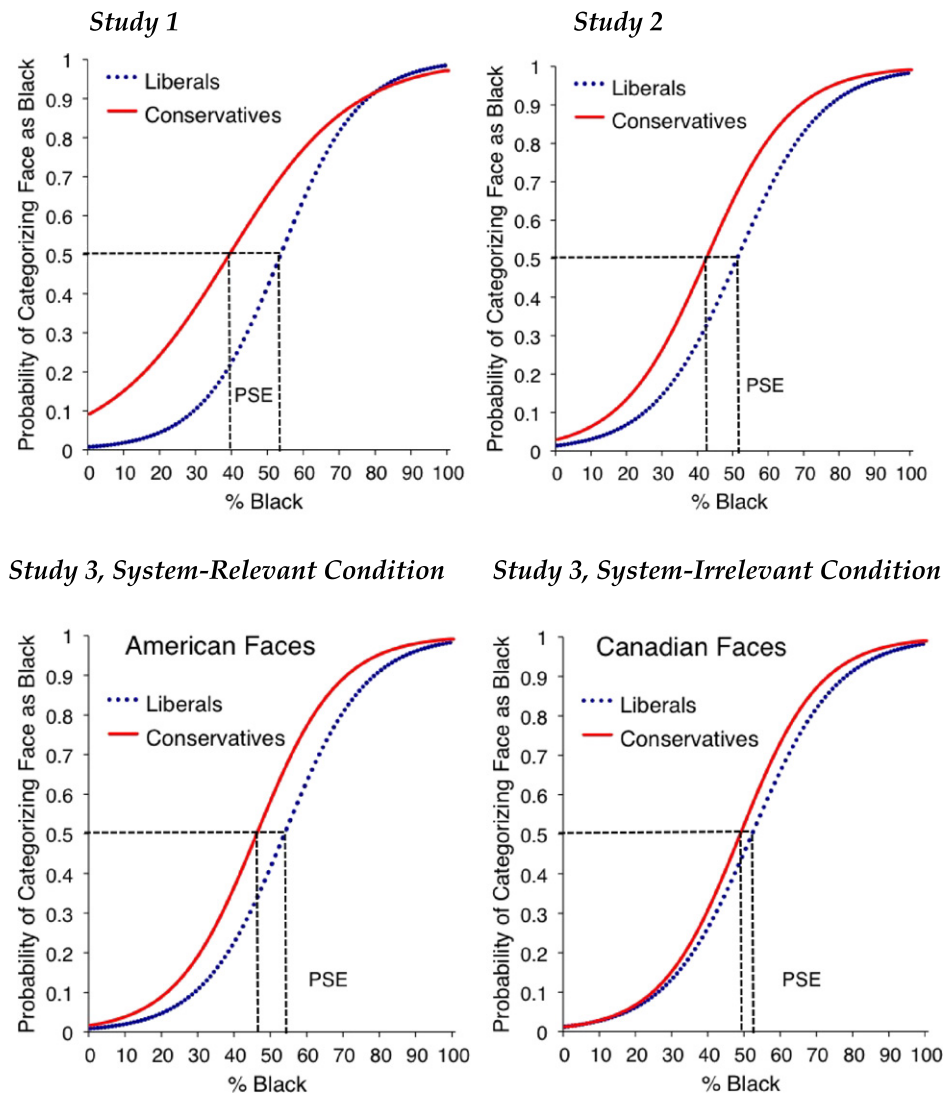


Fig. 4. Effects of Political Ideology on Use of the Principle of Hypodescent When Categorizing Racially Ambiguous Faces. Note: This figure is adapted from Krosch et al. (2013). “PSE” refers to the “Point of Subjective Equality,” defined as the point at which faces are equally likely to be categorized as Black or White. “Liberals” = two standard deviations below and “Conservatives” = two standard deviations above the grand mean for political ideology.

suggesting that there may be an epistemic, goal-oriented basis for conservative preferences for stereotype-congruent targets. Findings such as these have potential ramifications for judgment and decision-making in a variety of marketing contexts, especially given that some products and services confirm preconceived, stereotypical notions whereas others do not (Goode, Dahl, & Moreau, 2013). Racial, ethnic, and other group-based stereotypes come into play in some advertising campaigns as well. There is, for instance, some evidence that conservatives responded negatively to the inclusion of Arab and Muslim individuals in a highly publicized Coca-Cola commercial, shifting their attitudes in the direction of the competition (Pepsi), whereas liberals did not (Hoewe & Hatemi, 2016).

Ideological differences in the prioritization of personal values

Although the study of individual differences in value priorities may be traced back to the pioneering work of Henry

Murray (1938), it took several decades before taxonomies of value were applied to political psychology. Since the 1970s, there has been a good deal of research on ideological differences in the expression of personal and social values. Major theoretical distinctions are summarized in Table 4. Most, if not all, of these distinctions have been well validated in empirical research (Jost, Basevich, Dickson, & Noorbaloochi, 2016), although there are surely cross-cultural differences when it comes to the meaning and social significance of specific values (e.g., Torelli & Shavitt, 2010).

One of the leading figures in this area, Milton Rokeach (1973) stressed the political importance of two major values in particular: *equality* and *freedom*. He suggested that the four major social systems of the 20th century—and their ideological underpinnings—could be understood in terms of their relative commitments to freedom and equality. Specifically, Rokeach argued that supporters of capitalism value freedom but not equality, whereas supporters of Communism value equality but

Table 4

Personal values theorized to be associated with liberal (or leftist) and conservative (or rightist) political orientations.

This table is adapted from Jost, Basevich, Dickson, and Noorbaloochi (2016, p. 37).

Liberal/leftist	Conservative/rightist
Equality	Personal happiness
A world at peace	Family security
Harmony (humanism, personal growth)	Security (social order, national strength)
Environmental protection	Economic prosperity
Universalism	Conformity
Benevolence	Traditionalism/resistance to change
Self-direction	Power
Social change (progress, innovation)	Achievement
Fairness/social justice	Hierarchy/inequality
Harm avoidance	Obedience to authority
Prosociality (cooperation)	Ingroup loyalty
	Purity/divinity
	Competition
	Individualism (self-interest)

not freedom. At the same time, liberals and socialists value both freedom and equality, whereas fascists value neither (see also Tetlock, 1986). Braithwaite (1998) observed that rightists are more enthusiastic about values pertaining to *security*—including social order, national strength, and desire for social standing, whereas leftists are more enthusiastic about values pertaining to *harmony*—including equality, pacifism, and personal growth and expression.³

The dominant approach to the cross-cultural study of human values is that of Shalom Schwartz (2012). His taxonomy includes 10 ostensibly universal values, namely: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. These values are organized in terms of a circumplex model that revolves around two underlying dimensions, which Schwartz identifies as openness to change (stimulation, self-direction) versus conservation (conformity, security, and tradition) and self-transcendence (benevolence, universalism) vs. self-enhancement (power, achievement, hedonism). Studies demonstrate a remarkable level of consistency across Western nations when it comes to ideological divergence in the prioritization of specific values: liberals and leftists are more likely to value *benevolence* and *universalism*, whereas conservatives and rightists are more likely to value *conformity*, *security*, *tradition*, and *power* (e.g., Aspelund,

Lindeman, & Verkasalo, 2013; Caprara, Schwartz, Capanna, Vecchione, & Barbaranelli, 2006; Jones, Noorbaloochi, Jost, Bonneau, Nagler, and Tucker, in press; Jost et al., 2016; Piurko, Schwartz, & Davidov, 2011; Schwartz, Caprara, & Vecchione, 2010).⁴ Findings such as these are readily interpretable in terms of Jost, Glaser, et al.'s (2003a, 2003b) theory of ideology as motivated social cognition. Because those on the left are motivated to agitate for social change in the name of increased equality, they tend to devalue tradition, conformity, and power while prioritizing universalism and benevolence. Because rightists are motivated to defend the status quo, they tend to devalue universalism and benevolence while emphasizing tradition, conformity, security, and power (see also Jost et al., 2016).

Ideological differences in neurological structures and physiological functions

An *elective affinities* model would suggest that—by dint of nature as well as nurture—individuals develop pre-political dispositions, such as general physiological and psychological orientations toward environmental stimuli as well as personality characteristics, and that these lead people to gravitate toward ideas of the left or right if they are exposed to them (Jost et al., 2009). At the level of personality traits, we have seen that conservatives are higher in conscientiousness, whereas liberals are higher in openness to new experiences (Carney et al., 2008). At the level of affect, cognition, and motivation, conservatives are more focused than liberals on the reduction of uncertainty and threat, presumably because there is a natural connection between the maintenance of tradition and hierarchy and the desire for order, predictability, and control (Friesen et al., 2014; Jost, Glaser, et al., 2003a, 2003b; Van Berkel et al., 2015). These characterological differences appear to be instantiated at the level of neurocognitive structures and functions, especially when it comes to the anterior cingulate cortex (ACC) and the amygdala (Jost, Nam, Amodio, & Van Bavel, 2014).

Drawing on the theory of political ideology as motivated social cognition, Amodio, Jost, Master, and Yee (2007) hypothesized that liberals and conservatives would differ in terms of conflict monitoring—a neurocognitive process localized in the ACC that is sensitive to potentially discrepant response tendencies. In the context of a “Go/No-Go task,” participants were asked to respond quickly and accurately to a familiar (Go) stimulus, to the point that “Go” responses became habitual. Every once in a while, however, a “No-Go” stimulus appeared; on these trials, participants were instructed

³ Graham, Haidt, and Nosek (2009) adopt the more grandiose language of “moral foundations” rather than “personal values,” but their research program demonstrates ideological differences in the prioritization of five specific values. Liberals place greater value than conservatives on issues of *fairness* and *avoidance of harm*, whereas conservatives place greater (positive) value than liberals on *ingroup loyalty*, *obedience to authority*, and *purity*. Consistent with an analysis of political ideology as motivated social cognition (Jost, Glaser, et al., 2003a, 2003b)—these ideological differences in moral concerns are attributable, at least in part, to the fact that conservatives have stronger epistemic, existential, and relational needs (Van Leeuwen & Park, 2009) and score higher than liberals on *right-wing authoritarianism* and *social dominance orientation* (Kugler, Jost, & Noorbaloochi, 2014).

⁴ Aspelund et al. (2013) obtained inconsistent results when they investigated the relationship between ideology and value priorities in Central and Eastern Europe. The elective affinities model—which assumes that there is a “marketplace” for ideology—applies much better to Western-style democracies in which citizens are relatively free to choose parties and ideologies that correspond to their own psychological needs than to other forms of government in which options are (or until recently were) fixed by the social and political system.

to withhold their habitual responses. As hypothesized, ideology was associated with performance on the Go/No-Go task as well as patterns of brain activity. Liberals were better than conservatives at withholding habitual responses (that is, responding correctly on No-Go trials) and exhibited greater activity in the ACC on these trials. These findings are consistent not only with the observation that there are ideological differences in cognitive processing style, as discussed above, but also that liberals may be more neurologically attuned to the processing of novel, unexpected, and potentially contradictory pieces of information (see also Shook & Fazio, 2009).⁵

To investigate the notion that there would be ideological differences in physiological responses to threat, Oxley et al. (2008) exposed residents of Lincoln, Nebraska to a series of fear-inducing and disgusting images (such as a bloody face or a maggot-infested wound) as well as more neutral images (a bowl of fruit). They observed that more conservative participants exhibited stronger skin conductance responses (SCRs)—that is, increased sweat gland activity associated with arousal in the sympathetic nervous system—in response to threatening and disgusting (but not neutral) images (see also Smith, Oxley, Hibbing, Alford, & Hibbing, 2011). Oxley and colleagues also administered unexpected blasts of white noise and measured startle eyeblink responses—which are associated with amygdala activity—and found that conservatives exhibited stronger blink amplitudes than liberals.

Kanai, Feilden, Firth, and Rees (2011) explored the relationship between ideology and structural neuroanatomy. Specifically, they assessed regional brain volume in British university students and observed significant correlations between ideology and gray matter volume in two major neurological structures: the ACC and the right amygdala. Consistent with the activation findings of Amodio et al. (2007), larger ACC volume was associated with greater liberalism. Furthermore, larger right amygdala volume was associated with greater conservatism, a finding that is compatible with the observations of Oxley et al. (2008). Insofar as the ACC is associated with conflict monitoring and the amygdala is involved in responses to threat, this neuroanatomical evidence is broadly consistent with behavioral evidence that liberals and conservatives differ in terms of basic orientations toward uncertainty and threat.

To further probe ideological differences in neuroanatomical structure, Nam, Jost, Kaggen, Campbell-Meiklejohn, and Van Bavel (2017) investigated the relationship between system justification and regional brain volume. In two U.S. samples, we observed that the brains of individuals who scored higher on Kay and Jost's (2003) general system justification scale had more gray matter volume in the bilateral amygdalae. Insofar as system justification is a key motivational ingredient in resistance to change, tolerance of inequality, and political

conservatism, these results provide further evidence that ideology is reflected in specific neuroanatomical structures and functions.

There is, however, an important caveat that applies to this research as well as earlier studies by Amodio et al. (2007) and Kanai et al. (2011), namely that the direction of causality is inherently ambiguous. It could be that differences in brain activity contribute to ideological differences, but it is also possible that embracing a specific ideology contributes to differences in brain structure and function. We have referred to this as the “chicken-and-egg” problem in political neuroscience (e.g., Jost et al., 2014). Just as learning how to juggle or meditate or drive a taxi alters the structures of specific brain regions (as well as connections among brain regions), it is conceivable that embracing an ideological perspective (and immersing oneself in either Fox News or MSNBC) could affect the operation and organization of one's brain.⁶

Ideological asymmetries: an executive summary

I have now reviewed in some detail the major findings from five largely independent areas of research in political psychology. In particular, I have described a number of left–right (or liberal-conservative) differences when it comes to personality characteristics, cognitive processing styles and linguistic behavior, motivational interests and concerns, the prioritization of personal values, and neurological structures and physiological functions. According to Noël and Thérien (2008), the left–right “divide helps citizens integrate into coherent patterns their attitudes and ideas about politics” (p. 55). I would go further: ideology helps citizens integrate a wide range of direct and indirect reactions to the social world (some of which are manifestly political and others of which are not) into patterns that mesh with their own personalities—broadly construed to include cognitive, affective, and motivational structures—as well as lifestyles. In this sense, ideology reflects and contributes to relatively stable, inherent preferences that may be dormant or highly active (Simonson, 2008). This is not to say that the organizational effects of ideology are socially desirable or even logically consistent; ideology can lead people astray, and in many cases it courts confusion and misunderstanding (Jost, 2006).

With regard to “Big Five” personality characteristics, liberals are higher in openness to new experiences and compassion, whereas conservatives are higher in conscientiousness, orderliness, and politeness. These findings are remarkably consonant with theoretical hunches dating all the way back to the 1930s, as we saw in Table 1 (Carney et al., 2008). With regard to cognitive processing styles, we find that liberals are more tolerant of ambiguity and uncertainty and score higher on need for cognition and integrative complexity. Conservatives,

⁵ Weissflog, Choma, Dywan, van Noordt, and Segalowitz (2013) conceptually replicated the results of the Amodio et al. (2007) study, demonstrating that liberalism, rejection of inequality, and lower scores on right-wing authoritarianism were associated with greater ACC activity on No-Go trials.

⁶ Because political attitudes and cortical structures are not fully developed in humans until early adulthood, the field of political neuroscience is in need of longitudinal studies designed to isolate causal mechanisms by which changes in brain development affect political behavior (and vice versa).

on the other hand, exhibit more cognitive and perceptual rigidity as well as dogmatism and score higher on personal needs for order, structure, and closure (Jost, 2017). From the perspective of dual process theories of information processing, liberals exhibit a more reflective, deliberative, and analytical thinking style, whereas conservatives exhibit an intuitive thinking style that is presumably more reliant upon cognitive heuristics and shortcuts (Jost & Krochik, 2014), including stereotypes (Stern et al., 2013, 2015).

In terms of motivational concerns, heightened epistemic, existential, and relational needs to reduce uncertainty, threat, and social discord are positively associated with the endorsement of conservative, system-justifying attitudes and are negatively associated with the endorsement of progressive, system-challenging attitudes. Generally speaking, conservatives are motivated to defend and justify the societal status quo in the name of upholding tradition and hierarchy, whereas liberals are motivated to criticize or challenge the status quo in the name of greater equality (Jost, Langer, Badaan, et al., 2017). These motivational differences are reflected in the prioritization of personal values: whereas conservatives emphasize conformity, security, tradition, and power, liberals emphasize benevolence, universalism, and self-direction.

In what may come as a surprise to some readers, ideological differences are also instantiated at the level of neurological structures and functions. Most pertinent to our discussion here, liberals and low system-justifiers exhibit more activation and larger brain volume in the ACC, whereas conservatives and high system-justifiers exhibit larger brain volume (and perhaps more activation) in the amygdala (Jost et al., 2014). My review of the literature echoes Hibbing et al.'s (2014) conclusion that “there is simply too much evidence from too many sources to credibly argue that political attitudes and behaviors have no connection to biology” (p. 169).

Taking an *elective affinities* approach to the study of ideological differences, I would contend that processes operating at different levels of analysis are not only linked but, in all likelihood, mutually reinforcing (Jost et al., 2009). For instance, a person with an especially active amygdala is likely to be threat-sensitive and eager to establish existential security; s/he is likely to resist change, defend hierarchy, and justify the familiar status quo in the name of conformity, security, and tradition. For this person, following rules and norms—being conscientious—means deferring to conventional authority figures and holding politically conservative beliefs, opinions, and values. Or, to take another example, a person whose ACC is especially active may be more likely to detect potentially conflicting pieces of information and more motivated to process them in a complex, integrative manner. He or she may be relatively open to novelty, diversity, and change and driven to fight for social, economic, and political equality, even if it means challenging the status quo. This individual may see things the way the Greek poet C.P. Cavafy (1903) did: “He who hopes to grow in spirit will have to transcend obedience and respect. He will hold to some laws but he will mostly violate both law and custom, and go beyond the established, inadequate norm.”

Implications for the theory and practice of consumer psychology

The implications of recent research in political psychology for the study of consumer behavior—especially when it comes to persuasion and advertising, consumer preferences and consumption behavior, customer (dis)satisfaction and participating in boycotts—are multitudinous. If it is true that liberals and conservatives differ in terms of personality, cognitive processing style, motivational concerns, personal values, and neurological structures and functions, then it makes little sense to treat them homogeneously when devising and implementing marketing strategies and tactics. There are, in other words, tremendous opportunities for ideological market segmentation (Larsen, Wright, & Busbin, 1996) and the communication of ideologically resonant messages to natural constituencies, including customers and business partners (see Global Strategy Group, 2014). The relevance of political psychology is entirely obvious when it comes to political marketing—such as campaign messaging on behalf of electoral candidates and parties or steering social mobilization efforts on the part of community organizations. But research-based conclusions about ideological asymmetries should also inform any sophisticated understanding of lifestyle choices as well as judgments and decisions about consumer products and services (e.g., Crockett & Wallendorf, 2004; Fernandes & Ordabayeva, 2014; Holt, 2004; Jung et al., 2017; Khan et al., 2013).

It is easier and more practical than ever before to incorporate ideological variables in research on consumer behavior. In several states, personalized voter registration records—which include declarations of partisan affiliation—are made publicly available (Brown, 2015), and so is every campaign contribution in the U.S. of \$200 or more (Bonica, 2015). It is also possible to obtain aggregate-level statistics on voting behavior based on neighborhoods and electoral districts, and researchers have developed statistically valid methods of estimating the ideological positions of millions of social media users based on the politicians and news sources they follow (e.g., Barberá, Jost, Nagler, Tucker, & Bonneau, 2015).

Implications for persuasion, framing, and advertising

Wittingly or otherwise, many advertising campaigns make use of insights derived from the elaboration likelihood model in social psychology, which distinguishes between the central route to persuasion—which relies upon argument quality or strength—and the peripheral route—which relies upon more superficial characteristics such as source attractiveness or similarity (e.g., Rucker, Petty, & Briñol, 2014; Schumann, Kotowski, Ahn, & Haugtvedt, 2012). The fact that liberals exhibit stronger cognitive (and even neurological) responses to potentially conflicting pieces of information—and are less reliant upon stereotypical, “black-and-white” ways of thinking—suggests that they may process complex information more deeply than conservatives do. On the other hand, conservatives exhibit a more persistent cognitive style and are more attentive to potentially threatening stimuli in the

informational environment. All of this suggests that liberals and conservatives may, under some circumstances at least, be persuaded by different types of messages and through different psychological routes.

Along these lines, Jost and Krochik (2014) ascertained in two experiments that liberals were more influenced than conservatives by argument quality, whereas conservatives were more influenced than liberals by peripheral cues, such as source similarity. Fernandes and Mandel (2014), too, proposed that conservatives may be more swayed by appeals to “social proof” (i.e., descriptive social norms; Goldstein, Cialdini, & Griskevicius, 2008). All of this is consistent with the notion that conservatives are driven more strongly by relational needs for affiliation, conformity, and the attainment of shared reality with like-minded others (Stern, West, Jost, & Rule, 2014). More research is needed before drawing conclusions about marketing effectiveness, but the very existence of individual differences in receptiveness to different types of persuasive cues suggests that it would be foolish not to tailor one’s communication style to fit the ideological demeanor of one’s audience. Many communications specialists probably do this already, but their machinations may be based more on political stereotypes than on scientific evidence.

Insofar as conservatives are more strongly motivated to maintain stability, whereas liberals are more strongly motivated to promote change (Jost et al., 2008), one would expect ideological differences in receptivity to persuasive messages emphasizing themes of *stability* vs. *change*. In this vein, framing experiments by Duhachek, Han, and Tormala (2014) revealed that conservatives were indeed more affected by automobile advertisements featuring a message of stability, such as: “We’ve been here for 100 years. We’re the symbol of consistency! Keep your life great!” By contrast, liberals were more influenced by advertisements emphasizing change, such as: “We’ve been changing for 100 years. We’re the symbol of moving forward! Change your outlook!”

Given that liberals and conservatives differ in myriad ways when it comes to personal values and motivational concerns, there should be many other similarly promising ways to tailor messaging campaigns on the basis of elective affinities in political psychology. Several experiments demonstrate that conservatives can be swayed on environmental issues, for instance, by fairly subtle changes in wording or framing. More specifically, conservatives are less resistant and more open to pro-environmental initiatives when these initiatives are described as: “carbon offsets” rather than “taxes” (Hardisty, Johnson, & Weber, 2010); “patriotic” and consistent with the goal of protecting and preserving the “American way of life” (Feygina, Jost, & Goldsmith, 2010); fulfilling “duties” and “obligations” (Kidwell, Farmer, & Hardesty, 2013); maintaining ecological “purity” (Feinberg & Willer, 2013); and allowing the U.S. to “profit from leading the world in green technology” (Campbell & Kay, 2014). My review of the research literature on ideological differences in the prioritization of personal values suggests, in addition, that liberals should be influenced by messages

emphasizing harmony, benevolence, universalism, and egalitarianism, whereas conservatives should be moved by messages stressing tradition, conformity, security, power, and materialism.

Implications for consumer choice, judgment, decision-making, and behavior

It stands to reason that personality differences between liberals and conservatives will contribute to rather different types of consumer interests, financial investments, and leisure activities (e.g., Barra, 2014; Farmer, Kidwell, & Hardesty, 2014; Khan et al., 2013). For example, the research summarized in Table 2 suggests that liberals are more interested in art, music, cinema, books, and travel, whereas conservatives are more interested in sports, alcohol, national symbols, and organizational and cleaning supplies (Carney et al., 2008). With regard to decisions about travel in particular, there is evidence that political ideology shapes one’s choice of vacation destination, especially when it comes to planning distant or expensive trips (Legg, Tang, & Slevitch, 2012).

There are a number of other ways in which personality differences between liberals and conservatives are likely to affect consumer choices. Openness, for instance, is positively related to variety-seeking and willingness to try new products, especially products with innovative designs (e.g., Fernandes & Mandel, 2014; Goode, Dahl, & Moreau, 2010; Goode et al., 2013). Thus, research by Khan et al. (2013) suggested that whereas conservatives tended to purchase established national brands and to eschew generic brands, liberals were more likely to experiment with new brands of groceries, coffee, cleaning supplies, toiletries, diapers, and other consumer products. Work by Volland (2013) revealed that individuals (especially men) who were high in openness were more likely to spend money on leisure activities and restaurants, whereas individuals who were high in conscientiousness were *less* likely to spend money on these activities. The implications of these studies for product penetration and the geographical roll-out of new products and services are fairly obvious. When it comes to advertising pitches, liberals should be more influenced by novel experiential analogies (e.g., “driving a Bugatti sports car is like experiencing your first kiss”), whereas conservatives should be more influenced by conventional metaphors (e.g., “the Bugatti sports car is as fast as a speeding bullet”; Goode et al., 2010, p. 275).

People who are higher in system justification tend to hold relatively favorable attitudes toward corporations and brands (such as Disney and Coca-Cola) that are associated with U.S. hegemony and dominant cultural values such as power and materialism (Shepherd et al., 2015). When system justification motivation was increased through laboratory manipulations of system dependence or exposure to system criticism, even Americans who were chronically low in system justification—like liberals—exhibited stronger preferences for domestic over foreign products (e.g., Nike over Adidas, Budweiser over Corona, and Chevrolet over Toyota; Cutright et al., 2011). Those who were chronically high

in system justification—like conservatives—responded to these manipulations by selecting T-shirts with expressly system-justifying messages, such as “U.S. Pride” or “Love It or Get Out” (Cutright et al., 2011). According to Douglas Holt (2004):

Nations require a moral consensus to function. Citizens must identify with the nation, accept its institutions, and work toward its betterment. Nations are organized around a set of values that define what is good and just. These moral imperatives propel people to pursue national goals as they strive to meet society’s definition of success and respect. This is ideology, a system of ideas that forges links between everyday life—the aspirations of individuals, families, and communities—and those of the nation. To be effective, a nation’s ideology can’t be coerced or learned as though from a textbook. Rather, it must be deeply felt, taken for granted as the natural truth. National ideology is usually the most powerful root of consumer demand for myth. (p. 57).

This formulation is extremely congenial to a system justification perspective, which suggests that people engage in a wide variety of behaviors—including consumer behaviors—to satisfy the quintessentially ideological goal of maintaining (or restoring) the legitimacy of the overarching social system (e.g., Banfield et al., 2011; Cutright et al., 2011; Dong & Zhong, 2017; Liviatan & Jost, 2014; Shepherd et al., 2015).

As noted above, liberals are generally more interested in pro-environmental initiatives (Jacquet, Dietrich, & Jost, 2014), and “green” marketing campaigns may even be off-putting to conservatives (Gromet, Kunreuther, & Larrick, 2013; Hardisty et al., 2010). Presumably, this is because acknowledgement of global warming is threatening to the perceived legitimacy and stability of the capitalist economic system, which is, after all, heavily dependent upon the fossil fuel industry (Feygina et al., 2010; Hennes, Ruisch, Feygina, Monteiro and Jost 2016). Evidence is accruing rapidly that conservatives are more likely to engage in conspicuous consumption of luxury items, whereas liberals are more likely to engage in sustainable consumption through the purchase of products that are environmentally friendly (e.g., Fernandes & Ordabayeva, 2014; Gromet et al., 2013; Heilen, 2014; Kim, Park, & Dubois, 2015; Maxwell-Smith, Conway, Wright, & Olson, 2016; Watkins, Aitken, & Mather, 2016).

Studies of corporate leadership suggest that the ideological proclivities of executives and corporate board members shape organizational priorities in ways that are highly consistent with theory and research in political psychology. For example, studies of CEO’s and other corporate actors revealed that—in good economic times as well as bad—corporations led by liberals were more likely than those led by conservatives to promote environmental sustainability—as well as human rights, income equality, gender parity, diversity initiatives, product quality, and positive employee and community relations (Briscoe & Joshi, in press; Chin, Hambrick, & Treviño, 2013; Chin & Semadeni, 2017; Gupta, Briscoe, & Hambrick, 2017). Because conservative managers are more system-justifying

than liberal managers, they may experience weaker emotional reactions to ethical transgressions and seem to be less interested in corporate social responsibility overall (Hafenbrädl & Waeger, 2016; see also Tan, Liu, Huang, & Zheng, 2016). Likewise, research in financial economics shows that mutual fund managers who make campaign donations to Democratic (vs. Republican) political candidates are less likely to invest in companies that are deemed socially irresponsible, such as purveyors of guns, tobacco, or military weapons, as well as companies with poor employee relations and a lack of attention to diversity concerns (Hong & Kostovetsky, 2012).

Implications for customer dissatisfaction and politically motivated boycotts

Marketing research in Singapore and Australia indicated that liberals were more likely than conservatives to lodge formal complaints when they were dissatisfied with consumer goods and services (Keng, Richmond, & Han, 1995; Phau & Baird, 2008). Findings such as these are consistent with the notion that liberals are lower than conservatives in terms of system justification motivation and are more likely to criticize prevailing economic institutions and business practices (e.g., Jost, Blount, Pfeffer, & Hunyady, 2003; Jost, Langer, Badaan, et al., 2017). Following up on this earlier work, Jung et al. (2017) analyzed several hundred-thousand complaints to the U.S. Consumer Financial Protection Bureau, the Federal Communications Commission, and the National Highway Traffic Safety Administration. They, too, observed a clear ideological asymmetry with respect to customer dissatisfaction and consumer complaining behavior. After adjusting for demographic factors, rates of complaining were significantly higher among residents of predominantly Democratic (vs. Republican) districts. These residents were also more likely to dispute the resolution proposed by the financial institution in response to their initial complaint. Finally, Jung and colleagues directly investigated the effects of political ideology and system justification on hypothetical reactions to an unanticipated banking fee. They found that conservatives, compared to liberals, perceived the fee as fairer and were less likely to dispute the charge, and these effects were statistically mediated by system justification tendencies.

Building on the same theoretical logic, my colleagues and I investigated the hypothesis that liberals, because they are more critical of common business practices, would be more likely than conservatives to buy and boycott products for political reasons (Jost, Langer, & Singh, in press). We analyzed data from the American National Election Studies and European Social Surveys and discovered that liberals and leftists were indeed more likely than conservatives and rightists to report having bought a product—or refrained from buying a product—for political reasons, even after adjusting for demographic factors. Importantly, the pattern is the same in the United States and Europe, as shown in Table 5. We discovered that leftists were significantly more likely than rightists to have boycotted a product for political reasons in all 15 of the countries included in the European Social Survey.

Table 5
Per cent of survey respondents in the U.S. and Europe who bought or boycotted a consumer product for political reasons over the past 12 months.
This table is based on results summarized by Jost, Langer, and Singh (in press).

	Bought a product for political reasons	Boycotted a product for political reasons
United States		
Liberals	32.7	45.5
Conservatives	19.8	29.2
Europe		
Leftists	N/A	28.7
Rightists	N/A	20.2

Data for U.S. respondents come from the American National Election Studies (2016). Data for European respondents come from European Social Surveys (pooled data from 2002 to 2014).

N/A = Not Asked.

Concluding remarks

Although some political scientists continue to insist that, when it comes to ordinary citizens, ideology is, quite simply, “not for them” (Kinder & Kalmoe, 2017, p. 3), recent research in political psychology establishes that people who identify themselves as liberal or conservative differ in a multiplicity of meaningful, informative ways (e.g., Jost, 2017). These days, even corporations have political identities: consumers believe that Whole Foods, MTV, and Amazon.com are “Democratic” companies, whereas Chick-Fil-A, Wells Fargo, and Hilton are “Republican” companies (Global Strategy Group, 2014). People may not be unflinchingly consistent or loyal to the left or right—and many combine disparate ideological elements when it comes to developing their own worldviews—but they do exhibit clear preferences of an inherently ideological nature. Some of these preferences may be understood as political (or manifest) and others as “pre-political” (or latent), as Robert Lane (1962) pointed out long ago (see also Simonson, 2008). Few speakers of ordinary language are capable of providing as sophisticated and articulate a description of the rules of syntax and grammar as a linguist could, and few citizens are as articulate about the nuances of ideological distinctions as a political scientist would be. But it would be absurd to conclude from these observations that—because people follow the rules reflexively and imperfectly rather than self-consciously and flawlessly—they are illiterate or non-ideological (Jost, 2006).

Throughout this article, I have been suggesting that the study of consumer psychology will be theoretically and practically enriched by attending to ideological differences, that is, the countless ways in which human behavior is shaped by left–right (or liberal-conservative) differences not only in terms of beliefs and opinions but also in terms of underlying psychological and neurological factors. I am delighted to see that marketing researchers have already anticipated the opportunities open to them in this area of investigation. When I entered the term *political ideology* into a sitewide search engine for the Association for Consumer Research (<http://www.acrwebsite.org/search/search-acr-website.aspx?q=political%20ideology>), the website returned over 800 hits—all of which appear to be conference presentations given

since 2010. This astonishing degree of intellectual output suggests that a symbiotic relationship is well underway: the field of political psychology seems to be inspiring and influencing the activity of consumer researchers, and it is only a matter of time until work in consumer psychology begins to shape, in reciprocal fashion, theoretical and empirical developments in political psychology.

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