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Political diversity will improve social psychological science[1]

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Abstract: Psychologists have demonstrated the value of diversity – particularly diversity of viewpoints – for enhancing creativity, discovery, and problem solving. But one key type of viewpoint diversity is lacking in academic psychology in general and social psychology in particular: political diversity. This article reviews the available evidence and finds support for four claims: (1) Academic psychology once had considerable political diversity, but has lost nearly all of it in the last 50 years. (2) This lack of political diversity can undermine the validity of social psychological science via mechanisms such as the embedding of liberal values into research questions and methods, steering researchers away from important but politically unpalatable research topics, and producing conclusions that mischaracterize liberals and conservatives alike. (3) Increased political diversity would improve social psychological science by reducing the impact of bias mechanisms such as confirmation bias, and by empowering dissenting minorities to improve the quality of the majority's thinking. (4) The underrepresentation of non-liberals in social psychology is most likely due to a combination of self-selection, hostile climate, and discrimination. We close with recommendations for increasing political diversity in social psychology.

Keywords: academic bias, academic diversity, confirmation bias, discrimination, open science, political psychology, social psychology

He who knows only his own side of the case, knows little of that.
— John Stuart Mill, *On Liberty* (1859/1989, p. 38)

1. Introduction

In the last few years, social psychology has faced a series of challenges to the validity of its research, including a few high-profile replication failures, a handful of fraud cases, and several articles on questionable research practices and inflated effect sizes (John et al. 2012; Simmons et al. 2011). In response, the Society for Personality and Social Psychology (SPSP) convened a Task Force on Publication and Research Practices which provided a set of statistical, methodological, and practical recommendations intended to both limit integrity failures and broadly increase the robustness and validity of social psychology (Funder et al. 2014, p. 18). In this article, we suggest that one largely overlooked cause of failure is a lack of political diversity. We review evidence suggesting that political diversity and dissent would improve the reliability and validity of social psychological science.

We are not the first to make this point. Tetlock (1994) identified ways in which moral-political values led to unjustified conclusions about nuclear deterrence and prejudice, and Redding (2001) showed how the lack of political diversity across psychology's subfields threatens the validity of the conclusions of psychological science. Unfortunately, these concerns have gone largely unheeded. As we shall

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show, the reasons for concern are even greater now than when Tetlock and Redding published their critiques.

This article makes five distinct contributions to the scientific literature, each corresponding to a separate section of the paper. Section 2 shows that although psychology once had considerable political diversity, the trend over the last four decades has been toward political homogeneity. Section 3 identifies three risk points where the lack of political diversity can undermine the validity of scientific research claims. Section 4 draws on findings from organizational psychology to show how increasing political diversity can improve social psychological science. Section 5 examines possible sources of political homogeneity in social psychology today, including differences between liberals and non-liberals in ability and interest, hostility toward non-liberal views, and discrimination against non-liberals. In section 6, we offer recommendations for how social psychologists can increase political diversity within their own ranks and reduce the harmful effects of political homogeneity on their research.

Some comments on terminology are needed before we begin. First, we use the term "social psychology" to also include personality psychology because the two fields are closely intertwined and because it is awkward to refer repeatedly to "social and personality psychological science." We focus on social psychology because it is the subfield of psychology that most directly examines ideologically controversial topics, and is thus most in need of political diversity. Second, we focus on conservatives as an underrepresented group because the data on the prevalence in psychology of different ideological groups is best for the liberal-conservative contrast – and the departure from the proportion of liberals and conservatives in the U.S. population is so dramatic. However, we argue that the field needs more non-liberals however they specifically self-identify (e.g., libertarian, moderate). Third, it is important to recognize that conservatism is not monolithic – indeed, self-identified conservatives may be more diverse in their political beliefs than are liberals (Feldman & Johnston 2014; Klein & Stern 2005; Stenner 2009). Fourth, we note for the curious reader that the collaborators on this article include one liberal, one centrist, two libertarians, one whose politics defy a simple left/right categorization, and one neo-positivist contrarian who favors a don't-ask-don't-tell policy in which scholarship should be judged on its merits. None identifies as conservative or Republican.

A final preparatory comment we must make is that the lack of political diversity is not a threat to the validity of specific studies in many and perhaps most areas of research in social psychology. The lack of diversity causes problems for the scientific process primarily in areas related to the political concerns of the Left – areas such as race, gender, stereotyping, environmentalism, power, and inequality – as well as in areas where conservatives themselves are studied, such as in moral and political psychology. And even in those areas, we are not suggesting that most of the studies are flawed or erroneous. Rather, we argue that the collective efforts of researchers in politically charged areas may fail to converge upon the truth when there are few or no non-liberal researchers to raise questions and frame hypotheses in alternative ways. We do not intend this article to be an attack on social psychology – a field that has a long track record of producing research that is vital to understanding and improving the human condition (see examples in Zimbardo 2004). We are proud to be social psychologists, and we believe that our field can – and will – embrace some relatively simple methods of using diversity to improve itself as a science.

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2. Psychology is less politically diverse than ever

There are many academic fields in which surveys find self-identified conservatives to be about as numerous as

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self-identified liberals: typically business, computer science, engineering, health sciences, and technical/vocational fields (Gross & Simmons 2007; Zipp & Fenwick 2006).[2] In the social sciences and humanities, however, there is a stronger imbalance. For instance, recent surveys find that 58–66% of social science professors in the United States identify as liberals, while only 5–8% identify as conservatives, and that self-identified Democrats outnumber Republicans by ratios of at least 8 to 1 (Gross & Simmons 2007; Klein & Stern 2009; Rothman & Lichter 2008). A similar situation is found in the humanities where surveys find that 52–77% of humanities professors identify as liberals, while only 4–8% identify as conservatives, and that self-identified Democrats outnumber Republicans by ratios of at least 5:1 (Gross & Simmons 2007; Rothman & Lichter 2008). In psychology, the imbalance is slightly stronger: 84% identify as liberal, whereas only 8% identify as conservative. That is a ratio of 10.5 to 1. In the United States as a whole, the ratio of liberals to conservatives is roughly 1 to 2 (Gallup poll 2010; see Saad 2010).

Has academic psychology always tilted so far left? The existing data are imperfect, as the only data we could find that date back beyond a few decades examined party identification (Democrat vs. Republican; McClintock et al. 1965), not ideological self-placement. Before the 1980s, party identification did not correlate with the left-right dimension as strongly as it does today (Barber & McCarty 2013). There used to be substantial minorities of liberal Republicans and conservative Democrats. Nonetheless, since the early 20th century, the Democratic Party has been the Left-leaning party and the Republican Party has been the Right-leaning party (Levendusky 2009). In Figure 1, we have plotted all available data points on the political identity of psychologists at American colleges and universities, including both party identification (diamonds) and liberal-conservative identification (circles). Both sets of measures show a strong leftward movement. Psychology professors were as likely to report voting Republican as Democrat in presidential contests in the 1920s. From the 1930s through1960, they were more likely to report voting for Democrats, but substantial minorities voted for Wilkie, Eisenhower, and Nixon (in 1960). By 2006, however, the ratio of Democrats to Republicans had climbed to more than 11:1 (Gross & Simmons 2007; Rothman & Lichter 2008).

Is social psychology less politically diverse than academic psychology as a whole? There has never been an extensive or representative survey of the political attitudes of social psychologists, but we do have two imperfect sources of evidence. One of the largest gatherings of social psychologists is the presidential symposium at SPSP's annual meeting. At the 2011 meeting in San Antonio, Texas, Jonathan Haidt asked the roughly 1,000 attendees to identify themselves politically with a show of hands. He counted the exact number of hands raised for the options "conservative or on the right" (3 hands), "moderate or centrist" (20 hands), and "libertarian" (12 hands). For the option "liberal or on the left," it was not possible to count, but he estimated that approximately 80% of the audience raised a hand (i.e., roughly 800 liberals). The corresponding liberal-conservative ratio of 267:1 is surely an overestimate; in this non-anonymous survey, many conservatives may have been reluctant to raise their hands. But if conservatives were disproportionately reluctant to self-identify, it illustrates the problem we are raising.

The other piece of evidence we have comes from an anonymous Internet survey conducted by Inbar and Lammers (2012), who set out to test Haidt's claim that

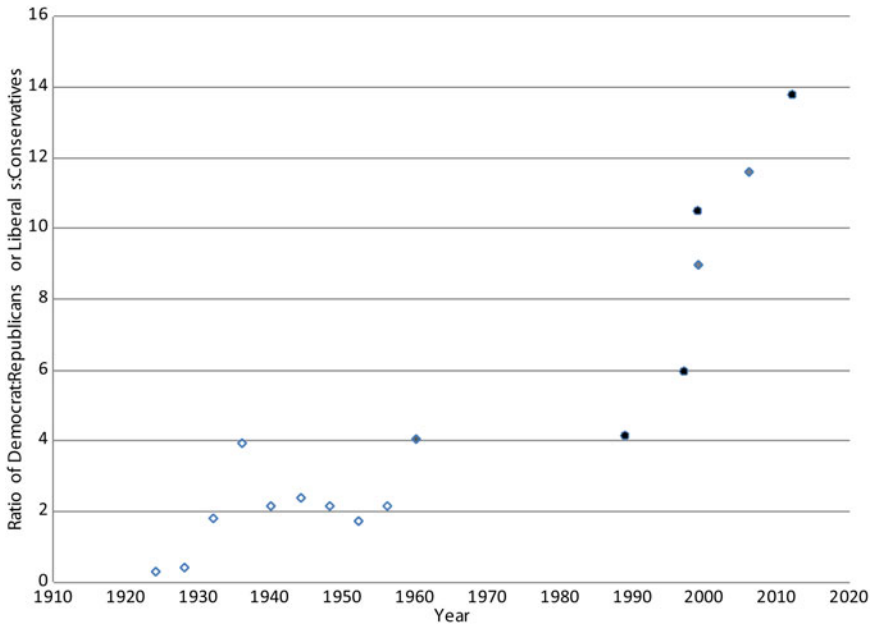


Figure 1. The political party and ideological sympathies of academic psychologists have shifted leftward over time. *Circles* show ratios of self-reports of liberal vs. conservative. *Diamonds* show ratios of self-reports of party preference or voting (Democrat vs. Republican). Data for 1924–60 is reported in McClintock et al. (1965). *Open diamonds* are participants' recollections of whom they voted for; *gray diamonds* are self-reported party identification at time of the survey. Data for 1999 is reported in Rothman et al. (2005). Data from 2006 is reported in Gross and Simmons (2007). The right-most circle is from Inbar and Lammers (2012) and is the ratio of self-identified liberal/conservative social psychologists.

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there were hardly any conservatives in social psychology. They sent an e-mail invitation to the entire SPSP discussion list, from which 292[3] individuals participated. Inbar and Lammers found that 85% of these respondents declared themselves liberal, 9% moderate, and only 6% conservative[4] (a ratio of 14:1). Furthermore, the trend toward political homogeneity seems to be continuing: whereas 10% of faculty respondents self-identified as conservative, only 2% of graduate students and postdocs did so (Inbar 2013, personal communication). This pattern is consistent with the broader trends throughout psychology illustrated in Figure 1: The field is shifting leftward, the ratio of liberals to conservatives is now greater than 10:1, and there are hardly any conservative students in the pipeline.

3. Three ways that the lack of diversity undermines social psychology

If left unchecked, an academic field can become a cohesive moral community, creating a shared reality (Hardin & Higgins 1996) that subsequently blinds its members to morally or ideologically undesirable hypotheses and unanswered but important scientific questions (Haidt 2012). The sociologist Christian Smith (2003) has studied such moral communities within the academy and has identified a set of moral narratives that link researchers' conceptions of history to their conceptions of their research. Smith describes the Left-leaning field of sociology as sharing what he calls the "liberal progress narrative":

> Once upon a time, the vast majority of human persons suffered in societies and social institutions that were unjust, unhealthy, repressive, and oppressive. These traditional societies were reprehensible because of their deep-rooted inequality, exploitation, and irrational traditionalism. . . . But the noble human aspiration for autonomy, equality, and prosperity struggled mightily against the forces of misery and oppression, and eventually succeeded in establishing modern, liberal, democratic . . . welfare societies. While modern social conditions hold the potential to maximize the individual freedom and pleasure of all, there is much work to be done to dismantle the powerful vestiges of inequality, exploitation, and repression. This struggle for the good society in which individuals are equal and free to pursue their self-defined happiness is the one mission truly worth dedicating one's life to achieving. (Smith 2003, p. 82)

Although Smith wrote this narrative for sociology, it is a plausible shared narrative for social psychology – a field that has produced copious research on racism, sexism, stereotypes, and the baneful effects of power and obedience to authority. Given the political homogeneity demonstrated in section 1 of this target article, the field of social psychology is at risk of becoming a cohesive moral community. Might a shared moral-historical narrative in a politically homogeneous field undermine the self-correction processes on which good science depends? We think so, and present three risk points – three ways in which political homogeneity can threaten the validity of social psychological science – and examples from the extant literature illustrating each point.

3.1. Risk point 1: Liberal values and assumptions can become embedded into theory and method

Political values can become embedded into research questions in ways that make some constructs unobservable and unmeasurable, thereby invalidating attempts at hypothesis testing (Sniderman & Tetlock 1986; Tetlock 1994; Tetlock & Mitchell 1993). Values become embedded when value statements or ideological claims are wrongly treated as objective truth, and observed deviation from that truth is treated as error.

3.1.1. Example 1: Denial of environmental realities. Feygina et al. (2010) sought to explain the "denial of environmental realities" by using system justification theory (Jost & Banaji 1994). In operationalizing such denial, the authors assessed the four constructs listed below, with example items in parentheses:

Construct 1: *Denial of the possibility of an ecological crisis.* ("If things continue on their present course, we will soon experience a major environmental catastrophe," reverse scored.)
Construct 2: *Denial of limits to growth.* ("The Earth has plenty of natural resources if we just learn how to develop them.")
Construct 3: *Denial of the need to abide by the constraints of nature.* ("Humans will eventually learn enough about how nature works to be able to control it.")
Construct 4: *Denial of the danger of disrupting balance in nature.* ("The balance of nature is strong enough to cope with the impacts of modern industrial nations.")

The core problem with this research is that it misrepresents those who merely disagree with environmentalist values and slogans as being in "denial." Indeed, the papers that Feygina et al. (2010) cited in support of their "denial" questions never used the terms "deny" or "denial" to describe these measures. Clark et al. (2003) referred to the items as assessing "attitudes," and Dunlap et al. (2000) characterized the items as tapping "primitive beliefs" (p. 439) about the environment.

The term "denial" implies that (1) the claim being denied is a "reality" – that is, a descriptive fact – and that (2) anyone who fails to endorse the pro-environmental side of these claims is engaged in a psychological process of denial. We next describe why both claims are false, and why the measures, however good they are at assessing attitudes or primitive beliefs, fail to assess denial.

Construct 1 refers to a "possibility" so that denial would be belief that an ecological crisis was *impossible*. This was not assessed, and the measure that supposedly tapped this construct refers to no descriptive fact. Without defining "soon" or "major" or "crisis," it is impossible for this to be a fact. Without being a statement of an actual fact, disagreeing with the statement does not, indeed cannot, represent denial.

Similar problems plague Construct 2 and its measurement. Denial of the limits of growth could be measured by agreement with an alternative statement, such as "The Earth's natural resources are infinite." Agreement could be considered a form of denial of the limits of growth. However, this was not assessed. Absent a definition of "plenty," it is not clear how this item could be refuted or confirmed. If it cannot be refuted or confirmed, it cannot be a descriptive fact. If it is not a fact, it can be agreed or disagreed with, but there is no "denial." Even strongly agreeing with this statement does not necessarily imply denying that there are limits to growth. "Plenty" does not

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imply "unlimited." Moreover, the supposed reality being denied is, in fact, heavily disputed by scholars, and affirming the Earth's resources as plentiful for human needs, given human ingenuity, was a winning strategy in a famous scientific bet (Sabin 2013).

Construct 3 is an injunction that we need to abide by the constraints of nature. Again "constraints of nature" is a vague and undefined term. Further, the construct is not a descriptive fact – it is a philosophical/ideological *prescription*, and the item is a prophecy about the future, which can never be a fact. Thus, this construct might capture some attitude toward environmentalism, but it does not capture *denial* of anything. It would be just as unjustified to label those who disagree with the item as being in denial about human creativity, innovation, and intelligence.

Construct 4 is similarly problematic. "Balance in nature" is another vague term, and the item assessing this construct is another vague prediction. One can agree or disagree with the item. And such differences may indeed by psychologically important. Disagreement, however, is not the same construct as denial.

Whether some people deny actual environmental realities, and if so, why, remains an interesting and potentially scientifically tractable question. For example, one might assess "environmental denial" by showing people a time-lapse video taken over several years showing ocean levels rising over an island, and asking people if sea levels were rising. There would be a *prima facie* case for identifying those who answered "no" to such a question as "denying environmental realities." However, Feygina et al. (2010) did not perform such studies. Instead, they simply measured support for primitive environmentalist beliefs and values, called low levels of such support denial, and regressed it on the system justification scores and other measures (a third, experimental study, did not assess denial). None of Feygina et al.'s measures refer to environmental realities. Thus, the studies were not capable of producing scientific evidence of denial of environmental realities.

Vague environmentalist philosophical slogans and values are unjustifiably converted to scientific truths even though no data could ever tell us whether humans should "abide by the constraints of nature." It is not just that people have different environmental attitudes; *the problem is the presumption that one set of attitudes is right and those who disagree are in denial*. This conversion of a widely shared political ideology into "reality," and its concomitant treatment of dissent as denial, testifies to the power of embedded values to distort science within a cohesive moral community.

3.1.2. Example 2: Ideology and unethical behavior. Son Hing et al. (2007) found that: (1) people high in social dominance orientation (SDO) were more likely to make unethical decisions, (2) people high in right-wing authoritarianism (RWA) were more likely to go along with the unethical decisions of leaders, and (3) dyads with high SDO leaders and high RWA followers made more unethical decisions than did dyads with alternative arrangements (e.g., low SDO–low RWA dyads).

Yet, consider the decisions they defined as unethical: not formally taking a female colleague's side in her sexual harassment complaint against her subordinate (given little information about the case), and a worker placing the well-being of his or her company above unspecified harms to the environment attributed to the company's operations. Liberal values of feminism and environmentalism were embedded directly into the operationalization of ethics, even to the extent that participants were expected to endorse those values in vignettes that lacked the information one would need to make a considered judgment.

3.1.3. How to recognize and avoid embedded-value biases. The appearance of certain words that imply pernicious motives (e.g., *deny*, *legitimize*, *rationalize*, *justify*, *defend*, *trivialize*) may be particularly indicative of research tainted by embedded values. Such terms imply, for example, that the view being denied is objectively valid and the view being "justified" is objectively invalid. In some cases, this may be scientifically tenable, as when a researcher is interested in the denial of some objective fact. Rationalization can be empirically demonstrated, but doing so requires more than *declaring* some beliefs to be rationalizations, as in Napier and Jost (2008), where endorsement of the efficacy of hard work – on one item – was labeled *rationalization of inequality*.

Turnabout tests often constitute a simple tool for identifying and avoiding embedded-values bias (Tetlock 1994). Imagine a counterfactual social psychology field in which conservative political views were treated as scientific facts and disagreements with conservative views treated as denial or error. In this field, scholars might regularly publish studies on "the denial of the benefits of free market capitalism" or "the denial of the benefits of a strong military" or "the denial of the benefits of church attendance." Or they might publish studies showing that people *low* in RWA and SDO (i.e., liberals) are more unethical because they are more willing to disrespect authority, disregard private property, and restrict voluntary individual choice in the marketplace. Embedding any type of ideological values into measures is dangerous to science. Later in this article, we review evidence suggesting that this is much more likely to happen – and to go unchallenged by dissenters – in a politically homogeneous field.

3.2. Risk point 2: Researchers may concentrate on topics that validate the liberal progress narrative and avoid topics that contest that narrative

Since the Enlightenment, scientists have thought of themselves as spreading light and pushing back the darkness. The metaphor is apt, but in a politically homogeneous field, a larger-than-optimal number of scientists shine their flashlights on ideologically important regions of the terrain. Doing so leaves many areas unexplored. Even worse, some areas become walled off, and inquisitive researchers risk ostracism if they venture in (see Redding [2013] for a discussion of a recent example in sociology). Political homogeneity in social psychology can restrict the range of possible research programs or questions. It may also deprive us of tools and research findings we need to address pressing social issues. The two examples given below illustrate this threat.

3.2.1. Example 1: Stereotype accuracy. Since the 1930s, social psychologists have been proclaiming the inaccuracy of social stereotypes, despite lacking evidence of such inaccuracy. Evidence has seemed unnecessary because stereotypes have been, in effect, stereotyped as inherently nasty and inaccurate (for a review, see Jussim 2012b).

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Some group stereotypes are indeed hopelessly crude and untestable. But some may rest on valid empiricism – and represent subjective estimates of population characteristics (e.g., the proportion of people who drop out of high school, are victims of crime, or endorse policies that support women at work; see Jussim [2012b] and Ryan [2003] for reviews). In this context, it is not surprising that the rigorous empirical study of the accuracy of factual stereotypes was initiated by one of the very few self-avowed conservatives in social psychology – Clark McCauley (McCauley & Stitt 1978). Since then, dozens of studies by independent researchers have yielded evidence that stereotype accuracy (of all sorts of stereotypes) is one of the most robust effects in all of social psychology (Jussim 2012b). Here is a clear example of the value of political diversity: A conservative social psychologist asked a question nobody else thought (or dared) to ask, and found results that continue to make many social psychologists uncomfortable. McCauley's willingness to put the assumption of stereotype inaccuracy to an empirical test led to the correction of one of social psychology's most long-standing errors.

3.2.2. Example 2: The scope and direction of prejudice. Prejudice and intolerance have long been considered the province of the political Right (e.g., Adorno et al. 1950; Duckitt 2001; Lindner & Nosek 2009). Indeed, since Allport (1954), social psychologists have suspected that there is a personality type associated with generalized prejudice toward a variety of social groups (Akrami et al. 2011), which they have linked to political conservatism (Roets & Van Hiel 2011). More recently, however, several scholars have noted that the groups typically considered targets of prejudice in such research programs are usually low status and often Left-leaning (e.g., African Americans and Communists; for more examples and further arguments, see Chambers et al. 2013; Crawford & Pilanski 2014). Using research designs that include both Left-leaning and Right-leaning targets, and using nationally representative as well as student and community samples, these researchers have demonstrated that prejudice is potent on both the left and right. Conservatives are prejudiced against stereotypically Left-leaning targets (e.g., African Americans), whereas liberals are prejudiced against stereotypically Right-leaning targets (e.g., religious Christians; see Chambers et al. 2013; Crawford & Pilanski 2014; Wetherell et al. 2013).

Summarizing these recent findings, Brandt et al. (2014) put forward the *ideological conflict hypothesis*, which posits that people across the political spectrum are prejudiced against ideologically dissimilar others. Once again, the shared moral narrative of social psychology seems to have restricted the range of research: The investigation of prejudice was long limited to prejudice against the targets that liberals care most about. But the presence of a nonliberal researcher (John Chambers is a libertarian) contributed to his decision to use multiple targets, which might, over time, lead the entire field to a more nuanced view of the relationship between politics and prejudice.

3.2.3. How to avoid a narrow emphasis on topics that advance liberal narratives. When researchers primarily focus on addressing questions that advance liberal narratives, or systematically ignore research inconsistent with liberal narratives, the risk of political bias increases. Instead of assuming that stereotypes are inaccurate without citing evidence, ask, "How (in)accurate are stereotypes? What has empirical research found?" Instead of asking, "Why are conservatives so prejudiced and politically intolerant?" (Hodson & Busseri 2012; Lindner & Nosek 2009), ask, "Which groups are targets of prejudice and intolerance across the political spectrum, and why?" (Brandt et al. 2014). One does not need to be politically conservative to ask the latter questions. Indeed, to our knowledge, at least, one of the authors of the ideological conflict hypothesis (Crawford) self-describes as liberal. Thus, simply having an ideology does not inevitably lead to biased research, even on politicized topics. Nonetheless, as we show later in this article, having a greater number of non-liberal scientists would likely reduce the time it takes for social psychology to correct long-standing errors on politicized topics.

3.3. Risk point 3: Negative attitudes regarding conservatives can produce a psychological science that mischaracterizes their traits and attributes

A long-standing view in social-political psychology is that the Right is more dogmatic and intolerant of ambiguity than the Left, a view Tetlock (1983) dubbed the *rigidity-of-the-right hypothesis*. Altemeyer (1996; 1998) argued that a consequence of this asymmetry in rigidity is that those on the right (specifically, people high in RWA) should be more prone to making biased political judgment than those on the left. For example, Altemeyer (1996) found that people high in RWA were biased in favor of Christian over Muslim mandatory school prayer in American and Arab public schools, respectively, whereas people low in RWA opposed mandatory school prayer regardless of the religious target group. On the basis of these and other results, Altemeyer characterized people high in RWA (who tend to be socially conservative) as hypocritical and rigid, and people low in RWA (who tend to be socially liberal) as consistent and fair-minded. Others have relied on this evidence to make similar arguments (e.g., Peterson et al. 2002).

But had social psychologists studied a broad enough range of situations to justify these broad conclusions? Recent evidence suggests not. The *ideologically objectionable premise model* (IOPM; Crawford 2012) posits that people on the political left and right are equally likely to approach political judgments with their ideological blinders on. That said, they will do so only when the premise of a political judgment is ideologically acceptable. If it's objectionable, any preferences for one group over another will be short-circuited, and biases won't emerge. The IOPM thus allows for biases to emerge only among liberals, only among conservatives, or among both liberals and conservatives, depending on the situation. For example, reinterpreting Altemeyer's mandatory school prayer results, Crawford (2012) argued that for people low in RWA who value individual freedom and autonomy, *mandatory* school prayer is objectionable; thus, the very nature of the judgment should shut off any biases in favor of one target over the other. However, for people high in RWA who value society-wide conformity to traditional morals and values, mandating school prayer is acceptable; this acceptable premise then allows for people high in RWA to express a bias in favor of Christian over Muslim school prayer. Crawford

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(2012, Study 1) replaced mandatory prayer with *voluntary* prayer, which would be acceptable to both people high *and* low in RWA. In line with the IOPM, people high in RWA were still biased in favor of Christian over Muslim prayer, while people low in RWA now showed a bias in favor of Muslim over Christian voluntary prayer. Hypocrisy is therefore not necessarily a special province of the Right.

In another study, Crawford (2012, Study 2) reasoned that the Left typically finds it acceptable to criticize and question authority. Therefore, a scenario involving a subordinate criticizing an authority figure would permit people low in RWA to punish a subordinate who criticizes an ideologically similar leader (e.g., President Barack Obama) more harshly than one who criticizes an ideologically dissimilar leader (e.g., President George W. Bush). However, such criticism of authority represents an objectionable premise for people high in RWA – thus, they should punish the subordinate equally, regardless of the leader's identity. Consistent with the IOPM, people low in RWA more harshly punished a military general who criticized Obama than one who criticized Bush, whereas people high in RWA punished the general equally regardless of the target leader's identity. Thus, this scenario shows the reversal of Altemeyer's findings – biases emerged among the *Left*, but not the Right. Results from seven scenarios have supported the ideologically objectionable premise model (see Crawford 2012; Crawford & Xhambazi 2015) and indicate that biased political judgments are not predicted by ideological orientation (as per Altemeyer), but rather by the qualities of the judgment scenarios used in the research.

These examples illustrate the threats to truth-seeking that emerge when members of a politically homogeneous intellectual community are motivated to cast their perceived outgroup (i.e., the ones who violate the liberal progressive narrative) in a negative light. If there were more social psychologists who were motivated to question the design and interpretation of studies biased towards liberal values during peer review, or if there were more researchers running their own studies using different methods, social psychologists could be more confident in the validity of their characterizations of conservatives (and liberals).

Detecting and avoiding mischaracterizing the traits of conservatives. One red flag is the uniformity of the disparaging conclusions about conservatives. If empirical results consistently portray conservatives negatively and liberals positively, this may signal a problem of political bias. The potential for political bias is likely greatly reduced when researchers seek to explain the motivations, foibles, and strengths of liberals as well as conservatives. Several programs of research have found evidence of strengths and weaknesses among both liberals and conservatives, including moral foundations theory (e.g., Haidt 2012), the ideologically objectionable premise model (Crawford 2012; Crawford & Xhambazi 2015), and the ideological conflict hypothesis (e.g., Brandt et al. 2014; Crawford et al. 2013; Munro et al. 2010). This evidence disconfirms the hypothesis that conservatives really do warrant relentless scientific condemnation. If one wishes to focus on just conservatives (or just liberals), understanding their weaknesses *and* strengths would seem to be more theoretically productive and less open to a charge of political bias.

We do not mean to suggest that liberals cannot do fair and unbiased work on charged topics. For example, a number of scholars are producing balanced work on people's reactions toward left-wing and right-wing authority figures (Frimer et al. 2014), value-based behavioral attributions across the political spectrum (Morgan et al. 2010), and people's beliefs about scientific consensus on hot-button political issues (Kahan et al. 2011), to name just a few. Nor do we mean to invalidate anyone's research program by pointing to specific problems in the examples we have discussed above. Indeed, we appreciate the even-handed approaches some of these authors have taken in other lines of their research (e.g., research on meritocracy and affirmative action support by Son Hing et al. 2002). These important lines of research indicate that the disconfirmation processes in our field are not entirely broken. However, if we look at the field as a whole and think of it as a complex system that depends on broad-ranging inquiry and institutionalized disconfirmation efforts, we are confident that the parameters are not set properly for the optimum discovery of truth. More political diversity would help the system discover more truth.

4. Why political diversity is likely to improve social psychological science

Diversity can be operationalized in many ways, including demographic diversity (e.g., ethnicity, race, and gender) and viewpoint diversity (e.g., variation in intellectual viewpoints or professional expertise). Research in organizational psychology suggest that: (a) the benefits of viewpoint diversity are more consistent and pronounced than those of demographic diversity (Menz 2012; Williams & O'Reilly 1998); and (b) the benefits of viewpoint diversity are most pronounced when organizations are pursuing open-ended exploratory goals (e.g., scientific discovery) as opposed to exploitative goals (e.g., applying well-established routines to well-defined problems; Cannella et al. 2008).

Seeking demographic diversity has many benefits (Crisp & Turner 2011), including combating effects of past and present discrimination, increasing tolerance, and, in academic contexts, creating bodies of faculty who will be more demographically appealing to students from diverse demographic backgrounds. However socially beneficial such effects may be, they have little direct relation to the conduct or validity of science. Viewpoint diversity may therefore be more valuable than demographic diversity if social psychology's core goal is to produce broadly valid and generalizable conclusions. (Of course, demographic diversity can bring viewpoint diversity, but if it is viewpoint diversity that is wanted, then it may be more effective to pursue it directly.) It is the lack of political viewpoint diversity that makes social psychology vulnerable to the three risks described in the previous section. Political diversity is likely to have a variety of positive effects by reducing the impact of two familiar mechanisms that we explore below: confirmation bias and groupthink/majority consensus.

4.1. Confirmation bias

People tend to search for evidence that will confirm their existing beliefs while also ignoring or downplaying disconfirming evidence. This *confirmation bias* (Nickerson

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1998) is widespread among both lay people and scientists (Ioannidis 2012). It is extremely difficult to avoid confirmation bias in everyday reasoning; for example, courses in critical thinking, temporarily suppress confirmation bias, but do not eliminate it (Lilienfeld et al. 2009). Even research communities of highly intelligent and well-meaning individuals can fall prey to confirmation bias, as IQ is *positively* correlated with the number of reasons people find to support their own side in an argument, and is uncorrelated with the (much lower) number of reasons people find to support the opposing argument (Perkins et al. 1991).

Confirmation bias can become even stronger when people confront questions that trigger moral emotions and concerns about group identity (Haidt 2001; 2012). Further, group-polarization often exacerbates extremism in echo chambers (Lamm & Myers 1978). Indeed, people are far better at identifying the flaws in other people's evidence-gathering than in their own, especially if those other people have dissimilar beliefs (e.g., Mercier & Sperber 2011; Sperber et al. 2010). Although such processes may be beneficial for communities whose goal is social cohesion (e.g., a religious or activist movement), they can be devastating for scientific communities by leading to widely accepted claims that reflect the scientific community's blind spots more than they reflect justified scientific conclusions (see, e.g., the three risk points discussed previously).

The peer-review process likely offers much less protection against error when the community of peers is politically homogeneous. Ideally, reviewers should scrutinize and criticize the methods of a paper equally closely regardless of whether or not they approve of the findings. Yet, confirmation biases would lead reviewers to work extra hard to find flaws with papers whose conclusions they dislike, and to be more permissive about methodological issues when they endorse the conclusions. This is exactly what has been found in experimental studies (Abramowitz et al. 1975; Ceci et al. 1985; both described below).

In this way, certain assumptions, theories, and findings can become the entrenched wisdom in a field, not because they are correct but because they have consistently undergone less critical scrutiny. When most people in a field share the same confirmation bias, that field is at a higher risk of reaching unjustified conclusions. The most obvious cure for this problem is to increase the viewpoint diversity of the field. Nobody has found a way to eradicate confirmation bias in individuals (Lilienfeld et al. 2009), but we can diversify the field to the point where individual viewpoint biases begin to cancel out each other.

4.2. Minority influence

Minority influence research has focused on the processes by which minorities influence majority members' (and thus the group's) reasoning (e.g., Crano 2012; Moscovici & Personnaz 1980). Majorities influence decision-making by producing conformity pressure that creates cohesion and community, but they do little to enhance judgmental depth or quality (Crisp & Turner 2011; Moscovici & Personnaz 1980). They also risk creating the type of groupthink that has long been a target of criticism by social psychologists (e.g., Fiske et al. 2004; Janis 1972).

In contrast, a dissenting minority can undermine group-cohesion norms (Crano 2012). Such norms can become dysfunctional for scientific communities, especially when they lead those communities to sacrifice scientific skepticism for the sake of advancing a political agenda (for examples, see Eagly 1995; Jussim 2012a; Redding 2001). For a scientific community, discord may be beneficial because it motivates majority members to think more deeply about the issues at stake (Crano 2012). In scientific contexts, the evidence or logic provided by the minority may sometimes be so persuasive that it wins the majority. Alternatively, if the majority view was correct all along, then the validity and credibility of the majority view are strengthened by withstanding a forceful attempt at falsification by the minority (Popper 1959; 1968). The many benefits of these processes have been borne out by research on minority influence, which shows that the deeper thought produced by dissent can lead to higher-quality group decisions (Crisp & Turner 2011; Moscovici & Personnaz 1980; Nemeth 1995; Nemeth et al. 2001).

There is even evidence that politically diverse teams produce more creative solutions than do politically homogeneous teams on problems such as "how can a person of average talent achieve fame" and how to find funding for a partially-built church ineligible for bank loans (Triandis et al. 1965). Pairs constituting one liberal and one conservative produced more creative solutions to these problems than did liberal-liberal or conservative-conservative pairings. There is abundant evidence that viewpoint diversity can and often does lead to novel solutions to a variety of problems (Crano 2012; Mannix & Neale 2005). Indeed, some social scientists have gone so far as to portray the problem-solving benefits of diversity as a necessary logico-mathematical truth, not just a contingent empirical one (Page 2008 – although see Tetlock 2007).

In sum, there are grounds for hypothesizing that increased political diversity would improve the quality of social psychological science because it would increase the degree of scientific dissent, especially on such politicized issues as inequality versus equity, the psychological characteristics of liberals and conservatives, and stereotypes, prejudice, and discrimination. Social psychologists have shown these effects in many settings. They could take advantage of them within their own ranks.

5. Why are there so few non-liberals in social psychology?

The question of *why* conservatives and other non-liberals are under-represented throughout the social sciences is complex (Klein & Stern 2005), and the evidence does not point to a single answer. To understand why conservatives are so vastly under-represented in social psychology, we consider five explanations that have frequently been offered to account for a lack of diversity not just in social psychology, but in other contexts (e.g., the under-representation of women and ethnic minorities in science, technology, engineering, and mathematics [STEM] fields; see Susan Pinker 2008).

5.1. Differences in ability

Gilbert (2011) observed that, "One well-chewed possibility is that liberals are more likely to want to become professors. For example, liberals may be more interested in new ideas, more willing to work for peanuts, or just more intelligent."

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The evidence does not support this view. Before we dig into it, we should note that a serious claim that intelligence differences explain the scarcity of non-liberals would make sense only if there were *sizeable* and consistent intelligence differences – for this claim, a five-point difference on mean SAT scores simply won't do. Notably, the data do not yield a consistent liberal advantage, even a small one. Some researchers have found a modest negative correlation between IQ and conservatism (Heaven et al. 2011; Hodson & Busseri 2012). However, others have found either no relationship (i.e., between political orientation and SAT-Math scores; Kemmelmeier 2008), or a curvilinear relationship; specifically, Kemmelmeier (2008) found that while conservatism generally correlated with lower SAT-Verbal scores, extreme conservatism predicted *higher* SAT-Verbal scores.

Second, the observed relationship between intelligence and conservatism largely depends on how conservatism is operationalized. *Social* conservatism correlates with lower cognitive ability test scores, but *economic conservatism* correlates with *higher* scores (Iyer et al. 2012; Kemmelmeier 2008). Similarly, Feldman and Johnston (2014) have found in multiple nationally representative samples that social conservatism negatively predicted educational attainment, whereas economic conservatism positively predicted educational attainment. Together, these results likely explain why both Heaven et al. (2011) and Hodson and Busseri (2012) have found a negative correlation between IQ and conservatism – because "conservatism" was operationalized as right-wing authoritarianism, which is more strongly related to social than economic conservatism (Van Hiel et al. 2004). In fact, Carl (2014) found that Republicans have higher mean verbal intelligence (up to 5.48 IQ points equivalent, when covariates are excluded), and this effect is driven by economic conservatism (which, as a European, he called economic *liberalism*, because of its emphasis on free markets). Carl suggests that libertarian Republicans overpower the negative correlation between social conservatism and verbal intelligence, so as to yield the aggregate mean advantage for Republicans. Moreover, the largest political effect in Kemmelmeier's (2008) study was the positive correlation between *anti-regulation* views and SAT-V scores, where $\beta = .117$, $p < .001$ (by comparison, the regression coefficient for conservatism was $\beta = -.088$, $p < .01$, and, for being African American, $\beta = -.169$, $p < .001$).

In summary, substantial evidence suggests that the most reliable relationships between political orientation and intelligence are the positive correlations of *both* social liberalism and economic conservatism with verbal intelligence, while no consistent correlations emerge between political views and mathematical intelligence. This pattern is incompatible with the hypothesis that research psychologists are overwhelmingly left-liberal because liberals are smarter than conservatives.

5.2. The effects of education on political ideology

Another explanation for the disproportionate number of liberals in academia is that education per se *causes* students to become more liberal. For example, many may view education as "enlightening" and believe that an enlightened view comports with liberal politics. There is little evidence that education causes students to become more liberal. Instead, several longitudinal studies following tens of thousands of college students for many years have concluded that political socialization in college occurs primarily as a function of one's *peers*, not education per se (Astin 1993; Dey 1997). These studies show that students become more liberal if they are around liberal peers, and more conservative if around conservative peers. Even the classic Bennington Study (Newcomb 1943) concluded that it was conformity to liberal norms, more than education per se, that led students to become more liberal. Thus, reference-group norms, more than educational enlightenment, lead people to become more liberal in college.

5.3. Differences in interest

Even if differences in intelligence are small or nonexistent, might liberals simply find a career in social psychology (or the academy more broadly) more appealing? Yes, for several reasons. The Big Five personality trait that correlates most strongly with political liberalism is openness to experience ($r = .32$ in Jost et al.'s [2003] meta-analysis), and people high in that trait are more likely to pursue careers that will let them indulge their curiosity and desire to learn, such as a career in the academy (McCrae 1996). An academic career requires a Ph.D., and liberals enter (and graduate) college more interested in pursuing doctorate degrees than do conservatives (Woessner & Kelly-Woessner 2009). Furthermore, the personal and intellectual priorities of liberals may predispose them to an academic career: Relative to conservatives, they are less interested in financial success and more interested in writing original works and making a theoretical contribution to science (Woessner & Kelly-Woessner 2009).

Such intrinsic variations in interest may be amplified by a "birds of a feather" effect. "Similarity attracts" is one of the most well-established findings in social psychology (Byrne 1969). As a field begins to lean a certain way, the field will likely become increasingly attractive to people suited to that leaning. Over time, the group itself may become characterized by its group members. Professors and scientists may come to be seen as liberal just as nurses are typically thought of as being female. Once that happens, conservatives may disproportionately self-select out of joining the dissimilar group, based on a realistic perception that they "do not fit well." Gross (2013) draws on interviews with and surveys of social science academics to argue that this sort of self-selection is the main reason why the professoriate has grown more liberal in recent decades.

Self-selection clearly plays a role. But it would be ironic if an epistemic community resonated to empirical arguments that appear to exonerate the community of prejudice – when that same community roundly rejects those same arguments when invoked by other institutions to explain the under-representation of women or ethnic minorities (e.g., in STEM disciplines or other elite professions). Gross (2013) relies heavily on self-reports of members of the target group suspected of prejudice. But cognitive psychologists and legal scholars such as Greenwald and Krieger (2006), and Kang and Banaji (2006), argue that this type of evidence is insensitive to unconscious prejudices which, they insist, are pervasive when carefully assessed in controlled lab environments. And organizational sociologists such as Reskin (2012) and Bielby (2013) argue that structural impediments to advancement – impediments to

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which individual employers tend to be oblivious – can also bias labor markets against target groups. In our view, it is disturbing when the thresholds of proof that behavioral and social scientists use in evaluating claims of prejudice hinge on "whose ox is being gored" (Tetlock & Mitchell 2009). The credibility of the scientific community is at stake. We should not expect to emerge with our collective reputations intact if we ground accusations of prejudice against outsiders in empirical arguments that we dismiss as inapplicable to ourselves – a failure of the turnabout test that outsiders are likely to find particularly galling.

That said, dispositional differences between liberals and conservatives in personality traits and values, combined with the "birds of a feather" effect, surely explain some portion of the under-representation of conservatives in the social sciences in general, and in social psychology in particular. In theory, these effects could explain the entire imbalance because there is no clear stopping point for the purifying processes that Gross (2013) describes. If this were the whole story, it would not undercut our epistemic arguments about the need for political diversity. Diversity would still improve the quality of social psychological science, but it would weaken the moral arguments. In a free society, people with different preferences may congregate in different occupations.

But what if self-selection is not the entire explanation? What if discouragement and discrimination are meted out to conservatives by the liberal majority? In that case, there would be additional reasons to take corrective action.

5.4. Hostile climate

Might self-selection be amplified by an accurate perception among conservative students that they are not welcome in the social psychology community? Consider the narrative of conservatives that can be formed from some recent conclusions in social psychological research: Compared to liberals, conservatives are less intelligent (Hodson & Busseri 2012) and less cognitively complex (Jost et al. 2003). They are more rigid, dogmatic, and inflexible (Jost et al. 2003). Their lower IQ explains their racism and sexism (Deary et al. 2008), and their endorsement of inequality explains why they are happier than liberals (Napier & Jost 2008). They are hyper-responsive to threatening and negative stimuli (Hibbing et al. 2014; Oxley et al. 2008), and they adopt their political beliefs in part to assuage their fears and anxieties (Jost et al. 2003). These conclusions do not remain confined to academic journals; they are widely reported in the press and in popular books about why conservatives deny science (e.g., Mooney 2012a; Tuschman 2013).

As conservative undergraduates encounter the research literature in their social psychology classes, might they recognize cues that the field regards them and their beliefs as defective? And what happens if they do attend graduate school and take part in conferences, classes, and social events in which almost everyone else is liberal? We ourselves have often heard jokes and disparaging comments made by social psychologists about conservatives, not just in informal settings but even from the podium at conferences and lectures. The few conservatives who have enrolled in graduate programs hear these comments, too, and some of them wrote to Haidt, in the months after his 2011 remarks at the SPSP convention, to describe the hostility and ridicule that force them to stay "in the closet" about their political beliefs – or to leave the field entirely. Haidt (2011) put excerpts from these emails online[5] (in anonymous form); representative of them is this one from a former graduate student in a top 10 Ph.D. program shared this account:

> I can't begin to tell you how difficult it was for me in graduate school because I am not a liberal Democrat. As one example, following Bush's defeat of Kerry, one of my professors would email me every time a soldier's death in Iraq made the headlines; he would call me out, publicly blaming me for not supporting Kerry in the election. I was a reasonably successful graduate student, but the political ecology became too uncomfortable for me. Instead of seeking the professorship that I once worked toward, I am now leaving academia for a job in industry.

Evidence of a hostile climate is not just anecdotal. Inbar and Lammers (2012) asked members of the SPSP discussion list, "Do you feel that there is a hostile climate towards your political beliefs in your field?" Of 17 conservatives, 14 (82%) responded "yes" (i.e., a response at or above the midpoint of the scale, where the midpoint was labeled "somewhat" and the top point "very much"), with half of those responding "very much." In contrast, only 18 of 266 liberals (7%) responded "yes," with only two of those responding "very much." Interestingly, 18 of 25 moderates (72%) responded "yes," with one responding "very much." This surprising result suggests that the hostile climate may adversely affect not only conservatives, but anyone who is not liberal or whose values do not align with the liberal progress narrative.

5.5. Discrimination

The literature on political prejudice demonstrates that strongly identified partisans show little compunction about expressing their overt hostility toward the other side (e.g., Chambers et al. 2013; Crawford & Pilanski 2014; Haidt 2012). Partisans routinely believe that their hostility towards opposing groups is justified because of the threat posed to their values by dissimilar others (for a review, see Brandt et al. 2014). Social psychologists are unlikely to be immune to such psychological processes. Indeed, ample evidence using multiple methods demonstrates that social psychologists do in fact act in discriminatory ways toward non-liberal colleagues and their research.

Experimental field research has demonstrated bias against studies that contradict the liberal progress narrative. Abramowitz et al. (1975) asked research psychologists to rate the suitability of a manuscript for publication. The methods and analyses were held identical for all reviewers; however, the result was experimentally varied between subjects to suggest either that a group of leftist political activists on a college campus were mentally healthier – or that they were less healthy – than a comparison group of non-activists. When the leftist activists were said to be healthier, the more liberal reviewers rated the manuscript as more publishable, and the statistical analyses as more adequate, than when the otherwise identical manuscript reported that the activists were less mentally healthy. The less liberal reviewers showed no such bias. (Abramowitz et al. did not identify any conservative reviewers.)

Ceci et al. (1985) found a similar pattern. Research proposals hypothesizing either "reverse discrimination" (i.e., against White males) or conventional discrimination

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(i.e., against ethnic minorities) were submitted to 150 Internal Review Boards. Everything else about the proposals was held constant. The "reverse discrimination" proposals were approved less often than the conventional discrimination proposals.

In these two field studies,[6] the discrimination may well have been unconscious or unintentional. But Inbar and Lammers (2012) found that most social psychologists who responded to their survey were willing to explicitly *state* that they would discriminate against conservatives. Their survey posed the question: "If two job candidates (with equal qualifications) were to apply for an opening in your department, and you knew that one was politically quite conservative, do you think you would be inclined to vote for the more liberal one?" Of the 237 liberals, only 42 (18%) chose the lowest scale point, "not at all." In other words, *82% admitted that they would be at least a little bit prejudiced against a conservative candidate*, and 43% chose the midpoint ("somewhat") or above. In contrast, the majority of moderates (67%) and conservatives (83%) chose the lowest scale point ("not at all").

Inbar and Lammers (2012) assessed explicit willingness to discriminate in other ways as well, all of which told the same story: When reviewing a grant, 82% of liberals admitted at least a trace of bias, and 27% chose "somewhat" or above; when reviewing a paper, 78% admitted at least a trace of bias, and 21% chose "somewhat" or above; and when inviting participants to a symposium, 56% of liberals admitted at least a trace of bias, and 15% chose "somewhat" or above. The combination of basic research demonstrating high degrees of hostility towards opposing partisans, the field studies demonstrating discrimination against research projects that are unflattering to liberals and their views, and survey results of self-reported willingness to engage in political discrimination all point to the same conclusion: Political discrimination is a reality in social psychology. Conservative graduate students and assistant professors are behaving rationally when they keep their political identities hidden, and when they avoid voicing the dissenting opinions that could be of such great benefit to the field. Moderate and libertarian students may be suffering the same fate.

6. Recommendations

In the prior sections of this article, we reviewed evidence showing that: (1) social psychology is a politically homogeneous field, with a large majority of liberals and few non-liberals; (2) this lack of diversity can undermine the validity of social psychology research in surprising but often hidden ways; (3) increasing political diversity would improve the quality of social psychological science; and (4) the lack of diversity stems from a variety of processes, two of which (hostile climate and discrimination) are under the direct control of social psychologists.

If these four claims are true, what can be done to ameliorate the threats to good science posed by political homogeneity? We recommend solutions in three sets. First, we discuss what social psychologists can do as a field through their organizations and governance. Second, we discuss what professors can do as teachers and as members of academic departments. Third, we discuss what individuals can do to reduce bias in their own research, and in their evaluations of the research of others. This list is surely incomplete; we encourage others to offer additional ideas for solving our discipline's political diversity problem.

6.1. Organizational responses

Diversity is a well-established value throughout the academy, and it enjoys broad support in psychology. The American Psychological Association has been very thoughtful about how to promote diversity within the field, and it issued a major report in 2005. Its task force focused on diversity with regard to race, gender, sexual orientation, and disability, but most of the specific recommendations in the report are appropriate for promoting political diversity as well (American Psychological Association 2005). Below are five of the report's 45 recommendations, which we have edited only slightly:

1. Formulate and adopt an anti-discrimination policy resolution.
2. Implement a "climate study" regarding members' experiences, comfort/discomfort, and positive/negative attitudes/opinions/policies affecting or about members of politically diverse groups.
3. Expand the Publication and Communications Board's database of conservative, moderate, and libertarian researchers who have expertise to serve as ad hoc reviewers or on editorial boards.
4. Conduct a study of barriers/obstacles that non-liberal students face within training programs, with the intent that these data subsequently be used in establishing formal suggestions for enabling the training of non-liberal students.
5. Each organization should develop strategies to encourage and support research training programs and research conferences to attract, retain, and graduate conservative and other non-liberal doctoral students and early career professionals. Examples might include dissertation awards, travel funds for presentations and attendance at conferences, and other financial support targeted to graduate students.

We offer these five steps as examples of the sorts of things that our professional organizations have already done to encourage demographic diversity. More than perhaps any other scientific field, psychologists understand the benefits of diversity and how to attain them, and could easily apply these principles to increase political diversity.

6.2. Professorial responses

There are many steps that social psychologists who are also college professors can take to encourage non-liberal students to join the field, or to "come out of the closet"[7] if they are already in the field.

1. *Raise consciousness, raise awareness.* Professors can acknowledge openly that political homogeneity is a problem in the field, and can state openly that they would like this to change. They can talk about the issue, especially in graduate courses, in faculty meetings about hiring and promotion, at symposia, colloquia, and conferences, and informally among faculty.
2. *Welcome feedback from non-liberals.* Although conservative students are just as satisfied with their college majors

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as are liberal students (indicating no general difference in attitude toward education), they are considerably less satisfied than liberal students with their humanities and social science courses – that is, the courses in which the overwhelmingly left-wing politics of the faculty are most likely to manifest (Woessner & Kelly-Woessner 2009). Liberal professors can make it clear that they are trying to do better, and that they would welcome emails or office visits – or even in-class challenges – from conservative and other non-liberal students. They could preface such a welcome with a discussion of the dangers of groupthink and the benefits for creativity and good thinking of viewpoint diversity.

3. *Expand diversity statements.* Professors can ask their departments to modify the language on their websites to include political diversity along with other kinds, in all statements encouraging members of under-represented groups to apply for admission. Even if it proves difficult to get programs to make such statements, individual faculty can do so on their personal Web pages. We realize that it may seem ironic to call for diversity initiatives aimed at non-liberals, since liberals have historically carried the banner of diversity as an ideal. However, our recommendations are not logically constrained by conservative doctrine, and we think adding more conservatives, libertarians, and people with less categorical perspectives – or no political identity at all – will strengthen our science.

6.3. Changes to research practices

There are several steps that researchers, journal editors, and reviewers can take to reduce the threats to scientific validity posed by political homogeneity. It is extremely difficult to spot bias in oneself (Pronin et al. 2002), but if researchers can get better at spotting political bias in one another, the quality of the research will still improve. Further, one potential consequence of such changes to our scientific practices could be an increase in the attractiveness of our discipline to non-liberals.

1. *Be alert to double standards.* As we have shown, findings that are at odds with liberal values are at risk of being judged more harshly than they deserve; findings that support liberal values are at risk of being waived through without sufficiently critical review. Therefore, whenever researchers review a manuscript or grant proposal that touches on ideologically charged topics, they should try a turnabout thought experiment in which one asks oneself and one's colleagues how they would react to researchers using the same standards of evidence and proof to argue for the mirror-image ideological conclusion (Tetlock 1994).

2. *Support adversarial collaborations.* By encouraging people with different assumptions to collaborate, we can move toward a more complete science of human behavior (Diaconis 1991). Adversarial collaboration is never easy (Mellers et al. 2001), and when there are high legal or policy stakes, it becomes even more difficult (see the responses to Tetlock & Mitchell 2009). Nonetheless, the SPSP task force (Funder et al. 2014) recommended civil adversarial collaboration in cases where one team of researchers failed to replicate the findings of another team. We think such collaboration would be helpful in resolving political differences, too. (Of course, such collaborations presuppose that social psychologists can find non-liberal social psychologists with whom to collaborate.) An ideologically balanced science that routinely resorted to adversarial collaborations to resolve empirical disputes would bear a striking resemblance to Robert Merton's (1942/1973) ideal-type model of a self-correcting epistemic community, one organized around the norms of CUDOS. CUDOS is an acronym for Communism (data are public property), Universalism (apply the same standards of evidence and proof to claims, regardless of who is making them), Disinterestedness (vigilance against ideological and commercial temptations to distort the truth), and Organized Skepticism (creation of accountability systems dedicated to even-handed norm enforcement).

3. *Practicing the virtues of CUDOS furthers a strong scientific culture.* The recommendations by the SPSP's Task Force on Publication and Research Practices (Funder et al. 2014) emphasized the need to contribute to a scientific culture that emphasizes getting the science right. While the report primarily discusses statistics and methods, we have shown that validity also requires high-quality conceptual and review practices. We also need to establish norms concerning what we do when our scientific claims are shown to be wrong. Professors need to acknowledge erroneous claims and correct them to reflect new findings more accurately (one rare example is Klein [2011]). Dr. Bruce Alberts, former President of the National Academy of Sciences, made this a central point when he insisted that scientists "need to develop a value system where simply moving on from one's mistakes without publicly acknowledging them severely damages, rather than protects, a scientific reputation" (Alberts 2013).

7. Conclusion

Psychology was once dominated by behaviorists, who shared a limiting set of assumptions about what constituted psychology. They also controlled nearly all outlets for professional advancement and scientific communication, and they created a hostile climate toward more cognitively oriented psychologists. The stranglehold of behaviorism before the Cognitive Revolution was described by George Miller: "The power, the honors, the authority, the textbooks, the money, everything in psychology was owned by the behavioristic school . . . those of us who wanted to be scientific psychologists couldn't really oppose it. You just wouldn't get a job" (quoted in Baars 1986, p. 203). Yet these differing perspectives and dissenting voices – often dismissed, denigrated, ignored, and relegated to second-class positions in their day – were crucial for progress in psychology. The same thing may be happening today to conservative and other non-liberal perspectives.

Others have sounded this alarm before (e.g., MacCoun 1998; Redding 2001; Tetlock 1994). We have added to this small literature in three ways: (1) We have drawn on a larger set of studies to show that the under-representation of non-liberals is increasing (see Fig. 1); (2) we have identified specific risk points in the research process, and specific psychological mechanisms by which political diversity can improve social-psychological science (e.g., via minority influence, and by helping researchers to overcome the confirmation bias); and (3) we have drawn on a wealth of new data (e.g., Gross 2013; Inbar & Lammers 2012) to

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provide a more comprehensive analysis of the multiple causes of the underrepresentation of non-liberals in social psychology.

No changes were made in response to the previous alarms, but we believe that this time may be different. Social psychologists are in deep and productive discussions about how to address multiple threats to the integrity of their research and publication process. This may be a golden opportunity for the field to take seriously the threats caused by political homogeneity. We think the case for action is strong, and we have offered specific suggestions for ways that social psychology can increase its political diversity and minimize the effects of political bias on its science.

The case for action becomes even stronger when we consider how our research is funded. As the academy has become increasingly liberal, non-liberals have become increasingly distrustful. Gauchat (2012) found that American liberals and conservatives trusted science roughly equally from the 1970s through the early 1990s. But since the mid-1990s, conservatives' trust has gone down while liberals' trust has gone up. Reviewing the "science wars" of recent decades, Moreno (2011, p. 18) concluded that "the problem [for evangelical Christians] is not mistrust of science so much as it is mistrust of scientists." So if the academy is becoming steadily more liberal while American politics is becoming increasingly polarized (Abramowitz 2010), is it any wonder that some conservative Republican politicians want to cut funding for some social sciences? This has already happened to political science: The recently passed Coburn Amendment placed severe limits on political scientists' access to federal funding (American Psychological Association 2013). We aspire to prevent social psychology, or psychology more broadly, from being next. And we certainly could be: In March 2014, the U.S. House Science, Space, and Technology's Research Subcommittee introduced HR 4186, which proposed $150 million in cuts (a 42% decrease) in National Science Foundation funding to social and behavioral sciences. The SPSP's response was swift, encouraging members to contact their congressional representatives and encourage them to oppose this resolution. Such congressional actions should cause us to pause and consider whether perceptions of the social sciences' ideological lopsidedness have inspired such legislation.

We have focused on social (and personality) psychology, but the problems we describe occur in other areas of psychology (Redding 2001), as well as in other social sciences (Gross 2013; Redding 2013). Fortunately, psychology is uniquely well-prepared to rise to the challenge. The five core values of the APA include "continual pursuit of excellence; knowledge and its application based upon methods of science; outstanding service to its members and to society; social justice, diversity, and inclusion; and ethical action in all that we do" (American Psychological Association 2009). If discrimination against non-liberals exists at even half the level described in section 4 of this target article, and if this discrimination damages the quality of some psychological research, then all five core values are being betrayed. Will psychologists tolerate and defend the status quo, or will psychology make the changes needed to realize its values and improve its science? Social psychology can and should lead the way.

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NOTES

1. All authors contributed heavily and are listed in reverse order of career seniority.

2. Both studies include community colleges in their analyses.

3. Inbar and Lammers (2012) conducted two surveys using the same mailing list. Their first survey was shorter and received 508 responses. This survey did not ask for an overall political identity; it asked for identity on economic issues, social issues, and foreign-policy issues. Of these three, we believe that being a social conservative is the one that carries the strongest taboo; only 3.9% of respondents said they were conservative on social issues. We note that Inbar and Lammers found more respondents willing to say that they were conservative on economic issues (17.9%) and on foreign policy issues (10.3%). But we believe it is overall identity – the willingness to say "I am a conservative" versus "I am a liberal" – that is the best operationalization of political diversity. We therefore focus on their second study, which also included a more extensive set of measures related to political discrimination.

4. We offer this additional point: In his 2011 speech to the Society for Personality and Social Psychology, Haidt reported that he was able to identify only one conservative social psychologist with any degree of field-wide name recognition – Clark McCauley. In the three years since that talk, no other conservative social psychologist has stepped forward, or been publicly identified, as a counterexample to Haidt's claim that the field lacks political diversity. The five authors of this article know of only one additional conservative social psychologist, but he has asked to remain unidentified. If social psychology does in fact have more political diversity than we claim in this article, nobody seems to know where to find it.

5. The excerpts can be viewed at YourMorals Blog, available at: http://www.yourmorals.org/blog/2011/02/discrimination-hurts-real-people/.

6. We know of only one field study that failed to find discrimination against conservatives in the academy, but it is an unpublished study that did not include psychology departments. Fosse et al. (2011) sent emails to the directors of graduate studies at the 75 top-ranked departments of sociology, political science, economics, history, and literature. The emails purported to be from prospective applicants who said that they had volunteered for either the Obama campaign or the McCain campaign in 2008. Responses were not slower or colder when responding to the student who said he had worked on the McCain campaign. This is encouraging, but we note that the emails described students who fit the general stereotype of liberalism – majoring in the field, wanting to use the field to have an impact on the world, wanting to stay well rounded. Only after these impressions were offered was it revealed, at the end of the third paragraph, that the student had worked on one of the presidential campaigns for a few months. Furthermore, we note that the director was not anonymous, was accountable for his or her actions, and that many respondents probably had text prepared to deal with the large volume of email requests received. We believe this study incorporated several design elements that made discrimination less likely.

7. We assume that many of the conservatives in the field attempt to keep their political identities a secret, for two reasons: (1) Only three people out of approximately 1,000 raised their hands publicly to declare themselves as conservatives when Haidt asked for a show of hands during his 2011 SPSP talk. Yet if the 6% number obtained by Inbar and Lammers (2012) was correct, and if the audience was representative of the profession, there should have been roughly 60 conservatives in the audience. (2) Most of the conservatives who wrote to Haidt after his 2011 talk specifically said that they keep their political identities secret.

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Open Peer Commentary

A "cohesive moral community" is already patrolling behavioral science[1]

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Abstract: Authors of non-liberal proposals experience more collegial objections than others do. These objections are often couched as criticism of determinism, reductionism, or methodological individualism, but from a scientific viewpoint such criticism could be easily answered. Underneath it is a wish to harness scientific belief in service of positive social values, at the cost of reducing objectivity.

Scientists are subject to the same distorting influences as everyone else. These include not only prejudice, ideology, and confirmation bias (target article, sect. 4.1 and beyond); we are also subject to the social pressures generated when people harness belief as a self-control device. For instance, people have been shown to form exaggerated beliefs about the addictive effects of a single drug use, arguably to keep themselves from trying it (Hammersley & Reid 2002; Heyman 2009, pp. 27–38). This kind of effort readily becomes communal and brings social pressure to bear on scientific inquiry. For instance, there was outrage in the recovering alcoholic community at the Rand report that 15% of alcoholics could successfully return to controlled drinking (Roizen 1987). Many beliefs about psychological issues can be interpreted as advancing or hindering communal efforts at impulse control. Diversity of opinion interferes with any resulting "cohesive moral community" (sect. 3, paras. 1–2; sect. 3.1.1, para. 9), which relies on the consensus of all right-thinking people. Going by the findings of one of the target article's coauthors (Haidt 2012), liberals are most apt to see immorality in callousness toward or belittling of disadvantaged people, whereas conservatives are more apt to see immorality in threats to social bonds, particularly as maintained by received wisdom.

A liberal moral community is already apparent within behavioral science. Among target articles in *Behavioral and Brain Sciences* are many topics that one side or the other could see as exciting people's lower impulses. Comparing just some of the articles on which I happen to have written commentaries, the greater risks taken in making non-liberal arguments are evident. (I know nothing of the authors' personal politics.)

Liberal: Atran and Norenzayan (2004) argued that religious belief has been shaped by its adaptive functions, thus arguably replacing its sacredness with utility.

Non-liberal: Nell (2006) argued that cruelty serves an adaptive function, for both "perpetrators and spectators," thus potentially making it seem more normal.

Liberal: Müller and Schumann (2011) discussed potential instrumental uses of recreational drugs. Most of these are currently illegal, and the movements to at least reduce restrictions on them are favored by liberals (although also by libertarians).

Non-liberal by implication: Van de Vliert (2013) presented a statistical analysis suggesting that countries' cultural strengths are a function of climate and wealth. Since wealth is not a truly independent variable, this thesis would seem to support climatic determinism, which has been anathematized by liberals.

The psychological origin of religion is largely taken for granted among scientists, and in *BBS* 27(6), only one of 25 commentators (Glassman) complained that target article authors Atran and Norenzayan belittled theology. With Müller and Schumann (*BBS* 34 [6]), only one of 19 commentators seemed critical of a political implication:"M&S [Müller & Schumann] . . . propose a staged drug policy that matches well the neoliberal governance scheme" (Wu 2011, p. 327). On the other hand, in *BBS* 29(3), several commentators blamed Nell for failing to uphold an environmental-pathology view of cruelty, leading him to comment in response,

> There is a need for a "negative psychology" as a balance to the mandatory optimism of current Western (and especially American) psychology that holds to Enlightenment notions of an inexorable march to perfection, and blocks serious empirical research on, yes, evil. (Nell 2006, p. 249)

Van de Vliert did not incur liberal criticism, but his complex model suggests wariness of political push-back (see my commentary on Van de Vliert in *BBS* 36(5): Ainslie 2013). He was at pains to distance his proposal from climatic determinism, noting that it was "a sensitive subject" (Van de Vliert 2013, p. 478). His own proposal was that both cold and hot climates impose stress, which interacts with a society's wealth to affect culture – in effect, stress that does not overwhelm you makes you stronger. However, cold stress had much greater effects than heat stress, and he did not analyze, or even mention, the dual role of wealth as both cause and effect. Even more remarkably, when a commentator pointed out the relevance of IQ as a factor (Allik & Realo 2013), the author acknowledged that "heat demands, cold demands, monetary resources, and their four interactions accounted for 62% of the variation in IQ across 106 countries" (Van de Vliert 2013, p. 514); but he said that this was a negative finding, since "none of the four interaction effects reached significance." Van de Vliert appears to have found evidence that the absence of cold demands is associated with both lower IQ and less cultural advance – much as in climatic determinism – but this simple conclusion is obscured within a more complex one that does not offend liberal opinion.

The issue of determinism has been especially polarizing since E. O. Wilson's *Sociobiology* appeared in 1975. Wilson's argument that many human character traits have a genetic basis led to charges that "biological determinism" was an apology for a racist status quo (reviewed in Segerstråle 2000; cf. Wilson 1975). The controversy endures (Laland & Brown 2011), and with it the suggestion that the genetics of some behavioral traits should not be studied to begin with (Hayden 2013). We might think that the critics mean climatic or biological *fatalism* – that is, sole determinism. However, there are some for whom determinism itself, which used to be accepted as a fundamental tenet of science, lays too heavy a hand on human choice – at least in the form of its implication, *reductionism* (the assumption that behavioral traits have a mechanistic basis):

> Reductionism is a plague that grows proportionally as our society gets more sophisticated at controlling human behavior. We come to experience and conceptualize ourselves as powerless victims of mechanism, and thereby enter into a self-fulfilling prophecy. (Miller 2003, p. 63)

Also in question is the assumption that a group's choices must be made entirely within the brains of the individual members – often criticized as "methodological individualism" (Udehn 2001).

Critics of determinist/reductionist/individualist approaches often fault them for precluding social influence. In doing so, they avoid recognizing three conciliatory possibilities:

1. That an inborn or environmentally imposed predisposition is not complete "determination," but is just prepared or prewired, a groove in the Lockean blank slate from which the chalk of behavior can deviate given adequate motivation.
2. That individuals may derive reward from vicarious experience, so individual interests need not be selfish. (Indeed, they are sometimes overwhelmingly altruistic; Marsh et al. 2014.)
3. That seeing the individual as the sole seat of motivation is compatible with studying the emergent properties of groups in their own right (Ross 2014, pp. 254–312) – "ontological individualism" as a component of "emergentism" (Sawyer 2002).

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Thus, from a scientific point of view, socially oriented critics could easily find compatibility with more mechanistic approaches. But logical solutions notwithstanding, liberal criticism seems to be inspired by a wish for behavioral science to actively advance our humanistic values and forestall our invidious impulses.

This wish is the real root of the moral community that nonliberal dissent threatens to make less cohesive. My reaction is that censoring science to serve social policy has dire implications – this was, after all, what Pope Urban VIII was trying to do with Galileo. In any case, society needs to decide whether keeping non-liberals out of social science departments (target article, sect. 2) will actually serve the goal of controlling base social impulses, and even if so, whether this goal is worth the divorce of belief from the best available research findings as judged in wide-ranging debate.

NOTE

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Recognizing and coping with our own prejudices: Fighting liberal bias without conservative input

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Abstract: This commentary summarizes my struggle to overcome liberal bias without conservative input. I generally assume I am biased and constantly try to build a good-quality argument for the opposite view. Trying to dispense with one's liberal values can help, if one is willing. Frequent self-tests help. Liberal biases include race, gender, and poverty, but also dislike of business corporations and even Western civilization. Feminism is the single strongest and most powerful bias.

Despite some quibbles over details, in the target article Duarte et al. are absolutely right that social psychology is beset by liberal bias. Their hope that this might be corrected by recruiting more conservatively minded social psychologists into the field is commendable, but I do not anticipate this happening any time soon. Hence, if social psychologists want to do an optimal job of discovering scientific truths, we shall have to overcome our liberal biases.

To be sure, many social scientists see their life's work as based on their (liberal) values, and so promoting the liberal political agenda is their main purpose rather than a handicap. This comment is addressed only to those social scientists who put finding the truth as their top value.

Which type are you? Suppose you conducted an excellent study on a topic close to your heart and the results came out starkly contrary to your political values. Would you push ahead to get those published? Suppose you found, for example, that your favorite minority or victim group really did chronically perform at a poor level and were significantly responsible for their own low status in society: Would you want the world to know (and with your name attached)?

Suppressing politically incorrect research findings (as authors or reviewers) is only part of the problem. Liberal bias prevents people from talking or even thinking about some issues. The episode of Lawrence Summers, the Harvard president who was vilified for suggesting as a hypothesis that the lack of female Harvard physics professors could be due to a shortage of women with the requisite intellectual gifts, should be a source of shame to scientists. The debate was not about scientific data and methodology. Rather, he was thinking thoughts that are not allowed by liberal bias to be thought. Scientific inquiry is hampered by prohibitions on free thought and free speech. Summers's case is reminiscent of Immanuel Kant, the brilliant philosopher who had to stop publishing because the authorities deemed his works to be insufficiently Christian.

Some decades ago I decided to abandon trying to support a particular viewpoint. I would strive instead to end up knowing the truth, even if it is disagreeable. Toward that end, I have struggled ever since to overcome my (mostly liberal) biases.

It is important to remember that you can never tell whether you are biased, at least certainly not by conscious introspection. It is necessary instead to assume that you are usually biased.

In my case, I took the extreme approach of trying not to care. I stopped voting, because voting requires taking sides. I want to be able to see each issue from both sides and to follow the data without favoritism or preference. This has created some difficulties for me, as I am now out of step with most peers (and relatives), who have strong political views. Espousing political values merely slows me down in my quest to end up knowing the truth, because they make me cling to favored views. One common form that bias takes is setting higher criteria for accepting unpalatable rather than politically agreeable conclusions.

Admittedly, I find that I cannot really stop caring about everything. Still, trying not to care is a useful general attitude, and I suspect (though I have no way of proving) that trying not to care helps diminish bias. And as scientists, we can at least learn to be embarrassed or even ashamed about our liberal biases, rather than proud of them.

One of the hardest things about overcoming bias is that one has to recognize one's values and preferences – and then constantly try to build the opposite case. If you wish there are no innate racial or gender differences, for example, then to guard against liberal bias you must constantly try to make the best case that there are such differences. It is essential to push oneself to develop the argument one dislikes, and not just to spell out a straw-man version suitable for trashing but rather to do a credible job of articulating how a very different perspective could produce a different explanation.

I devise tests for my liberal bias. For example, do I object to racial profiling (police selectively suspecting African Americans) while failing to protest gender profiling (police selectively suspecting males)? Have I considered the possibility that women earn less than men because women do not work as hard and are less ambitious? More broadly, do I follow the standard liberal line of blaming women's problems and deficiencies on men? Do I readily see the evil things done by corporate America but fail to appreciate the (probably far greater) immense positive effects it has had?

In my own experience, feminism has been by far the most difficult aspect of liberal bias to overcome. Deeply ingrained habits of liberal feminist thought are augmented by widespread intimidation and enforcement, as accusations of sexism are considered sufficient to condemn both an idea and anyone who even suggests it. This is especially difficult because the feminist bias masquerades as opposing bias.

Liberal bias gives me a quasi-phobic tendency to avoid thinking certain thoughts because someone might find them offensive. To counter this, I ask myself exactly why some idea would be offensive. (Surprisingly often, I find liberals will quickly label something as offensive but cannot articulate what makes it so.) One finds oneself afraid of being accused of blaming the victim, for

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example – but that is not a scientific argument. Sometimes victims do deserve some blame.

Blind spots for liberals include not only issues of race, poverty, and gender but also a knee-jerk hostility toward large corporations and profits, a lack of understanding of economics, and in many cases a negative attitude toward Western civilization.

It has helped me to assume that many of my preconceived ideas are wrong and so I should be eager to change those. Catching my mistakes will hasten me along the long road toward the truth.

Method and matter in the social sciences: Umbilically tied to the Enlightenment

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Abstract: This commentary deals with the nonconformity of academics and the ethos of social science. Academics in all fields deviate from majority norms in politics and religion, and this deviance may be essential to the academic mind and to academic norms. The Enlightenment legacy inspires both methods and subject matter in academic work, and severing ties with it may be impossible.

Given the indisputable fact that social psychology has been dominated by liberal ideals, Duarte et al. suggest that the field would be better off if practitioners were a more representative sample of the population in terms of politics. A broader historical and psychological context is needed in order to evaluate this suggestion. The political agenda of social psychology has been shaped by historical events. In 1979 Dorwin Cartwright wrote: "If I were required to name the one person who has had the greatest impact upon the field, it would have to be Adolf Hitler" (Cartwright 1979, p. 84). In addition to Nazism in Europe, the Civil Rights Movement and the Vietnam War had a formative effect. The Kitty Genovese murder in 1964 led (rightly or wrongly) to bystander-effect research. None of these seems as subversive as work on the Just World illusion (Lerner 1980). Would a conservative-majority social psychology have produced another body of research? Naturally.

The analysis needs to start with the fact that all academics, not just psychologists, diverge significantly from the general population in terms of beliefs and ideals, and this may be linked to their career commitments. This is a statistical generalization, allowing for concrete exceptions, but still a strong one. A liberal majority dominates most disciplines, including economics, physics, biology, engineering, business, and law (Cardiff & Klein 2005; Klein & Stern 2009; Klein & Western 2005). The association between academic aspirations and politics was evident in a 2004 survey of 15,569 undergraduates. Before starting college, 19% of liberal undergraduates were interested in getting a Ph.D., whereas conservatives were under 10%. While in college, 33% of conservatives chose professional fields, and only 18% of liberals (Woessner & Kelly-Woessner 2009).

Neither do the target article authors mention that the findings about the politics of academics rather unsurprisingly run parallel to findings about their religiosity, which show a similar degree of nonconformity. These are highly relevant because religiosity correlates so clearly with politics. Surveys of religiosity among academics in the United States, starting in 1914, have consistently shown a huge gap separating them from the general population (Ament 1927; Ecklund & Park 2009; Ecklund & Scheitle 2007; Gross & Simmons 2009; Lehman & Witty 1931; Leuba 1916). Recent surveys of elite faculty found 63.7% non-believers, compared to under 5% in the general population. Of the population, 14% were "evangelical"/"fundamentalist," but they were under 2% among academics (Ecklund & Scheitle 2007; Gross & Simmons 2009). Findings from outside the United States have been similar (Beit-Hallahmi 2015).

Gross and Fosse (2012) argued that the liberalism of academics is causally tied to an over-representation of Jewish (i.e., secular), non-religious, or liberal Protestant individuals among them. Gross and Simmons (2006) found that conservative politics, Republican Party affiliation, and evangelical identity were tied to lower confidence in higher education and holding professors in lower esteem. Granger and Price (2007) found that fundamentalist beliefs reduced the likelihood of pursuing science training, and Sherkat (2011) reported that Catholics and conservative Protestants had low levels of science literacy.

Research on eminent scientists in both the natural and the social sciences has shown that they had been recognized early on as unusually gifted, anti-authoritarian, and contemptuous of convention and tradition (Eiduson 1962; Eiduson & Beckman 1973; Feist 2006; Roe 1952). Political views, career interests, and religious identities stabilize in late adolescence, when religious and political non-conformists, marked by intellectualism (a high level of analytical, non-intuitive thinking), start moving towards academic careers (Ecklund 2010; Elchardus & Spruyt 2009; Hardy 1974; Highton 2009; Hoge & Keeter 1976).

Quite early on, an "eminence effect" was noted, with more eminent scientists in all fields being irreligious. James Leuba wrote, "I do not see any way to avoid the conclusion that disbelief in a personal God and in personal immortality is directly proportional to abilities making for success in the sciences in question" (Leuba 1916, p. 279). Among members of the U.S. National Academy of Sciences in biological and physical sciences, many of them Nobel Laureates, only 7% believed in a personal God, while in the general population the corresponding figure hovers around 95% (Larson & Witham 1998). Data on Nobel Laureates in all fields, including Peace and Literature, show similar trends (Beit-Hallahmi 2015). An international intellectual (secular) elite was a reality before 1900, as demonstrated by data on early Nobelists (Beit-Hallahmi 2015). Most winners before 1920 had been born before 1850, and were no more religious than laureates 100 years later.

Lipset (1982) argued that academic excellence was tied to nonconformity in both religion and politics, and that the most eminent were in the radical left corner. Bello (1954) interviewed 87 promising research scientists under age 40. The majority were irreligious, and almost no one voted for Dwight Eisenhower in 1952. More recently, in a 2005 study, the correlation between eminence and politics was demonstrated by data on the Democrat/Republican ratio at California universities. At UC Berkeley it was 8.7:1; at UCLA, 7.2:1; at Stanford, 6.7:1; at UCSD, 6.6:1; and, even at Caltech (supposedly dominated by conservative, but brilliant, engineers), it was 4.2:1. Less prestigious California institutions had more Republicans (Cardiff & Klein 2005).

Could the ethnic/religious/political composition of the social psychology tribe (or the nuclear physics tribe) change significantly in the foreseeable future? Research on Catholic under-representation in academia offers relevant data. Greeley (1963; 1973; 1977; 1990) challenged received wisdom and presented data showing that, since the 1960s, Catholics had the same rates of graduate degrees as others, and were just as likely to enter the academic world. Fifty years later, Catholics, who make up more than 25% of the population, are indeed well-represented among holders of advanced degrees (27.9%), but significantly under-represented among elite faculty (9.0%) (Ecklund & Park 2009). Internationally, data on Nobel Laureates show a severe under-representation of Catholics in all fields except Literature (Beit-Hallahmi 2015). This case shows that cultural change is slow and unpredictable, and in the foreseeable future we will meet the usual suspects in both physics and social science.

Duarte et al. cite approvingly Robert Merton's "ideal-type model of a self-correcting epistemic community" (sect. 6.3,

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para. 2) but fail to notice that choosing it is a political act. Merton (1942/1973) advocated an anti-authoritarian weltanschauung, derived from Enlightenment ideals (or even an Enlightenment political program). Hollinger (1996) showed that Merton's portrayal of the academic ethos was developed in the context of the fight for democracy in the 1930s and 1940s. In social science, an ethos based on universalism and skepticism cannot be easily insulated from substantive questions. Wishing to find a new inspiration, Duarte et al. find themselves back where social science started – at the Enlightenment.

Is liberal bias universal? An international perspective on social psychologists

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Abstract: Based on our comparison of political orientation and research interests of social psychologists in capitalist Western countries versus post-Communist Eastern European countries, we suggest that Duarte and colleagues' claim of liberal bias in the field seems American-centric. We propose an alternative account of political biases which focuses on the academic tendency to explain attitudes of lower status groups.

"The field is shifting leftward" claim Duarte et al. in the target article (sect. 2, para. 4). Their analysis suggests that the social psychological research is conducted in a politically homogeneous environment that includes mainly political liberals and lacks a conservative voice. In this commentary we highlight some limitations of such an American-centric view on social psychology and present an alternative explanation of psychologists' political skew – based on their opposition to the attitudes prevalent in their societies, particularly among the low-status groups.

Duarte et al.'s analysis relies mainly on a unidimensional understanding of political ideology, in which political orientation in terms of economic issues is highly correlated with political orientation in terms of social issues (see Jost et al. 2009). This overlap of economic and political liberalism seems more prevalent in the Western capitalist countries, particularly in the United States. In other parts of the world, such as the post-Communist nations of Eastern Europe, free-market economic worldviews are often linked to social liberalism (Golec 2001; Kossowska & van Hiel 2003). By ignoring the differences between economic and social attitudes, Duarte and colleagues inaccurately generalize the political leanings of American social psychologists to the rest of the world (see Henrich et al. 2010a).

The claim about psychological field "shifting leftward" comes from Jonathan Haidt's observation during the 2011 Society for Personality and Social Psychology (SPSP) annual meeting (Haidt 2011), as well as Inbar and Lammers's (2012) analysis of SPSP members' political attitudes. The SPSP is an American non-profit institution, holding its meetings in the United States, with 72.5% of members being American. Indeed, more than 80% of psychologists participating in both studies by Inbar and Lammers (2012) were American. Duarte et al.'s observation about psychologists' liberalism might then be a local American specificity rather than a universal phenomenon. We decided to examine this phenomenon with a more internationally diverse sample.

For international comparison, we selected two Western traditionally capitalist nations (the United Kingdom and the United States) and two East European post-Communist nations (Hungary and Poland). We focused on comparing these countries because of their diverse political-economic history, as well as differences in support for state interventionism in economy. Indeed, support for state interventions tends to be higher in Hungary and Poland than in United Kingdom and the United States, and this difference is particularly strong among people of lower socioeconomic status (World Values Survey Association 2014).

In a recent online study of 132 social psychologists from the United Kingdom, United States, Hungary, and Poland (Bilewicz et al., in press), we asked participants to indicate their political views with respect to social issues (e.g., religion or gender roles) and economic issues (e.g., taxes or welfare state) (Fig. 1). Social psychologists working in the post-Communist East European countries expressed rather right-wing political orientation with respect to economic issues and left-wing political orientation with respect to social issues, whereas Western social psychologists expressed left-wing orientation on both dimensions. Although East European social psychologists were overall more right-wing than Western social psychologists, this difference was more pronounced for economic than for social issues. Despite a relatively small sample size, this study serves as a preliminary illustration of the differences between Western and Eastern social psychology.

It then seems that Duarte et al.'s conclusions of about "the field" might be limited to Western countries with a long tradition of free-market economy and liberal democracy. Moreover, by overseeing the situational context of political opinions and focusing on self-selection and hostile climate as the main reasons for liberal bias, they essentialize psychologists' political opinions. We propose an alternative explanation of dominant political leanings in psychology.

American and British social psychologists function in societies in which support for state interventions in economy is relatively low, even among low-status groups. In Hungary and Poland, however, low-status groups support economic interventions (World Values Survey Association 2014). We suggest that psychologists – usually part of the middle class – tend to accentuate their political attitudes in opposition to attitudes prevalent among low-status groups in their societies. Such accentuation is a typical distinction strategy of the middle class, allowing for reproduction of cultural and social capital in opposition to the working class rather than in

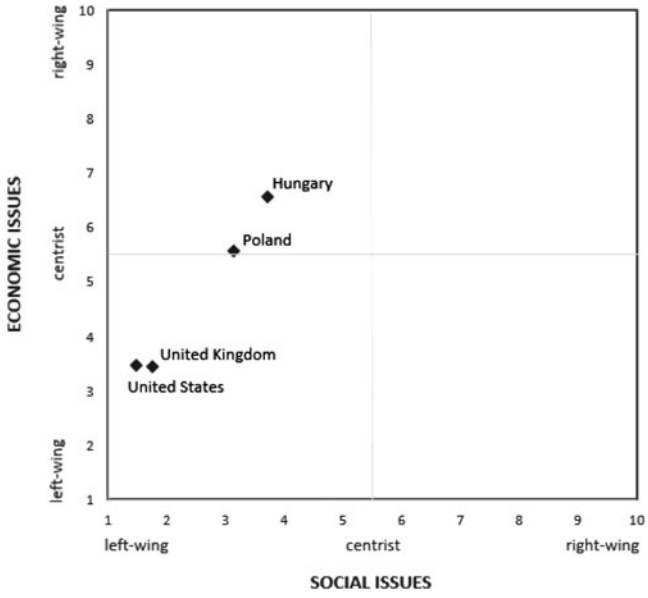


Figure 1 (Bilewicz et al.). Political orientation of social psychologists in Western and Eastern-European countries (United States N = 52, United Kingdom N = 22, Hungary N = 32, and Poland N = 26).

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opposition to higher classes (Bourdieu 1984). This opposition seems to be reflected in the research interests of social psychologists.

In the case of Western social psychology, some of the commonly studied topics are: ethnic prejudice, climate-change denial, and system justification (see the target article). All of them can be attributed to the political Right rather than Left. However, in the case of East European social psychology, the most commonly studied topics include: complaining, belief in an unjust world, entitlement attitudes, conspiracy theories, nationalism, and non-competitiveness (Bilewicz & Olechowski 2014). These issues combine anti-capitalism and social conservatism – a mix common among the low-status groups in post-Communist countries. East European social psychologists tend to perceive these topics in terms of pathologies. This stigmatizes negative evaluations of current economic and political order, and delegitimizes collective action.

Another good illustration of regional differences in research topics is the use of the implicit association test, a measure of unconscious attitudes (Greenwald et al. 1998). This method, originally developed in the USA to explain stereotyping, discrimination, and racial biases (see Greenwald & Banaji 1995; McConnell & Leibold 2001), has been used by Polish social psychologists as a tool for measuring consumer attitudes toward corporate brands (e.g., Maison et al. 2001; 2004). The same technique can then be used in the interest of groups that are discriminated against (in the West) or in the interest of the market and the power-brokers (in Eastern Europe). This example seems to further illustrate the differences in the economic worldviews of social psychologists.

Social identities of social psychologists are construed in opposition to the "participants" – the low-status out-group members worth studying (Hegarty & Bruckmüller 2013). Thus, social psychological research might not be biased because of liberal political inclinations, but rather, by the opposition between researchers and the values of the low-status groups in their societies.

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On the history of political diversity in social psychology

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Abstract: We argue that the history of political diversity in social psychology may be better characterized by stability than by a large shift toward liberalism. The branch of social psychology that focuses on political issues has defined social problems from a liberal perspective since at least the 1930s. Although a lack of ideological diversity within the discipline can pose many of the problems noted by Duarte et al., we suggest that these problems (a) are less apparent when the insights of social psychology are pitted against the insights from other social science disciplines, and (b) are less pressing than the need for other types of diversity in the field, especially ethnic and racial diversity.

In the target article, Duarte et al. argue that social psychology has become more politically lopsided over the years, with liberals and liberalism all but dominating a field that was once much more politically diverse. They go on to suggest a number of ways that the science of social psychology would benefit from increased representation of conservatives and conservative ideology in our departments, leading journals, and academic discourse. Our goals in this brief commentary are threefold.

First, we question the authors' conclusions about increasing liberal homogeneity in social psychology, and we come to a somewhat different conclusion from our own historical analysis of the field: Social psychology has been (and continues to be) a politically liberal social scientific discipline since at least the 1930s. Second, we consider how liberalism within the field can be both a weakness and a potential strength. And finally, we suggest that increasing political diversity, while important, may be less important for the health of the field than increasing other types of diversity, especially racial and ethnic diversity.

The starting point for our historical analysis of the field is the foundation of the Society for the Psychological Study of Social Issues (SPSSI) in 1936. From the outset, SPSSI members focused on liberal concerns such as racial prejudice, class conflict, and war. Prominent psychologists in this camp included Otto Klineberg, Gordon Allport, David Krech, Ralph White, Dan Katz, Nevitt Sanford, Daniel Levinson, Else Frenkel-Brunswik, Theodore Newcomb, Brewster Smith, and, later, Tom Pettigrew, Herb Kelman, Irving Janis, and Bob Abelson. Most contemporary researchers studying stereotypes, prejudice, and intergroup relations more broadly and, increasingly, environmental and health psychologists, are the intellectual heirs of the SPSSI researchers from the 1930–1960s eras.

However, the field of social psychology during much of this era was comprised of more than just the SPSSI social-justice tradition. A second tradition developed in the 1950s, which centered more on rigorous scientific experimentation and distinguished itself from the "softer" side of social psychology that focused on social issues. Prominent in this group were Leon Festinger, Carl Hovland, Hal Kelley, Don Campbell, Stanley Schachter, John Thibaut, and Bill McGuire. Probably most of these now-deceased researchers also at least leaned toward political liberalism, even though their research was not as clearly connected to politics. Duarte et al. seem less concerned about liberalism in these less politically relevant branches of social psychology.

Duarte and colleagues rely on a survey by McClintock et al. (1965) to suggest that psychology was more politically heterogeneous a half century ago than it is today. However, it is difficult to make inferences about the politics of social psychologists from those data. The difficulty arises for two main reasons: (1) The survey lumped the then-small field of social psychology in with the larger other specialties in academic psychology, such as learning, sensation and perception, and physiological psychology, whose subject matters were far from social issues; and (2) as Duarte et al. note, party identification was not as highly correlated with political ideology in the American public then as now: r=.00 in 1956; r=.62 in 2004 (Lewis-Beck et al. 2008). The "sorting" of political parties into distinct ideological camps is a well-documented but fairly recent phenomenon (Levendusky2009), and there is no reason to think that academic psychologists were immune to such broader societal trends. As such, no doubt numerous psychologists who identified as Republicans in the McClintock survey were liberal and some who identified as Democrats were conservative. As noted, we think it is a good bet that most social psychologists in those days were at least somewhat politically liberal, regardless of their party identification.

One of us has long argued that scientists with differing theoretical or ideological priors have two competing models available to them in presenting their findings: the adversarial model and the inquisitorial model (Sears 1966; 1994). In the present context, the adversarial approach would pit the findings of liberal and conservative researchers studying a common question against one another. Each side would argue its position to the best of its ability, marshalling evidence in support of its position and accepting or disputing the conclusions of its scholarly adversaries. In the legal world, the adversarial model is practiced by the American justice system (i.e., with a prosecution and a defense) and follows the contours of a political debate. In the inquisitorial model, by contrast, ostensibly

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neutral researchers attempt to gather and present evidence fairly from both sides of an issue. That also has a long legal tradition, of course, and is widely practiced in court systems around the world (e.g., China, Russia, Germany, and Scotland).

When viewed through an interdisciplinary lens, social psychology has many potential adversaries in more conservative disciplines such as economics and political science. Social psychologists can pit, say, a theory of symbolic politics against theories of self-interest or prospect theory against the rational-actor model typical in economics. In these cases, social psychologists can usefully adopt the adversarial model by presenting their best case while those with other philosophies, ideologies, and viewpoints do the same. What typically emerges is a richer, more nuanced picture of the phenomenon under study. Boundary conditions and limitations of each approach can be identified and potentially reconciled.

Nevertheless, when viewing the internal dynamics of a decidedly liberal field, many of the shortcomings identified by Duarte et al. are important. When a field develops a political consensus with no one to argue for other views, an adversarial model is no longer viable and an inquisitorial model is likely to be hampered by bias. With respect to the SPSSI tradition, Duarte and colleagues' point to a hostile climate toward conservatives and illustrate how problems of embedded bias in theory and methods can hinder scientific inference and discourse. It is ironic that a field that so aptly documented the dangers of insular groupthink and ideological homogeneity is so susceptible to them. We agree with Duarte and colleagues that such homogeneity of ideology adversely impacts the field's intellectual richness and creativity.

While a diversity of political viewpoints would benefit social psychological science, we also believe that political diversity is not necessarily the most important type of diversity for the field as a whole to pursue. Exposure to politically diverse viewpoints – and challenges to the insights of the field – is always possible from other social science disciplines and from society as a whole. Social psychologists may therefore do well for the science by increasing their commitment to interdisciplinary collaboration and public dialog. However, diversity in traditionally disadvantaged ethnic groups, racial groups, and economic classes is still sorely lacking, not just in social psychology, but across most of social science as a whole (see Medin & Lee 2012). Given the historical substantive foci of social psychology within the social sciences – often with explicit goals to seek justice for disadvantaged people – we are not sure that political diversity should be the leading priority.

QTIPs: Questionable theoretical and interpretive practices in social psychology

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Abstract: One possible consequence of ideological homogeneity is the misinterpretation of data collected with otherwise solid methods. To help identify these issues outside of politically relevant research, we name and give broad descriptions to three questionable interpretive practices described by Duarte et al. and introduce three additional questionable theoretical practices that also reduce the theoretical power and paradigmatic scope of psychology.

Questionable research practices (QRPs) in social psychology and other disciplines have been the target of efforts dedicated to improving empirical social psychology; however, a focus on improving empirical practices can be more effective by linking it with a simultaneous focus on improving theoretical and interpretive practices. While mature sciences are generally characterized by broad theoretical consensus (i.e., paradigms; Kuhn 1962), these perspectives are often in conflict, and efforts to resolve these discrepancies foment theoretical advancement and a more precise understanding of scientific phenomena (Popper 1959). When social psychology – or any scientific discipline – adopts a singular *ideological* worldview, this serves to quell sources of potentially generative conflict. It also leads to additional (and justifiable) concerns that researchers are motivated to produce and interpret findings in a manner that is consistent with a given research perspective.

Duarte and colleagues identify several instances of questionable interpretive practices (QIPs) that may have resulted from ideological homogeneity (Jussim et al., in press b). These are instances where researchers used proper research methods for gathering data, but engaged in potentially problematic interpretations of that same data. These practices are *unlikely to be unique* to research areas touched by political ideology, and we believe that naming them and giving them a more general description will help researchers be vigilant for these practices more broadly:

1. *Premature theoretical closure*: This is the practice whereby a finding is treated as firmly established when all of the necessary conditions for claiming that the finding is supported have not yet been tested. For example, Duarte et al. highlight work that suggested right-wing authoritarians are more likely to make hypocritical political judgments, when these judgments were only tested for a very limited range of issues.

2. *Imprecise naming*: There is an incentive to name constructs with as much breadth as possible so that the construct studied can be thought to extend to a wider array of situations. Duarte et al. highlight research where the original authors made claims about "unethical decisions" broadly, although they primarily measured decisions contrary to liberal values.

3. *Begging the question*: In some cases, a particular research question or method is framed in such a way that the only possible result confirms the researcher's hypothesis. Duarte et al. discuss research where the original investigators built their conclusion (denial of realities) into the name of their measure of environmental attitudes.

There are theoretical problems in (social) psychology that go beyond questionable interpretations of the data and include problematic theoretical practices at several stages of the theoretical process. We suggest that the QIPs identified by Duarte et al. are part of a more general category of questionable theoretical and interpretive practices (QTIPs). Although there are many potential QTIPs, we think that three are worth briefly describing and adding to the list offered by Duarte et al. in the target article and by Jussim et al. (in press b).

4. *Déjà vu constructs*: The incentives in social psychology are to produce novel theories, leading to a proliferation of theories in our major journals. However, oftentimes new theoretical constructs are merely old constructs with new branding (Hagger 2014). Instead of ego-depletion, for example, much of the work could fit under the much older label of mental fatigue.

5. *Homophone constructs*: Psychologists study many everyday behaviors and phenomena leading us to name our constructs with everyday words. This also leads to a situation where we give the same name to a variety of different phenomena that are not interchangeable. For example, intentions can mean many different things, and only by specifying the precise type of intentions (e.g., implementation intentions, continuation intentions; see Hagger 2014) is it possible to make precise predictions as well as comparisons across studies and literatures.

6. *Naturalistic fallacy*: Social scientists are particularly prone to providing empirical support for emerging social trends, reifying an apparently emerging status quo with data suggesting that these desired end-states are the way things naturally *are*. Historically,

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both liberally tinged (biological origins of sexual preference) and conservatively tinged (effects of illegal drugs) research programs have produced effects that appear motivated to justify a given social order.

QTIPs are different from QRPs. For example, Duarte and colleagues connect their contribution to discussions about QRPs in social psychology. QRPs lead to inflated Type I errors, and produce results that appear robust but are in fact false positives. If the dearth of non-liberals in academic social psychology leads to QRPs, presumably in the favor of a liberal perspective, then one would predict that research agendas conducive to a liberal perspective (e.g., conservatives are rigid; Jost et al. 2003) would be more likely to produce false positives compared to research agendas conducive to a conservative perspective (e.g., the effect of grit on successes in life; Duckworth et al. 2007). However, it is not at all clear that more or less liberal research agendas produce different levels of false positives, and, indeed, neither the conservatives-are-rigid nor the grit-leads-to-success research agendas appear to be false positives. What is in doubt is the interpretation and scope of the reliable effects produced from various research agendas. This is not due to QRPs, but rather *may* be the result of QTIPs.

Rather than focusing on who is biased against whom (we know people are generally biased against those they disagree with; Brandt et al. 2014), the focus should be on how to improve social psychological theory. By naming and describing QTIPs, we hope to move the discussion from who is biased to a focus on how we can improve the theoretical foundations of social psychology. Even if the analysis by Duarte et al. is entirely incorrect, pushing social psychologists to think about their QTIPs in addition to the QRPs is a valuable contribution.

The psychology of psychology: A thought experiment

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Abstract: In the target article, Duarte et al. allege that the lack of political diversity reduces research efficacy. We pose a thought experiment that could provide an empirical test by examining whether institutional review board (IRB) members, granting agencies, and journal reviewers filter scientific products based on political values, invoking scientific criteria (rigor, etc.) as their justification. When these same products are cast in terms highlighting opposite values, do these people shift their decisions?

Fewer than 10% of social scientists consider themselves politically conservative. Duarte et al. review evidence suggesting that diversifying political viewpoints within the academy could have salutary effects in several domains, including research. Here we address this claim.

A thought experiment. Suppose institutional review boards (IRBs), grant funders, and journal reviewers are influenced in their judgment of research by its political orientation, not just its scientific merit (Ceci et al. 1985). Suppose individuals are asked to evaluate a project; in one version the data support a liberal agenda and in another version they support a conservative agenda – despite the methods, procedures, and analyses being identical. Only the political implications of the results differ. Reviewers should not treat these studies differently if the studies are identical except for their political implications. If the studies have the identical design, analysis, literature framing, and so forth, they should be rated similarly in terms of their scientific rigor, appropriateness, and publishability.

Suppose journal reviewers are asked to review a study, a summary of which follows. After reading the full study, reviewers rate the rigor of the design, the importance/appropriateness of the question, the adequacy of the literature review/framing, and its publishability, by employing the typical considerations for the journal. Here are two politically opposite versions of the same study:

Version A of study. *Is the Black–White IQ gap partly explained by economic disadvantage of Blacks?* Researchers analyzed a nationally representative data set that included IQ and a host of demographic and environmental variables. They reported that controlling for parental educational attainment and income reduces the average Black–White group difference in IQ by roughly 90% or 13 IQ points, and, given that parents' socioeconomic status (SES) is an imperfect measure of environmental influences on intelligence, even this 13-point reduction is likely to underestimate the importance of parental social class on racial differences in intelligence. The researchers conclude that:

> According to cultural theories of racial and ethnic differences in intelligence, as African American families advance up the socioeconomic ladder, their children should be less exposed to environmental deficits and therefore should do better and, by extension, close the gap separating the Black mean from the White mean. In fact, this is exactly what we found: The magnitude of the mean Black–White group difference in IQ for higher SES levels, when measured in standard deviations, is far smaller. . . . Matching Black and White children for the geographical areas of their homes, the schools they attend, and other finer-grained socioeconomic indicators reduces the mean group IQ difference still further, eliminating IQ gaps completely. Black children from the best areas and schools (those associated with the highest mean scores) average only slightly lower than do White children with similar socioeconomic indicators. This is an anomaly for genetic theory but is easily handled by environmental theories.

1. Rate the above study on its scientific methodology. Did the researchers' methodology allow a reasonable test of the research question? Use a 1 to 9 scale, in which 1 = extremely bad, 5 = neither good nor bad, and 9 = extremely good.

2. Rate the question asked by these researchers regarding its appropriateness for investigators to address – is this an appropriate question for researchers to ask? Use the same 1 to 9 scale.

Version B of study. In a flipped version, different reviewers rate the same study but with the results tilted in the opposite direction:

Is the Black–White IQ gap partly explained by economic disadvantage of Blacks? Researchers analyzed a nationally representative data set that included IQ and a host of demographic and environmental variables. They reported that controlling for parental educational attainment and income reduces the average Black–White group difference in IQ by only 30% or roughly 5 IQ points out of the 15-point gap that separates Blacks and Whites. Moreover, given that parents' socioeconomic status (SES) partly reflects their genetic differences in intelligence, even this 5-point reduction is likely to mask some genetic differences in parental intelligence. The researchers conclude the following:

> According to cultural theories of racial and ethnic differences in intelligence, as self-defined Black groups advance up the socioeconomic ladder, their children should be less exposed to environmental deficits and therefore should do better and, by extension, close the gap separating the Black mean IQ from the White mean IQ. In fact, we found that the magnitude of the mean Black–White group difference in IQ for higher SES levels, when measured in standard deviations, is actually much larger than that found between lower SES groups. . . . Matching Black and White children for the geographical areas of their homes, the schools they attend, and other finer-grained socioeconomic indicators again reduces the mean group IQ difference but does not eliminate it. Black children from the best areas and schools (those schools

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associated with the highest mean scores) still average slightly lower IQs than do White children with the lowest socioeconomic indicators. This is an anomaly for the culture-only theory but is consistent with genetic theory through regression to the mean.

Conclusion. If liberal reviewers favor Version A and conservatives favor Version B, this would be evidence that extra-scientific considerations influence reviewers' calculus in ways that may be opaque to authors and editors. Reviewers of a version incongruous with their political orientation might view the study as "not asking the right question," whereas their ideologically similar peers who review the opposite version might rate it as appropriate and relevant. One wonders whether a study of this type – if revealing that reviewers (including those who are regular journal reviewers and editors or grant-agency panelists) were biased against ideologically contrary interpretations – would be as readily publishable as its own counterpart arriving at the opposite conclusion.

A greater number of non-liberal scientists might help correct errors in scholarly reasoning and reframe the designs of politically valenced investigations, or at least counterbalance them against competing designs. If a presumptively open, self-referential peer-review process is influenced by political ideology, diversifying political ideology is warranted. If reviewers assume the role of political gatekeepers to decide what is fundable or publishable, science will be the perpetual loser.

Political homogeneity can nurture threats to research validity

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Abstract: Political homogeneity within a scientific field nurtures threats to the validity of many research conclusions by allowing ideologically compatible values to influence interpretations, by minimizing skepticism, and by creating premature consensus. Although validity threats can crop in any research, the usual corrective activities in science are more likely to be minimized and delayed.

Duarte et al. document the types of distortions that can creep into a scientific field when a particular political ideology takes hold and alternative viewpoints are largely absent. We agree with their analysis and offer additional support for a key theme: Ideological homogeneity can nurture threats to the validity of research conclusions and can be especially damaging to external and construct validity.

An example is meritocracy, a measure used by Napier and Jost (2008) to test the conclusion that conservatives are better at "rationalizing inequality – for example, by seeing it as emerging from a fair, legitimate, and meritocratic system" (pp. 568–69). However, their single-item measure of meritocracy is comparable to items in personal efficacy scales (asking if success in life is due to luck or hard work). Other research shows that this item is significantly related to personal agency but not to system justification (Schlenker et al. 2012). "Meritocracy" is compatible with the liberal view that conservatives rationalize injustice, whereas "personal agency," a label better supported by data, is inconsistent with a darker portrayal of conservatives. This example illustrates how the labeling of constructs guides interpretations.

Researchers should be skeptical when interpreting scale results: look carefully at the items themselves, make their own judgments about relevant concepts, and rely on empirical justification for conclusions. Ultimately, construct validity is determined by examining a measure's place in the nomological net of similar and dissimilar constructs. Political homogeneity can distort this process by allowing ideologically compatible values to influence interpretations (e.g., by using a biased, limited selection of other constructs for assessing convergent and discriminant validity), minimize skepticism, and create premature consensus.

Another example is the system justification (SJ) scale, which was designed to measure "the rationalization of the status quo" to avoid acknowledging the injustice of the system (Kay & Jost 2003, p. 825). Conservatives score higher on SJ than liberals, seemingly supporting the interpretation that the former are more defensive, fearful, and motivated to distort reality. However, SJ is positively related to personal control, optimism, self-esteem, agreeableness, moral commitment, and work ethic, and negatively related to depression, neuroticism, and cynicism (Schlenker et al. 2012). The nomological net into which this measure fits would usually be regarded as indicating positive adjustment and mental health and seems inconsistent with a darker view of conservatives. As with meritocracy, using a wider range of measures for the net – ones having positive as well as negative connotations – yields a better appreciation of what might actually be measured and why a different set of conclusions might be appropriate.

Embedding liberal values within theory and method is especially evident in the extensive literature linking political views with personality and prejudice. A major confound has plagued this research: Studies focused on attitudes toward minority, primarily Left-leaning social groups (e.g., atheists, homosexuals, Blacks) and failed to include social groups across the entire ideological spectrum (Chambers et al. 2013). When Right-leaning social groups (e.g., Christians, business people, military personnel) were included, liberals expressed as much prejudice toward those groups as conservatives expressed toward the Left-leaning ones. In other words, both conservatives and liberals express prejudice toward groups whose values and goals conflict with their own. The restricted range of prior targets permitted misleading generalizations that have questionable external validity.

Another construct validity problem applies to measures that are widely assumed to be antecedents of prejudice and markers of intolerance and bigotry: right-wing authoritarianism (RWA), modern and symbolic racism (MR/SR), and social dominance orientation (SDO). Each scale contains items that comprise important value components of political ideologies. For example, the RWA scale includes items that reference religion and traditional values, which are embraced by conservatives more than liberals, and the SDO scale includes items that assess preferences for equality (receiving equal outcomes regardless of inputs) rather than equity (receiving outcomes commensurate with one's inputs), which are favored by liberals more than conservatives (Schlenker et al. 2012). Similar concerns about measures of prejudice have been raised by others (e.g., MR/SR: Sniderman & Tetlock 1986; Zuriff 2002), but these critiques have largely been ignored and these measures continue to be widely utilized.

To illustrate the problem, we found that scores on these measures (e.g., RWA, MR/SR, SDO) were negatively related to evaluations of Left-leaning groups but positively related to evaluations of Right-leaning groups. In other words, these relationships again show prejudice on both sides, with conservatives (high scorers) and liberals (low scorers) each favoring groups who shared compatible values (Chambers et al. 2013).

In two other studies, we manipulated both the race (Black or White) and ideological position (conservative or liberal) of the target and assessed participants' scores on MR and anti-black racism (Chambers et al. 2013). If these measures assessed racial bigotry – as they are purported to do – they should predict negative attitudes towards Black targets and positive attitudes towards White targets, regardless of the target's ideological position. However, we found that they predicted attitudes based on the target's ideological position and not its race. Higher MR

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scores, for example, predicted negative attitudes (i.e., greater prejudice) towards both Black *and White* liberal targets, and positive attitudes (i.e., lower prejudice) towards both White *and Black* conservative targets. In other words, these measures seem to be tapping differences in core ideological beliefs and values. Ironically, they failed to predict the very thing they are supposed to predict – racial prejudice.

Although we focused on construct and external validity, internal and statistical conclusion validity can also be compromised. An example is the relationship between a measure of social inequality (Gini index) and happiness, which was used by Napier and Jost (2008) to conclude that, unlike conservatives, liberals "lack ideological rationalizations that would help them frame inequality in a positive . . . light" (p. 571). However, data re-analyses showed a major confound (between Gini index and time) and a failure to control for variables that were included in their other work (church attendance). When these were taken into account, the social inequality effect disappeared (Schlenker et al. 2012).

Keep in mind that threats to validity can creep into any research, but whenever a particular ideological position dominates, corrective activities are more likely to be suppressed. The beauty of science is that corrective activities usually occur; the question is how long these might take.

Liberal bias and the five-factor model

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Abstract: Duarte et al. draw attention to the "embedding of liberal values and methods" in social psychological research. They note how these biases are often invisible to the researchers themselves. The authors themselves fall prey to these "invisible biases" by utilizing the five-factor model of personality and the trait of *openness to experience* as one possible explanation for the under-representation of political conservatives in social psychology. I show that the manner in which the trait of openness to experience is conceptualized and measured is a particularly blatant example of the very liberal bias the authors decry.

Duarte et al. are to be commended for addressing the important topic of a pervasive liberal ideological bias that potentially undermines the scientific validity of some social-psychological research. Their critique, however, does go not far enough. The bias they identify is far more pervasive than the authors realize. In fact, in the course of their own argument the authors rely upon a particularly egregious example of the very bias they critique.

In addressing the under-representation of conservatives in social psychology, Duarte et al. ask, "[M]ight liberals simply find a career in social psychology (or the academy more broadly) more appealing?" (sect. 5.3, para. 1). Their answer is as follows:

> Yes, for several reasons. The Big Five personality trait that correlates most strongly with political liberalism is openness to experience (r=.32 in Jost et al.'s [2003] meta-analysis), and people high in that trait are more likely to pursue careers that will let them indulge their curiosity and desire to learn, such as a career in the academy (McCrae 1996). (target article, sect. 5.3, para. 1)

What they fail to realize is that the five-factor model of personality, and in particular the trait of *openness to experience*, embodies liberal ideological biases rather blatantly.

In the revised personality index of the five-factor model (the Revised NEO Personality Inventory [NEO-PI-R]), the trait of openness to experience is divided into 6 different "facets" (Costa & McCrae 1992). One of these facets (no. 6) is termed "Values," and is judged by eight statements. I list here only four (the numbering is mine), although all of the statements listed under Values are equally problematic. Depending upon whether one agrees or disagrees with each of these statements, her scores on Values and on openness to experience go up or down. I have indicated whether the response of "agree" for each statement causes one's score to go up or down:

1. I believe that we should look to our religious authorities for decisions on moral issues. (Agree: Openness score goes down)
I believe that the different ideas of right and wrong that people in other societies have may be right for them. (Agree: Openness score goes up)
2. I believe that laws and policies should change to reflect the needs of a changing world. (Agree: Openness score goes up)
3. I believe the new morality of permissiveness is no morality at all. (Agree: Openness score goes down)

Consider how, in the words of Duarte et al. (sect. 3.1), "liberal values and assumptions [are] embedded into theory and method" (in this case, the theory and method of the five-factor model). In considering these statements, I am referring both to the statements themselves and to how they affect one's Values score.

Statement 1 reflects a liberal ideological bias against religion. Is reliance upon *scientific* authorities, for example, "close-minded"? Granted, the question concerns moral decisions (so let us assume that science cannot resolve questions of right and wrong). Why, then, is reliance upon *religious* authorities as opposed, for example, to philosophical or ethical authorities, or simply, moral "experts," singled out as an instance of close-mindedness? Academics often rely upon authorities when making decisions on moral issues (e.g., the authority of John Rawls when considering matters of distributive justice), although they would likely be uncomfortable characterizing this as reliance upon an authority (even if it is).

Statement 2 reflects a liberal ideological rejection of *moral absolutism* which, from a liberal ideological perspective, is typically associated with religion. It is also a statement open to multiple interpretations. While reflecting liberal values of toleration and multiculturalism, it could easily be read as a defense of *moral relativism*, a very problematic view (e.g., female genital mutilation is "right" for societies where it is widely practiced) that bears no clear relation to "open-mindedness."

Statement 3 is in some ways a concise statement of political conservatism. Edmond Burke, often considered the father of modern political conservatism, wrote repeatedly about the need to "preserve our ancient indisputable laws and liberties, and that ancient constitution of government which is our only security for law and liberty" (Burke 1881/1997, p. 90). Consider contemporary debates over "original intent" in regard to the U.S. Constitution. Many conservatives embrace a strict constitutional originalism based upon an adherence to the principles of the Founding Fathers and reject "judicial activism." Liberals are more inclined to view the Constitution as a flexible document that should be interpreted in accord with changing circumstances.

Regarding Statement 4: *The Oxford Dictionary of Phrase and Fable* (Knowles 2006) defines a "permissive society" as "the form of society supposed to have prevailed in the West since the mid-1960s (associated especially with the late 1960s and early 1970s), characterized by greater tolerance and more liberal attitudes in areas such as sexuality, abortion, drug use, and obscenity." On one basic level, we would expect conservatives to be opposed to "more liberal attitudes" (inasmuch as they are conservatives). The differences between American liberals and (social) conservatives on issues such as abortion, drug use, and obscenity are well known.

These are just 4 out of 8 questions in one section of the revised NEO PI-R personality inventory. According to Duarte et al., one explanation for the under-representation of conservatives in social psychology is that liberals are more "open to experience." What

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they fail to realize is that this association is *circular*. It exists because liberal biases are built into the characterization and assessment of personality itself upon which the authors rely.

I suspect that the five-factor model of personality has become something of a sacred cow in psychology. This is unfortunate. The entire inventory is full of all manner of moral and political biases (though it is beyond the scope of this commentary to make this wider case). The liberal biases in the open-to-experience dimension, however, should be clear for all to see. I urge the authors, in line with their own commendable recommendations, and the entire field of psychology, to take note of the liberal ideological biases built into the most widely used measure of personality.

Political bias is tenacious

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Abstract: Duarte et al. are right to worry about political bias in social psychology but they underestimate the ease of correcting it. Both liberals and conservatives show partisan bias that often worsens with cognitive sophistication. More non-liberals in social psychology is unlikely to speed our convergence upon the truth, although it may broaden the questions we ask and the data we collect.

Most people, but especially political liberals, view diversity of almost any kind as an intrinsic good. But Duarte et al. recognize that greater diversity of political views in social psychology should not be seen as an end in itself. In no way diminishing contemptible cases of politically conservative students made to feel unwelcome in our field, the preeminent value of diversity in this case is its potential to produce better science. Duarte et al.'s core argument is that a more politically diverse social psychology will serve as an antidote to liberal bias and help the field more quickly and efficiently "converge upon the truth" (sect. 1, para. 5).

Their argument rests on two key assumptions. The first is that social psychological research is widely vulnerable to political bias. While only a small percentage of social psychological research has an explicitly political focus, it is important to remember that only a few decades ago climate science would have seemed irrelevant to partisan politics. As partisan hostility increasingly insinuates itself into everyday American life (Iyengar & Westwood 2014), its potential to ensnare previously apolitical scientific questions in the web of the ongoing culture war will grow as well. Moreover, social psychological research is uniquely susceptible to political bias because its fundamental motivating assumption – that human behavior and outcomes are largely determined by social forces – lies precisely on the intellectual fault line of left–right ideological conflict. Any research that bears on the role of individual versus situational determinants of human outcomes is vulnerable. It is hard to dispute, for example, that liberal sympathies in social psychology contributed to the field's initial reluctance to accept research demonstrating substantial genetic contributions to intelligence and personality (e.g., Kamin 1974).

More formally, the persistent intuition that political ideology biases the interpretation of scientific data has now been confirmed by dozens of experiments over the past five decades (Lord & Taylor 2009; MacCoun 1998), and there is little reason to believe that social psychological researchers are immune to these effects. While some evidence suggests that liberals are dispositionally less prone than conservatives to motivated reasoning (e.g., Jost et al. 2003), a recent meta-analysis by our research group examining more than 30 studies of politically biased evidence evaluation found clear evidence of partisan bias in both liberals and conservatives, and at virtually identical levels (Liu et al. 2014). Moreover, several studies have provided intriguing evidence that partisan bias becomes more rather than less pronounced with greater topical knowledge and cognitive sophistication (e.g., Kahan et al. 2013; Taber & Lodge 2006), as does a general insensitivity to one's own biases (West et al. 2012). Early studies documenting biased evidence evaluation used psychology researchers as participants (e.g., Abramowitz et al. 1975; Mahoney 1977), and this more recent research further confirms that high levels of knowledge, intelligence, and perceived objectivity do not necessarily provide protection from bias, as most people likely assume. Instead, they may simply allow scientists with strong ideological commitments to unknowingly deploy their considerable cognitive skills in biased fashion to become particularly resistant to attacks on those commitments.

Thus, we agree with Duarte et al. regarding the potential for political bias to impede the progress of scientific discovery in social psychology. We have considerably less confidence, however, in their subsequent assumption that increasing the representation of non-liberals in the field will effectively address the problem.

There is certainly wisdom in Duarte et al.'s assertion that increasing the number of conservative social psychologists would increase the likelihood of identifying flaws in research with embedded liberal biases. The anecdotal examples of liberal bias they cite are consistent with research on motivated skepticism (Ditto & Lopez 1992; Ditto et al. 1998) showing that a primary source of biased judgment is our tendency to uncritically evaluate information that confirms our prior beliefs and preferences.

But political bias is both implicit and tenacious, and there is little reason to believe that either liberal social psychological researchers, or any newly minted conservative ones, will be easily disabused of the tendency to expect and prefer empirical results that confirm their political views, and find flaws in results that do not. Social psychology has seen many theoretical controversies and data have resolved few of them (Greenwald 2012). Increasing the minority influence of conservatives in the field may lead to more diverse viewpoints being represented in the literature and a more challenging peer-review process, but rather than leading the field to converge on some universally accepted "truth," it seems more likely to engender theoretical conflict and a divided literature, with each side defending their operationalizations, methods, and data while disparaging those of the other side. Calls for greater civility and scientific humility are valuable, but another fear is that a prevailing liberal bias will be replaced by an "equivalency bias" favoring the view that liberals and conservatives are equally bestowed with psychological strengths and weaknesses. This may ultimately prove to be the case, but it may not, and defaulting to such an equivalency bias in place of a liberal one will leave our science no better off.

In the mid-1900s, psychologists were optimistic that integration by itself would improve interracial relations, until research and real-world experience revealed that contact produces beneficial results only under specified conditions (Dovidio et al. 2003). Analogously, additional efforts will be required to approximate a social psychology free of political bias, and there is important convergence here with ongoing efforts to acknowledge and combat researcher bias more generally (Simmons et al. 2011).

Duarte et al. offer an important critique and some initial plans of attack, but the challenge remains to develop strategies that allow the signal of data to rise above the noise of ideological conflict. Making our field more welcoming to scholars of all political persuasions is intrinsically right, and it will surely lead to new questions and novel data. But in times so partisan, and for a field as entangled

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in ideology as social psychology, convergence upon the truth is likely more than even liberals can expect from diversity.

Mischaracterizing social psychology to support the laudable goal of increasing its political diversity

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Abstract: Duarte et al.'s arguments for increasing political diversity in social psychology are based on mischaracterizations of social psychology as fundamentally flawed in understanding stereotype accuracy and the effects of attitudes on information processing. I correct their misunderstandings while agreeing with their view that political diversity, along with other forms of diversity, stands to benefit social psychology.

I agree that increased political diversity in social psychology, like many other forms of diversity, would be a plus because it would foster diversity of thought on social issues. However, Duarte et al. have put forward this enlightened idea in an accusatory manner that mischaracterizes research and theory in the field.

To reveal the target article's biased perspective, I note the authors' analysis of the presumed undermining of social psychology by its political liberalism. Their first example is their claim that social psychologists are in denial about stereotype accuracy. Not so. Gordon Allport, a founder of research on stereotyping, argued for stereotypes' "kernel of truth" (Allport 1954/1979, p. 190), and his nuanced theorizing discouraged the notion that stereotypes are mere fictions. Consistent with Allport, understanding of accuracy requires differentiating between accuracy at the group and the individual levels (e.g., Ryan 2003). Sheer logic dictates that group stereotypes, as mental averages of group members, wrongly describe atypical individuals even while they may convey considerable accuracy at the group level. For example, in arguing that that gender stereotypes are "data-driven representations of social reality," Wood and Eagly (2012, p. 91) reviewed numerous studies showing that beliefs about sex differences and similarities are moderately to highly correlated with empirical data on the personality traits, abilities, social behaviors, and occupational distributions of women and men (e.g., Hall & Carter 1999). These same authors also reviewed research spelling out the considerable potential of group stereotypes to mischaracterize individual group members.

Concerning a wide range of other stereotypes, Koenig and Eagly (2014) provided strong evidence of their grounding in observations of group members' behaviors. Their studies tested the proposition that stereotypes of group members derive from people's observations of their behaviors in the social roles in which group members are overrepresented relative to their numbers in the population. Yet, neither Koenig and Eagly nor the advocates of gender stereotype accuracy appear to have raised the ire of their social psychological colleagues.

Despite many social psychologists' considerable open-mindedness concerning group-level stereotype accuracy, most stereotype research addresses, not accuracy, but the negative consequences of stereotypes for individuals. One theme is that stereotypes disadvantage strivers from lower-status groups who attempt to take on new roles. It is stereotypes' descriptive accuracy that lends them the power to suppress the aspirations of those individuals who strive to break the strictures of stereotypes. Such individuals can face backlash (Rudman et al. 2012) and depressed performance of stereotype-relevant tasks (Steele & Aronson 1995). Other research emphasizes the many ways that stereotypes legitimize the societal status quo (e.g., Cuddy et al. 2008). Yet, stereotypes' group-level accuracy and their support of the societal status quo are two sides of the same coin.

Another example that Duarte et al. offer of the presumed undermining of social psychology is their claim that social psychology is dominated by the view that prejudice and intolerance are limited to the political right. To support this claim, they feature a small number of studies that yielded one-sided characterizations of conservatives but soon faced contrary evidence produced by other researchers. On this point, Duarte and colleagues appear to be unfamiliar with the massive amount of research in social psychology on the effects of attitudes and ideology on information processing (see Eagly & Chaiken 1998). A fundamental proposition of attitude theory is that attitudes exert selective effects at all stages of information processing. Hundreds of studies have tested the proposition that people's attitudes bias information processing in favor of material that is congruent with their attitudes. Such *congeniality effects* are common in research on exposure and attention to attitude-relevant information and the perception, judgment, and evaluation of such information. Despite complexities arising from competition between pressures toward congeniality and pressures toward accuracy (e.g., Hart et al. 2009), neither attitude theory nor its typical findings yield support for the idea that congeniality biases are limited to or stronger among persons on the political right.

Duarte et al. correctly describe social psychology as populated mainly by political liberals. The phenomenon stems from liberals' attraction to a field that they believe produces knowledge that can facilitate social change. Following from the social movements of the last 50 years, adherents of increasing equality on the basis of gender, race and ethnicity, and sexual orientation have flocked to social psychology. However, their preferences for progressive social change do not invariably produce biased science, given that liberal, like conservative, psychological scientists are constrained by the shared rules of post-positivist science. When bias is present, it tends to be corrected over time, as illustrated by the aftermath of Jost et al.'s (2003) article.

Duarte et al. have stigmatized the entire field of social psychology based in large part on their exaggeration of social psychologists' hostility to group-level stereotype accuracy and their overemphasis on a few studies that negatively characterized conservatives. Their article thus displays their lack of broad knowledge of theory and research in this discipline. Also, they have unwittingly illustrated one of social psychology's oldest principles – that attitudes bias information processing, in this case by fostering their highly selective and one-sided characterization of social psychology. It is fortunate that they have published in a journal that allows others to correct their misjudgments.

"Wait – You're a conservative?" Political diversity and the dilemma of disclosure

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Abstract: Many of the proposed recommendations for remedying the harmful effects of political homogeneity for psychology depend upon conservatives disclosing their political identity. Yet how likely is this, when disclosure is so harmful to the individual? Considering this issue as a *social dilemma* clarifies the pernicious nature of the problem, as well as suggesting how the dilemma can be resolved.

As Duarte and colleagues note in their thought-provoking and insightful article, there is a stunning lack of political diversity in social psychology. Ironically for a field in which one of the biggest topics of study is prejudice, the academy is both subtly

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and overtly hostile to conservatives (Inbar & Lammers 2012; Jussim 2012a). Duarte et al.'s article was of particular interest to me, in part because I was one of the just 2% of graduate students who self-identified as conservative in Inbar and Lammers' survey. I agree with the authors on almost all of their points in the target article, but also suggest that the authors fail to discuss an issue central to ameliorating the lack of diversity in the field: actually having people disclose their non-liberal political identities. Many of the proposed recommendations for improving the state of the field are predicated on having conservatives disclose their political identity. But how likely is this?

As I began my graduate studies in psychology, I faced an important choice: Should I attempt to hide my own conservative political beliefs? Indeed, I was specifically advised by more than one social psychology professor to not disclose my own right-of-center politics if I wish to be successful in my career in social psychology. Here, I argue that disclosing one's political identity in the present climate should be seen as a *social dilemma*. Considering this state of affairs as a social dilemma – a situation in which collective interests are at odds with private interests – helps to clarify the pernicious nature of the problem, as well as suggesting how the problem can be ameliorated.

Social dilemmas have two fundamental characteristics:

1. Each individual receives a higher payoff for defecting from what is in the collective interest (e.g., using all the available resources for your own advantage) than for cooperating, regardless what other individuals do.
2. All individuals are better off if they all cooperate than if they all defect (Dawes 1980; Hardin 1968).

How does the issue of disclosing one's non-liberal identity constitute a social dilemma? In short, the individual non-liberal researcher is better off by not disclosing, but the collective is better off by there being such disclosure.

The first prong of a social dilemma is that the individual researcher receives a higher payoff from defecting from what is in the common interest. Given the hostility in the field, political conservatives are individually better off by not disclosing their political views. A researcher who hopes to win grants, publish papers in top-tier journals, and gain tenure would be individually better off by attempting to "pass" as liberal. Yet, should conservative psychologists – and particularly graduate students – simply try to hide their political beliefs? I suggest not.

The second prong of a social dilemma is that the collective is better off if everyone cooperates. If people do not disclose their non-liberal political identity and conservative social psychologists withdraw from this hostile environment, the field is much worse off – affecting liberals, conservatives, and all those in between. How so? As discussed at length in the target article, lack of diversity is harmful to the field for a number of reasons, including these: Liberal values and assumptions can become embedded into theories and methods; researchers may concentrate on topics that validate the liberal progression narrative and avoid topics that contest that narrative; and negative attitudes regarding conservatives can produce a science that mischaracterizes their traits and attributes.

Why is disclosure necessary to avoid this collective tragedy? Put simply, having openly conservative psychologists is a prerequisite for some of the most important solutions proposed by Duarte et al. Unless there are openly conservative psychologists, it will be impossible to engage in cross-political collaborations and have a base of non-liberal psychologists to act as reviewers. More broadly, the benefits of intergroup contact are well documented for reducing prejudice and encouraging cooperation (Allport 1954; Pettigrew & Tropp 2006). Fundamentally, however, this depends on group members being identified as such – which is impossible if people hide their beliefs. Further, it is important for group memberships to be salient in intergroup encounters for the positive effects to generalize to other individuals and contexts (Hewstone & Brown 1986). Unless individuals disclose their non-liberal political beliefs, a hostile climate will remain where prospective students are put off by the perceived lack of diversity. Having openly conservative psychologists is therefore essential to reducing hostility in the field.

What, therefore, is one to do? In their landmark paper, Messick and Brewer (1983) identify two types of solutions to social dilemmas: structural solutions and motivational solutions. *Structural solutions* are those that come about through organised group action, and often involve regulation or social coercion to constrain individual motivation in the collective interest. In contrast, individual *motivational solutions* rely on the individual preferences of the actors involved, seeking to maximize those factors that influence individuals to act for the collective good. To help resolve this dilemma, both structural and motivational solutions can be employed. However, it is too much here to expect that conservatives should simply disclose their identities and face the resulting problems. Motivational solutions aimed at conservatives, therefore, are likely to have limited effectiveness. Rather, the structural features of our system must change to provide additional support and benefits to conservatives and reduce the costs of disclosure. It is liberals who are privileged in social psychology, and therefore liberals who must take the lead in breaking this down.

Perhaps the most important thing liberal psychologists can do is to actively be aware of their advantaged position in the field simply by virtue of their political beliefs, and challenge this wherever possible. It is liberals – not conservatives – who have both the greatest responsibility and the greatest power to create a climate in which open disclosure and acceptance of diversity is celebrated. Only then can we avoid the disastrous effects that political homogeneity will have on our discipline.

Towards a de-biased social psychology: The effects of ideological perspective go beyond politics

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Abstract: Reasonable conservatives are in short supply and will not arrive to save social psychology any time soon. The field needs to save itself through de-biasing. The effects of a liberal worldview permeate and distort discussion of many topics that are not overtly political, including behavioral genetics and evolutionary psychology, the fundamental attribution error, and the remarkably persistent consistency controversy.

A liberal is a man too broadminded to take his own side in a quarrel.[1]

— Robert Frost

Liberals may be too open-minded for their own (ideological) good; they keep finding fault with themselves, and the target article is probably a good example. Which is not to say it is not largely correct. Social and personality psychology obviously lacks ideological diversity, and Duarte and colleagues provide strong circumstantial evidence that the causes include hostile climate, lack of role models, and subtle and not-so-subtle discrimination of the same sort that underlies other lacks of diversity elsewhere in society.

Duarte et al. argue that our science would be better if more conservatives were included in the ideological mix. But the point of view that carries this label has changed greatly in recent years. Not so long ago, no conservative would dream of shutting down the government over an ideological dispute, denying the

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validity of settled science, or passing laws to encourage open carry of weapons on college campuses. Conservatives were *conservative*. Such people indeed have a lot to contribute to any discussion, including scientific ones. But many modern-day so-called conservatives – especially the loudest ones – would be better described as radical, and among their radical characteristics is a pride in anti-intellectualism and willful ignorance. In a call for more conservatives, who are we actually inviting, and, I truly wonder, how many even exist? I am not optimistic about the feasibility of finding enough reasonable conservatives to join our field, even if we could overcome all of the barriers the target article so vividly describes. At best, such change is a long-term goal.

In any case, we shouldn't wait for conservatives to arrive and save us. We need to save ourselves. The target article presents mixed messages about whether de-biasing is feasible. On the one hand, it cites evidence that de-biasing is difficult or impossible. On the other hand, the entire article is an effort at de-biasing. I choose to believe the more optimistic, implicit claim of Duarte et al., which is that we can become more intellectually honest with ourselves and thereby do better science. I find the "mirror-image" test particularly promising. For any finding, we should indeed get into the habit of asking: What if the very same evidence had led to the opposite conclusion?

Politics is the least of it. In focusing on research that seeks to describe how conservatives are cognitively flawed or emotionally inadequate, or on research that treats conservative beliefs as ipso facto irrational, Duarte et al. grasp only at the low-hanging fruit. More pernicious, I believe, are the way ideological predilections bias the conduct and evaluation of research that, on the surface, has nothing to do with politics. An awful lot of research and commentary seems to be driven by our value systems, what we *wish* were true. So we do studies to show that what we wish were true is true, and attack the research of others that leads to conclusions that do not fit our worldview. Examples are legion. Consider just a few:

Personality and abilities are heritable. This finding is at last taking hold in psychology, after a century's dominance of belief in a "blank slate." The data were just too overwhelming. But the idea that people are different at the starting line is heartbreaking to the liberal worldview and encounters resistance even now.

Human nature is a product of evolution. Social psychologists are the last people you would expect to deny that Darwin was right – except when it comes to human behavior, and *especially* if it has anything to do with gender differences (Winegard et al. 2014). The social psychological alternative to biological evolution is not intelligent design, it is culture. And as to where culture came from, that's a problem left for another day.

The *Fundamental Attribution Error* is, as we all know, the unfortunate human tendency to view behavior as stemming from the characteristics – the traits and beliefs – of the people who perform it. Really, it is the situation that matters. So, change the situation and you can change the behavior; it's as simple as that. This belief is very attractive to a liberal worldview, and one does not have to look very far to find examples of how it is used to support various liberal attitudes towards crime and punishment, economic equality, education, and so forth. But the ideological consequences of belief in the overwhelming power of the situation are not consistent. This belief implies that the judges at Nuremberg committed the Fundamental Attribution Error when they refused to accept the excuse of Nazi generals that they were "only following orders."

The *consistency controversy*, which bedeviled the field of personality psychology for decades and still lingers in various forms, stems from the conviction among many social psychologists that the Fundamental Attribution Error, just mentioned, affects an entire subfield of psychology. Personality psychology, it is sometimes still said, exaggerates the importance of individual differences. But to make a very long story very short, individual differences in behavior *are* consistent across situations (Kenrick & Funder 1988), and personality is stable across decades (e.g., Nave et al. 2010). Many important life outcomes, including occupational success, marital stability, and even longevity, can be predicted from personality traits as well as or better than from any other variables (Roberts et al. 2007). And changing behavior is difficult, as any parent trying to get a child to make his bed can tell you; changing attitudes is just as hard, as anyone who has ever tried to change anyone else's mind in an argument can tell you. Indeed, does anybody ever change their mind about anything? Maybe so, but generally less than the situation would seem to demand. I expect that responses to the article by Duarte et al. will add one more demonstration of how hard it is to change ingrained beliefs.

NOTE

1. The quote is apparently from an interview with Frost. Available at many places on the Web, including: http://www.barrypopik.com/index.php/new_york_city/entry/a_liberal_is_a_man_too_broad_minded_to_take_his_own_side_in_a_quarrel/; http://www.quoteauthors.com/quotes/robert-frost-quotes.html.

Political attitudes in social environments

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Abstract: We agree with Duarte et al. that it is worthwhile to study professions' political alignments. But we have seen no evidence to support the idea that social science fields with more politically diverse workforces generally produce better research. We also think that when considering ideological balance, it is useful to place social psychology within a larger context of the prevailing ideologies of other influential groups within society, such as military officers, journalists, and business executives.

Although we appreciate several things about the target article by Duarte et al., including its insistence that social scientists should work to minimize the impact of their political views on research and its sensitivity to political threats to social science funding, we find their central argument unpersuasive. We have seen no good evidence that social science fields with more politically diverse workforces have higher evidentiary standards, are better able to avoid replication failures, or generally produce better research. As there are no standardized ways to measure these outcomes in the aggregate, and as reliable data on researcher politics at the disciplinary and subdisciplinary levels are scarce, there have never been – to our knowledge – any systematic attempts to examine the relationship between epistemic quality and the political composition of social-scientific communities. Duarte et al. are thus calling for major changes in policy and practice based on sheer speculation. The authors cite some evidence of the benefits of "viewpoint diversity" in collaboration, but there is a scale mismatch between these studies (of small groups) and the field-level generalizations the authors make. In point of fact, research on the history and sociology of social science suggests that scientific/intellectual movements that bundle together political commitments and programs for research – movements of the sort the authors believe to have weakened social and personality psychology – have arisen under a wide range of political conditions, as have counter-movements calling for greater objectivity. Until we know more about these and related dynamics, it would be premature to tinker with organizational machineries for knowledge production in the social sciences, however much one may worry, alongside the authors, about certain current trends.

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In addition we think it is helpful to consider the Duarte et al. argument in a broader context by considering other professions that lean strongly to the left or to the right. The cleanest analogy, perhaps, is between college professors (who are disproportionately liberal Democrats) and military officers (mostly conservative Republicans; see the research of political scientist Jason Dempsey [2009]). In both cases, there seems to be a strong connection between the environment and the ideology. Universities have (with notable exceptions) been centers of political dissent for a very long time, just as the military has long been a conservative institution (again, with some exceptions). And this is true even though many university professors are well-paid, and live well, and even though the U.S. military has been described as the one of the few remaining bastions of socialism in the 21st century. Another example of a liberal-leaning profession is journalism (with its frequently cited dictum to "comfort the afflicted and afflict the comfortable," and again the relative liberalism of that profession has been confirmed by polls of journalists; e.g., see Weaver et al. 2003), whereas business executives represent an important, and influential, conservative group in American society. There has been some movement to balance out the liberal bias of journalism in the United States, but it is not clear what would be done to balance political representation among military officers or corporate executives.

In short, we applaud the work of Duarte et al. in exploring the statistics and implications of political attitudes among social researchers. But the psychology profession, like the military, is an all-volunteer force, and it is not clear to us that the purported benefits of righting the ideological imbalance among social psychologists (or among military officers, or corporate executives) are worth the efforts that would be involved in such endeavors. In any case, these sorts of ideological what-ifs make interesting thought experiments.

Liberals and conservatives: Non-convertible currencies

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Abstract: Duarte et al. are correct that the social science enterprise would improve on several fronts if the number of politically conservative researchers were to increase; however, because they misunderstand the degree to which liberals and conservatives are dispositionally different, they fail to appreciate the full range of reasons that conservatives are reluctant to enter the modern social sciences.

Duarte et al.'s target article is valuable and even necessary. We agree that increasing the number of politically conservative researchers would enhance the social scientific process and in this commentary we even mention two additional benefits that could accrue. At the same time, Duarte et al. fail to appreciate the fundamental differences between liberals and conservatives and as a result may misunderstand the potential for rectifying the current situation.

No doubt in part because social scientists are overwhelmingly liberal, conservatives are so much on the defensive that they sometimes believe they are being criticized even when they are not. A clear example is found in the target article itself where the authors accuse us of claiming that conservatives are "hyper-responsive to threatening and negative stimuli" (sect. 5.4, para. 1) even though a simple word search indicates we never used any such phrase (cf. Hibbing et al. 2014). Though our findings do show that, compared to liberals, conservatives are more responsive and attentive to negative stimuli, this does not make them hyper-responsive any more than it makes liberals hypo-responsive. Indeed, in the cited works we go to great lengths to explain that neither side is deserving of a pejorative label and that it is best to stop with the acknowledgment that liberals and conservatives are simply different. From an evolutionary standpoint, responsiveness to negative situations is hardly a bad strategy; but in the current climate, if social science researchers point out any way in which conservatives are different from liberals, the immediate assumption is that the goal is to demean conservatives. Duarte et al. are correct that research needs to be written more carefully, but it also needs to be read more carefully. Perhaps greater ideological balance would help on this front.

A related potential benefit of increasing the number of conservative researchers is enhanced public acceptance of the social science enterprise. We come from a discipline (political science) on the frontline of attacks from politicians. These attacks typically are led by politically conservative lawmakers and resonate most with politically conservative citizens. Would the hostility of conservatives toward political and social science research be diminished if the composition of the research community was more ideologically balanced? A shift toward balance undoubtedly would broaden acceptance of the social sciences; however, in contrast to the tone of the target article, we believe that (1) for the most part, conservatives today do not want to become social scientists; and, (2) even if the number of conservative social scientists did swell, conservatives would remain deeply suspicious of social science research. Duarte et al. do not see the matter this way primarily because they fail to appreciate the fundamental differences between liberals and conservatives even though some of their own research points to foundational differences (e.g., Haidt & Graham 2007).

Duarte et al. cite recent research suggesting that liberals are as prejudiced as conservatives toward "ideologically dissimilar others" (sect. 3.2.2, para. 2); in other words, conservatives are prejudiced against stereotypically left-leaning targets (e.g., African Americans), whereas liberals are prejudiced against stereotypically right-leaning targets (e.g., religious Christians). Related research shows that liberals and conservatives are equally likely to "misremember" history and to make mathematical errors all in order to affirm their ideology (Frenda et al. 2013; Kahan et al. 2013). As a result, Duarte et al. argue that liberals and conservatives are nothing more than two sides of the same coin – with one side disliking Muslims and gun control in parallel to the other side's dislike of Christian fundamentalists and genetically modified foods.

Conservative attitudes toward liberals and liberal concepts (and liberal attitudes toward conservatives and conservative concepts) are certainly important to study, but they are not all that matters. In truth, the telling comparisons involve the contrasting responses and behaviors of liberals and conservatives when they are *not* being exposed to politically charged stimuli. For example, compared to liberals, individuals with conservative issue preferences register significantly greater physiological responses (and directed attention) to startling noises and negative imagery (Dodd et al. 2012; Oxley et al. 2008); compared to conservatives, liberals are more likely to seek out information even if it may be undesirable (Shook & Fazio 2009); and, compared to conservatives, liberals consistently register lower preference for closure (Jost et al. 2003).

Liberals may dislike their political opponents just as much as conservatives do, and they may be just as willing to twist reality to validate their biases, but this does not alter the fact that liberals and conservatives experience and process the world in remarkably different fashions. Ironically, if Duarte et al. acknowledged this gross asymmetry, it would heighten their central message, since fundamental differences make it all the more important for social scientists to be sensitive to both types.

On the other hand, the existence of these bedrock differences suggests explanations for the paucity of conservative social scientists that Duarte et al. may find disquieting. As Pinker (2002) points out, compared to liberals, conservatives are more likely to

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believe that the human condition is flawed, easily understandable, and not readily remediable; ergo, conservatives tend to perceive social programs and social research as unnecessary and/or counterproductive. Combine these perceptions of the human condition with conservatives' reservations about uncertain information searches (Shook & Fazio 2009) and situations with insufficient closure (Jost et al. 2003), both of which are hallmarks of science and especially social science, and it becomes even more apparent that conservative misgivings regarding the social sciences can be traced to the nature of the enterprise.

The prevailing liberal orthodoxy in many academic disciplines discourages conservatives from signing on, and the solutions proposed in the target article may help . . . a little. A larger change would require significant increases in the number of conservatives who want to spend their adult lives as social scientists, and, given the topics investigated in the modern social sciences, this is unlikely even if the climate became more welcoming. Achieving greater ideological balance in the social sciences will take much more than alerting liberal academics to the existence of imbalance; it will take coming to terms with the fundamentally different (and occupationally relevant) predispositions of conservatives and liberals.

A predominance of self-identified Democrats is no evidence of a leftward bias

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Abstract: The reasoning of Duarte et al. hinges on the basic premise that a positive ratio of Democrats versus Republicans implies a political bias. However, when placed in a global and historical context, it is evident that U.S. Democrats currently represent a moderate position on the political left–right spectrum. Thus, Duarte et al. provide no evidence of a leftward bias in the scientific community.

Undoubtedly, a severe asymmetry in the distribution of relevant (political) viewpoints in any scientific community could endanger objectivity and progress. Duarte et al. assert that the majority of psychologists (personality and social psychologists in particular) these days self-identify as Democrats rather than Republicans (referring specifically to the two major parties in the United States) and conclude that the community is therefore biased to the left. This reasoning hinges on the presumption that U.S. Democrats occupy the left of the political spectrum, whereas U.S. Republicans occupy the right, implying that a moderate – and thus arguably unbiased – position would fall in between the two, so that a politically unbiased community would be constituted of an approximately equal ratio of scientists identifying as Democrats and Republicans. However, as we demonstrate below, this reasoning is fundamentally flawed because it results from an inappropriate categorization of the continuous left-right spectrum, invalidating Duarte et al.'s most fundamental basic premise.

In what follows, we rely on a vast, longitudinal, international database of content analyses of political party manifestos: the Manifesto Project Database compiled by the Manifesto Research on Political Representation project, which is one of the major data sources in comparative political science (König et al. 2013). In 2003, the project received the American Political Science Association's (APSA) award for the best data set in comparative politics. Much more information on the project, the coding, and many references providing further details can be found at the website: https://manifestoproject.wzb.eu/. The project is based on quantitative content analyses of parties' election programs from more than 50 countries, covering all free, democratic elections since 1945. It provides an estimate of parties' positions on a left–right scale based on coding of quasi-sentences into many different categories which capture a predefined set of political issues (Budge et al. 2001). We base our considerations on the recently proposed logit left–right scale ("LLR scale"; Lowe et al. 2011).

Duarte et al. identify the 1980s as the critical point tilting the field towards affiliating with the Democrats and thus allegedly to the left. However, the U.S.-party positions on the LLR scale over time (see Fig. 1) clearly show that both have strongly shifted towards the right of the political spectrum since the 1980s. As a result, Democrats currently hold a moderate position, whereas Republicans are positioned farther out on the right wing than they used to be. Thus, the relative increase in self-identified Democrats in the community can be explained through the simple notion that scientists tend to favor a moderate, balanced position. In turn, the increase in self-identified Democrats cannot be taken as evidence in favor of a pro-left bias in the community.

Moreover, Duarte et al. treat the community as though it were comprised exclusively of scientists from the United States (discussing evidence primarily referring to the latter) and refer exclusively to the political spectrum in the United States. However, according to the Web of Knowledge® publication database, across psychology, about 46% of all records since 2004 are published by U.S.-based scientists, whereas another 46% are by scientists from Great Britain, Germany, Canada, Australia, the Netherlands, Spain, Italy, France, Japan, Switzerland, Belgium, and Sweden. (Highly similar numbers are obtained when considering the 20 most impactful journals in psychology or the 10 most impactful journals in personality and social psychology.)

It is self-evident that the political parties of these countries will not map onto the Democrat-versus-Republican categorization from the United States. Comparing the position of U.S. Democrats and U.S. Republicans on the LLR scale to those of the 99 political parties of said 12 countries clearly reveals that U.S. Democrats are best characterized as holding a moderate (rather than left) position in a global context (results are virtually identical when considering all countries available in the manifesto database). Figure 2 plots the proportion of actual votes parties received in the most recent national elections against their position on the LLR scale. As can be seen, the "global midpoint" (both unweighted and weighted by actual votes that parties received) is close to the numerical neutral point of the left-right spectrum. In turn, this is essentially the current position of U.S. Democrats. By contrast, U.S. Republicans score approximately 1 standard deviation right of this global midpoint. Thus, in comparison to the political spectrum of all parties across these countries (which contribute just as much to psychological science as the United States), it is clear that the U.S. spectrum (Democrats vs.

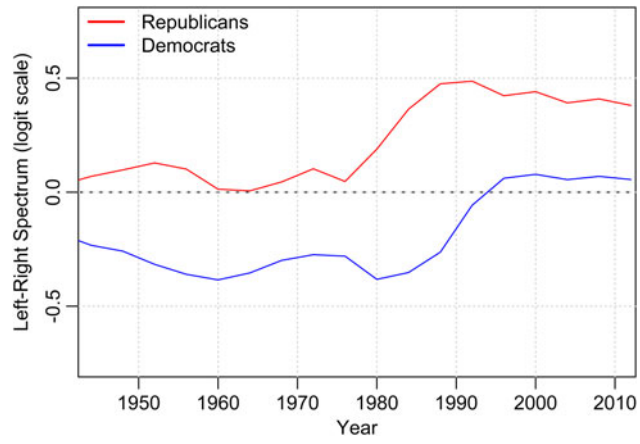


Figure 1 (Hilbig and Moshagen). Moving average (3 periods) of U.S.-party positions on the logit left–right (LLR) scale over time.

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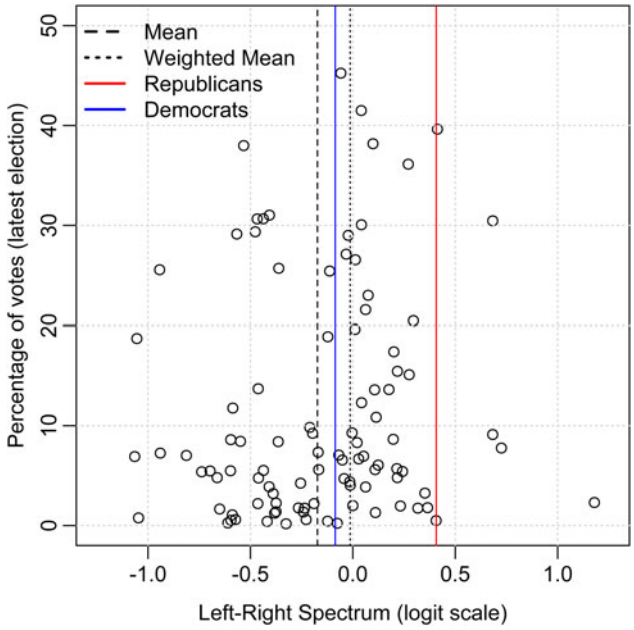


Figure 2 (Hilbig and Moshagen). Percentage of votes gained in most recent election conditional on party positions on the logit left–right (LLR) scale. The *black lines* indicate the unweighted (*dashed*) and weighted (*dotted*; weighting party positions by the proportion of actual votes received) mean across parties (mean and median differ by less than 2% of the scale). The *red and blue lines* indicate the LLR position of U.S. Republicans and U.S. Democrats (latest election only), respectively.

Republicans) can only discriminate among the right half. By implication, self-placement scales (particularly those with endpoints labeled "liberal" and "conservative") are likely to show the same bias, as these are interpreted in reference to the national political spectrum as manifested in major political parties (Benoit & Laver 2006). Overall, a positive ratio of self-identified Democrats versus Republicans cannot be taken as evidence for a leftward bias – quite the contrary, an approximately equal ratio would be indicative of a bias to the right. If anything, the community appears to be aligned with a moderate position on the global left-right spectrum.

In summary, manifesto data from comparative political science indicates that U.S. Democrats currently hold a moderate (rather than leftist) position, whereas U.S. Republicans occupy the right wing of the political spectrum – more so than they used to and especially in global terms. Consequently, referring solely to the Democrats versus Republicans dichotomy severely misrepresents the underlying political spectrum. Thus, based on the evidence they present, Duarte et al. cannot assert that the field shows a pronounced pro-left bias; this in fact invalidates the basic premise of their reasoning.

Increasing ideological tolerance in social psychology

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Abstract: We argue that recognizing current ideological diversity in social psychology and promoting tolerance of minority views is just as important as increasing the number of non-liberal researchers. Increasing tolerance will allow individuals in the minority to express dissenting views, which will improve psychological science by reducing bias. We present four recommendations for increasing tolerance.

Increasing ideological diversity in social psychology is crucial. However, we believe that recognizing the ideological diversity that currently exists in the field is just as important. In our surveys of the politics of social-personality psychologists, we found considerably more political diversity than we had expected – at least on economic and foreign policy (Inbar & Lammers 2012). In our first survey of 508 individuals, 18.9% described themselves as moderate and 17.9% as conservative on economic issues. Likewise, on foreign policy 21.1% described themselves as moderate and 10.3% as conservative.

These data should not be taken to indicate that social psychology does not have an ideological diversity problem – over 90% of respondents described themselves as liberal on social issues, and in a second survey 85% described themselves as liberal overall. However, we believe that they do suggest that there is a substantial amount of diversity in some areas, and that fostering tolerance of existing political differences may improve the quality of social psychological science just as much as recruiting more non-liberal researchers. These goals are not mutually exclusive – in fact, increased tolerance of existing differences also makes the field more welcoming to non-liberal newcomers. Here, we present four specific recommendations:

Avoid signaling that non-liberals are not welcome in social psychology. In papers, presentations, and casual conversations, many social psychologists assume that their audience consists entirely of political liberals. Professional talks contain jokes at the expense of Republican politicians (and Republicans only), and speakers sometimes openly disparage conservative beliefs. If the audience is entirely liberal, this is harmless (if somewhat unprofessional) comic relief. But the audience is not entirely liberal. Casually disparaging conservatives in a professional setting alienates colleagues who don't share the majority's political beliefs, and it sends a message to students and junior researchers that there is only one acceptable political ideology in the field. This will likely encourage those who do not share the majority ideology to choose a different line of work. As Bloom (2011) observes, "Nobody wants to be part of a community where their identity is the target of ridicule and malice." When giving a talk, writing a paper, or even just chatting with colleagues, we recommend keeping in mind that the audience might may be more politically diverse than expected. Avoid sending signals that only one political point of view is correct or acceptable. Does this mean censoring one's beliefs? Of course not – but it does mean treating others' beliefs with respect, not derision.

Be especially careful around students. There is an obvious power imbalance between students and faculty, and faculty can wittingly or unwittingly take advantage of this imbalance to pressure students to adopt the "correct" political beliefs. In our surveys, multiple students and post-docs indicated that they felt pressured or intimidated by senior colleagues. For example, one post-doc described being insulted publicly by a senior colleague for having voted Republican. Duarte (2014/2015) describes being pressed by a faculty member to "clarify" his views on Jimmy Carter during a graduate school admissions interview. (The admissions committee had discovered a blog post of Duarte's where he criticized Carter's views on the Middle East.) Most social psychologists realize that this sort of blatant intimidation is unacceptable. However, they may be less aware of the more subtle ways in which they might communicate that some political beliefs are unacceptable. We therefore propose that our first recommendation is particularly important in faculty members' interactions with students, and that faculty need to be especially mindful of how they talk about politics around them.

Take conservative beliefs seriously. Simply dismissing conservative beliefs as the product of ignorance, religious fanaticism,

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or stupidity is itself lazy and ignorant. Of course, liberal social psychologists need not be less critical of political ideas they disagree with, but it is always wise to remain open to the possibility that one is wrong – or at least to the possibility that there is value in opposing opinions. This can also have personal benefits. When people are largely surrounded by the likeminded, their views become more extreme (Lamm & Myers 1978). Although extremists tend to think that they are more right than their opponents (Toner et al. 2013), their beliefs are less based on their understanding of the facts than they think (Fernbach et al. 2013). Seriously engaging with opposing views is one way to combat this.

Practice tolerance. This may seem easier said than done. But we often need to interact with people with whom we disagree politically. Generally, we manage to do this: If we disagree, we can disagree respectfully; if we find we are unable to disagree respectfully, we can avoid certain hot-button topics. Most working people manage to do this in their professional lives because most professions are nowhere near as ideologically homogeneous as psychology is. If so many people manage to tolerate those who disagree with them – if we ourselves are able to do so in many areas of life – it should not be too much to ask that social psychologists do it as well.

Conclusion. Recruiting more non-liberal psychological scientists is a worthy goal, but it will take time – and, moreover, we see no reason that we should *ever* expect social psychology to perfectly mirror the demographics of the general population. People will choose to do what interests them, and some of these preferences may be correlated with demographic differences. Ideological imbalance is most problematic when the minority is silent because they fear personal or professional retribution if they express their views. Individual scientists will be biased by their values, but this bias is mitigated as long as there is a diverse scientific community that critically examines their conclusions (Nagel 1961). But when some views are systematically excluded, a scientific field is likely to pursue biased research questions and produce biased conclusions. We strongly believe that establishing a more ideologically tolerant climate is the easiest and quickest way to combat this pernicious tendency.

Political diversity versus stimuli diversity: Alternative ways to improve social psychological science

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Abstract: Instead of enhancing diversity in research groups, we suggest that in order to reduce biases in social psychological research a more basic formulation and systematic testing of theories is required. Following the important but often neglected ecological research approach would lead to systematic variation of stimuli and sometimes representative sampling of stimuli for specific environments.

We agree with the diagnosis of Duarte et al. that political and social psychological research is sometimes biased. However, we disagree with their proposed cure (e.g., affirmative action for conservatives). According to Duarte and colleagues such biases in research can be traced back to insufficient diversity in ideas, perspectives, and research agendas. To enhance this diversity, and thereby reduce biases, the authors propose to enhance the political diversity of research groups. We are skeptical about this recommendation for several reasons: First, we do not know *how much* diversity would be necessary to reduce these biases. Would it be enough to include liberals and conservatives? Or should communists, fascists, or even terrorists also be included? Second, *which type* of diversity would be most important for reducing biases in research? Alternatively to political diversity, one may think of ethnic, cultural, religious, or disciplinary diversity. Third, we doubt that diversity within research groups necessarily reduces biases. Diversity in research groups may foster influences of hidden profile (Lu et al. 2012), where the focus on common information produces minimal consensus, which creates limited and biased research. Diversity in research groups may even lead to protracted conflicts and biased research – for example, the endless debates about qualitative or quantitative research or pro- or anti-Israel attitudes. Such examples show that not all diverse research groups are productive.

In order to develop alternatives to improve social psychological science, we suggest that a more systematic analysis of the underlying processes that lead to biased research would be necessary. In addition to biases produced by methodological weaknesses (Cumming 2014; Simmons et al. 2011), we think biases in research emerge mainly because of the following reasons: Researchers often focus only on certain stimuli examples but not systematically on the whole or, at least, a broad range of stimuli (e.g., triggering events for disgust; Proch & Kessler 2014). They actively disbelieve what they consider as morally wrong (e.g., positive effects of authoritarianism; Kessler & Cohrs 2008). In addition, they perceive some issues as "social problems," whereas similar other issues disappear (e.g., targets of prejudice; Kessler & Mummendey 2001). Finally, they take for granted what others also state to be true, which prevents them from actually testing their truth.

Based on these considerations, we would like to focus on one simple but often neglected way to handle the problem of biased research. Instead of producing studies with "interesting" effects, theories and concepts should be tested more systematically. We feel that such interesting effects are more likely to be published than systematic tests of theories. This is not necessarily a political phenomenon, but may lead to biased research in all social psychological fields. Systematic testing of theories requires a thorough formulation of theories and concepts. Observations and phenomena should, therefore, be analyzed in psychological terms, which are then traced back to general social psychological processes. For instance, most intergroup research has demonstrated that members of all groups (even the most arbitrary) show some biases (Tajfel et al. 1971). Taking into account such basic social psychological research would make obvious that conservatives as well as liberals would be biased, albeit both may exhibit their biases on their group-specific topics. Moreover, thorough testing of theories should include more systematic observations (see Rozin 2001). In addition to the orthogonal experimental design, this would include systematic variation of stimuli and an ecological representative design.

We therefore suggest taking an ecological perspective along the lines proposed by Brunswik (1955; Dhami et al. 2004) more seriously. Such an approach would lead to a greater variation of (among others) triggering events, group identities, and targets of deviance and prejudice that are studied. For instance, to test the hypothesis that conservatives are more disgust sensitive than liberals, it is necessary to vary the disgust-eliciting events systematically. Thus, research should focus not only on elicitors that trigger disgust in conservatives, such as homosexuality, but also on elicitors that may trigger disgust in liberals, such as environmental pollution or animal husbandry. In fact, our own recent studies show that either conservatives or liberals can be more disgust sensitive depending on the set of triggering events (Proch & Kessler 2014). With such results, representative sampling becomes an important tool for further research. With representative sampling, it becomes possible to examine the domination of certain stimuli in a particular environment, which could make either conservatives or liberals more disgust sensitive.

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Thus, generalizations beyond a particular environment may be invalid. We should follow Brunswik's ideas of varying the environmental stimuli in order to disentangle psychological processes from content. This would be possible only by varying the content of stimuli either systematically or according to the typical distribution in a certain environment. Only then could one generalize psychological tendencies (e.g., higher disgust sensitivity) towards a particular environment.

In addition to the self-conscious inclusion of an ecological perspective in testing and sampling, we would like to add that the scope of theory building and knowledge gathering should also be broadened. Fundamental phenomena should connect diverse fields within social psychology and psychology in general. Instead of working in isolated spheres and keeping citation circles, work groups should link more closely and challenge each other in constructive ways. Interestingly, the present target article seems to focus mainly on "American" social psychology and does not refer to a "European" tradition (or diverse others) such as basic intergroup research (e.g., Tajfel & Turner 1979). Furthermore, excellent research may also broaden its scope of literature to the history of psychology, to other social sciences (e.g., anthropology, philosophy), and to all relevant written and oral sources, which would include novels and simply talking to people with various perspectives. Finally, we may also learn to take questions, concerns, and critique of young students and researchers more seriously, as they do not think along habitual lines in the manner of more experienced researchers (Luchins 1951). Perceived from this angle, we recommend not worrying about the composition of work groups, but rather being concerned about the scope and breadth of the research focus and evidence.

Lack of political diversity and the framing of findings in personality and clinical psychology

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Abstract: I extend the arguments of Duarte et al. by examining the implications of political uniformity for the framing of findings in personality and clinical psychology. I argue that the one-sided framing of psychological research on political ideology has limited our understanding of the personality correlates of liberalism and conservatism.

Consider the following passage:

> [S]tructural MRI data demonstrated that conservatives have an increased gray matter volume of the right amygdala, a brain structure involved in the processing of threatening information. This suggests that individuals embracing conservative political views might be more sensitive to signals of threat, and display avoidance regulatory strategies. (Carraro et al. 2011, p. 1)

At first blush, this summary of the literature seems couched in scientifically impartial language. Yet, a moment's reflection reveals that this passage could just as readily been worded as follows:

> [S]tructural MRI data demonstrated that liberals have a decreased gray matter volume of the right amygdala, a brain structure involved in the processing of threatening information. This suggests that individuals embracing liberal political views might be less sensitive to signals of threat, and be less likely to display avoidance regulatory strategies.

Carraro et al.'s choice of conservatives' rather than liberals' personality as the *explanandum* may appear inconsequential. Nevertheless, the question of how to conceptualize differences in political ideology may hold largely unappreciated implications for the conduct and interpretation of research in personality and clinical psychology.

In their incisive article, Duarte et al. lay bare the troubling scientific ramifications of political uniformity for social psychology. I extend Duarte et al.'s important arguments by examining the implications of this lack of political diversity for a problem they did not explicitly address – namely, the *framing* of findings in two fields allied with social psychology: personality and clinical psychology (see also Groeger 2011).

Over the past several decades, researchers have demonstrated that conservatives and liberals differ in sensitivity to threat (Hibbing et al. 2014; Jost et al. 2003) and openness to experience (Carney et al. 2008), with conservatives being higher in the former and lower in the latter. The assertions of some writers to the contrary (Ferguson 2012), these differences are robust, replicable, and generalizable across diverse samples (Hibbing et al. 2014).

Although these differences are value-free, they have commonly been framed by researchers as reflecting poorly on conservatives. For example, conservatives' higher sensitivity to threat relative to liberals' has frequently been portrayed as reflecting "negativity bias" (Hibbing et al. 2014) or "motivated closed-mindedness" (Thórisdóttir & Jost 2011), and conservatives' lower levels of openness to experience relative that of liberals has been portrayed as reflecting a reliance on "system-justifying ideologies" (Jost & Hunyady 2005).

Furthermore, many authors who have examined the personality correlates of political ideology have framed them in terms of explaining the sources of conservatives', rather than liberals', political ideology, thereby implying inadvertently that only the former necessitates explanation. As exemplified by such book titles as *The Republican Brain* (Mooney 2012b), these writers have often treated conservatives as the reference class and liberals as the comparison class. For example, although Jost et al. (2003) maintained that political conservatism is rooted partly in a desire to satisfy certain "psychological motivational needs" (p. 340), they did not address the possibility that political liberalism stems from different emotional needs. Similarly, the "negativity bias" of conservatives, which appears to reflect their heightened threat sensitivity (Lilienfeld & Latzman 2014), can just as validly be conceptualized as a "bias away from threat" on the part of liberals.

The one-sided framing of liberal-conservative differences neglects research suggesting that high and low levels of most, if not all, personality traits are neither inherently maladaptive nor adaptive. Instead, extremes on both poles of these traits probably entail differing trade-offs (Nettle 2006). For example, although high levels of threat sensitivity are tied to risk for certain anxiety disorders and other internalizing disorders (Nelson et al. 2013), these trait levels may be adaptive in circumstances of high objective danger, such as the gathering storm clouds of war. Conversely, although low levels of threat sensitivity are tied to risk for psychopathic personality and other externalizing conditions, such as conduct disorder (Patrick et al. 2009), these trait levels may predispose to adaptive risk-taking and perhaps prosocial altruism (Smith et al. 2013). Trade-offs may also be evident for extremes on the dimension of openness to experience. Although high openness to experience is associated with heightened creativity and artistic accomplishment (Li et al. 2015), it is also associated with elevated levels of schizotypy and paranormal beliefs (Kwapil et al. 2008). On the flip side of the coin, low openness to experience is linked to high levels of rigidity, authoritarianism, and perhaps prejudice (Cullen et al. 2002), but it may also be linked to better reality contact and a relative immunity to psychotic ideation.

Moreover, many individuals on both poles of personality dimensions may seek out and occupy certain "ecological niches" (Hutchinson 1978) in which their dispositions facilitate adaptation. For example, individuals with low openness to experience may thrive in occupations marked by a high need for structure, such as tax law, whereas individuals with high openness to

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experience may thrive in largely unstructured occupations, such as literature.

A nuanced and comprehensive understanding of personality requires researchers to appreciate that individual differences are rarely adaptive or maladaptive per se, but are associated with both advantages and disadvantages as a function of still poorly understood moderating variables, including other personality variables and situational factors. The lack of political diversity in psychology may contribute to a one-sided perspective that implicitly regards extremes in certain individual differences as inherently maladaptive. As a consequence, psychologists have accorded insufficient attention to (a) personality dispositions associated with liberalism and (b) the potential advantages of high threat sensitivity and low openness to experience, thereby impeding our understanding of the relations between personality and ideology on both ends of the political spectrum.

As Duarte et al. observe, most psychologists appear to be politically liberal. Because most of us are blind to the existence of our psychological blind spots (Pronin et al. 2002), many psychologists may be largely oblivious of the extent to which their political biases subtly shape their framing of research on political ideology.

A conservative's social psychology

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Abstract: I suggest that social psychologists should stick to studying positive and negative attitudes and give up stigmatizing some attitudes as "prejudice." I recommend that we avoid assuming that race and ethnicity have no biological foundations, in order to avoid a collision course with modern biology. And I wonder how much difference the target article recommendations can make in the context of hiring a social psychologist for an academic position.

"Conservative" means different things to different people. In my case it means a conservative Catholic, fearful of big government, big business, and the decline of individual liberties that accompanies and outlasts every war the United States engages.

I point out two issues in social psychology that call for conservative attention, then reflect briefly on recommendations for increasing political pluralism in social psychology.

Social psychology without prejudice. Duarte et al. summarize studies showing that liberals can be prejudiced against conservatives, just as conservatives can be prejudiced against liberals. But I want to take this issue a step further to problematize – as postmodern liberals like to say – the very concept of prejudice.

The empirical warrant for the concept of prejudice is that some attitudes, both negative and positive, cannot be understood with social psychology's everyday armamentarium of attitude theory and research. This logic led to research on the authoritarian personality and other efforts to show that there is something special and defective about the kind of people who have conservative prejudices. But if now we begin to see that self-serving bias is part of the human condition, perhaps we can do without the concept of prejudice.

Suppose I sit farther away from someone I know to be a smoker, I'm less friendly in conversation with smokers than with non-smokers, and I associate positive words faster with non-smokers and negative words faster with smokers. I might argue that I do not have a prejudice against smokers, rather I have a negative attitude toward smokers because they threaten me in various ways: Smoking is disgusting, smokers smell bad, smokers lack self-control, and smokers are an expensive drag on our health care system.

And so might conservatives find reasons for seeing liberals and their policies as threatening in various ways, just as liberals find reasons for seeing conservatives and their policies as threatening. It might help the much-mourned political dialogue between liberals and conservatives if we could do without stigmatizing "their" views as "prejudice." Let's go back to studying attitudes and erase "prejudice" from our textbooks and journals.

Constructions of race and ethnicity. Race and ethnicity are social constructions; we are not born with access to these categories, we must learn them. But are they only social constructions? Do race and ethnicity exist only in our minds or do these categories have some objective foundation? Here I want to raise the possibility that there are biological differences between groups socially recognized as racial and ethnic groups.

In medicine, ethnic profiling has emerged in several domains (Burchard et al. 2003). There are ethnic group differences in diseases, such as Tay-Sachs and sickle-cell anemia. There are ethnic differences in response to drugs, such as weaker response to beta-blockers for African Americans and greater sensitivity to opioids for Chinese. Ethnic profiling in medicine can be controversial (Wade 2003), but sometimes discrimination is in the patient's interest.

It is in genetics that the most controversial results have emerged. Rosenberg et al. (2003) studied 4,682 alleles from 377 markers in 1,056 individuals from 52 tribal and national groups across 5 continents. Results showed 94% of genetic variation was within group, 2% between groups of the same region, and 4% between regions. Clustering by similarity produced seven regions: Africa, Europe, Middle East, Central/South Asia, East Asia, Melanesia, and America.

These clusters are uncomfortably close to the old-fashioned "races of man," and the work has led to extended arguments about the clustering techniques used and the fuzzy boundaries between clusters (Lewontin 2006). Will biology find genetic correlates of ethnicity and race? It may be dangerous to bet against a modern biology that can already test DNA to predict eye color coupled to hair color (Walsh et al. 2013). Can genetic differences contribute to cultural differences? There is broad genetic variation in every sizable human group, but it is possible that small statistical differences at a few loci may push groups in different cultural directions.

Taken together, developments in medicine and genetics suggest that social psychologists should avoid assumptions that might put us on a collision course with modern biology. Human groups can be socially constructed without denying the possibility of biological group differences, just as breeds of dogs can be socially constructed without denying the biological substrate that breeders work with.

Will the recommendations make a difference? In the concluding paragraph of the target article, Duarte et al. recognize that bias against conservatives is a problem, not just for social-personality psychology but for most of psychology and indeed most of social science. This is a key observation because it points to the vulnerability of conservatives applying for an academic position.

In the current job market, where hundreds of applications are submitted for each job opening, the first winnowing of applications almost begs the selection committee to exercise their values in fast and furious reactions to the pile of applications. The selection committee for a social psychology position usually includes department members who are not social psychologists, but this is no help when psychologists in general run 10:1 liberal versus conservative.

Worse yet, psychology department selection committees in recent years are likely to include non-psychologists who are selected for liberal values. Pressures to hire more minority faculty will often bring a provost's representative onto the committee to make sure that at least one finalist is a minority candidate. The same pressures will usually ensure that a minority student is a member of the committee.

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Imagine the reactions of these professional liberals to a job candidate whose research suggests that stereotypes are not all wrong, or that liberals are prejudiced against conservatives, or that race and ethnicity are more than arbitrary constructions. Now imagine that the social psychologist on the committee wades through these liberal reactions to suggest that social psychological science might be improved by giving more attention to this candidate . . .

The target article is a heartening start, but so long as psychology, the social sciences, and academic institutions are all dominated by liberal values, I fear that the recommendations suggested by Duarte et al. can do little to raise political diversity in social psychology.

Diverse crowds using diverse methods improves the scientific dialectic

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Abstract: In science, diversity is vital to the development of new knowledge. We agree with Duarte et al. that we need more political diversity in social psychology, but contend that we need more religious diversity and methodological diversity as well. If some diversity is good, more is better (especially in science).

Scientists move ever closer to finding a solution to a given problem via a three-step program where a theory is proposed, challenged, and refined in accordance with accumulated evidence (Mueller 1958). This dialectical method requires diverse theories be tested, and, ideally, the most supported theories emerge from an accurate interpretation of objective data. Yet, scientists are human beings with brains that predispose us toward interpreting evidence in ways that confirming our pre-existing biases (Ditto & Lopez 1992; Pyszczynski & Greenberg 1987). Some scholars suggest there is wisdom in crowds, and crowds may be immune to cognitive biases in the evaluation of evidence (Galton 1907). Groups, however, are not immune to this cognitive bias; rather, they can be *more* biased in the conclusion they reach (Iyer & Graham 2012; Lorenz et al. 2011). The critical ingredient that can make some groups less biased than individuals is viewpoint diversity (Larrick et al. 2011). In general, this corroborates the target article's argument. The target article, however, is too limited in its definition of diversity.

Social psychologists tend to emphasize the importance of diversity of familial background, gender, race, and sexual orientation (SPSP Diversity Initiatives Statement; Society for Personality and Social Psychology 2014), which likely leads to more diverse viewpoints that affect the theories that our field generates. Duarte et al. advocate striving to diversify political viewpoints, which would further diversify the field's theories. But, why stop there? For example, nonreligious people are vastly over-represented in social psychology, too. Much like the research attacking conservatives' cognitive ability, social psychological research also attacks religious people's cognitive ability. For example, Kanazawa (2010) published paper which argues that intelligence leads people to be more liberal and less religious (and, more opposed to consensual non-monogamy, which is another stigmatized identity under-represented in social psychology; see Conley et al. 2012). Similarly, Zuckerman et al. (2013) reported that religious people are less intelligent because they are more prone to conforming and less analytic in their cognitive styles. This minority-disparaging research suggests a hostile climate for religious people in social psychology, which would steer them toward more congenial careers (much like how the perceived hostile climate for conservatives may steer them away from liberal communities and liberal fields; Inbar & Lammers 2012; Motyl 2014; Motyl et al. 2014). To this end, social psychologists should work to include religious people to further increase viewpoint diversity and, as a result, improve the scientific dialectic.

Increasing diversity need not be limited to the attributes of people either. Greater methodological and process diversity is also necessary to move nearer to scientific truths. Maslow (1966) stated, "It is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail" (p. 15). Research methods and statistical techniques have varied in their usage over time, but seem to do so in predictable manners, with trends occurring much as in fashion or art. As punch-card systems overtook statistical analyses by hand (or abacus), social psychologists designed methods that required more complicated computations. Today, we are moving into an era of "Big Data," where studies may have millions of data points for millions of participants and require computing power that was until recently unimaginable (Rudder 2014). It is impossible to forecast what social psychologists will learn from this next revolution in research design and data analytics, but it will likely continue moving social psychologists ever closer to scientific truth. This trend toward the latest new thing inevitably leads psychologists to predictably value complexity for complexity's sake, even as computer scientists are increasingly finding that simple methods performed on well-conceptualized variables outperform complex methods on noisy variables (Domingos 2012).

The broader point is that the review process in science is fraught with disagreement, yet there is a latent variable – the quality of a given publication – that is extractable from that disagreement, *if* diversity is present. It is this same statistical technique, where random error is distinguished from signal, which underlies psychometrics, meta-analysis, and, more broadly, the wisdom of crowds. These techniques assume there is no systematic error in the process; however, if all measurements are biased in the same direction, then averaging across these measurements will fail to produce a wise aggregated result. This is the exact point of the target article, in that systematic bias in a liberal direction will lead to worse measurement of the latent variable representing the true quality of research. Yet, in many ways, the choice of political diversity is arbitrary, as any lack of diversity can result in systematic error. We all accept that age, gender, and racial diversity will reduce systematic error as well. Collective norms that assume some methods are superior to others also introduce systematic error, and so increasing the representation of reviewers from outside a discipline can also reduce systematic error in the review process (Rozin 2001). One could argue that the academic perspective itself leads to a particular bias and that increasing the contributions of citizen scientists can improve the overall diversity of the perspectives included in the review process.

While the target paper is compelling in terms of how increased political diversity would benefit social psychology, we feel a broader view of diversity may be even more beneficial. In particular, the target article focuses on political diversity; we believe that social psychology lacks diversity in a number of other important domains (e.g., religion, methodology), and this lack of diversity in these other domains has similarly negative effects on the quality of social psychological research. Moreover, we believe that increasing methodological and process diversity moves science ever closer to truth by removing erroneous noise associated with particular methods and publishing processes. Additionally, the homogeneity of social psychological science creates an environment where there is much agreement on a given thesis, but limited opportunities for an antithesis to gain traction, and even fewer opportunities for genuine synthesis to occur. The danger is that our homogeneous field using homogeneous

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methods will face exceptional difficulty in moving closer to discovering truth.

Welcoming conservatives to the field

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Abstract: More conservatives would provide advantages, and social psychologists may not be as opposed to increasing the number of conservatives as Duarte et al. think. Recruitment problems concern primarily self-selection and biases in undergraduate instruction. Social psychologists should welcome having conservatives in the field to serve as a conduit for our theories and methods to conservative intellectuals and policy makers.

I agree with Duarte et al. that there is prejudice against conservatives and that there might be significant scientific and social gains from having more conservatives in the field.

The analogy to the entry of East Asians into the field is salient to me. East Asians have profoundly changed our understanding of the nature of the self and the relation of the self to larger groups, including society. They have also powerfully influenced our thinking about cognition. Eastern holistic thinking is at base enormously different from logical, analytic thinking. It solves some problems that analytic thinking can't.

Eastern views generate theories that would not likely come from a purely Western orientation. And the two traditions provide vantage points for critiquing each other's social practices and cognitive habits. I believe something like the same thing might be true if the social and behavioral sciences were to include larger numbers of conservatives. It would increase the range and nature of social and behavioral theories and provide valuable criticism.

As a liberal, there is another reason I want to increase the number of conservatives in the field. I want us to affect the social and political thought of conservative intellectuals and politicians. Some conservative positions are simply untenable in light of well-established social psychological theory. It's enough to mention the fundamental attribution error. There are also opportunities for affecting social policy. A frequent conservative impulse is to reject any proposed intervention because there could be unforeseen damaging effects or "negative externalities." Social psychologists well understand these concerns, but we also have theories that can help to avoid untoward consequences, and we have methods that can test interventions before they become adopted on a large scale.

How severe is the prejudice against conservatives? As Duarte et al. acknowledge, it's hard to know because it's clear that at least a part of the reason for few of them being in the field is self-selection on the basis of interests. But there is no question that conservative students might be turned off in part by professors asserting views they believe to be supported by theory and research but which in fact are merely readouts of liberal ideology. And sometimes professors express outright contempt for conservative views, which aside from being rude, lowers our credibility with sensible people of all political persuasions.

But I doubt that we are turning away many potential graduate students with a conservative bent. For the foreseeable future, self-selection based on interests, combined with distaste for the liberal ideology of the field, will result in few conservatives applying to graduate school. And a conservative eager to apply to graduate school would undoubtedly know it would be unwise to reveal conservative beliefs in an application.

How about conservative PhDs trying to join social science faculties? Would they find it difficult to get a job? I don't doubt that a conservative political stance would be a disadvantage, but I object to the purported evidence on the point presented by Duarte et al. The Inbar and Lammers (2012) poll is flawed. The investigators asked a large number of social psychologists, "If two job candidates (with equal qualifications) were to apply for an opening in your department, and you knew that one was politically quite conservative, do you think you would be inclined to vote for the more liberal one?" The end point on the scale was labeled "not at all." Only by checking that endpoint could respondents show they had no prejudice against conservatives. The possibility that the respondent might be inclined to be biased *in favor of* the conservative candidate was not taken seriously or perhaps not even considered. Moreover, we know that scale-point labels can drastically shift responses. The Inbar and Lammers scale could have the tacit implication that any reasonable social scientist could at most be neutral.

At least one of the authors of the target article apparently agrees with the assertion that neutrality is as far as a social psychologist would go. When I told him that I would be inclined to vote for the conservative, he seemed skeptical. I was surprised by his reaction. For all the reasons stated at the beginning of my commentary, I would welcome the intellectual opportunities and challenges owing to the presence of a conservative in my department. (Though I readily admit that the conservative's presence might cast a pall on some water-cooler conversations!)

To see whether I was alone in my preferences, I polled 16 prominent social psychologists, asking them if they would welcome having more conservatives in the field, and whether, other things equal, they would vote for a conservative job candidate or a liberal candidate. (I dropped the adjective "quite" in front of conservative, because it seemed more reasonable to compare a conservative to a liberal than to compare someone who was "quite conservative" to someone who was a mere liberal.) To my knowledge, all of my respondents would describe themselves as liberal or moderate. Thirteen of the 16 stated they would welcome conservatives to the field. There is probably a NIMBY (not in my back yard) effect, however. Only seven said that they would vote for the conservative job candidate. (Seven said they would vote for the liberal, and two said they would have no bias either way.) The existence proof here: There are prominent non-conservative social psychologists who would welcome conservatives into the field, and some of those social psychologists assert they would bend over backwards to hire a conservative into their department.

So the situation might not be as bleak as Duarte et al. assume. Their proposals for making the field more welcome to conservatives seem to me to be reasonable, possible to institute, and maybe more effective than they might assume. At the least, I think social psychologists will bear in mind the admonitions in Duarte et al.'s target article when they write or lecture, and possibly even when they frame their hypotheses and design tests for them. I hope so.

Political orientations do not cancel out, and politics is not about truth

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Abstract: Duarte et al. propose that divergent political biases cancel each other out such that increasing political diversity will improve scientific validity. We argue that this idea is misguided. Their recommendations for improving political diversity in academia bear the danger of imposing political interests on science. Scientific scrutiny and criticism are the only viable remedies for bad science.

Duarte et al. document that the majority of psychological researchers in the United States are politically liberal. They present illustrative cases where the researchers' liberal orientations have led to biased and tendentious research. A corresponding bias could easily be found in economics or other fields where the majority of researchers are conservative (Zipp & Fenwick 2006); whether the issue is particularly severe in social psychology is hard to tell. Bad science is ubiquitous (Goldacre 2008). To combat bad science, it is essential to use scientific rigor to identify scientific errors, methodological flaws, and unfounded claims. We strongly support attempts to improve current reviewing procedures and scientific self-correction mechanisms.

Duarte et al., however, propose a different strategy. They argue that increasing political diversity in a research environment will improve scientific validity. Specifically, they assume that politically diverse positions "cancel out each other" (sect. 4.1, para. 4) and that a mix of politically opposing positions in a research environment will generate better approximations to scientific truth. We strongly disagree with this "cancelling-out" hypothesis for several reasons.

First, we can find no empirical evidence to support this assumption in the academic domain. Even if diversity is beneficial in some domains outside of science, as the examples from organizational psychology cited by Duarte et al. suggest, it does not follow that this would be beneficial for science.

Second, the call for greater diversity is commonly motivated by a desire to increase social justice and equity rather than to search for scientific truth. Facilitating the access of, say, women to academia is a political issue; nobody should be discriminated against, for example, by being excluded from an academic position on the basis of features such as gender or ethnicity. The question of whether the gender composition of a research environment has an effect on scientific quality is not part of the discrimination argument. In fact, discrimination based on gender or ethnicity is considered unfair precisely because it is generally assumed that gender or ethnicity have no bearing on academic achievement.

Third, several bizarre conclusions follow from the cancelling-out hypothesis. For example, will collaboration between evolutionary theorists and Intelligent Design advocates cancel out their respective biases and generate a more truthful theory somewhere in the middle? Scientific truth is not a matter of political diversity and compromises unless one assumes a radical constructivist position (Lennon 1997). And why limit diversity to political diversity? Why not increase religious diversity and add a religious fundamentalist to a psychology department dominated by atheists, hoping that their orientations will cancel out? We cannot see how this combination would improve scientific outcomes. The history of science rather demonstrates that religious or political diversity is a hindrance to scientific progress; the role of the church in the great scientific revolutions from Galileo to Darwin may serve as a case in point. Instead of cancelling each other out, those with opposing political viewpoints will likely denigrate each other, and their particular biases will be stretched to greater extremes. It seems that Duarte et al. are neglecting a crucial distinction: Political diversity is a manifestation of conflicts of interest, not of biased knowledge, and a compromise of interests does not imply a convergence on truth.

Fourth, the cancelling-out hypothesis suggests that all political orientations are comparable and on par with one another, in particular with respect to their stance on the scientific method and their ability and willingness to contribute to scientific research. However, some political orientations, most notably those that are closely associated with religious beliefs, are in effect opposed to the scientific method as a privileged route to knowledge (Gauchat 2008). Of course, there has always been academic debate about what constitutes a legitimate scientific method. But although science is in a continuous state of flux, there is an accepted core of legitimate methodology; the case of Intelligent Design is a good example of an attempt to gain trustworthiness and political influence by declaring oneself to be genuinely "scientific." If we wanted to increase political diversity in our institutions, who would decide which parties to admit to the diversity mix and which to exclude? What are the criteria for determining whether a political orientation will contribute to the cancelling-out mechanism?

There is a more fundamental argument for why we see the call for political diversity in science as misguided and ultimately as politically dangerous. Simply speaking, one cannot choose one's gender, skin color, or ethnicity. Which party to vote for in an election is, by contrast, a matter of choice. The idea that people can freely change their vote as personal preferences or political circumstances change is a pillar of democratic societies. We are not born with our political partisanship, albeit some findings suggest a – weak and mediated – genetic influence on political orientations (Oskarsson et al. 2014). Treating political categories such as liberal or conservative as if they were categories like gender and ethnicity – that is, genetically determined and immutable – is committing a kind of naturalistic fallacy. Recommending, as Duarte et al. do, that the political composition of academic teams be actively regulated is to falsely take political orientations as "given" – as facts of nature. What if researchers change their political orientation over time, and what about the possibility that this change may occur as a result of their scientific pursuit itself? We think that any attempt to externally control the degree of political diversity in a group of thinking and developing individuals is doomed to fail.

Why is it politically dangerous to try to actively increase political diversity? Selecting candidates according to political orientation, be it for an academic or any other type of position, has rightly been viewed as a distinguishing hallmark of totalitarian regimes. We do not insinuate any such intentions to Duarte et al.; however, selecting for political diversity necessarily implies assessing individuals' political orientations. And who assesses the assessor? The very idea of political selection bears the seed of political control, of abuse, and of fabricating academic careers that are uncorrelated with scientific achievement.

Political bias, explanatory depth, and narratives of progress

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Abstract: Political bias has indeed been a distorter of psychology, not just in particular research areas but in an aversion to the explanatory depth available from politically fraught fields like evolution. I add two friendly amendments to the target article: (1) The leftist moral narrative may be based on zero-sum competition among identity groups rather than continuous progress; and (2) ideological bias should be dealt with not just via diversity of ideological factions but by minimizing the influence of ideology altogether.

This *BBS* target article may be among the most important papers on the practice of psychology in the recent history of the field. Left-wing bias has indeed been a substantial distorter of large swaths of research and theory. How could it not be, given everything we (as psychologists, of all people!) know about the intellectually corrupting effects of ideology, in-group consensus, and the demonizing of dissenters? Duarte et al. brilliantly document and

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diagnose the problem, though their survey of the damage is only partial. In addition to the topics they call out, I would add the study of sex differences, violence, genetic contributors to economic inequality, cultural contributors to economic inequality, and the shaping of personality and intelligence (see Pinker 2002; 2011a; also see Susan Pinker [2008]).

The problem extends beyond particular research areas. I suspect that a left-liberal bias also explains the paucity of deep explanations in psychology – the fact that our "theories" often consist of an ever-lengthening list of biases, fallacies, illusions, neglects, blindnesses, and fundamental errors, each of which pretty much restates the finding that human beings are bad at something. To explain *why* humans are bad at what they are bad at, and good at what they are good at, psychology needs to invoke deeper principles from disciplines that are more foundational than psychology itself, including economics, genetics, and evolutionary biology. But these sources of explanatory depth are often excluded from psychologists' consciousness because of their perceived political baggage (Pinker 2002).

In addition to compromising scientific psychology, the political bias identified by Duarte et al. has corroded trust in science as a whole. To take a baleful example, skeptics of anthropogenic climate change commonly write off the scientific consensus by claiming that the left-wing bias of academic researchers is so pervasive and unacknowledged that nothing coming out of the academy can be taken at face value. They are surely wrong about climate science, but our field has given them ample evidence that such a bias exists. A salient example is the conspicuous outrage and lack of balanced debate after Lawrence Summers' 2005 remarks on the interpretation of evidence regarding gender discrimination in academia (see Pinker 2005).

The social sciences must return to politically disinterested inquiry, and the target article is a welcome call to action. I will add two friendly amendments.

First, I'm not sure that Christian Smith's liberal progress narrative is an entirely accurate summary of the political orientation of social scientists. As someone who has documented that there is a good deal of empirical truth to the narrative itself – we *have*, in fact, made a great deal of progress since the Enlightenment (Pinker 2011a) – I can vouch that contemporary left-liberals adamantly deny it (though they do believe the struggle for such progress is worth prosecuting). Abolition of slavery? There are more slaves today, I am frequently informed, than at any time in history. The end of racial segregation? American prisons are the new Jim Crow. A decline in racism? It has just gone underground in the form of implicit biases. The rights and safety of women? The barriers have just become better hidden, while women are in more danger than ever, especially the one in four college women who have been raped. The end of barbaric corporal punishment? We now live in a Panopticon-style carceral society whose subtle forms of surveillance and conformity make burning at the stake no longer necessary.

These days it is the libertarians, not the left-liberals, who tend to believe in progress (e.g., Ridley 2010). Rather than liberal progress, the narrative of many left-leaning academics is that society consists of a zero-sum competition among classes, genders, and races, and the mission worth dedicating one's life to achieving is ensuring that the currently disadvantaged groups get their fair share of the power and resources. For these reasons, Duarte et al.'s repeated reference to the "liberal progress narrative" seems to miss the mark. None of the examples of political bias that they call out requires a conviction that our society has made progress.

A second observation: The authors had a stroke of rhetorical genius in using the left-liberal shibboleth of "diversity" against them. And they make an interesting case that some kind of affirmative action for conservatives and libertarians might help neutralize the bias. But the analogy between race and gender, on the one hand, and political ideology, on the other, is partial at best. Gilbert and Sullivan notwithstanding, one is not born a liberal or a conservative in the same way one is born a male or a female, a European or an Asian or an African. Political ideologies are not arbitrary markers but have intellectual content which can be exposed, debated, and, when appropriate, discounted. All scientists should do this, including liberals and leftists; we shouldn't assume that leftists are hardwired to bias their science in a leftward direction, requiring a faction of right-wingers to cancel them out with an opposing bias. It would be a shame if this tactical suggestion of the authors' sparked a diversionary debate over the merits of quotas and reverse discrimination, and overshadowed their larger point that the conduct of good science requires that we all do everything possible to identify and minimize the distortions of parochial ideologies.

Sociopolitical insularity is psychology's Achilles heel

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Abstract: Academic psychology has become increasingly non-diverse politically, which skews and impedes social psychological science (as Duarte et al. argue). We should embrace viewpoint diversity, especially since the arguments favoring sociopolitical diversity are identical to those for demographic and cultural diversity. Doing so will produce a more robust, open, and creative psychological science that is informed and tested by a multiplicity of sociopolitical paradigms.

No American institution has embraced cultural and demographic diversity more than the academy, and nowhere with greater enthusiasm than in the social sciences. Universities differ in many ways, as do their psychology departments, but all celebrate diversity. Substantial efforts are devoted to attract demographically diverse faculty and students, integrate culturally diverse content throughout the curriculum, provide diversity-related programming, and encourage researchers to be culturally competent.

Yet, we do not take the same steps to diversify the faculty politically or ensure that diverse sociopolitical viewpoints are represented in the curriculum and research. Up to 33% of academic psychologists freely admit to discriminatory practices against those with whom they differ politically (Inbar & Lammers 2012), and studies reveal substantial bias against politically conservative students, professors, and policy perspectives. Conservative students and faculty (what few there are) perceive the academy as "appropriate for and welcoming of people with broadly liberal political sensibilities and as inappropriate for conservatives" (Gross & Fosse 2012, p. 155). If this climate existed with respect to people of color, it would give rise to a successful class action suit for racial discrimination (Tetlock 2012).

Unfortunately, sociopolitical bias remains one of the last acceptable forms of prejudice in the academy (and beyond) (see Jussim 2012a). In describing how academic psychology has become increasingly non-diverse politically, and the many ways in which this skews and impedes policy-relevant psychological science, Duarte et al. have diagnosed the discipline's Achilles heel. *Ideas* are what universities and academic psychology are all about. Why have we not embraced intellectual diversity on social and political issues?

The arguments favoring sociopolitical diversity, each of which is supported by a compelling body of research findings, are *identical* to those for demographic/cultural diversity:

1. When a diversity of viewpoints and life experiences is represented among the faculty and student body, it benefits teaching, learning, and research. (Indeed, demographic diversity is seen

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as instrumental in achieving the educational benefits that flow from cultural and viewpoint diversity; see Grutter v. Bollinger 2003.)

2. The sociopolitical values and demographic/cultural backgrounds of faculty and students are often central to their personal identity.

3. Discrimination in hiring and professional relationships due to differences in sociopolitical values is as insidious today as is discrimination on the basis of demographic differences (Redding 2012).

We ought, therefore, to value and promote sociopolitical diversity with the same vigor as we do demographic/cultural diversity. We should give voice to those sociopolitical identities outside the mainstream of academic life and research paradigms, remedy discrimination against those having such identities and their feeling of isolation in the academy (which makes them reluctant to manifest their sociopolitical identity in academic life and professional activities), and engage a range of sociopolitical ideas in our scholarly perspectives and teaching.

There is, of course, a fourth argument – the need for social justice – which undergirds demographic diversity but is thought inapplicable to sociopolitical diversity, since political conservatives have not been a disadvantaged group in society. Yet, conservatives are marginalized and vastly under-represented within psychological science. Perhaps, then, we should strive for fairer treatment and greater representation of conservatives so that they are not implicitly or explicitly discriminated against in graduate admissions, hiring and promotion, the peer-review process, and departmental and university life generally (see Inbar & Lammers 2012; Redding 2012). Duarte et al. explain how doing so *will benefit the profession and society* by producing a more robust, open, and creative psychological science that is informed and tested through a multiplicity of sociopolitical paradigms. Not only do political minorities bring diverse perspectives, but their presence has a de-biasing and net-widening effect on the rest of the scientific community (see Page 2009).

As for the somewhat self-serving and circular claim that the academy's research perspectives and findings are liberal because liberal ideas are necessarily the correct ones, the available empirical evidence refutes the notion that there are differences between liberals and conservatives in intelligence (see sect. 5.1 in the target article), in academic ability (see Redding 2012), or in the quality of their information processing or degree of cognitive bias when they evaluate research findings and policy questions (Kahan 2013). Conservatives tend to be somewhat less open to experience (Jost et al. 2003) than liberals, but this does not mean that their policy preferences are inferior. More to the point, consider the strong empirical evidence that ideological biases unavoidably influence research agendas, paradigms, and methods, as well as the interpretation of findings and how they are used or not used to support policy preferences. Consider also how psychological science has been shaped (Kahan 2013; MacCoun 1998; Redding 2001; 2013; Tetlock 2012) by, among other things, "the embedding of liberal values into research questions and methods" (target article, Abstract).

It is inescapable human nature to approach value-laden issues, whether in research, teaching, or professional practice from the perspective of one's own sociopolitical lens. (If most psychologists were conservative, the profession surely would be captured by conservative ideas and sensibilities.) Since psychology faculties are not socio-politically diverse, it comes as no surprise that their research on policy-relevant topics also lacks diversity. Researchers are human beings (!) who cannot help but be influenced by the views they hold on the topics they investigate. This is why the de-biasing efforts that Duarte et al. suggest, while very useful, alone will not solve the problem.

Fundamentally, the only way to achieve sociopolitical diversity in research and teaching is to diversify who is on the faculty, by fostering a climate that is welcoming of multiple sociopolitical voices and thereby encourages non-liberal individuals to pursue careers in academic psychology, and through outreach efforts to hire them onto our faculties (see the target article; Redding 2012). We should not want sociopolitical uniformity on social science faculties, especially since sociopolitical perspectives are an important component of culture and, therefore, of cultural diversity. If we want our universities and psychology department to be places that respect and truly engage diverse ideas, rather than doing so almost exclusively from one political vantage point, diversifying the faculty ideologically is the only way to achieve sociopolitical inclusiveness and heal psychology's Achilles heel.

What kinds of conservatives does social psychology lack, and why?

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Abstract: Although Duarte et al.'s claims about the potential benefits of greater political diversity in the ranks of social psychology are apt, their discussion of the decline in such diversity, the role played by self-selection, and the specific domains they cite in discussing an anti-conservative bias raise issues that merit closer examination. The claim that sound research and analysis challenging liberal orthodoxies fails to receive a fair hearing in our journals and professional discourse is also disputed.

People of all political hues are bound to view evidence and arguments through the prism of their understandings and values, and to create pressures to uniformity. One thus cannot disagree that greater political diversity in our field (and other kinds of diversity as well) would benefit us. That conceded, let me comment on three issue raised in the target article that I think worth further critical consideration.

The loss of political psycho-diversity. The terms *liberal* and *conservative* in the present U.S. political climate have a different meaning than they did when the field included more self-described conservatives, and more (moderate) Republicans. Beliefs that characterized Eisenhower and Nixon supporters – that is, fiscal conservatism and advocacy of gradual rather than radical social change (to say nothing of acceptance of a highly progressive tax structure) – are not conservatives of the sort Duarte et al. have in mind when they speak of under-representation. Social scientists who hold such traditional GOP views, but nevertheless believe that government should play an active role in addressing social ills and are comfortable with extension of gay rights, and the freedom of women to seek abortions, are unlikely to label themselves as "conservatives" lest they be tarred with the same brush as those who reject such views. The authors present no evidence, empirical or even anecdotal, of hostility to more traditional types of conservatism (such as that endorsed by the Conservative parties in the United Kingdom or Canada). In short, what is largely absent, and rejected in social psychology (and in our elite universities), is a particular strain of conservatism – one heavily influenced by evangelical Christianity and/or by resentment of and resistance to changes in America's demography and social attitudes.

Interestingly, Duarte et al. seem unconcerned about the virtual disappearance from our ranks of academicians with perspectives far to the *left* of the typical liberal Democrat – that is, individuals who do not accept the view that a combination of capitalism (even with more constraints) and democracy is the only imaginable road to a good society.

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Self-selection and the politics of social psychology. Duarte et al. are correct in pointing to self-selection as a source of liberal over-representation. Some of the central tenets of social psychology clearly have more appeal for students who want to explore sources of social ills and potential remedies than those who wish to preserve the status quo. Liberal professors no doubt tend to choose examples, both in the classroom teaching and their research, in which conservative rather than liberal foibles are offered as cases in point. But Duarte et al. cite little, if any, evidence that research reports focusing on liberal susceptibility to particular biases, or reports documenting mutual susceptibility, are in fact subject to less critical scrutiny by journal reviewers and editors (as opposed to survey respondents or research participants) than the reports of conservative susceptibility.

Duarte et al. fail to mention that some of the most heavily lauded applied work in our field – notably, in education – features findings highly consistent with such traditional *conservative* values as persistence in the face of adversity, and a sense of personal responsibility and self-efficacy. Most applied work in social psychology is in reality not so much liberal in spirit as *reformist*. Demonstrations that modest interventions can bear fruit (Walton 2014; Walton & Cohen 2011) challenges both leftist claims that disadvantage cannot be overcome without structural changes in society and rightist claims that those who are faring badly are doing so primarily because of deficits in motivation, ability, or character.

Ill-chosen exemplars of liberal bias. The link between conservative ideology on the one hand and resistance to evidence of climate change and its anthropogenic origins, and accordingly to rejection of calls for action on the other is by no means an obvious one. (Moreover such a linkage is largely restricted to the United States). Stewardship of the earth, maintaining the biological status quo, and conservation of resources are obligations one might expect conservatives to take more seriously than liberals. How and why climate-change denial has become such a hallmark for so many conservative Republicans is an interesting and timely challenge for social scientists to address. (I would suggest "follow the money.") But given where the weight of evidence lies, a lack of evenhandedness in treating the input of two sides in this debate is not compelling evidence of an anti-conservative bias. Other domains (education, policing, welfare economics, etc.) would surely provide more fertile ground in the search for evidence that journal editors and granting agencies are unwilling to support work that challenges liberal orthodoxies with convincing data.

With respect to stereotype accuracy, the discussion offered by Duarte et al. lacks historical perspective. The original concept of a stereotype was more than the assumption of some statistical relationship between group membership and some negative (or positive) characteristic. Rather, it referred to the oversimplified belief that all or virtually all members of a particular group share some characteristic, as an essential quality (Lippman 1922). Whether the types of base-rates that Duarte et al. cite are given more weight or less weight than they merit on Bayesian grounds – and by whom – is an empirical question perhaps worth investigation (although the answer surely depends on the stipulated group and characteristic). But that question was not what motivated researchers within the social sciences to address the phenomenon of stereotyping. Their concern was the *consequences* of stereotypes for those subject to them, and for those holding them. References to "inaccurate" stereotypes do oversimplify the issue, but so do claims that particular stereotypes are "accurate" – especially in the absence of discussion of the factors that produce and sustain the relevant differences in actions and outcomes.

Conclusions. It would be good for the field of social psychology if thoughtful conservatives (and other thoughtful questioners of orthodoxy) were contributing more to our journals, and if "political correctness" of a sort that can limit inquiry and stifle classroom discussion were less in evidence. It may well be that slipshod work and arguments that give comfort to liberal orthodoxies are subjected to less critical scrutiny than those that support conservative beliefs. Of greater concern would be evidence (which I did not find in Duarte et al.'s article) that well-done work that supports conservatives orthodoxies or challenges liberal ones fails to get a fair hearing or merited support within our discipline. Indeed, the seriousness with which social psychologists have taken the issues raised by the authors of the present article and the other papers that they cite, shows that dissenting voices are both being aired and prompting vigorous discussion.

Conservatism is not the missing viewpoint for true diversity

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Abstract: The target article diagnoses a dominance of liberal viewpoints with little evidence, promotes a conservative viewpoint without defining it, and wrongly projects the U.S. liberal-conservative spectrum to the whole field of social psychology. Instead, we propose to anticipate and reduce mixing of theorizing and ideology by using definitions that acknowledge divergence in perspective, and promote representative sampling and observation of the field, as well as dialogical publication.

We agree with Duarte and colleagues in two regards: Yes, there are problems with under-representation of some viewpoints among academics in social psychology, and, yes, theory and ideology are occasionally mixed in theory building and testing. However, we do *not* think their examples of under-representation and ideology-driven social psychological research are typical of the field. We also believe their proposals are neither necessary nor sufficient.

We question three basic assumptions of the target article: Are "liberal" ideologies biasing social psychological theorizing more than other, more "conservative" ideologies? Is there solid evidence for under-representation of conservatives? Would conservative viewpoints render social psychology more representative in any meaningful way?

Social psychologists often hold an individualist conceptualization of human nature, and neglect relational and collective self-aspects. This fits the conservative viewpoint better than more liberal or left worldviews. The same is true for the neglect of culture's role in human evolution, leading to sometimes questionable biologistic hypotheses in evolutionary psychology. Together, these have probably done more harm to psychological theorizing than the prominence of some liberal ideology in some specific social psychological theories that are rightly pointed out by the target article.

The evidence for the claims of under-representation is rather weak. One of the target article's data points is a show of hands at the 2011 Society for Personality and Social Psychology (SPSP) meeting. One of us was present at this occasion, but could not raise a hand because the categorization used did not fit the political orientation of this researcher. Better investigations of researchers' standing on various issues would be needed before such claims of homogeneity could be made.

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The target article's stated goal is to promote non-liberal worldviews in general, but in practice it relies solely on contrasting liberals and conservatives within the political spectrum of the United States. It is troubling that the conservative viewpoint, in contrast to the liberal narrative, is never properly characterized or defined. Historic changes in the U.S. conservative ideology since the 1980s or today's fissures in the conservative political movement of the United States are completely ignored. It is also surprising that U.S. political worldviews are generalized *pars pro toto* to the whole field of social psychology. Contrasting liberalism and conservatism is misleading in at least four ways:

1. Even from a U.S. perspective, conservatism may not be the most important missing viewpoint or group – there are also non-voters, various immigrant groups whose ideology fits neither conservatism nor liberalism, and people who do not categorize themselves as either conservatives or liberals, including some of the authors of the target article.
2. From a European perspective, the differences between U.S. conservatives and U.S. liberals often seem marginal, and often both seem to the right of the political spectrum. For instance, many representatives of U.S. liberals and conservatives alike are much more skeptical towards the idea of a welfare state than are the majority of Europeans.
3. From a global perspective, using political orientation as a criterion would in fact require the recruitment of far more diverse viewpoints, such as environmentalists, pacifists, communists, fascists, separatists, jihadists, and so forth. People from North America and Western Europe are in many respects very exceptional and not representative of the majority of cultures (Henrich et al. 2010b).
4. Political orientation is only one of a number of dimensions by which to categorize people, including academics. This is briefly acknowledged in the target article, but other dimensions such as ethnicity, race, and gender are reduced to demographic diversity and dismissed as adding nothing beyond the conservative-liberal dimension. This is clearly too narrow. Cultural psychology has accumulated ample evidence for the diverse psychologies shaped by socialization.

In sum, the heterogeneity of today's societies in the United States and the West in general, as well as globally, undermines the basic assumption that especially conservative viewpoints are needed for a more representative social psychology.

Political diversity as such does not prevent the mixing of ideology with theory. Nothing is to be gained from counterbalancing well-established but allegedly liberally biased theories with conservatively biased theories. Instead, social psychologists need to distinguish between their roles as researchers and political citizens (Waldzus et al. 2012). Perspective dependency is unavoidable and has therefore to be accounted for in the theoretical and empirical process. The following measures can help achieve this.

Define psychological constructs such that they incorporate diverging perspectives where appropriate. For example, Mummendey and Wenzel (1999) define discrimination as "an ingroup's subjectively justified unequal, usually disadvantageous, evaluation or treatment of an outgroup, that the latter (or an outside observer) would deem unjustified" (p. 159).

Define the target population, also with the help of sociological and anthropological literature, and seek to understand it before testing hypotheses. The goal is to adapt manipulations, hypotheses, and measures to divergent perspectives. Useful methods include observation, interviews, and surveys with open questions. Anticipate misunderstandings between subcultures (Rozin 2001). This requires changes in the culture of editorial decision making and reviewing to value and publish descriptive data that cannot (yet) be theoretically explained or predicted.

Establish and promote publication formats that reinforce or even require debate (such as the dialogical publication scheme used by *Behavioral and Brain Sciences*), across disciplinary boundaries as well. The goal is to help discover blind-spots and mistakes caused by a too narrow perspective.

The target article could have provided a great service to the field if it had characterized the pitfalls of the liberal viewpoint properly and promoted concepts of diversity beyond it in general. However, by promoting an undefined conservative viewpoint as the main missing perspective, we are afraid that the target article does more harm than good: It proposes a pseudo-solution that could create an illusion of objectivity through "diversity" while preventing the field from taking effective necessary steps to overcome its actual ideological biases.

Should social psychologists create a disciplinary affirmative action program for political conservatives?

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Abstract: Freely staying on the move between alternative points of view is the best antidote to dogmatism. Robert Merton's ideals for an epistemic community are sufficient to correct pseudo-empirical studies designed to confirm beliefs that liberals (or conservatives) think deserve to be true. Institutionalizing the self-proclaimed political identities of social psychologists may make things worse.

Robert Merton's norms for a self-correcting epistemic community are referenced in Duarte et al.'s target article. These include the ideals of disinterestedness and organized skepticism. Notably, Merton makes no mention of balance in the political beliefs of the community's disputatious members. Merton prized the intellectual virtues we associate with a Thucydides (disciplined impartiality) or a Socrates (a principled commitment to explore the other side). He was well aware of the intellectual hazards attendant on the triumph of ideology over critical reason; which is perhaps one reason why he proposed that the members of an ideal epistemic community must be disputatious, and should be so by applying quality-control standards for reasoning, research design, and the interpretation of evidence. It seems to me the ideals of Merton's epistemic community are sufficient to critique and correct pseudo-empirical studies aimed at confirming beliefs that liberals (or conservatives) think deserve to be true.

Merton wrote during an era when an institution of higher learning (my own) could proudly declare in its official 1972 Report on the Criteria of Academic Appointment that the primary aim of a great university is the discovery and communication of new knowledge and the cultivation of rational judgment, and that in the furtherance of that goal "there must be no consideration of sex, ethnic or national characteristics, or political or religious beliefs or affiliations in any decision regarding appointment, promotion, or reappointment at any level of the academic staff" (Shils et al. 1972, p. 5). Duarte et al. want to overturn that prohibition on the political and ideological screening of scholars. I doubt that step will be effective. I do not think it is wise.

Throughout the target article, there are nods, hedges, shows of solidarity, and words of praise for social psychology, although the dominant tone is one of epistemic crisis. The authors propose that politically liberal research institutions should become proactive in welcoming political conservatives to campus, selectively setting them loose in the halls of the academy to define and engage the subject matter of social psychology. Social psychologists are called upon to create a disciplinary affirmative action program for political conservatives. This recruitment of scholars on the basis of political beliefs is justified by an appeal to the epistemic

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well-being of the discipline, so as to improve the stock of ordered knowledge in what Duarte et al. judge to be the relatively undisciplined and insufficiently disputatious contemporary social psychology community.

Narrowly stated, there is lots of "advocacy research" out there, both inside and outside the academic social science disciplines. "How do you feel about the murder of innocent life?" "How do you feel about female genital mutilation?" Those are not impartial interview probes regarding the voluntary termination of a pregnancy or surgical modifications of the human body; and precisely because they are leading, conclusion-tending questions formulated in such a way as to block alternative interpretations have no place in scientific inquiry (Shweder 2004; 2013). Duarte et al. are very effective at exposing this type of bias in the construction of interview probes.

Broadly summarized, the authors point to the ideological homogeneity of social psychology, the loss of a Socratic assumption questioning tradition, and the promotion of liberal egalitarian moral agendas and legends of Enlightenment progressivism (religion should and will go away and be replaced by science; groups should and will go away and be replaced by individuals; stereotyping individuals on the basis of group characteristics is vicious; heteronomy should and will go away and be replaced by autonomy), all dressed up in the appearance of empirical demonstration studies. The famous Milgram experiments come to mind. Most interpretations involve some form of disparagement of both hierarchy and in-group/out-group formations. Rarely considered is the adaptive function and reasonableness of the decision-making heuristic: Respect superior orders from high-status and trusted in-group members. Here one may well be faced with an experimental selection bias, in which a setting is contrived to produce a dramatic but atypically maladaptive result, like watching some species of birds sitting on a basketball rather than on their own eggs because of their reliance on circularity cues, which generally serve them well in their normal uncontrived reproductive environments where they do not typically find a very round basketball situated next to their imperfectly circular eggs.

These are real problems for those of us who value Socratic communities (Shweder 2015). Nevertheless, the recommendation section of the target article (sect. 6), while seeking greater voice for under-represented ideological perspectives in social psychology, embraces the very problem it diagnoses by advocating a liberal affirmative action approach, by institutionalizing the self-proclaimed political and moral identities of social psychology students and faculty, and by making political attitude census categories legitimate criteria for the admission of students, the granting of fellowships, and the promotion of faculty. This type of bureaucratic formalization of political and moral identities, even in the intended service of a social justice quest for "viewpoint diversity" in the academy, is not likely to produce convergence in the search for truth or greater respect for the ways of critical reason. It might make things worse. I doubt the proposal will contribute to the process of imaginative hypothesis generation or the willingness to engage in skeptical reasoning.

One fascinating feature of the Duarte et al. proposal is the absence of a particular anticipated dissent. Early on, one of the co-authors is described as "a neo-positivist contrarian who favors a don't-ask-don't-tell policy in which scholarship should be judged on its merit" (sect. 1, para. 4). I found myself wondering: Does he or she really support the affirmative action recommendation? I would have welcomed that contrarian voice. Such a policy stance may seem old-fashioned, quaint, or utopian. Nevertheless, whether one is a positivist or not, that stance seems wise to me: Be disputatious; judge what is said (rather than the political beliefs of the person who said it); do so on its epistemic merits; prize Merton's ideals. The knowable world is incomplete if seen from any one point of view, incoherent if seen from all points of view at once, and empty if seen from no perspective at all. Freely staying on the move between alternative points of view is still the best antidote to dogmatism.

When theory trumps ideology: Lessons from evolutionary psychology

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Abstract: Evolutionary psychologists are personally liberal, just as social psychologists are. Yet their research has rarely been perceived as liberally biased – if anything, it has been erroneously perceived as motivated by conservative political agendas. Taking a closer look at evolutionary psychologists might offer the broader social psychology community guidance in neutralizing some of the biases Duarte et al. discuss.

Imagine a group of psychologists conducting research on politically charged topics such as race, sex differences, stereotyping, and morality. Imagine that these psychologists generate novel hypotheses and empirical findings that had scarcely been considered by the predominantly liberal social psychology community. Imagine further that these psychologists face accusations that their research is biased by a conservative political agenda, and, as a consequence, they face some degree of stigma and exclusion from the liberal establishment within the field.

Now imagine that these psychologists, rather than being political conservatives who have been drawn into the field via high-effort recruiting processes, are just as liberal as their social psychology peers.

This reality can be experienced in the flesh at the annual conference of the Human Behavior and Evolution Society, or at the annual Society for Personality and Social Psychology Evolutionary Psychology Preconference. A casual observation of the researchers who attend these and similar meetings will suggest that evolutionary psychologists are just as liberal as other psychologists (one might even see more environmentalists and vegans). Such observations would correspond with the only empirical investigation into the political attitudes of evolutionary versus non-evolutionary psychologists. In a sample of 168 Ph.D. students from six U.S. universities, Tybur et al. (2007) found that two of the 31 evolutionary psychologists (6.5%) – compared with 21 out of the 137 non-evolutionary psychologists (18.1%) – identified as Republican or Libertarian. When asked to place themselves on a seven-point Likert scale ranging from −3 (*strongly conservative*) to +3 (*strongly liberal*), all 31 of the evolutionary psychologists in the sample categorized themselves as more liberal than the scale midpoint. These data coincide with the fact that some of the highest-profile evolutionary behavioral scientists of the 20th century, including Robert Trivers (a member of the Black Panthers), John Maynard Smith (a registered member of the Communist Party of Great Britain) and E. O. Wilson (one of the world's leading conservationists), favored (sometimes radically) liberal politics in their personal lives. Simply put, evolutionary psychologists and social psychologists have similarly liberal political attitudes, and they often research similar topics.

Despite being just as liberal as non-evolutionary psychologists – and, seemingly, carrying the same personal political beliefs that could bias their research – you won't find many suggestions that evolutionary psychologists should strengthen their science by adding more political conservatives to their ranks. If anything, many liberal academics have erroneously argued that evolutionary psychologists are conservative activists who use their research to promote a conservative political agenda (for overviews, see Lyle & Smith 2012; Segerstråle 2000; Tybur et al. 2007).

So, why have evolutionary psychologists been labeled as ideologically conservative even though the data indicate that they are as

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liberal as non-evolutionary psychologists? Why can they, despite their liberal ideologies, conduct the type of "diverse" research on morality, prejudice, and sex differences that Duarte et al. urge social psychologists to consider? One of the benefits of an evolutionary perspective is that it is, by nature, an *a*political theoretical framework, as long as scientific readers or practitioners do not succumb to naturalistic or moralistic fallacies. When scientific practitioners and consumers are mindful to avoid leaping from "is" to "ought" or vice versa, the hypotheses derived from an evolutionary perspective can differ quite strikingly from those that would be generated from a liberally biased perspective, and they do not always fit simple liberal moral intuitions. For example, consider Navarrete et al.'s (2010) proposal that aspects of race-based prejudice might be rooted in evolved psychological mechanisms designed for adaptive coping with threats posed by aggressive outgroup men. Far from conducting this research to justify prejudice against outgroup men, Navarrete (himself left-of-center and a member of a minority group) hopes that the research would, if anything, be used to attenuate such prejudice. Or consider Thornhill and Palmer's (2000) suggestion that sexual coercion could be better understood by considering an evolutionary perspective. Merely proposing this hypothesis was broadly interpreted across academia as "justifying" rape, and Thornhill (who himself has strong liberal values and abhors sexual coercion) experienced personal harassment as a result. Indeed, detractors attempted to break into his home and left death threats on his home answering machine (Thornhill, personal communication).

If evolutionary psychologists are personally liberal, how are they able to conduct research that departs so markedly from liberal intuitions? And can the answers to these questions inform solutions to social psychology's problem with liberal bias?

We suggest that a robust, multidisciplinary theoretical framework can act as a buffer between researchers' personal political beliefs and their research questions. Duarte et al., while correct in pointing out social psychology's liberal demographics, miss a critical ingredient that allows such demographics to metastasize into widespread, biased research: the lack of a coherent, overarching theoretical framework that can be used to generate testable predictions. Indeed, social psychology has frequently been criticized for lacking such a framework with integrative support from other disciplines (Kelley 2000; Krueger & Funder 2004; Pinker 2011b; Tooby & Cosmides 1992). With a dearth of theoretical boundaries from which to guide research questions and generate hypotheses, researchers might instead use their own political biases to guide their research questions and methods, even if unwittingly.

If this line of thinking is correct, then social psychology's problem with liberal bias is not due to its liberal demographics alone; it is due to a combination of liberal demographics and the lack of a rigorous, apolitical theoretical framework. There are two strategies that could be used to correct the field's liberally biased research, then. The first is that outlined by Duarte et al. – to pepper the field with conservatives who can introduce their own political biases to offset those of the liberal majority. An alternative would be to commit ourselves to avoiding moralistic and naturalistic fallacies and to shore up the foundations of social psychology with theories that are grounded in apolitical realms, such as evolutionary theory. We favor the latter strategy; we believe it would be easier to implement, and it would have additional benefits beyond correcting politically based biases.

Diversity of depoliticization?

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Abstract: An ideologically homogeneous discipline of political psychology is a serious problem. But undoing the field's homogeneity may not suffice to address this problem. Instead, we should consider undoing the politicization.

Political psychologists, indeed academics in general, ought to seek the truth about their subject matter. The target article demonstrates that an ideologically homogeneous field of political psychology is predictably bad at undertaking this task. This is a very serious problem. And I agree that it ought to be addressed. But while diversifying political psychology (and related fields) promises to be an improvement over the current state of affairs, I wonder whether this solution goes far enough. Perhaps instead of undoing the profession's homogeneity, we should strive to undo its politicization.

Heterogeneity can help reduce the problems identified as a way of fighting one kind of bias with another kind. Conservatives can help call out the liberals' mistakes, point out their blind spots, correct their skewed operationalizations, and so on. Perhaps this will suffice to counter the harmful effects of political biases at the level of the profession as a whole. But it cannot suffice at the level of the individual researcher. After all, even when our personal mistakes are countered by others, we are still making mistakes. And it seems obvious that we should avoid making mistakes, at least if we can do so at reasonable cost.

The mistakes in question are the result of biases from which we suffer in light of partisan attitudes. But it is by no means a given that we have such partisan attitudes. So why not say that taking seriously our task to seek the truth about political psychology requires that we avoid those attitudes? Instead of fighting the symptoms, why not get rid of the disease?

The basic thought here can be summarized as follows (see also Van der Vossen, forthcoming): Being politically biased will predictably interfere with our ability to correctly undertake the task of political psychology. But we should avoid things that make us bad at undertaking our professional tasks. Doing so is, I think, a straightforwardly moral imperative. As a result, we should avoid being politically biased. This means depoliticizing political psychology. Or, more accurately, it means depoliticizing political psychologists (as well as others like them).

I do not deny, of course, what the target article is careful to point out: Ideological people do not necessarily produce faulty research. But focusing solely on this is also to miss part of the point. What matters is not just whether pieces of research are faulty. It also matters whether researchers are approaching their tasks in a morally and professionally acceptable manner. And when political psychologists (and those who research political questions in general) are partisan or ideological, the answer is no. This is precisely why a field can go astray.

The moral ideal, then, is that those academics who study political questions remain as apolitical as can be reasonably expected. And the moral ideal of the field of political psychology should be one that asks its members to remain out of politics. Such an ideal is not unusual. As a general matter, it is plausible that researchers should not have a personal stake in the outcome of their research. We want scientific investigations to be impartial, guided by the facts and not by personal preferences, motivations, and so on. Compare, for example, the demand that medical researchers should not be on the payroll of pharmaceutical companies. The reason here is the same as with partisan political psychologists: it threatens the impartiality of their research (Angell 2000).

The real solution to the problems identified, then, is not just to undo homogeneity. It is to undo politicization. Academic fields that focus on political issues should adopt something like a guideline regarding conflict of interests that prohibits or at least strongly discourages political activism by its members. Political psychologists (as well as philosophers, sociologists, and other academics in related fields) should be discouraged to be active in political

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parties, make campaign donations, advocate for political goals, and so on.

In the long run, a depoliticized field will be better for everyone involved. It will be better for the ideological minority (whose views, careers, arguments, and work do not receive the attention and appreciation that they objectively merit). But it will also be better for the majority. In an ideological and homogeneous field, the dominant view will receive less scrutiny, and therefore likely be developed less carefully, than its challengers. As a result, the truth (whatever it is) will likely end up being misrepresented, undersold, or skewed. And that harms our ability to achieve important social improvements.

A checklist to facilitate objective hypothesis testing in social psychology research

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Abstract: Social psychology is not a very politically diverse area of inquiry, something that could negatively affect the objectivity of social psychological theory and research, as Duarte et al. argue in the target article. This commentary offers a number of checks to help researchers uncover possible biases and identify when they are engaging in hypothesis confirmation and advocacy instead of hypothesis testing.

Duarte et al. contend that a lack of political diversity within social psychology may lead to biased research practices and conclusions, and that increasing political diversity within the discipline would improve psychological science. Increasing the number of nonliberal social psychologists is, however, a process that will likely take considerable time, if it is achieved at all. There is therefore a need for tangible guidelines and more immediate steps that researchers can take to combat bias. Given that a liberal-leaning (or conservative-leaning) field is at risk for confirmation bias (Hardin & Higgins 1996), a number of "checks" are recommended that researchers can immediately incorporate into their practices to ensure a focus on hypothesis testing rather than hypothesis advocacy and confirmation.

Because people have "bias blind spots" and cannot accurately diagnose the influence of their own biases (ideological or otherwise; Pronin & Kugler 2007), a hypothesis-testing checklist has the potential to help researchers correct for biases in whatever form they exist (e.g., political, religious, racial, and cultural biases, on one hand, or theoretical and professional loyalties and biases, on the other). We offer four strategies researchers might consider using to protect against bias.

Check 1. Begin by asking, "What do I want to be true and why?" Ideally, the scientific method is characterized by objectivity. Realistically, however, social psychological science is conducted by people who share many of the same biases as those they study (e.g., confirmation biases). It may therefore be useful for researchers, before going into the laboratory or the field, to strive to account for whatever biases they can by asking themselves, "What do I want to be true and why?" Although personal desires or preferences should have little sway in the scientific process, an early accounting of one's own explicit biases allows one to add design elements to ensure that all theoretically grounded hypotheses (not only those that are most palatable) are meaningfully considered and tested.

Check 2. Explicitly state the theoretical rationale for your hypothesis in the form of an *if-then* statement. Starting with a theoretical rationale for one's hypothesis is not only "good science," but also a crucial part of avoiding bias. Theoretical foundations give a clear understanding of why one expects one's hypotheses to be true (Sutton & Staw 1995). One way to confirm that hypotheses are grounded in a theoretical rationale rather than ideological bias is to generate an if-then statement: *If* a given theoretical proposition is true, *then* the following effect should be observed. Generating an if-then statement requires researchers to zero in on the theoretical premise that grounds their prediction. Focusing on and explicitly stating the theoretical premise behind one's predictions helps ensure that hypotheses are not driven by preferences for what researchers want to find but are firmly grounded in theory.

Check 3. Generate theoretical arguments for competing hypotheses and design studies accordingly. McGuire's (2004) perspectivist approach to research and knowledge acquisition argues that all possible hypotheses are true – one just needs to think through the moderators and conditions when one hypothesis is more likely to be true than another. For this reason, researchers should challenge themselves to generate theoretical rationales not only for their preferred hypothesis but also alternative hypotheses. Generating a strong theoretical explanation for different, if not opposite, patterns of results than those that are preferred or expected can attenuate tendencies toward hypothesis confirmation and advocacy, instead of hypothesis testing.

McGuire (2004), for example, models the perspectivist approach by hypothesizing that viewing violence on television could lead to more aggressive behavior because exposure legitimizes violence as acceptable and therefore increases desires to behave aggressively (Berkowitz et al. 1963). Alternatively, viewing violence on television could also lead to a reduction in aggressive behavior because exposure to violence provides a catharsis of hostile feelings and therefore reduces desires to behave aggressively (Feshbach & Singer 1971).

Once researchers generate a theoretical rationale for competing hypotheses, they can adopt an appropriate empirical strategy. Testing competing hypotheses in one design allows the data to speak for themselves: Which account is most consistent with the data? Designing strong tests of alternative hypotheses, however, requires that each hypothesis have an equal opportunity to be supported. Sometimes this goal is best accomplished by designing multiple studies: one or more studies that provide a strong test of Hypothesis A, and one or more that provide equally strong tests of Hypothesis B or C (for examples, see Skitka & Tetlock 1993; Skitka et al. 2002). Thresholds for what counts as support for each hypothesis should be decided a priori and could be pre-registered to avoid moving the goalposts, or engaging in questionable research practices to favor one hypothesis over another (e.g., Simmons et al. 2011).

Check 4. Be open to adversarial collaborations. In a sense, this checklist provides steps for researchers to fight against their own biases and thus to be their own intellectual adversaries. Nonetheless, psychology has documented the power of motivated reasoning (Kunda 1990); it is possible that some biases will still slip through the cracks. Researchers should be open to pursuing adversarial collaborations as a fail-safe (see the Appendix in Mellers et al. [2001] for a detailed example). One may ask a colleague who has different theoretical or partisan loyalties to review one's work, or, ideally, invite collaboration in each step of the research process. Being open to invitations from others' for adversarial collaboration would also be desirable.

The current checklist gives researchers tools to be more objective and skeptical architects of their own research. In the true spirit of scientific inquiry, social psychologists should aspire to put theories and hypotheses to the strictest of tests. Adhering to the above-mentioned guidelines may facilitate objectively motivated hypothesis testing rather than subjectively laden hypothesis advocacy or confirmation. Moreover, these suggestions represent

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more immediate solutions to the problem of ideological bias that do not require researchers to wait for a day when the field is marked by greater ideological diversity.

Too paranoid to see progress: Social psychology is probably liberal, but it doesn't believe in progress

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Abstract: We agree with Duarte et al. that bias in social psychology is a serious problem that researchers should confront. However, we are skeptical that most social psychologists adhere to a liberal progress narrative. We suggest, instead, that most social psychologists are paranoid egalitarian meliorists (PEMs). We explain the term and suggest possible remedies to bias in social psychology.

Duarte et al. contend that the field of social psychology has become increasingly populated by politically liberal researchers. In fact, although social psychology was once more diverse, it has, according to Duarte et al. (supported by evidence from Inbar & Lammers [2012]) become alarmingly monolithic. This paucity of political diversity creates three chief problems: (1) liberal values may become enmeshed in theory and method; (2) researchers may focus on topics that support the liberal progress narrative and avoid topics that potentially contradict it; and (3) hostile attitudes about conservatives may create a field that misrepresents the psychology of conservatism. Of course, any explicit or implicit discrimination against conservatives (or any other group of people) that is *not based* on scientific criteria should be eliminated from social psychology. To this end, Duarte et al.'s review provides a welcomed and useful evaluation of the current state of the field. We have some concerns, however, with Duarte et al.'s promotion of Christian Smith's "liberal progress narrative" (see Smith 2003). We believe that the term paranoid egalitarian meliorism (PEM) more accurately characterizes the attitude of many social psychologists. We suggest that PEM may lead to many of the symptoms that Duarte et al. accurately diagnose.

Duarte et al. propose that many social psychologists adhere to what Smith called the "liberal progress narrative" (LPN) (Smith 2003, p. 82). This narrative may bias the field because it may insidiously motivate researchers to pursue inquiries consistent with this belief system while ignoring other, potentially contradictory investigations. The LPN views history as a battle against unjust and oppressive institutions and regimes. Gradually, according to the LPN, freedom has flowered and the righteous forces of democracy and equality have triumphed over the darkness of concentrated social and economic power. However, many injustices still remain and still deserve the devoted attention of morally righteous people.

Although there is some truth to Duarte et al.'s argument regarding the LPN, we believe that it mischaracterizes the political narrative/attitude that most social psychologists hold. In fact, informal evidence suggests that many social psychologists are hostile to whiggish notions of "progress" and consider it indecent to trumpet cultural successes while ignoring the many real or perceived injustices that free markets and technology have birthed. For example, although this is anecdotal and requires further substantiation, our experience suggests that many social psychologists were either indifferent or actively hostile to Steven Pinker's extremely whiggish (essentially a LPN manifesto) *The Better Angels of Our Nature* (Pinker 2011a), which documents the incredible secular decline in human violence. Furthermore, at least a few prominent social psychologists have written books lamenting the growing threat of violent media, the rising trend of narcissism, and the increasing misery of today's youth – all narratives that contradict the basic tenets of progress.

We suggest, instead, that many social psychologists adhere to a brand of liberalism that is strongly colored by the attitude of paranoid egalitarian meliorism (PEM). We do not mean paranoid pejoratively; rather we mean it as a form of error-management (Haselton & Nettle 2006). In this view, paranoid refers to a heightened sensitivity to perceive injustices and/or threats to equality. Because of this, many social psychologists (a) study topics that are related to perceived injustices (stereotyping, prejudice, hierarchies, immorality of the wealthy, obedience); (b) ignore topics that are perceived to threaten egalitarianism (heritability, stereotype accuracy, possible benefits of conformity/hierarchy); and (c) become hostile/biased against research which suggests that some outcome differences among individuals and/or groups are at least partially caused by differences in personal traits rather than by discrimination or social oppression (e.g., that sex differences in science, technology, engineering, and math (STEM) field representation are partially caused by cognitive differences and the different occupational preferences of men and women).

At its most extreme, PEM can lead to the creation of perceived victim groups who become quarantined from objective scientific analysis. Protection of such perceived victim groups becomes a sacred value (Tetlock 2003), and those who are perceived as violating this sacred value are assailed. Biased reviews, funding, and hiring decisions are justified because they are a means to protecting a sacred cause. Consider the example of STEM-field representation given above. Because women are a perceived victim group, the dispassionate and disinterested study of STEM-field representation is almost impossible in social psychology. Those who suggest that the disparate representation is caused at least partially by personal traits are often attacked, denied access to top-tier journals, and forced to adhere to much more rigorous scientific standards than those who argue that the disparate representation is entirely socially caused. In general, PEM disdains scientific analyses that posit that personal variables may explain some variation in outcomes, because such analyses are seen as "blaming the victims." Although this is, as we noted, an extreme outcome of PEM, it requires only a small percentage of passionate advocates to potentially distort the review, hiring, and tenure processes.

We, of course, are dedicated to tolerance, diversity, and equality of treatment. Furthermore, we believe that social science can and should be used to help us better understand society so that we can improve the life of all people, especially those who are particularly vulnerable. However, this should be achieved by pursuing the truth regardless of however temporarily unpleasant it may be to some people. Perhaps social psychologists should attempt to mimic medical researchers. Many medical researchers are passionately committed to the cause of improving peoples' well-being. However, that passionate commitment does not interfere with objective analyses of susceptibility rates. One may think it unjust that some groups (e.g., men or women) are at greater risk for certain maladies, but that doesn't prevent researchers (and the Centers for Disease Control and Prevention) from noting the heightened risk and advocating potential preemptive action (e.g., advocating that sexually active women get HPV vaccinations). It may offend some people's moral sensibility that some groups are more vulnerable to certain diseases than others, but it is just a fact that we have to live with.

If increasing the number of conservatives in psychology will help to achieve this end, then we endorse Duarte et al.'s recommendations. The important thing is getting the science right.

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Meta-ethical pluralism: A cautionary tale about cohesive moral communities

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Abstract: Meta-ethical pluralism gives us additional insight into how moral communities become cohesive and why this can be problematic (even dangerous) – and in this way provides support for the worries raised by the target article. At the same time, it offers several reasons to be concerned about the proposed initiative, the most important of which is that it could seriously backfire.

For decades, meta-ethicists have debated that status of people's ordinary moral discourse (e.g., Blackburn 1984; Brink 1989; Darwall 1998; Dreier 1999; Gibbard 1990; Harman 1996; Mackie 1977; Shafter-Landau 2003; Smith 1994; Wong 1984). When people declare that "Racial discrimination is unacceptable!", are they expressing negative feelings and/or other "con" attitudes towards discrimination, or an affective affiliation with community norms? Or are they conveying beliefs about objectively determined (i.e., non-relative and/or mind-independent) matters of moral fact?

Most involved in the debate (though not all – see Gill 2008; Loeb 2008) assume the answer to be one or the other. But our research suggests that it is *both*. On some occasions, for some issues, people take an objectivist stance, believing non-relative/mind-independent facts to underpin their moral beliefs/judgments/values/practices (hereafter referred to as "beliefs"). Other times, for other issues, the same people take a non-objectivist stance, treating their moral beliefs as reflections of a personal moral code and/or the social community to which they belong (Wright, in press; Wright et al. 2013; 2014; see also, Goodwin & Darley 2008; 2010; 2012).

Under the former circumstances, people express strong certainty about their beliefs and intolerance for divergent beliefs. They show little interest in interacting with or helping those who hold divergent beliefs and find social censorship or punishment acceptable. Under the latter circumstances (i.e., the non-objectivist stance), people express less certainty and less intolerance for divergence. They show a greater interest in interacting with or helping those who hold divergent beliefs and are uncomfortable with social censorship/punishment, believing that people should make their own choices and that open dialogue and debate is important (Wright, in press; Wright et al. 2013; 2014; see also Wright 2012; Wright et al. 2008). A paradigmatic example of this was provided by Jonathan Safran Foer, author of *Eating Animals* (Foer 2010), during a lecture delivered in 2012 when he stated: Industrialized animal agriculture is the most serious moral crisis of our time, *and yet* each person must decide for himself/herself how to respond.[1]

A strong predictor of people's meta-ethical stance on an issue is the *degree of consensus* expected from their relevant community. Where stronger consensus is expected, greater objectivity – and intolerance for divergent beliefs – is found (Goodwin & Darley 2010; 2012; Wright et al. 2014). This relationship appears complex and bidirectional: Although we have found perceived consensus to fully mediate the relationship between meta-ethical stance and attitudes/behaviors towards divergence (Wright et al. 2014), manipulations of perceived consensus have also resulted in shifts in meta-ethical stance (Goodwin & Darley 2012). Regardless, the point is that people who belong to cohesive communities (i.e., those with strongly shared moral beliefs) are more likely to view those beliefs as objectively grounded and less likely to tolerate divergence. What in less cohesive communities may be viewed as reasonable (even celebrated) moral diversity, becomes deviance to be censured or prohibited – even punished.

The relevance of this to the topic at hand should be (hopefully) clear. The more unified/cohesive a community we perceive ourselves to be, the more likely we are to feel suspicious of and inclined to reject divergence – especially when it is of moral significance, as are many of the issues discussed in the target article. This suggests that creating a less cohesive community – one that openly acknowledges a wider range of beliefs/judgments/values/practices – could shift meta-ethical stances and reduce expectations of consensus, increasing tolerance for disagreement and appreciation for respectful dialogue/debate. And an initiative that advocates for a stronger conservative voice in social psychology (and academia more generally) may indeed be a legitimate way to decrease the cohesiveness that the authors worry is undermining our scholarly activities.

That said, let me express three concerns that might warrant further consideration before investing serious time and money into this initiative:

First, the divide between liberals and conservatives nationwide (if not globally) has become increasingly large and incendiary. According to a recent Pew Research Center report, there is greater ideological disagreement between, and uniformity within, liberal and conservative groups today than at any point in the previous two decades – generating stronger, more harmful, animosity (Pew Research Center 2014). They have become separate, and increasingly cohesive, communities. It is therefore unlikely that bringing conservatives and liberals together under the same academic umbrella will turn them into a "community" (cohesive or otherwise). Yet this is critical, because while perceived disagreement *within* communities can have the aforementioned positive effects (found also by others; e.g., Crano 2012), disagreement *between* cohesive communities often has the opposite effect (examples of which are given in the target article). People disapprove – often strongly – of divergence in other communities (Wright 2012; Wright et al. 2008; but see Sarkissian et al. 2011), which can create a polarized "us against them" situation. And if we aren't careful, this initiative could have a similar effect, resulting in the stagnation, bickering, and outright conflict often present when disagreeing cohesive communities come together to "work it out." In other words, many of the problems identified in the target article could get *worse*, not better.

Second, this isn't our first encounter with the distorting influence of bias – indeed, many important mechanisms and strategies have been developed to help protect against it. If we have become lazy in their application, this should be fixed. But I'm not convinced that an initiative directed at one *particular* source of bias is warranted. And, if our objective is to be as "value-neutral" as possible, I'm not sure how bringing together such strongly divided groups accomplishes this – it's not as if, contrary to what Duarte et al. seem to think, liberal and conservative beliefs, if placed in close enough proximity to one another, will somehow cancel (or balance) each other out!

Third, cautionary tale aside, community cohesiveness is not always a bad thing – it provides a solid foundation for both continuity/tradition *and* social change. Plus, I think we can generally agree that certain moral issues are (or *should be*) "closed" to dialogue and debate. I'm not saying that liberals have everything right – or that they should discount, ignore, and/or shut down all conservative viewpoints. But we need to be clear on where the mandate for increased diversity begins and ends. Which divergent beliefs count as legitimate counterpoints? Whose divergent voices should be included? Unless we are simply seeking diversity for diversity's sake (which I hope we're not), these questions require serious thought.

NOTE

1. Talk given by Jonathan Foer as part of the *College Reads* program at the College of Charleston, South Carolina, in 2012.

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Authors' Response

It may be harder than we thought, but political diversity will (still) improve social psychological science[1]

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Abstract: In our target article, we made four claims: (1) Social psychology is now politically homogeneous; (2) this homogeneity sometimes harms the science; (3) increasing political diversity would reduce this damage; and (4) some portion of the homogeneity is due to a hostile climate and outright discrimination against non-liberals. In this response, we review these claims in light of the arguments made by a diverse group of commentators. We were surprised to find near-universal agreement with our first two claims, and we note that few challenged our fourth claim. Most of the disagreements came in response to our claim that increasing political diversity would be beneficial. We agree with our critics that increasing political diversity may be harder than we had thought, but we explain why we still believe that it is possible and desirable to do so. We conclude with a revised list of 12 recommendations for improving political diversity in social psychology, as well as in other areas of the academy.

When we began writing our target article in 2011, our goal was to begin a conversation about what we saw as the problem of political homogeneity in social and personality psychology. The quality and diversity of perspectives, arguments, and new ideas offered by the 33 commentators strengthens our faith in social psychology as a field that is open to criticism, able to use its own work to examine itself, and ultimately committed to "getting it right." We are pleased that so many of our peers have taken our ideas seriously and joined the conversation about how social psychology can improve the quality of its work.

The wealth of ideas in the commentaries makes it impossible to respond to each point. Instead, we organize our response into four sections that correspond to the four claims in our target article:

1. Social psychology is now politically homogeneous (Section R1).
2. This homogeneity sometimes harms our science (Section R2).
3. Increasing political diversity would reduce this damage (Section R3).
4. Some portion of the homogeneity is due to a hostile climate and outright discrimination against non-liberals (Section R4).

We begin each section by noting support for our position, then acknowledging the arguments of our critics, and then responding to their critiques. To foreshadow our conclusion: We think the 33 commentaries, taken as a whole, strengthen claims (1) and (2). We think claim (3) still stands, but we are now more aware of obstacles, complications, and downsides that might be associated with our recommendations for increasing political diversity. It will be harder than we thought, and we see merit in some of the additional ideas proposed for reducing the effects of political bias. We think claim (4) stands as well; none of the commentators have presented evidence that rebuts the multiple sources of evidence that we presented on this point.

R1. Claim 1: Social psychology is now politically homogeneous

Almost all commentators have accepted our contention that social psychology largely lacks political diversity, even the commentators who strongly disagree with other claims (e.g., **Eagly**). This consensus is striking. In a field that typically touts the importance of diversity, it is valuable to discover that most of us recognize the extraordinary lack of political diversity in social psychology. Nonetheless, three commentators have disagreed. Those disagreements revolve around a few key points:

R1.1. Haidt's "show of hands" demonstration is unconvincing

Seibt, Waldzus, Schubert, & Brito (**Seibt et al.**), referring to Jonathan Haidt's demonstration that few social psychologists would publicly self-identify as conservative at a major conference, suggest that "The evidence for the claims of under-representation is rather weak." That would be true if our evidence were limited to Haidt's "show of hands" (target article, sect. 2, para. 3; see also Note 7). But in our target article we presented multiple forms of evidence, including a graph showing how partisan identity and ideological orientation have both been moving leftward, and a survey of the field that included self-reports of political identity and of willingness to discriminate (Inbar & Lammers 2012). Those who think that conservatives are properly represented should offer some evidence, or at least tell us where the missing conservatives can be found.

R1.2. The American political system is unusual, in ways that render our claim invalid

Hilbig & Moshagen claim that our evidence that psychologists are likelier to identify as Democrats than Republicans (Gross & Simmons 2007; Rothman & Lichter 2008) is invalid, because, they argue, U.S. Democrats are actually moderates or centrists when their policy views are examined in relation to policy views in Europe and elsewhere.

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Cross-national comparisons of extremism are notoriously difficult. (What criteria should we use in judging whether left-wing Democrats are to the right of the Tony Blair/Gordon Brown wing of the British Labor Party?) But even if we treat the claim as largely true, it does not alter our conclusion that social psychology leans left. Our conclusions do not hinge on a single source of data, as we present evidence from multiple sources that social psychologists are politically homogeneous (see Figure 1 of the target article). This includes party identification, ideological identification, and attitudes towards policy issues (see Inbar & Lammers 2012). Neither **Hilbig & Moshagen** nor **Seibt et al.** present evidence showing that social psychologists are more aptly characterized as moderates or centrists. We also note that it is ever convenient to characterize one's own ideology as centrist or "moderate," while casting the other side as the true ideologues. Moreover, our target article presented direct evidence and examples of biased research, which is ultimately the core issue. Hilbig & Moshagen did not address that evidence.

What would change our view? When research starts to report that large minorities (say, 20%) of social psychologists are members of moderate right or libertarian (classic liberal) parties (e.g., European Christian Democrats, American Republicans, or Coalition Australian parties), and that they identify as non-left, and support non-left policies, our view that social psychology lacks diversity will change. For now, such data do not exist.

We found **Bilewicz, Cichocka, Górska, & Szabó**'s (**Bilewicz et al.**'s) data fascinating and a valuable step toward understanding the ideological characteristics of social psychologists outside of Western democracies. Their data from Eastern Europe suggest that social psychologists are not universally left-wing, at least on economic issues, especially in countries in which the Left is still tainted by its association with communism. But we find it noteworthy that, like U.S. social psychologists, the Western *and* Eastern European social psychologists in this sample report being "liberal" (leftist) in their positions on social issues – those most likely to inform and distort social psychological research. Indeed, these data largely mirror those of Inbar and Lammers (2012), who find that, whereas there is some variation among social psychologists on economic and foreign policy issues, there is little variation on social issues.

R2. Claim 2: The lack of political diversity sometimes harms our science

We were pleasantly surprised by the complete agreement with this claim. Not one commentator contests our claim that the lack of political diversity can in principle distort the field's scientific conclusions. Even our harshest critics acknowledge that there is a potential problem. **Hilbig & Moshagen** write that "a severe asymmetry in the distribution of relevant (political) viewpoints in any scientific community could endanger objectivity and progress." **Eagly** disagrees with many of our specific examples of biased research, but writes that she agrees with us that "political diversity, along with other forms of diversity, stands to benefit social psychology." This claim was the centerpiece of our target article. An ideological monoculture is seen by all as a *scientific* problem, even by those who doubt that it is an ethical problem or that it is caused by discrimination.

Many commentators have added insights into how intellectual diversity can improve research. For example, **Nisbett** notes the benefits that East Asian social psychologists have brought to the field's understanding of cultural differences in social cognition. **Ceci & Williams** offer a vivid example of how a research project that asks a politically uncomfortable question can get blocked at many stages, from funding to IRB review to publication.

Other commentators have expanded our arguments by identifying additional examples of harm brought to the field by political homogeneity. They note widely varying substantive research areas that may be suffering from ideological distortion, including political psychology (**Chambers & Schlenker**), studies of the power of the situation and the fundamental attribution error (**Funder**), personality and behavioral genetics (**Charney**; **Lilienfeld**), intelligence (**Pinker**), group differences (**McCauley**; Pinker), and prejudice (McCauley). Had we surveyed 100 additional psychologists, we would surely have found more.

Taken together, the commentaries have significantly *strengthened* our conclusion that political homogeneity is a threat to the integrity of social psychology (and other social sciences; the problem is not unique to social psychology). Although general claims that motivated reasoning can distort scientific thinking have long been recognized (e.g., Ioannidis 2012; Nickerson 1998), our target article and the many commentaries constitute the clearest documentation of *specific* domains in which political biases seem to be particularly problematic. Social psychology (like many other academic fields) has a motivated reasoning problem. This was our central point.

R3. Claim 3: Increasing political diversity would improve the quality of our science

Given the near-universal acceptance of our claims that (1) social psychology is politically homogeneous, and (2) this political homogeneity can harm our science, it is unsurprising that many commentators have endorsed our third claim: Increasing political diversity would improve the state of our science. Some, such as **Chambers & Schlenker**, **Lilienfeld**, and **Redding**, agree that increasing political diversity would reduce the epistemic costs our science faces. Others – such as **Gelman & Gross**; **Hibbing, Smith, & Alford** (**Hibbing et al.**); **Nisbett**; and **Pinker** – endorse our argument that increased political diversity would improve elite and public perceptions of our field.

That said, our third claim seems to have elicited by far the most disagreement, in five primary forms: (1) Conservatives are just not interested or capable of conducting social psychological science; (2) Calling for increased political diversity is premature and not data-driven; (3) Increasing political diversity will cause unanticipated problems; (4) Other forms of diversity are as (or more) important than political diversity; and (5) Political diversity is not necessary for protecting the field from political bias. We address each of these counterclaims in the next subsections.

R3.1. Conservatives are just not interested in – or capable of – conducting social psychological science

Several commentators repeated the argument for self-selection of liberals into (and conservatives out of) social

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psychology that we addressed in our target article. **Eagly** notes that liberals are more attracted to the type of progressive social change highlighted by social psychology. **Gelman & Gross** highlight how people self-select into environments that promise ideological fit, using the military as a career more attractive to conservatives.[2]

Hibbing et al. argue that we ignore fundamental differences between liberals and conservatives that explain conservatives' self-selection out of social psychology. We agree that there are important differences between liberals and conservatives, and indeed some of own research has shown fundamental differences in liberals' and conservatives' values and moral beliefs (e.g., Crawford 2012; 2014; Graham et al. 2009). We included a section in our target article (sect. 5.3) describing the evidence that "differences in interest" were relevant, and likely account for some portion of the underrepresentation of non-liberals.

That said, we are unconvinced that these differences are robust or reliable enough to produce the types of career-determining decisions that **Hibbing et al.** suggest. One problem is that Hibbing et al.'s argument collapses social and economic conservatism, despite abundant evidence of the importance of this distinction (e.g., Feldman & Johnston 2014; Malka & Soto 2015). Indeed, much of the evidence in favor of Hibbing et al.'s thesis has relied on measures of social conservatism, but has been generalized to "conservatism" writ large. Second, meta-analytic treatments of behavioral measures of psychological rigidity (van Hiel et al. 2010) have produced much less robust results than did the Jost et al. (2003) meta-analysis of self-report measures (for details, see Jussim et al., in press a). Finally, a recent set of studies showing ideological differences in avoiding dissonance-arousing situations (Nam et al. 2013) have proven difficult to replicate (Brandt & Crawford 2014; Crawford et al., in preparation b).

As we said in our target article, we agree that self-selection contributes to the political homogeneity of the field. This is, however, a chicken-and-egg problem: Are social psychological phenomena inherently more attractive to liberals? Or have pressures to conform to liberal norms influenced the questions that social psychologists pose – and the phenomena they discover? If there were more lines of inquiry attractive to conservatives, or at least more lines of inquiry that didn't have obvious liberal values embedded within them, would social psychology attract more conservatives? These are open questions, and one way to find out is to change how we conduct our work and frame our hypotheses. This is precisely the change we proposed in our target article.

Although we showed the implausibility of claims that cognitive differences between liberals and conservatives are sufficient to explain the massive ideological lopsidedness of the field, some commentators have endorsed such claims. For example, **Beit-Hallahmi** argues that conservatives are religious and conformist, and that religiosity and conformity are the antithesis of science. This exaggerated view of conservatism ignores the multi-dimensionality of political orientation (and it is consistent with research findings that partisans often exaggerate opponents' positions; see Jussim et al. [in press a] for a review). We reviewed evidence (Kemmelmeier 2008) in our target article that cognitive ability is negatively related to social conservatism (akin to the religiosity that Beit-Hallahmi mentions) but *positively* to economic conservatism. Beit-Hallahmi argues that the fact that liberal academics have risen to the top is evidence of their intellectual superiority. We would invite Beit-Hallahmi to consider the following turnabout test – would this argument be accepted as valid if it pertained to female or African American scientists' positions in STEM (i.e., science, technology, engineering, and mathematics) fields?

Relatedly, there seem to be several misconceptions surrounding just *who* we suggest join the ranks of social psychology. We acknowledge, as several commentators noted (**Kessler, Proch, Hechler, & Nägler** [**Kessler et al.**]; **Wright**), that we did not clearly *define* political diversity in our target article. First, we reiterate, we are not calling for Nazis, KKK members, terrorists, anti-Semites, racists, Creationists, or other political-religious extremists (as variously questioned or insinuated by, e.g., **Beit-Hallahmi**; **Pfister & Böhm**; **Ross**; **Seibt et al.**). In fact, we are not even necessarily calling for *conservatives* – instead, we clearly state throughout our target article (e.g., recommendations in section 6) that we are calling for *non-liberals*, which could certainly include conservatives, but also moderates, libertarians, apolitical people, and so forth. We agree with **Funder** that "reasonable conservatives" (implicit in Ross's mention of moderate, fiscal conservatives[3]) would be quite welcome, but we cringe at the idea that a left-leaning field should get to judge what counts as "reasonable" conservatism. (We would also want to know whether applicants to graduate programs who are on the left would be limited to "reasonable liberals," or whether applicants on the far left would still be admitted.) Further, Funder's call for "reasonable" conservatives implies that typical conservatives are unreasonable.

R3.2. Calling for increased political diversity is premature and not data-driven

Pfister & Böhm and **Gelman & Gross** are skeptical of the applicability to social psychology of the findings reviewed in our target article that increased diversity improves decision-making (Crano 2012; Mannix & Neale 2005). Gelman & Gross acknowledge the leftward tilt of the field, but want more evidence that diversity improves science before calling for more diversity. (It is tempting to replace political diversity with gender diversity and see if the authors would feel the same way about the need for more research.) These authors suggest that we cannot apply the results from small-scale organizational diversity to large-scale diversity (such as in the field of social psychology). Yet the goal of much social science experimentation is to design small-scale studies to understand and generalize to larger populations. For example, should we not seek to apply lab-based evidence that anthropomorphizing environmental protection causes increases environmentalism (Ahn et al. 2014) to inform large-scale environmental protection campaigns? Should we not seek to apply lab-based evidence that superordinate goals improve intergroup relations (Gaertner et al. 1989) to large-scale settings?

R3.3. Increasing political diversity will cause unanticipated problems

Several commentators raised concerns about epistemic costs that could *result* from political diversity. **Ditto, Wojcik, Chen, Grady, & Ringel** (**Ditto et al.**) offer

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several concerns, from a splintering of the field into ideological camps (also expressed by **Kessler et al.**) and the creation of new ideologically homogeneous journals, to a transformation from a field that produces more left-leaning conclusions to one that is muddled in moderation and an "equivalency bias." Relatedly, several commentators (**Pinker**; **Pfister & Böhm**; **Seibt et al.**; **Wright**) express concern with a "cancelling out" approach by which conservatives were recruited to "cancel out" the biases of liberal social psychologists (especially if such practices led to quotas for conservative psychologists; Pinker).

Some clarification of our point is necessary here. We are not calling for a field in which there are equal numbers of right-wing extremists to "cancel out" the left-wing extremists – and we regret the use of this "cancel out" phrase in our target article (sect. 4.1, para. 4), which likely led to confusion. We would simply prefer a field in which there are enough non-liberals to provide checks and balances on the types of motivated reasoning that undercut the quality of theories, methods, statistical decision-making, and interpretation. Our desired end-state is not a field in which ideological battles rage, but rather one that is intellectually honest, tolerant, and dynamic. We find little fault with **van der Vossen**'s vision of a depoliticized scientific field (although we disagree that political agnosticism among the members of our field is required[4]), or with **Pinker**'s vision of a field of politically disinterested inquiry (see also **Tybur & Navarette**; **Winegard, Winegard, & Geary** [**Winegard et al.**]). Indeed, **Baumeister** speaks from his own personal experience of trying to personally disengage from politics, and how it has made him more open to data, whatever its political implications.

Complete value neutrality may be an impossible ideal, yet it may still be worth quixotically striving for, because the price of abandoning the quest is our slippery-slope degeneration into an anything-goes, advocacy-driven pseudo-science, with a methodological façade of rigor (Tetlock 1994). Political diversity is important not to provide equal time or to cancel out one side; it is important to ensure that politically popular notions presented as science are subjected to sufficient skeptical scrutiny to maximize the chance of "accepted science" actually being valid.

R3.4. Other forms of diversity are as (or more) important than political diversity

Motyl & Iyer did not challenge the importance of political diversity, but they did argue for the importance of other types of diversity, such as methodological or religious. We agree, but point out that more diverse religious perspectives would likely produce more diverse political perspectives, given the relationship between religiosity and political orientation, at least among the politically engaged (Malka et al. 2012). We acknowledge the validity of **Seibt et al.**'s argument that there are many sources of political diversity, besides conservatism, which are lacking from social psychology. To reiterate our target article's argument, we are interested in increasing the number of *non-liberal* voices in social psychology, including centrists, libertarians (classic liberals), the politically apathetic, or those whose political views do not easily fall out on a left/right spectrum.

Along with **Ross** and **Seibt et al.**, **Binning & Sears** argue that gender and ethnic diversity are more important than political diversity (though they provide no justification for this claim). **Pfister & Böhm** and **Pinker** extend this argument by suggesting that political orientation should not be a protected type of diversity such as gender or ethnicity, because political orientation is not immutable. Comparative discrimination, beliefs about what attributes merit protection, and judgments of importance of various types of biases are all beyond the scope of our article or so subjective that we see no scientific/empirical way to address them. We leave readers to reach their own conclusions about these issues, hopefully informed by our article's points without being constrained by them.

Further, we were surprised by **Pfister & Böhm**'s argument that the improvement of deliberation and outcomes is *not* a function or purpose of diversity efforts. Rather, they declare that the *real* purpose of diversity is justice and equality. However, **Redding** highlights that many legal arguments in favor of efforts to increase demographic diversity rely on the fact that such diversity provides differences of perspectives. We think the following thought experiment makes our point: Imagine that the last female Supreme Court justice is about to retire. Should the President go to great lengths to find a woman to nominate? If so, is it only for the sake of justice and equality, or do we also believe that diversity of perspectives and life experiences will improve the functioning of a deliberative body?

In sum, we agree that many forms of diversity are important, but we repeat that the epistemic benefits of diversity come more from viewpoint diversity than from demographic diversity (Menz 2012; Williams & O'Reilly 1998). We have norms in our field that strongly encourage demographic diversity; yet, as we pointed out in our target article (and as **Binning & Sears** acknowledge), there are norms in our field that *discourage* political diversity, one of the most important forms of viewpoint diversity.

R3.5. Political diversity is not necessary for protecting the field from political bias

Several commentators recognize that political homogeneity can create biased assumptions and research, but question (or are at least agnostic about) whether increased diversity is the solution. For example, **Brandt & Proulx** provide several additional questionable interpretive practices (QIPs), which they cleverly rename "QTIPS" (for "questionable theoretical and interpretive practices") that can harm theory construction and testing. **Washburn, Morgan, & Skitka** (**Washburn et al.**) suggest adversarial collaboration and additionally provide a helpful checklist that researchers can use to self-monitor against committing QIPs.

Binning & Sears argue that interdisciplinary collaboration can increase diversity of thought and improve social psychological science. **Kessler et al.** go one step further by arguing that such collaboration can increase the breadth and scope of social psychological theory. This is a point echoed by **Tybur & Navarette**, who suggest that evolutionary psychology, a discipline which has been tarred as "conservative" (see **Seibt et al.**) despite the left-wing personal beliefs of many of its practitioners, can be a model for social psychology. Specifically, they argue that a social psychology with a preponderance of theories (versus an overarching one, like natural selection) allows scholars to cherry-pick the theory most amenable to their values and expectations.

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Along similar lines, **Kessler et al.** suggest encouraging ecological theory testing and exemplify this strategy with their own research demonstrating that when elicitors of disgust among liberals (e.g., environmental pollution) are included in study materials, the typical relationship between conservatism and disgust sensitivity can be reversed. **Pinker** likewise encourages scholars to focus on grander theory rather than "interesting" effects. **Washburn et al.** suggest that social psychologists take advantage of their preponderance of theories by designing studies to provide compelling and fair tests of competing hypotheses. **Shweder** argues that the ideals of Merton's epistemic community should be sufficient to address the problems we raised, and he fears that any sort of ideological screening of scholars (including mild forms of affirmative action such as greater outreach) might backfire and damage the intellectual climate of the field.

We agree with these commentators when they argue that political bias is *not* inevitable, and social psychologists may be capable of policing themselves and one another to avoid the biased blind spots and embedded assumptions we highlighted in our target article. Indeed, we noted many examples in our target article of ideologically balanced research that did not necessarily involve non-liberal social psychologists. Even if our article does not end up leading to any increase in the political diversity of the field, an increased awareness of these issues (and scholars' attempts to mitigate them) should help improve the science. At the same time, it is important to recognize the limits of people's abilities to recognize their own biases (e.g., Pronin et al. 2002).

That social psychologists *can* limit their political biases falls far short of *ensuring that all will*. As long as the field is so politically homogeneous, and as long as all of its members are not capable of preventing such biases, the field will have a tendency to produce findings that support left-wing values and narratives. Thus, we still think that increasing the number of non-liberals in social psychology will improve theory and research. But we also recognize that this is just one way to protect our science from political bias, and we thank the many commentators for their efforts to highlight the challenges in implementing our recommendation.

R4. Claim 4: Some portion of political homogeneity is due to a hostile climate and outright discrimination against non-liberals

Our target article noted that some portion of the political homogeneity in social psychology is due to self-selection on the basis of personality and personal interest, and several commentators have agreed (e.g., **Eagly**; **Gelman & Gross**; **Hibbing et al.**). But we also presented several sources of evidence that there is a hostile climate for non-liberals – particularly conservatives – and that direct discrimination against non-liberals happens at several points in the career pipeline and publication process. Although most commentators did not explicitly address this claim, the majority of those who did agreed with it (e.g., **Ainslie**; **Inbar & Lammers**; **Nisbett**).

Only two commentators have disputed the claim, and they do so indirectly, not by denying hostility and discrimination, but by declaring the *disproportion* entirely a result of self-selection. **Eagly** simply declares that the disproportion derives from self-selection without citing any support of this testable claim. In contrast, **Hibbing et al.** have presented a thoughtful elaboration of the social and psychological bases for expecting self-selection to play a major role. This is a valuable contribution in its own right. We note, however, that their analysis constitutes an excellent theoretical basis for *predicting* self-selection to play a major role. They present no evidence that directly identified self-selection is the major driver, and they have not grappled with the considerable evidence our target article reviewed documenting pervasive bias against conservative ideas and challenges to liberal narratives. Indeed, even Hibbing et al. acknowledge that, "given the topics investigated in the modern social sciences, this [reducing the disproportion] is unlikely even if the climate became more welcoming" – implying that even they recognize the climate as unwelcoming.

Overall, therefore, there is clear consensus among our diverse set of commentators that hostile environment and outright discrimination exist, and constitute significant obstacles to the creation of a more politically balanced field. We see this as an extraordinary step forward.

R5. Some possible ways forward

Some commentators recognize the epistemic costs to the field that result from political homogeneity, but express skepticism about whether we could actually achieve diversity (**Baumeister**; **Washburn et al.**; **Winegard et al.**), especially given the ubiquity of liberalism throughout academia (**McCauley**). These commentaries have given us a more sober view of the challenge of increasing political diversity within social psychology.

Wright has raised important points about exactly how diversity initiatives would be implemented. There are a number of fairly easy things researchers can do, if they choose (see final recommendations section R5.2 below).

Everett notes the difficulty of "coming out" as a conservative, and how public acknowledgment of one's political views places undue onus on the minority (non-liberal) relative to the majority (liberal) members of the field (see also Jussim 2012a). We echo his call for those in the liberal majority to recognize their privileged position, and to express the sort of tolerance of difference suggested by **Inbar & Lammers** and in our target article.

Several commentators have raised important points regarding who in our field determines whether and how we achieve political diversity (e.g., **Pfister & Böhm**). First, we should clarify that we never called for quotas. We asked social psychologists, individually and collectively, to monitor their own biases and take proactive steps to encourage political diversity. We did not recommend the type of totalitarian enterprise that Pfister & Böhm hyperbolically invoke (a form of governance that demands the same homogeneity and uniformity that concern us in social psychology today). And we do not wish to see **van der Vossen**'s envisioned field of strictly apolitical social psychologists. But passions must be kept moderate and inquiries guided by good faith attempts to remain value neutral and to test hypotheses, interpret data, and reach conclusions in ways relatively free of political bias.

Another key clarification is that we do not call for the demographics in the field to match those of the population – self-selection is a partial explanation for political homogeneity in the field, and we are not advocates

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(as perhaps implied by **Inbar & Lammers**) of requiring the field to reflect population demographics.

R5.1. A proposal for checking political biases in discussions of political bias

R5.1.1. The accumulation of political bias. Imagine that scholars who suspect that our target article is correct offered the following argument for their position:

Proposition 1. Several lines of research (reviewed earlier) predict intergroup discrimination when majority groups see minority groups as holding different views on ego-involving topics – and preventing the group from achieving its objectives. True effect sizes could average 10% bias or higher.

Proposition 2. But let's posit that the true effect size is as low as 1%. Even then, ideological bias could still be a huge problem because the effects compound through the frequent interactions that the few conservative social psychologists might have with liberal ones. These might involve many subtle forms of hostility (e.g., aloof hallway conversations), or more consequential ones (e.g., sneering comments behind closed doors; biased evaluations of grant proposals).

To threaten the epistemic integrity of social psychology, it is not necessary that such biases *always occur*, only that they occur often enough to tilt the playing field. **Eagly**, for example, points to *exceptions* to our claim of political bias as *refutations* of our argument, as evidence that political bias *does not exist*. But just as the election of Barack Obama to the U.S. Presidency does not demonstrate the end of racism, we did not argue that bias was *inevitable in every situation, only that it inevitably accumulates across situations*.

Thus, the hypothetical scholar who agrees with us might argue that even if each effect were small, there are so many ways in which bias can creep in every day. A 1% bias effect could easily balloon into a 20% or 40% or 80% difference between liberal and non-liberal researchers on the long-term, professional-outcome dependent variables that count in science (e.g., grants, publications, impact).

Proposition 3. These cumulative biases will inevitably contaminate the scientific knowledge base of the discipline. The "inevitably" flows from mixing assumptions of the following sort. Suppose that the null hypothesis for a popular liberal position – say, on unconscious bias or stereotype threat – represents the true causal state of affairs, so there is only a 5% chance of getting a significant effect in any given test. Even ideas with zero merit should be able to gain traction in fields in which (a) liberal proponents outnumber conservative skeptics by, say, 5:1 or 10:1; (b) liberals are 5 or 10 times likelier to want to run studies on the topic; (c) proponents are adept at using creative methods to pump up the probability of finding significant results well beyond 5% to 30% or 60% (see Simmons et al. [2011] on p-hacking); and (d) the file-drawer problem is at work – and proponents are roughly 3 times or 5 times likelier to submit significant effects for publication than non-significant effects, and journals are 3 or 5 times likelier to accept significant than non-significant effects.

Working from these assumptions, the pro-Duarte et al. scholar plots functions that show how fast a nonexistent phenomenon can spread in a scientific literature – and announces Q.E.D.

R5.1.2. The denial of political bias. Now let's imagine the reaction of a scholar who suspects that our target article exaggerates the problem. She could argue that the foregoing cumulative-bias analysis is a thinly veiled tautology, an elaborate compound interest equation dressed up as a psychological argument. The simulation of cumulative bias (1) does not, by itself, provide a shred of evidence that such biases actually accumulate; and (2) fails to build in the influence of *any* countervailing variables, such as the commitment of serious professionals to norms of scientific fair play and the ability of professionals to suppress bias.

Our reaction to this dissection of the simulation is: "Bravo! You have moved the scientific conversation forward by hypothesizing key moderator variables that determine when political biases are likely to be most and least problematic."

Although no one has, to our knowledge, ever advanced the cumulative-political bias simulation just sketched, cumulative-bias simulations are common in debates at the interface of social psychology and the study of larger social systems. In fact, the *Journal of Personality and Social Psychology* has just published an analysis that is logically equivalent to the first two propositions of the political-bias analysis given above, but the focus is on white Americans' biases toward African Americans (Greenwald et al. 2015). These authors argue that even if the behavioral effect sizes for unconscious racial bias were as small as some skeptics insist (Oswald et al. 2013), the cumulative effects across cross-racial encounters could be as oppressive as those laid out in the cumulative-political-bias example. Cumulative-racial-bias arguments of this sort have also been advanced by other investigators as well as by social science experts in employment-discrimination class-action litigation (see Tetlock & Mitchell 2009).

Neither reviewers nor the editor for the top journal in the field saw a need to qualify the Greenwald et al. (in press) simulation by noting either the absence of supporting data or of the exclusion of countervailing variables from the model. We respectfully submit the following to our colleagues who, like **Eagly**, claim that science trumps politics and that political bias is not a problem: To pass the logical-consistency check and avoid falling prey to double standards, you cannot both accept the racial-bias simulation and reject the political-bias simulation. Assuming ceteris paribus, you must either (1) reject *both* simulations, or (2) accept both. This turnabout thought experiment strikes us as a litmus test of scientific even-handedness.

Of course, a politically motivated observer will challenge ceteris paribus and argue that it is unreasonable to posit that all things are equal with respect to the two cumulative-bias models. A liberal could argue that "everyone knows racial bias is far more tenacious than political bias." A conservative might counter, "In some places, yes, but have you listened to social psychologists at cocktail parties?" Daniel Kahneman's (2012) adversarial-collaboration model tells us what needs to be done to escape a solipsistic stalemate. Each side should step back and acknowledge the other side's strongest points; itemize where they diverge; specify, ex ante, the types of evidence that would induce them to move toward the other side's position; and agree on a process for collecting that evidence. If adversarial collaborations of this sort arise from the current exchange, we would count that as a triumph of science over politics.

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R5.2. Final (revised and augmented) recommendations

So, what do we recommend for researchers interested in engaging in good faith attempts to protect themselves and their field from political biases? We summarize our original recommendations and now add the most constructive ones based on the commentaries:

1. Acknowledge the problem and raise awareness about it.
2. Seek feedback from non-liberals.
3. Expand organizational diversity statements to include politics.
4. Add a statement to your own academic website acknowledging that you encourage collaboration among people of diverse political views.
5. Eliminate pejorative terms referring to non-liberals; criticize others' scholarship when they use those terms. As an editor or reviewer, do not permit such terms to pass without comment.
6. Avoid "leakage" of political hostilities or presumptions (including jokes) when functioning in any teaching or research capacity, but especially around students and junior colleagues.
7. Encourage young scholars who are not liberals to pursue careers in social psychology.
8. Be alert to double standards. Use turnabout tests to reveal bias.
9. Support adversarial collaborations that encourage competing ideological camps to explore the boundary conditions on each other's claims, in joint data collection and model building efforts.
10. Assign in classes, especially for graduate students, the growing scholarship taking social psychology and related disciplines to task for having a *scientific* problem stemming from political bias (Brandt et al. 2014; Crawford 2012; Eagly 1995; 2011; Inbar & Lammers 2012; Jussim 2012a; 2012b; Jussim et al., in press a; Redding 2001; Tetlock 1994). Teach eliminating such biases as a core component of methods, validity, and scientific integrity.
11. Use **Washburn et al.**'s checklist in one's own work, especially in politicized areas.
12. Use Popperian falsification. If you are a liberal social psychologist, to guard against potential bias, seek to falsify rather than confirm your preferred prediction.

R6. Conclusion

In his commentary, **Funder** suggests that the reactions to our target article will demonstrate just how difficult it will be to change the landscape of political diversity and to remove embedded values from the field. Although Funder makes many excellent points in his commentary, this is one on which we have to disagree. The majority of the commentaries reflect agreement with the arguments for increased political diversity that we laid out in our target article. Where there was disagreement, most of it was constructive. We do not believe increasing political diversity in social psychology will be easy; however, we are encouraged by this set of commentaries.

We also hope that these issues will be discussed in other social sciences, and in humanities departments as well. We are optimistic that academics in many disciplines will share our appreciation of the power of viewpoint diversity to improve the quality of thought. We hope that our arguments and solutions will be considered by those who practice not just social psychology, but the social sciences and humanities broadly, and who train future generations of scholars and citizens for life in a vibrant democracy.

NOTES

1. All authors contributed substantially to this Response and are listed in alphabetical order.

2. Gelman & Gross wonder why we don't call for more diversity within the military. The main reason is that we are social psychologists, not members of the armed forces. A second reason is that cohesion is extremely important in military units, which are organized for effective action. This is not the case in any science, where truth seeking is more important than cohesion.

3. Interestingly, despite **Ross**'s claim, there is evidence that liberals (especially those who consider themselves economically liberal) are actually willing to discriminate against more economically conservative individuals (Crawford et al., in preparation a).

4. We find it ironic that a libertarian scholar would advocate for restrictions of people's ability to join professions of their choice.

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[The letters "a" and "r" before author's initials stand for target article and response references, respectively]

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