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DO IDEOLOGICALLY DRIVEN SCIENTIFIC AGENDAS IMPEDE THE UNDERSTANDING AND ACCEPTANCE OF EVOLUTIONARY PRINCIPLES IN SOCIAL PSYCHOLOGY?

William von Hippel and David M. Buss

This is an exciting time to be a social psychologist. Our journals are full of fascinating findings that attract the attention of our colleagues and the media. The breadth and eclectic nature of our discipline—along with the centrality of social and personality psychology to human experience—have made our theories and findings foundational to many other social sciences. Unfortunately, that breadth and eclecticism come at a cost, as social research is more aptly described as a thousand points of light than as a coherent beam illuminating the empirical landscape. Although our field contains hundreds of fascinating findings and an abundance of mini-theories, it lacks a cogent meta-theoretical framework that unifies its diverse elements.

This lack of coherence makes it difficult to organize the field in ways that are clear for our students and compelling for policymakers and fellow scientists. It can also obscure the relevance and applicability of new ideas from one area to another. But these costs need not be borne by our discipline. A widely accepted meta-theory with the potential to inform many of the important aspects of human existence was first proposed over 150 years ago, when Darwin included humans within the purview of evolutionary theory. This chapter considers a possible reason this meta-theory has yet to play a major organizing role in our discipline, why its adherents often toil on the periphery of social/personality psychology rather than at its center, and why some members of our discipline might prefer it that way.

An evolutionary approach might or might not be emphasized in the study of a particular social psychological problem for many reasons, depending on which aspects of which problems are being studied. But no matter the problem, it is always relevant to consider *why* people behave as they do—that is, to consider function. Indeed, social psychology has many theories that address the *why* question, and they are typically along the lines of "people do *X* to increase their selfesteem, happiness, sense of control or justice, relationship satisfaction, and so on."

Nevertheless, most of these theories provide only partial explanations, because they do not consider why people want to increase their self-esteem, happiness, sense of control or justice, relationship satisfaction, and so on. From an evolutionary perspective, the proper function of psychological processes cannot be these internal end-states. If people want to enhance their self-esteem, then enhanced self-esteem is likely to have aided them in solving one or more adaptive problems, such as increased effectiveness at negotiating hierarchies, attracting mates, or ensuring the success of one's coalition. Evolution has crafted specific motivations in people because those motivations historically led their bearers to experience greater reproductive success, so it is worth considering what outcomes psychological states such as self-esteem, happiness, and a sense of control evolved to support. In this sense, an evolutionary perspective does not take anything away from existing social psychological theories but rather adds an important level of explanation to them. An evolutionary perspective also provides guidance and constraints on our theorizing and integrates it with the rest of the life sciences.

This proliferation of seemingly unrelated partial explanations in social psychology leads us to the central question of this chapter: Why do social psychologists spend their careers studying problems that are central to survival and reproduction (e.g., close relationships, inter-group relations, persuasion) but without availing themselves of the theoretical advantage that can be gained by considering the only known theory of *why* that exists in the life sciences? We propose that at least *part* of the answer to this question lies in the left-leaning political ideology of most social psychologists. We spend the remainder of this chapter outlining how and why ideologically driven scientific goals might play a role in limiting the understanding and acceptance of evolutionary principles in social psychology.

Important caveat. If what you have read so far is already raising your ire or blood pressure (as it did for a few of our reviewers), please keep in mind that we are not arguing that ideology is the only thing preventing all social psychologists from becoming evolutionary psychologists. People adopt a particular theoretical orientation for many reasons, ² and the goal of this chapter is to explore one of them. If this chapter convinces you that ideology explains some of the variance in some people's conceptual misunderstandings and negative attitudes toward evolutionary psychology, then our goal in writing it will have been achieved.

A Survey of 335 Well-Established Social Psychologists

The arguments articulated in this chapter are based primarily on data collected from members of the Society of Experimental Social Psychology (SESP) in an IRB-approved survey conducted in July of 2015. These results are supplemented

by several decades of our observations and inferences from interactions with fellow social psychologists. Membership in SESP is limited to people who are five years post-PhD and are judged to have made a significant contribution to social psychology. There are slightly more than 1,000 SESP members, most of whom are North American. We surveyed 901 of these members, avoiding people known to have significant administrative duties, known to be retired and no longer actively involved in social psychology, and known to emphasize an evolutionary perspective in their own work. We received 335 responses to our survey, for a response rate of 37.2%. Of these respondents, 33.4% were female (which is representative of the gender distribution of the society itself), the average age was 51.5 years, and the average time since completing the PhD was 22.8 years. The complete survey and the raw data are available at https://osf.io/ebvtq/.

The first question we consider is how do members of SESP view evolutionary psychology? To address this question, we included three key items in the survey. First, participants were asked to respond on a scale from 0% to 100% how likely it is that Darwin's ideas of evolution are true and that plants, animals, and humans all evolved through similar causal processes across hundreds of millions of years. The mean response to this item was 87.6% (modal response was 100%), suggesting overwhelming endorsement of evolutionary theory as applied to life on Earth. Next, participants indicated how likely it is that most of Darwin's ideas about evolution are true BUT that humans were an exception and were not a product of evolution. The mean response to this item was 6.9% (modal response 0%). These findings indicate that almost all members of SESP believe evolutionary theory applies to humans, and very few believe that humans are an exception to evolutionary principles.

The critical issue for this chapter is the degree to which this endorsement of evolutionary theory manifests in a belief in the evolution of the social mind. To examine this question, we asked participants to indicate how likely it is that Darwin's ideas of evolution apply to the human mind and that many of our social attitudes and preferences evolved across millions of years. In contrast to the highly skewed responses to the prior two questions, responses to this item were almost equal across the entire scale range, and the mean response was 54.8% (with a mode of 50%).

There are at least two ways to interpret this 33% gap between the mean levels of endorsement of evolutionary biology and evolutionary social psychology (or the 50% gap between the modes). First, it is possible that SESP members are skeptical that slow-moving evolutionary processes could play an important role in the context of incredibly fast-moving cultural and technological changes. Consistent with such a possibility, an eminent member of SESP wrote the following email along with his/her response to the survey: "Frankly I'm pretty skeptical of evolutionary psychology. From my point of view, cultural evolution

proceeds at a much faster pace than biological evolution, and that's where we should focus our explanatory efforts." We disagree with this intellectual position for two reasons. First, cultural evolution is based on a foundation of evolved psychological mechanisms from which it cannot be fully divorced (Tooby & Cosmides, 1992). Second, models of gene-culture co-evolution are essential to understanding some phenomena (more on this later), and we see no reason to deprive social psychology of this powerful theoretical tool. Nevertheless, it is reasonable to focus one's efforts on factors that are expected to have the greatest explanatory power, and thus a focus on cultural factors is both scientifically defensible and ideologically neutral.

It is also possible, however, that ideological factors play an important role in this 33–50% gap and that motivational biases prevent social psychologists from learning about and exploiting evolutionary psychology in their own work. Most of the arguments in the remainder of this chapter examine this ideological/motivational possibility. As our first piece of evidence, we consider the remainder of the email from this same eminent member of SESP. After expressing skepticism about the importance of evolutionary psychology, he/she asked us to consider this (slightly abbreviated) list that he/she shares with his/her students.

It does not take much reading between the lines to infer from these questions that there may be more to this psychologist's rejection of evolutionary psychology than concerns about the pace of biological evolution. Addressing all the apparent misunderstandings of the field would require more space than is available in this chapter, but we would be remiss if we did not briefly point out some of the confusions that seem evident in this list of questions (for longer expositions about these and related confusions, we refer readers to Confer et al., 2010, and to Lewis, Al-Shawaf, Conroy-Beam, Asao & Buss, in press).³

TABLE 2.1 Questions to Ask Your Local Evolutionary Psychologist

Do you eat meat? If so, do you eat it raw? If not, why not?

Does your wife have a 5:7 waist-to-hip ratio? Are her breasts symmetrical? If not, why are you still with her?

Has she reached menopause? If yes, why haven't you divorced her?

Do you practice any form of birth control? If so, why?

Other than your wife, how many attractive young women are you currently having sex with?

If you have divorced and remarried, have you killed your new wife's children from her earlier marriage—or at least kicked them out of the house with no financial support? If not, why not?

Do you ever have sex when your partner isn't ovulating? If yes, why?

Do you engage in any form of sexual activity other than vaginal intercourse? If yes, why?

Question 1 implies a lack of awareness that substantial human evolution took place after we learned to control fire. Indeed, our large brain-to-gut ratio is enabled by the fact that we cook our food and thus extract more nutrients than would be available if we ate it raw—an excellent example of gene-culture co-evolution (Wrangham, 2009). Question 2 confuses evolved preferences with the degree to which those preferences can be translated into actual mating decisions; as Mick Jagger famously noted, "you can't always get what you want." Moreover, this question implies that one aspect of physical appearance should trump all others—a position contrary to evolutionary psychological theories of mating (e.g., Buss, 2015; Schmitt, 2015).

Questions 3, 4, 7, and 8 imply that humans evolved to want to have children or to maximize their reproductive success—positions explicitly repudiated by evolutionary psychologists (e.g., Confer et al., 2010; Tooby & Cosmides, 1990). Rather, humans evolved sexual drives and sexual attraction to partners displaying reliable cues to fertility. In combination, these desires have led to reproduction, with no need for a desire for children (which would obviously be irrelevant in our ancestral species that did not understand the link between sex and reproduction). In other words, humans likely evolved to want sex rather than to want children and then to feel nurturant to those children who came along as a consequence.

Question 5 implies a common confusion between evolved goals and their expression in overt behavior. Men can be attracted to a variety of women but choose not to act on those attractions for a host of reasons: love and commitment to their partner, lack of ability to attract these women, concerns about a loss of status within their social group, and so on. A great deal of evolutionary psychology is concerned with when and how people subvert one set of goals (e.g., desire for sexual variety) to another set of goals (e.g., long-term relationship maintenance) or values (e.g., beliefs in the immorality of infidelity).

Question 6 implies similar confusion between competing goals. Although men tend to invest less in stepchildren than they do in their biological children (Anderson, Kaplan, & Lancaster, 1999), and being a stepchild does pose an increased risk of being killed by one's stepparents (Daly & Wilson, 1988), many men invest in stepchildren, partially as an effort to attract and retain their mother as a romantic partner. For good reason, a man's willingness to invest in a woman's children enhances his attractiveness to her.

Question 7 implies two confusions. First, it mistakenly assumes that the evolved function of sex in humans is solely fertilization, thereby ignoring the role of sexual behavior in promoting long-term pair bonding. Second, it ignores the evolutionary literature on why women evolved concealed ovulation, with one plausible function being to promote sexual interest across the fertility cycle and thereby promote long-term bonding and close companionship (e.g., Strassman, 1981; Thornhill & Gangestad, 2008).

Lastly, these questions raise an interesting irony when juxtaposed with comments from several reviewers regarding the issue of falsifiability. These questions all imply that the observations they contain falsify certain evolutionary psychological hypotheses. For example, Question 2 implies that men who partner with women without a low waist-to-hip ratio falsify the hypothesis that men have evolved an attraction to this well-documented fertility cue. Question 5 implies that men who are not having sex with numerous young attractive women falsify the hypothesis that men have evolved a desire for sexual partner variety. The irony is that some critics imply that certain evolutionary hypotheses have been falsified while simultaneously claiming that they are unfalsifiable. We refer interested readers to more extensive discussions of specific evolutionary hypotheses that have been falsified (e.g., the kin investment hypothesis about male homosexuality) and why this frequently repeated yet clearly erroneous claim lacks scientific warrant (e.g., Confer et al., 2010; Lewis et al., in press).

It is true that this email is only an anecdote, and it is also possible that the individual asking these questions is well aware of the misunderstandings that are implied but feels that they are worthwhile discussion points. Thus, these questions may not reflect the level of understanding of evolutionary psychology that is broadly held by social psychologists. Unfortunately, our experience suggests otherwise. Our guess (and our experience at talks and faculty meetings) is that many members of SESP would find these questions and their implied answers to be damning to the evolutionary enterprise, or at least to prominent evolutionary psychological hypotheses. If so, it seems that many social psychologists have fundamental misconceptions about the basic tenets and theories of evolutionary psychology and consequently reject a view of evolutionary psychology that evolutionary psychologists have explicitly and repeatedly rejected (e.g., Confer et al., 2010).

The interesting question is why would experienced and highly influential social psychologists harbor so many fundamental misconceptions about the theories and findings of evolutionary psychology? We believe that ideological discomfort with the evolutionary enterprise deters many scholars from engaging with it seriously and thereby prevents them from learning a body of theories and empirical research that is much more informative (and much less inflammatory) than they might think.

Why Are Social Psychologists Uncomfortable with Evolutionary Psychology?

Many scholars have argued that social psychologists are on the political left (Haidt, 2011; Inbar & Lammers, 2012; Redding, 2001), and our survey of SESP members corroborates this claim. When asked whom they had voted for (or would have voted for) in the 2012 U.S. presidential election, 305 of our respondents chose Barack Obama (the candidate on the political left), and only 4

chose Mitt Romney (the candidate on the political right). The sample was also skewed with regard to opinions about issues such as abortion and gun control; the mean response was within two points of the liberal end of an 11-point scale and only five individuals (less than 2% of our sample) scored on the conservative side of the scale midpoint.4

Such skewed responses make it difficult to correlate SESP members' political positions with their attitudes toward evolutionary issues, but the logic is not difficult to follow. First, as can be seen in the example provided in Table 2.1, social psychologists often perceive evolutionary psychology through the lens of genetic determinism, believing that if people have an evolved tendency to do X, then they have little choice but to do X or are likely to do X regardless of context. If genes did have such a powerful and environmentally independent influence on human behavior, then any social problem that emerged from evolved predispositions would indeed be intractable. An evolved tendency for people to be violent (Archer, 2004) would mean that violence is inevitable, and an evolved tendency for men to prefer sexual variety (Symons, 1979) would mean that monogamy is impossible. This misperception about genetics and psychological adaptations might account for part of the reason that members of SESP showed bimodal distributions in their perceptions of the likelihood that humans have a genetic tendency to be violent (M = 58%, modes at 20/30% and 60%) and that men evolved to have more difficulty than women being sexually faithful (M = 49%, modes at 10 and 50%). A substantial proportion of SESP members might be rejecting these possibilities on ideological grounds.

The theoretical framework of evolutionary psychology reveals why such inferences are mistaken. First, evolved psychological adaptations are contextdependent, designed to produce contingent responses to specialized classes of environmental problems. Second, in most cases, humans have multiple strategies for solving the same adaptive problem. For example, if the adaptive challenge is obtaining a scarce resource, taking it by force may be one option, but engaging in cooperative exchange is another. Third, environmental factors can eliminate or greatly reduce the likelihood of specific strategies by ramping up their costs. Indeed, that is precisely what has happened over the past few centuries with violence, which has steadily declined in much of the world (Pinker, 2011). Fourth, humans also evolved the capacity for self-control (e.g., to delay gratification, to prioritize goals, to subvert one goal in the service of other goals) and thus can choose not to aggress or be sexually unfaithful even if they are tempted to do so. The key point is that the inference that violence and infidelity are inevitable if they evolved is simply erroneous; nor is that inevitability implied by modern evolutionary psychological hypotheses.

The second source of discomfort with evolutionary psychology appears to emerge from the bias that what is natural is good. This has been dubbed the naturalistic fallacy, or the "is-ought" fallacy: If something evolved in nature, it ought to exist. For example, if men have evolved to prefer sexual variety

(Buss & Schmitt, 1993; Schmitt, 2005; Symons, 1979), then philandering by men is at least excusable. Nature is full of undesirable stuff, however, at least according to most human value systems. Diseases are natural, but we deem them undesirable and spend billions trying to eradicate them. Similarly, violence is natural—indeed violent competition for mates or resources is common across the animal kingdom—but we have developed a professional police force and criminal justice systems to reduce the expression of this proclivity in humans. Humans have also evolved context-dependent adaptations to refrain from aggression when resource acquisition and social conflicts can be resolved with less risky strategies, when an opponent is more physically formidable, when reputational costs are too high, and so on (see Buss, 2005; Pinker, 2011).

As Pinker notes,

Many intellectuals have averted their gaze from the evolutionary logic of violence, fearing that acknowledging it is tantamount to accepting it or even approving of it. Instead, they have pursued the comforting delusion of the Noble Savage, in which violence is an arbitrary product of learning ... But denying the logic of violence makes it easy to forget how readily violence can flare up, and ignoring the parts of the mind that ignite violence makes it easy to overlook the parts that can extinguish it. With violence, as with so many other concerns, human nature is the problem, but human nature is also the solution.

(Pinker, 2003, p. 336).

Thus, rather than viewing what is natural as good, it would behoove social psychologists to remember that what is natural is often distinctly unpleasant, and the advantage of human society is that we can choose to inhibit or promote the expression of psychological tendencies in manifest behavior regardless of whether those tendencies have been selected by evolutionary processes.

Opposition to Politically Inconvenient Discoveries: I. Evolved Gender Differences

Gender equality emerged as a strong political movement in the 1960s and 1970s. A critical concern was that women were discriminated against in the workplace (as indeed they were and often still are). Against this backdrop, some psychologists decided that it was essential to view men and women as psychologically monomorphic, possessing identical abilities, dispositions, interests, and proclivities. According to this view, evolved gender differences might be used to justify unequal treatment of women and gender discrimination. As an example, consider a recent commentary in *Psychological Science*, in which Harris, Chabot, and Mickes (2014) failed to replicate some of the menstrual cycle effects on women's political preferences found by Durante, Rae, and Griskevicius

(2013). Concern about the potential misuse of Durante et al.'s results appears evident in Harris et al.'s commentary, titled, Women can keep the vote: No evidence that hormonal changes during the menstrual cycle impact political and social religious beliefs. Regardless of the scientific merits of the original empirical study, the conflation of a scientific issue (are there menstrual cycle effects on political beliefs?) with a political issue (gender equality in political participation) is troubling. This is not a lone example, as similar concerns can be seen in Rudman and Fetterolf's (2015) Psychological Science commentary, titled, Why sexual economics theory is patriarchal, 6 and no doubt a broader search would reveal many others.

We believe that such political concerns have often led to the rejection of evidence for evolved psychological sex differences. Although it is obvious that scientific knowledge can be misused, we argue that this particular concern is misplaced for several key reasons. First, achieving gender equality is a legitimate and worthy moral goal regardless of what the scientific evidence reveals about evolved gender differences. As Pinker (2003) notes,

equality is not the empirical claim that all groups of humans are interchangeable; it is the moral principle that individuals should not be judged or constrained by the average properties of their group ... If we recognize this principle, no one has to spin myths about the indistinguishability of the sexes to justify equality. Nor should anyone invoke sex differences to justify discriminatory policies (p. 340).

Second, evolved gender differences are expected only in domains in which men and women have faced recurrently different adaptive problems over the long course of human history (Buss, 1995a, b). In domains in which they have faced similar adaptive problems—which are in fact most domains—the genders are predicted to be psychologically similar. Nevertheless, some evidence exists for different intellectual profiles between the genders, with women typically showing better verbal abilities than men and men typically showing better spatial rotation abilities (translating into better quantitative skills) than women. There are numerous explanations for these gender differences, and it is unknown whether (and if so, to what degree) genetic or other biological factors underlie these effects (Halpern, 2012).

To examine SESP members' opinions regarding the sources of these differences, we included two questions in our survey. In the first, we asked members to indicate how likely they thought it was that women's brains had evolved in a manner that led women to be more verbally talented than men. In the second question, we asked members to indicate how likely they thought it was that men's brains had evolved in a manner that led men to be more mathematically talented than women. The mean response to the first item was 40.3%, and the mean response to the second item was 30.2% (a significant difference). Of course, it is possible that the female verbal advantage is more likely to have evolved than the male

spatial/mathematical advantage, but it is also possible that left-leaning desires to support women who have faced so much discrimination across our history are playing a role in these perceptions. As one of our respondents wrote, "I found it curious how contradictory I was in responding! For instance, when science ostensibly reveals that the majority group has certain advantages, I say it's 'bad,' but when the minority group has certain advantages, I say it's 'good!'" We hope that our findings contribute more generally to the self-insight reflected in this comment, as the field becomes more reflective about the unintended biases we all carry.

Opposition to Politically Inconvenient Discoveries: II. Some People Have More Desirable Traits than Others

Liberal political ideology strongly stresses human equality. According to modern democratic principles, all people should be treated equally regardless of ethnicity, gender, sexual orientation or identity, age, amount of body fat, and so on. Political movements toward equality have made great progress and have expanded most people's moral circles to include groups that had previously been perceived as legitimate targets of discrimination. Partly because of this political ideology, many psychologists are uneasy about theories and empirical findings that suggest that humans have evolved to value some people more than others.

A prime example centers on evolutionary theories of attractiveness. Beauty, according to many in the social sciences, is entirely in the eyes of the beholder. According to this view, standards of attractiveness are arbitrary and culturally variable, and beauty itself is only skin-deep. You can't judge a book by its cover, the cliché goes, and the content of our character is more important than surface appearances. As a consequence of these beliefs, the hypothesis that humans have evolved standards of attractiveness, which some people embody more fully than others, has been met with a great deal of uneasiness by social psychologists. This uneasiness is reflected in the response of SESP members to our survey question that asked how likely it is that there are universal standards of attractiveness for facial features and body shape, such that there are ideal appearances for men and women. SESP members thought this possibility was 51% likely, and consistent with many other items, that average was in the context of a bimodal distribution, with the two modes at 10% and 70/80%.

This uneasiness on the part of some social psychologists (which we believe is reflected in SESP members' bimodal responses) is exacerbated by three key factors. First, beauty is undemocratically distributed; some people have more of it than others due to luck of the draw. Second, beauty appears to be something over which people have limited capacity for improvement, although the multi-billion dollar beauty products, cosmetic surgery, and fitness industries are strong testaments that people try to improve their attractiveness. Third, people endowed with beauty get better treatment; they are more popular, are preferentially hired in many jobs, earn higher incomes, and obtain a variety of

social benefits (although there are also drawbacks, such as being perceived as snobbish and sexually unfaithful; Singh, 2004).

The uneasiness of many social scientists with taking attractiveness seriously resulted in it being virtually ignored for most of the history of social psychology (with the exception of a few pioneers, such as Berscheid & Walster, 1974). Evolutionary psychologists have extended this early work and in so doing have marshaled three sets of (admittedly disquieting) findings. First, physical attractiveness is a quality that is more valued in women than in men in the context of mate selection (Buss, 1989). Second, beauty is anchored not in arbitrary social customs but rather in biologically important qualities such as health and fertility (e.g., Buss, 1987; Symons, 1979; Williams, 1975). This line of research has also discovered cues to beauty that were previously unknown to the scientific community, such as waist-to-hip ratio (Singh, 1993), facial symmetry (Gangestad & Thornhill, 1998), thickness of the limbal ring (the outer edge of the iris, which lightens and thins with age; Peshek, Semmaknejad, Hoffman, & Foley, 2011), and lumbar curvature (Lewis, Russell, Al-Shawaf & Buss, in press). Third, the value people place on beauty manifests in more than just mating decisions. Physically attractive people are also more desired as friends, coalition partners, and even kin (Sugiyama, 2005). So beauty is not only unfair, but the unfairness also extends to our most important social relationships.

We confess that these findings are disturbing, and we can offer only two observations. First, and perhaps most obviously, denying the problem does not change the underlying reality. In his memoir Ugly (2013), Robert Hoge (the self-described "ugliest person you've never met") decries the widespread tendencies to pretend that beauty doesn't matter and that ugly ducklings inevitably transform into beautiful swans. Hoge argues that we will only make progress in dealing with the undemocratic distribution of attractiveness by first acknowledging it and then moving on to note that attractiveness is not the only human quality that is important and that it need not be self-defining. Hoge's advice could have been written by a clinical psychologist, who would suggest that it is important not to deny unpleasant aspects of reality but not to catastrophize or ruminate on them either. Second, the more we understand the causes and effects of attractiveness, the better placed we are to deal with them. Our role as social psychologists is not to search for social phenomena as we would like them to be but rather to document social phenomena that exist in the world so that we might better prepare people to address them.

Opposition Based on Religious Grounds

Consistent with SESP members' left-leaning politics, concerns about God, religion, and the meaning of life that appear to prevent many people from adopting an evolutionary approach to understanding humanity were not very important to most members of SESP. When asked how often they pray, 63% of the membership reported that they never pray. Similarly, members of SESP thought it 66% likely that life has no intrinsic meaning or purpose (with the modal response to this item being 90/100% likely) and 73% likely that there is no God or higher power, soul, or continuing existence after death (with the modal response being 90% likely).

How Do the above Concerns Coalesce into SESP Members' Attitudes toward Evolutionary Psychology?

In this chapter, we have proposed a variety of reasons left-leaning social psychologists (i.e., nearly all of us) might be ideologically predisposed to dislike and avoid contact with evolutionary psychology. At this point, it is not possible to disentangle these various sources of antipathy and discomfort, but we can look to our survey of SESP members to provide a tentative answer to which issues play a particularly important role. Recall that SESP members were nearly unanimous in their endorsement of evolutionary theory (judging it as 88% likely to be true, with a mode of 100% likely) but very much on the fence when it comes to evolutionary social psychology (judging it to be 55% likely to be true, with a mode of 50% likely). To gain an initial sense of factors that might play a role in this 33% gap in mean rates of endorsement and 50% gap in the modes, we regressed beliefs in evolutionary social psychology on beliefs in evolutionary theory. We then saved the residuals from this analysis (i.e., the tendency to believe or disbelieve evolutionary social psychology controlling for the underlying tendency to believe in evolutionary theory) and tried to predict these residuals with responses to the various questions discussed above.

The first issue we examined was whether perceptions of evolutionary psychology are tied up in racial/ethnic concerns, perhaps because of some of the ways that evolutionary theory has been misused/misunderstood in the past (e.g., Social Darwinism). To address this issue, we asked SESP members how likely they thought it was that members of some ethnic groups were genetically more intelligent (Mean = 26.4%, Mode = 10% likely) or athletic (Mean = 45.1%, Modes = 20 and 50% likely) than members of other ethnic groups. Responses to this item did not predict the residual tendency to endorse evolutionary social psychology, suggesting that SESP members are not rejecting evolutionary social psychology because of their concerns regarding research on ethnicity and race.

In contrast, a simultaneous regression revealed independent variance in the residual tendency to endorse evolutionary social psychology was predicted by SESP members' beliefs that well-known gender differences might have a genetic cause($\beta = 0.120$, p = 0.033; bivariate r = 0.295, p < 0.001), that sex hormones might have an important influence on attitudes and behavior ($\beta = 0.207$, p < 0.001; bivariate r = 0.380, p < 0.001), that humans might have a genetic tendency to be violent ($\beta = 0.126$, p = 0.024; bivariate r = 0.308, p < 0.001), and

that there might be universal standards of attractiveness ($\beta = 0.208$, p = 0.001; bivariate r = 0.398, p < 0.001). Thus, it seems that members of SESP who do not accept a role for genetics and hormones in sex differences, who do not accept the possibility that the dark side of human nature might have evolved, and who do not accept that there are universal standards of attractiveness that some people meet better than others are also unlikely to embrace evolutionary psychology, despite believing in evolutionary theory.

These findings bring us back to the question with which we began this chapter: What role does ideology play in the acceptance of these possibilities and the more general acceptance of evolutionary explanations for social behavior? We largely abandoned analysis of the political ideology items once we noted the extreme skew in the political attitudes of SESP members, but these findings clearly raise the question of whether ideology might be involved. To test this possibility, we correlated SESP members' averaged responses to these four items with their self-reported liberalism to conservatism and found a small positive relationship (r = 0.20, p < 0.001). This relationship seems to emerge from the fact that people across the political spectrum are equally likely to perceive these possibilities as highly probable, but only people on the far left are likely to believe that there is virtually no chance that these possibilities are true (see Figure 2.1).

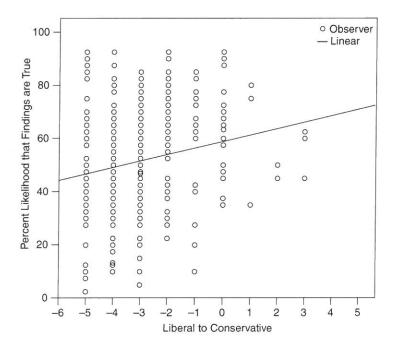


FIGURE 2.1 Relationship Between Self-Reported Political Orientation and Perceived Likelihood that Four Critical Evolutionary Findings Might Be True.

A common assumption often stated among our colleagues is that evolutionary psychologists are more conservative than their nonevolutionary counterparts. The findings in Figure 2.1 suggest that such an ideological difference is neither necessary nor likely. The most liberal respondents in the SESP survey were also the most divided on whether these four key findings are likely to be true, with many of these highly liberal respondents indicating that these possibilities are nearly 100% likely. This finding is consistent with the results of surveys of PhD students in evolutionary psychology (Tybur, Miller, & Gangestad, 2007) and evolutionary anthropology (Lyle & Smith, 2012), which reveal that evolutionary students are just as politically liberal as their fellow PhD students in other areas of psychology and anthropology.

Conclusions

It is neither a novel insight nor a secret that ideology, politics, and religious beliefs sometimes influence science. Darwin's theory of natural selection has been vigorously opposed for religious and ideological reasons. This opposition to evolutionary theory continues in modern times primarily among people on the religious right, as most people on the left accept it as scientifically valid. In this chapter, we have proposed that the ideologically driven goals of our left-leaning colleagues might play an important role in limiting the understanding and acceptance of evolutionary principles in social psychology. We are by no means claiming that ideology is the sole, or even necessarily the primary, factor that prevents social psychology from availing itself of the conceptual tools of the most powerful explanatory framework in the life sciences. Other key causes include lack of educational exposure to the fundamental principles of evolutionary biology in psychology graduate curricula and (ironically) evolved cognitive mechanisms such as essentialism and teleology that interfere with people's understanding of the logic of evolutionary processes (Legare, Lane, & Evans, 2013).

Moreover, there are healthy scientific disagreements about the precise ways in which evolutionary theory can best be used to understand human social conduct. One involves disputes about the relative domain-specificity versus generality of social psychological adaptations (Confer et al., 2010). Another involves differing models of the links between evolved psychological adaptations and cultural evolution (e.g., see chapters in the 2016 Handbook of Evolutionary Psychology, especially the contrasting positions of Pinker and Henrich on cultural group selection). Clearly, many sources of healthy scientific disagreement exist about evolutionary psychology and the precise ways it should be applied to humans. Nonetheless, we hope that we have persuaded readers that ideology has played at least some role in limiting its integration in social psychology.

Substantial social psychological research shows that many people would rather not learn about bad news that cannot be fixed (e.g., Dawson, Savitsky, &

Dunning, 2006; Lerman, Croyle, Tercyak, & Hamann, 2002), but this understandable tendency should not stand in the way of our scientific enterprise. Evolutionary psychology clearly has given us some bad news, but it has given us a lot of good news, too. People have evolved tendencies to be selfish, suspicious, hostile, and prejudiced but also to be friendly, cooperative, and altruistic. The public image of evolutionary psychology is that it tends to focus on the dark side of human nature, and it is true that sexual treachery, violence, and warfare are central topics of study. It seems less widely known among social psychologists that empathy, cooperation, altruism, friendship, love, and morality are also the focus of a great deal of evolutionary psychological theorizing and research (e.g., Bloom, 2012; Buss, 2006; de Waal, 2008; Tooby & Cosmides, 1996). And just as important, evolutionary psychology has shown us many times that people have an evolved capacity to override their evolved tendencies, to activate some and deactivate others, and thereby to behave in a manner of their own choosing. Just as we can create low-friction physical environments to prevent activation of our callus-producing adaptations, we can create low-friction social environments to prevent activation of our adaptations for discrimination and violence. Furthermore, societies can create social structures that overpower or suppress some of our evolved mechanisms and in so doing create more peaceful and just communities (Nowak, Gelfand, Borkowski, Cohen, & Hernandez, 2016). Indeed, by examining the contexts that activate, deactivate, and override evolved tendencies, evolutionary psychology gives greater leverage to social psychologists who use their scientific research to pursue social justice goals.

In closing, we see two reasons to be optimistic about a fuller, more integrative, evolutionary social psychology. One is that mainstream social psychology and evolutionary psychology agree fundamentally about the power of the situation. Social psychologists have a deep and rich history of showing the power of the situation in classic studies such as Milgram's experiments on obedience to authority and Latane's studies of the effects of group size on social loafing. Evolutionary psychology, despite the stereotype of it being a genetic determinist framework, comports well with this emphasis on the power of the situation. Examples include the effects of income inequality on homicide rates (Daly & Wilson, 1988) and the effects of attractive women on testosterone production and male risk-taking (Ronay & von Hippel, 2010). Social psychological adaptations evolved precisely to respond to situationspecific social challenges. Thus, the context-dependent adaptations at the core of evolutionary psychology and social psychology's emphasis on the power of the situation are intrinsically compatible.

The second encouraging note is that many of the most powerful evolutionary theories focus on important domains of social behavior. These include kin selection theory (Hamilton, 1964), the theory of reciprocal altruism (Trivers, 1971), sexual selection theory (Darwin, 1871), sexual conflict theory (Parker, 1979), as well as a host of more specialized evolutionary theories designed to account for coalitional psychology, opposite-sex friendships, mating strategies, cognitive biases, status hierarchies, costly social signaling, social learning, cultural evolution, and many others (see the 51 chapters in the 2016 *Handbook of Evolutionary Psychology*). Social psychology and evolutionary psychology, in short, are natural scientific allies. Both stand to benefit from a fuller scientific integration.

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Notes

1 For example, see section titled "Happiness, confidence, optimism, and guilt are interpersonal" in von Hippel & Trivers (2011, p. 42).

2 A psychologist might be skeptical of an evolutionary approach for other reasons than ideology. To quote one of our commentators, the criticism "I hear most often is the 'it's not falsifiable' issue, which usually takes the form of, 'If a man is sleeping with lots of women, that's because he evolved to be attracted to many mates to enhance chances of reproduction; but if he is monogamous with one women forever, that's also because he evolved to be faithful to continue to have access to that one woman." The problem with this criticism is that it skips levels of analysis. If research revealed that men are no more interested in sexual variety than women, that would disconfirm an evolutionary hypothesis. But such a finding would not disconfirm evolutionary psychology any more than finding that a particular situation doesn't matter would disconfirm social psychology. Evolutionary hypotheses are just as falsifiable as any others, are just as likely to be moderated by contextual factors, and are just as likely not to apply to a particular individual.

3 We would also be remiss if we didn't acknowledge that we had many similar misconceptions when we first engaged with the literature in evolutionary psychology and biology. The pitfall is that evolutionary logic seems seductively simple, but the predictions that arise from it are often anything but simple, leading many people to think that they understand it when they do not.

4 For a more thorough discussion of these data, see Jonathan Haidt's blog at http://heterodoxacademy.org/2016/01/07/new-study-finds-conservative-social-psychologists/.

5 Alternatively, perhaps this title was meant to be tongue-in-cheek, and the authors were noting that hormonal effects on voting—reliable or not—are immaterial to voting rights

6 For further discussion of this issue, see Baumeister & Vohs (2004) and Vohs & Baumeister (2015).

7 Perhaps this is why members of SESP believe that it is only 33% likely that well-known gender differences in nurturance and aggression might have a stronger basis

- in genetics than in socialization or cultural factors (or perhaps not; at this point, we have no clear answer to this question).
- 8 Of course, the same holds for intelligence, as a great deal of evidence points to its high heritability. Nevertheless, in intellectual domains it is readily apparent that accomplishments are achieved through hard work, whereas it is easy to forget how much effort models and movie stars exert to maintain their perfect physiques.
- When we residualize their answers to these questions by first removing the variance accounted for by beliefs in Darwinian evolution, the unexplained residual variance in these four critical items also correlates with self-reported liberalism to conservatism (r = 0.23, p < 0.001). It is important to note, however, that these relationships do not emerge with the index of political issues.

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