

Evolutionary Psychology, Human Universals, and the Standard Social Science Model.

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Abstract:

Proponents of evolutionary psychology take the existence of human universals to constitute decisive evidence in favor of their view. If the same social norms are found in culture after culture, we have good reason to believe that they are innate, they argue. In this paper I propose an alternative explanation for the existence of human universals, which does not depend on them being the product of inbuilt psychological adaptations. Following the work of Brian Skyrms, I suggest that if a particular convention possesses even a very small advantage over competitors, whatever the reason for that advantage, we should expect it to become the norm almost everywhere. Tiny advantages are translated into very large basins of attraction, in the language of game theory. If this is so, universal norms are not evidence for innate psychological adaptations at all. Having shown that the existence of universals is consistent with the so-called Standard Social Science Model, I turn to a consideration of the evidence, to show that this style of explanation is preferable to the evolutionary explanation, at least with regard to patterns of gender inequality.

Keywords:

Evolutionary Psychology, Social Norms, Human Universals, Standard Social Science Model, Game Theory.

For many of its adherents, evolutionary psychology (EP) holds out the promise of bringing the study of humanity within the ambit of science. It will, they claim, do for psychology, and related disciplines, what the scientific revolution did for astronomy and mechanics: take it out of the hands of people essentially driven by considerations

extraneous to the disciplines (whether religious or ideological) and set it on the sure path of science.

Central to its claims of superiority over what it calls the Standard Social Science Model (SSSM) is its alleged superior ability to explain the existence of human universals. Indeed, the very existence of such universals ought to be a source of profound embarrassment to proponents of the SSSM, evolutionary psychologists claim, since if its hypotheses were true, there would be few or no such universals. The SSSM, at least as it is portrayed by EP, holds that the mind is a *tabula rasa*, a blank slate (or in a more up-to-date manifestation, a general purpose learning machine). On this view, though we might have innate learning strategies, little else is built in. Accordingly, the content of our social practices and customs, our ways of life and manners of relating to one another, are learned. They are social norms, handed down from one generation to the next, and owe their existence to the ancestral choices, witting or not, of the group. If this were so, evolutionary psychologists claim, we ought to expect human behaviors to vary radically from place to place, and across time. But we don't. Instead, we find that there are very many human universals. Accordingly, the SSSM stands condemned, and we must look elsewhere for the explanation of human behavior and social norms.

The preferred explanation, of course, is that these human universals are part of our genetic inheritance from our paleolithic ancestors, the result of adaptive behavior laid down in our modular brains. How else to explain the fact that human sexual behavior follows the same gendered patterns across all, or almost all, known human cultures; that everywhere people prefer their kin to non-kin, and so on, for all the human universals identified by anthropologists? If culture played an important role in explaining patterns of human behavior, the presence of these universals would be extremely surprising, requiring that culture after culture made the same ancestral choices, choices which have been sustained across thousands of years, while so much else changed around them.

Thus, the existence of robust human universals is taken by proponents of EP to be decisive evidence in its favor. Witness, for instance, Steven Pinker evoking the (alleged) universality of gender differences in psychology in corroboration of EP:

Things are not looking good for the theory that boys and girls are born identical except for their genitalia, with all other differences coming from the way society treats them. If that were true, it would be an amazing coincidence that in every society the coin flip that assigns each sex to one set of roles would land the same way (or that one fateful flip at the dawn of the species should have been maintained without interruption across all the upheavals of the past hundred thousand years). (Pinker 2002: 350).

Couple the mere existence of these universals to plausible hypotheses as to how they might be adaptive, at least in our ancestral environment, and the evolutionary explanation looks inescapable. Add to this the evidence that comes from repeated attempts to eliminate cultural universals in particular groups (Pinker 2002: 257; 346), and the evidence is overwhelming. Our behaviors, no less than our bodily characteristics, are laid down in the human genome.

In this paper, I want to focus on this argument from human universals. Is it really the case that their existence constitutes decisive – or even persuasive – evidence in favor of EP, as Pinker and other advocates believe? Or are there alternative explanations available for such universals, explanations which grant a much larger role to culture and learning – and therefore a smaller role to innateness – and which are more in the spirit of the SSSM than of EP? In the first part of this paper, I shall defend the claim that such explanations are indeed available, and that the existence of cultural universals, or near-universals, is therefore compatible with the falsity of EP. But the fact that rival explanations of the data are possible will not suffice to show that such explanations are preferable. In the second part of the paper, I shall therefore turn to a consideration of the historical and sociological evidence, in order to assess which mode of explanation better explains the data. Human universals are fully compatible with both kinds of explanation, but the SSSM does better in explaining the observed variations, I shall claim.

SSSM and the Existence of Universals

The conception of the SSSM against which EP directs much of its critical energy is a straw man. Certainly, no-one – not even Skinner and his followers – has ever believed in the blank slate of Pinker’s title. Even behaviorists believe that the human mind has in-built learning mechanisms and preferences, in the absence of which schedules of reinforcement would be useless. All sides in the nature-nurture debate (at least all minimally rational sides) are interactionists. Everyone agrees that human behavior is the product of a genome (and other developmental resources) *and* the environmental conditions which, at minimum, control how that genome is expressed. Nevertheless, we cannot simply conclude that the debate between EP and the SSSM is entirely the product of the over-heated imaginations of certain writers. There is a real debate to be had here.

The debate between the SSSM and EP concerns, not whether behavior is the product of genes *or* the environment, but the relative importance of each. The best way to make sense of this debate is in terms of the norms of reaction which describe the behaviors (Kitcher 1985: 25). Those who we regard as being on the side of nature hold that the norm is relatively flat *across the range of environments which are practically accessible*. Though (except for the least sophisticated of them) they do not deny that it is possible to alter the traits in question, they hold that is difficult to alter them in ways that are desirable. Moreover, to the extent to which we can alter traits in desirable directions, they hold that we can do so only by altering the environment in highly *undesirable* ways: for instance, only by indoctrinating people, or massively restricting their freedom (Pinker, 169-170). Those on the ‘nurture’ side of the equation, in contrast do not (or should not) deny that biology is an important influence upon behavior. Instead, they hold that this influence is powerfully mediated by culture, so that we can, at least in principle, alter it in ways of our choosing.

There is, therefore, a debate to be had between proponents of EP and of (something rather like) the SSSM. Moreover, it is a debate with political implications, for all that those on the nature side obsessively invoke the supposed naturalistic fallacy to insulate their claims from the world of morality and politics. On it turns our ability to reshape our

social world in ways which would make it less unjust. This debate is sharpest in the area of gender relations, upon which I shall concentrate here. Many of the most controversial claims of evolutionary psychologists, from Buss to Pinker and Baron-Cohen, concern sex differences and preferences. Male control of resources is the product of evolved preferences (Buss); male dominance of the sciences is the product of their superior systemizing abilities (Baron-Cohen). These are not inequalities to be lamented, but the inevitable consequences of differences that are innate ('biological', as Baron-Cohen would have it; see Connellan 2000). Since the cost of altering them would be prohibitive, we must learn to live with them. Contrast this with the claims of feminists in the SSSM mould, such as Susan Moller Okin: 'the social construct of gender' gives rise 'to the multiple inequalities between the sexes that exist in our society' (Okin, 134). The contrast could not be clearer. There is a debate here, and one which matters, for all that both sides tend to mischaracterize it.

Feminists in the SSSM tradition like Okin must therefore confront the objection that the existence of cultural universals makes their claim that inequalities are the product of social construction highly implausible. The fact that certain norms are cross-culturally ubiquitous might be taken to show that they are in fact innate, coded in the human genome in such a manner that they will be expressed in almost any environment. How should proponents of the SSSM respond? They might simply deny the existence of robust universals. This is surely implausible: some important behaviors and practices just do seem to be universal. Indeed, proponents of the SSM *themselves* routinely invoke such universals. For instance, feminists opponents of EP often invoke the (near) universal existence of patriarchy to explain the kinds of data collected by evolutionary psychologists like David Buss (1994) and Geoffrey Miller (2000), who focus on sexual behavior. These feminists grant that the gendered responses and patterns of behavior these researchers discover are real enough, but argue that patriarchy and its norms explains this data, not the modular brain. In so doing, they seem merely to push the problem back a level: perhaps patriarchy, and not evolved preferences, explains the universality of gender inequality, but what explains the universality of patriarchy? It seems, then that if the SSSM is to meet the challenge posed by EP, it must advance its own explanation for the existence of universals.

On what grounds, then, should the SSSM make its stand against EP? Though it ought to admit that there are evolved human universals, and that human nature constrains culture, many of the universals that EP claims as evidence for its hypotheses the SSSM must hold are significantly the product of culture. These universals, SSSM claims, are *conventions*. Therein lies the nub of the problem for the SSSM. If they are indeed conventions, it is very surprising that they universal. At least, so our best theories of conventions appear to suggest.

On the influential view advanced by David Lewis (1969), conventions are solutions to coordination problems. Two (or more) people have a coordination problem when they interact regularly in circumstances in which the best action for each take depends upon the action of the other. The solution they hit upon will be a convention just in case two conditions are satisfied: (a) unilateral defection from the convention would irrational,

other things being equal, and (b) the solution is arbitrary, in the sense that there is at least one other option which would have solved the problem just as well. If there is one solution which works much better than the others, than we ought to expect it to be selected, and that solution is therefore, by definition, not merely conventional. If different groups of human beings are faced with the same coordination problem at different times, we ought to expect them to hit upon each available solution in equal proportions. If, instead, they repeatedly come up with the same solution, it seems that the solution was not arbitrary, and therefore it is not a convention.

Now, social norms seem to be largely sets of conventions. Thus, we ought to expect them to vary from society to society. But, as Pinker points out, gender roles do not vary greatly from society to society:

All cultures divide their labor by sex, with more responsibility for childrearing by women and more control of the public and political realms by men [...] In all cultures, men are more aggressive, more prone to stealing, more prone to lethal violence (including war), and more likely to woo, seduce, and trade favors for sex (Pinker: 346).

Indeed, we could easily add to this list of universal, or near-universal, gender differences. But if these differences are near-universal, must we not admit that they are not merely conventional? If male dominance was conventional, then we ought to expect to find it no more widely distributed than female dominance, or equality of the sexes. Since it is near-universal, it cannot be merely conventional.

I believe that we ought to concede that this is the case. Patriarchy is not *merely* conventional. But we do not need to concede that it is not *importantly* conventional. The tools developed by John Maynard Smith, the evolutionary biologist who, more than anyone else, is responsible for introducing game theory into evolutionary biology, will allow us to see how patriarchy might become universal, despite the fact that it is neither innate in the human mind, nor a better solution to the coordination problems faced by our ancestors than others available (such as equality or female dominance).

Asymmetries and Selection

For many sets of interactions, Maynard Smith noticed, there is no evolutionarily stable strategy (ESS). In these situations, selection would instead be frequency dependent, with the success of each strategy a function of how numerous it is relative to others available. For instance, in the hawk/dove game, where hawks always escalate conflicts and doves always stop short of physical confrontation, the payoff to each falls as the number of players utilizing it rises. But, as Maynard Smith saw, if there is an appropriate asymmetry between the players, an ESS will evolve. One possible asymmetry is first possession – ownership – of the contested resource. To illustrate how this might happen, Maynard Smith introduces a third strategy, ‘bourgeois’, to the hawk/dove game. The bourgeois strategy is a conditional strategy: someone who plays ‘bourgeois’ plays ‘hawk’ if they are the ‘owner’ of the resources, and dove if they are the interloper. Under the right conditions, a population of organisms playing bourgeois (bourgeoisie?) will do better playing against each other than hawks or doves do against them. Thus, it is an ESS. In

other words, a population in which confrontations between competing animals is purely ritualistic, in which conflicts typically end before either combatant is seriously hurt, can evolve entirely by individual natural selection. If each organism plays the bourgeois strategy, then the interloper will typically back down after a short display, leaving the resource in the possession of the owner (Maynard Smith 1982).

Since the recognition of such asymmetries is stable, we ought to expect this to occur regularly in evolution. Once such strategies become available, they soon go to fixation. Thus, in species in which disputes over the possession of resources are common, we can expect some kind of tie-breaking asymmetry to come to be recognized. And this seems to be the case: 'bourgeois' is a commonly recognized tie-breaker in such disputes. As Maynard Smith points out, the asymmetry which settles these disputes could be purely conventional (1988: 212). There is good reason, however, to think that ownership is not a *purely* conventional asymmetry, since if it were we ought to expect the opposite tie-breaking strategy – 'paradoxical' – to be just as common as 'bourgeois'. Organisms play 'paradoxical' just in case owners relinquish resources to interlopers, as a means of settling conflicts. It is easy to see why 'bourgeois' has the advantage over 'paradoxical', since a resource will tend to be more valuable to owners than to intruders. Owners will already have gone to the trouble of exploring their territory, and this might give them the advantage when it comes to defending it. 'Paradoxical' has been observed, in a species of spider, but it is rare (Skyrms 1996: 78).

But if both 'bourgeois' and 'paradoxical' are ESSs, then why is 'bourgeois' so much more common a tie-breaking strategy? It is easy to see why 'bourgeois' is the more common, but difficult to explain the extent to which this is the case. Since defending a known territory gives the owner a relatively small advantage over the interloper, we would expect 'bourgeois' to be only slightly more common than 'paradoxical'. What explains the enormous disparity in the frequency with which each is observed? Skyrms argues that the solution lies in what he calls broken symmetries (67-8). He asks us to think of a vertical plank, which is supporting an ever-increasing load. As the pressure upon the plank increases, we would expect it to buckle, either to the left or to the right. But if the plank is perfectly symmetrical and perfectly vertical, then there would be no reason for it to buckle to one side, rather than the other. Nevertheless, it does eventually buckle one way or the other: no plank is perfectly symmetrical, though we may not be able to detect the imperfections which make it asymmetrical. As the pressure increases, the asymmetries in the plank will be sufficient to ensure that it buckles upon side rather than the other. A tiny imperfection will be sufficient to produce the effect.

In the same way, Skyrms argues, a very small advantage accruing to a resource holder will be sufficient to ensure that 'bourgeois' has a decisive advantage over 'paradoxical' (78-9). The 'basin of attraction' is very much larger for the former than for the latter, even if the initial advantage which breaks the symmetry is very small. Hence, almost all organisms which have a norm for settling conflicts over resources by reference to possession play 'bourgeois', and 'paradoxical' is almost unknown.

Broken Symmetries and Social Norms

This finding has important lessons for anyone who wishes to understand how and why social norms and conventions arise among human beings. A very small symmetry-breaking ingredient among players who face a coordination problem can be expected to have a decisive effect upon the convention which arises. Now, coordination problems are pervasive in human life. For instance, relations between the sexes, who need each other for reproduction, can be conceptualized as a set of coordination problems. Responsibility, for child-rearing and other tasks, has to be allocated. There are, obviously, many solutions to these labor allocation tasks. But if there are natural symmetry breaking features differentiating the sexes, we ought to expect one set of solutions to these problems to be far more common than others. Are there such symmetry-breaking features? Of course there are, and in the environment of evolutionary adaptation they were far from insignificant. The costs of bearing children and breast-feeding them fall upon women only. Moreover, there are differences in the strength of men and women, which were likely important in the environment of evolutionary adaptation. These symmetry-breaking features are so conspicuous, and so significant, that it is likely that the basin of attraction for a single set of social norms was very large indeed. We do not need to postulate strong – or even weak – *psychological* differences between men and women to explain the near-universality of traditional roles; the solution is already before us, in merely *physiological* differences. Similarly, other universal norms, such as the norms which underlie child-parent relationships and which explain the pattern of child-abuse observed by Daly and Wilson (1988) might be the product of nothing more profound than the fact that children must be breast-fed by women who have recently given birth (though it is also worth noting that a very modest innate tendency to bond with one's children could easily itself be a factor in significantly enlarging the basin of attraction of a norm – thus weak psychological factors could help explain strong social norms).

All this is just to say that we do not need EP to explain social norms. The division of labor which we see in all hunter-gatherer societies, with women staying near the camp-site while men roam, is exactly what we would expect given the different roles men and women play in child-rearing. The exclusion of women from political power and from public forums is very likely the consequence of nothing deeper than the fact that males are able to impose their will upon women, given their relative strength. 'Femininity', the norms and behaviors expected of women, may be no more than the cultural elaboration of these fundamental divisions. For all that EP has shown, social norms might be conventions, and the fact that the same conventions are near universal may simply be the result of symmetry breaking factors which slightly favor one solution over others, thereby greatly increasing its basin of attraction.

Evidence for the SSSM

Nothing said up to this point demonstrates that the EP explanation for the near-universal patterns of human social life is false. I have met their challenge, in that I have shown that the existence of these norms can be explained by the SSSM, but I have given little reason

to think that one explanation is preferable to the other. If we are to settle the debate, we need to do more than just show that the SSSM is compatible with the evidence, but that it explains it better. We need a means of testing the rival hypotheses against the evidence.

It is easy enough to conceive of empirical tests, but much harder to design a study that is both practical and ethical. It seems that the only kind of evidence available here is historical, anthropological and sociological, concerning the extent to which human preferences (for instance) actually change in response to alterations in the social environment. If EP is correct, we should find that our preferences remain stable across different environments. Of course, given that interactionism is true we should expect to find that human preferences are not entirely fixed. If many of the disputed behaviors are adaptations, as EP claims, then they are probably facultative. Thus, we do not refute EP simply by finding exceptions to its predictions. Instead, we need to ask whether it or the SSSM does a better job in explaining the patterns of departures from the standard preferences we actually find.

EP claims that our preferences are adaptations. More particularly, it claims that these preferences are proximate mechanisms which move us to pursue goods which boost our inclusive genetic fitness. We cannot object to the claim that these preferences are facultative. But it would be odd, to say the least, if they were never dysfunctional. The supposed objects of our preferences (the beauty of women, the wealth of men, and so on) are tokens which are *normally* correlated with genetic fitness, but if the link between fitness and these tokens are broken, in manners which were rarely or never encountered in the environment of evolutionary adaptation, we ought to expect the preferences to persist. Facultative adaptations can only be adaptations to conditions encountered frequently enough for solutions to the problems they present to have been selected for. Thus novel conditions ought to produce dysfunctional preferences and behaviors. Indeed, EP makes just this claim in explaining many of the ways in which we, living lives in conditions very different from the environment of evolutionary adaptations, engage in harmful behaviors. We overconsume sugar and fat because we have evolved preferences for high-energy foods, and we have these preferences because in the EEA they were adaptive. They are adaptive no longer (for us), but the preferences remain.

But when we turn to deviations from the predicted preferences in human sexuality, the distinction between proximate and ultimate explanations is forgotten. The men of Yomybato tribe, in the Peruvian jungle, prefer women with the highest possible waist-to-hip ratio, in defiance of the prediction that they would prefer a waist-to-hip ratio of 0.7 like most other men. What is the explanation for this preference? Alcock suggests that it is adaptive. In the harsh ancestral environment in which they lived, obesity was all but impossible. Hence,

a male preference for the largest available women would in the past have encouraged males to have sexual liaisons with women with relatively large fat reserves and relatively high fertility *in the ancestral Yomybato environment* (Alcock: 143).

This may be so, but it fails to explain why males have evolved this preference. Given that the preference is a proximate mechanism, we should expect it to remain robust. Unless the Yomybato have been isolated for a long time, their preferences should have remained

unaltered, dysfunctional or not. Unless, of course, their preferences are not the in-built mechanisms for ensuring genetic success, which operate behind their backs in the manner EP alleges. If the preference is instead a social norm, which owes its existence to the manner in which it promotes the survival of the group or the genetic fitness of individuals within it, then the speed with which it has altered is explicable.

Similar points can be made about many of the other claims of EP. Consider Buss's explanation of the preference of some women for younger men, contrary to his prediction. He claims that this only occurs when the women have plentiful resources of their own, or in situations in which the correlation between the age of men and their control of resources fails to hold (29). But we should expect the preference of women for older men, which functions as a proximate mechanism to boost their inclusive fitness, to be more robust than this, not to alter whenever it no longer tracks the goods which enhance fitness. We have no reason to postulate a facultative adaptation here – not unless there is evidence that these kinds of situations occurred regularly enough in the past for the appropriate response to them to have come to be inscribed in the genome.

EP has difficulty explaining these preference alterations. But the SSSM has no such problem. If our preferences are significantly the product of social norms, then though we ought to expect some degree of robustness in them, we can also expect them to be capable of shifting relatively rapidly. If circumstances change, such that a preference no longer tracks goods important to survival, cultural norms can shift quickly. Think of the explosive growth in couples living together in recent history, and in births outside marriage. Once a preference loses its rationale, it may quickly be abandoned.

Evolutionary psychologists are well aware of the rival explanations of gender inequalities, and have amassed data which, they claim, shows such explanations to be invalid. According to what we shall call the patriarchy view, women's preferences are the product of two factors: internalized social norms, and the rational responses of women to the prevailing social conditions (Okin 1989). If these social conditions change, then so will women's considered responses, and ultimately the social norms will follow. But, EP claims, the data do not support these predictions. Buss, for instance, takes two pieces of evidence to be especially important here. First is the fact, according to one study at least, that successful professional American women value high social status and wealth even *more* than do less successful women (46). Second is the historical data, once again from the United States, concerning the relative importance of attractiveness in a partner, for males and females. In these tests, subjects were asked to rate the importance of attractiveness in a marriage partner on a scale from 0.0 to 3.0. In 1939, men gave attractiveness an average rating of 1.50 on this scale, while women rated it at 0.94. In 1989, men rated attractiveness at 2.11, while women rated it 1.67. Buss takes this as confirming his hypothesis, since 'the sex difference remains invariant', with men placing more emphasis upon attractiveness, just as he predicted (58). Both pieces of evidence are taken to show, contrary to what the SSSM predicts, that social changes do not lead to alterations in people's preferences.

Do these results confirm Buss's claims? He finds the first piece of evidence particularly compelling. If women simply had a rational preference for resources, than women who already possessed sufficient resources would not care about the wealth of potential mates, Buss argues. They would make their mating decisions on other grounds. But they do not. Therefore, he thinks, we should conclude that patriarchy view is false.

There are several reasons to be sceptical of Buss's claim that this result invalidates the patriarchy view. In the first place, we already noted that we ought to expect *some* degree of robustness in the preferences of women. If culture has a role to play in explaining our preferences – and, to repeat, no one denies that it has *some* role – we ought to expect those preferences to be difficult to shed. It is, after all, a commonplace that feelings can remain with us even after we reject the beliefs which made our acquiring them rational. The child who is brought up in a religious family can feel guilty about her failure to attend church long after she becomes an atheist. Similarly, the woman who, as a child, was surrounded by a culture which impressed on her the importance of landing a good 'catch' may find the preference for a wealthy partner hard to shake off.

And when we examine the actual content of the reported preference, the claim that it is an innate disposition, rather than a response to the conditions in which women find themselves, becomes less plausible. Suppose that the preference were innate, in such a manner that, like our taste for sweet things, it is not responsive to changes in the environment which would make pursuing it irrational. Then we would expect all women to have the same preference, regardless of their own access to resources. But they don't: wealthier women have a *stronger* preference for resources in a mate. This is a puzzle for the EP explanation, not a confirmation of it.

How do we explain the fact that wealthier women have a stronger preference for resources than have the less wealthy? There are several factors which go to explaining it. For one thing, possession of resources is strongly correlated with social status: it comes as no surprise that women with high social status want to marry men of a high social status. We all want our spouses to feel at ease and to fit into the circles within which we move. Moreover, wealthier women are accustomed to a higher standard of living, and may rationally seek a mate that will enhance that standard. There is no mystery here, on the SSSM view.

What of Buss's second piece of data, the historical evidence showing that males from 1939 to 1989 consistently rated attractiveness in a partner more important than did females? Buss says that the data shows that the sex difference 'remained invariant' (58). But this is simply false. In fact, the gap has narrowed, from 0.56 in 1939 to 0.44 in 1989. More strikingly, the emphasis that women placed upon attractiveness in 1989 was *greater* than that placed by men in 1939! Buss takes these expressed preferences as evidence that our desires are innate and relatively inflexible, but it seems to indicate instead the degree to which they are malleable. Once again, something akin to the SSSM does a better job of explaining the observed facts than does EP.

Conclusion

The division we have examined in this article, between those I have (hesitantly) called proponents of the SSSM and proponents of EP is, fundamentally, a dispute about the significance of history and culture. EP believes that the differences we can observe, between us and our society and those far removed from us by time and space, are relatively superficial. All people share the same human nature, which places significant constraints upon the ways of life available. Societies which do not respect these constraints, which ignore them in their zeal to establish a utopia, do not survive, and during their short lives they inflict great costs upon their members. Proponents of the SSSM do not (or ought not) deny that we all share a common nature, and that this nature sets limits on what we may achieve. But they believe that these limits are much less constraining. Moreover, while EP believes that not only the boundaries of ways of life, but also their details, are importantly a product of human nature, SSSM believes that nature only sets boundaries: social norms and history settle what the way of life will be within these boundaries.

Which view captures human life best, in all its diversity? I have presented arguments for the conclusion that the SSSM is closer to the truth than EP. In part, however, the victory of the SSSM has been a product of the regions of life upon whose explanation I have concentrated. I have focused on sexuality and gender, regions in which, I suggest, we have good reason to believe that our behavior is very importantly a product of social norms. The selection of these areas of human behavior was not arbitrary. They were chosen because a great deal of attention has been lavished by EP upon them. It has chosen this ground as a test case for its views. And they were chosen because it is with regard to these areas of social life that the common accusation, that EP has pernicious implications by lending support to regressive social, moral and political views, is most plausible.

Upon this ground, the SSSM has a decisive advantage. If we ignore history and culture, as EP is all too eager to do, then we easily misread existing social norms as the direct expression of human nature. We miss the extent to which these norms are within our power to transform. But with regard to other regions of human behavior, it may well be the case that EP's hypotheses are correct. To take one example almost at random, the patterns of disgust exhibited by human beings really do seem to track the extent to which objects that elicit it manifest signs which would indicate potential infection. Our propensity to this emotion really does seem the product of natural selection. Here is an instance where human nature does not merely set the boundaries of human life; it helps to explain the details.

I do not suggest, therefore, that EP is an intellectually bankrupt research program. It has already produced important and informative hypotheses concerning human behavior and history, and there is reason to expect it to continue to do so. Not coincidentally, however, the elements of human life which are best explained by EP are largely, perhaps entirely, outside the realm which is disputed political ground. Nothing of significance hangs upon the explanation of disgust, or of taste in food. Upon these questions, historical differences

really are relatively superficial, and safely ignored. It is only when it turns to explaining the human differences with which people identify that EP is not the harmless, purely objective, enterprise it takes itself to be, that it becomes the weapon of a political program, whether its proponents are aware of this fact or not. If its contentions here were true, then of course we would just have to stomach them. But they are unlikely to be true. There are better explanations available of all the phenomena which EP takes as evidence for its theories. Human beings are more complex, and more varied, both historically and culturally, than EP admits. We have every reason to hope and to believe that our biology does not prevent us from achieving a far greater degree of equality, within and between countries, between races and sexes, than we have hitherto attained.

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