Contemporary Nativism, Scientific Texture, and the Moral Limits of Free Inquiry

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Some thinkers distrust Darwinist explorations of complex human behaviors, particularly investigations into possible differences in valued skills between genders, races or classes. Such projects, it is claimed, tend to have adverse effects on people who are already disadvantaged. A recent argument by Philip Kitcher both clarifies and generalizes this charge to cover a wider genre of scientific projects. In this paper I try to spell out and analyze Kitcher's argument. The argument fails, I suggest, because some of its key premises fail to convince. My analysis focuses on relevant facts about the role of inquiry in fallibilist contexts, the texture of belief in contemporary natural science, and the moral dimension of scientific research.

1. Introduction. A recent Vatican document states what it claims are women's characteristic traits: "Listening, welcoming, humility, faithfulness, praise and waiting." These, the document says, are virtues that women display "with particular intensity and naturalness."[1] Many thinkers in the liberal camp reacted strongly to the statement. Some Darwinists, by contrast, suggested that the Vatican may have a point, even if only a "partial one."[2] This particularly enraged those who dismiss all psycho-

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1. Statement of official doctrine, written by Cardinal Joseph Ratzinger and formally issued by the Vatican July 31, 2004.

2. Unlike the Church, Darwinians take natural traits as being intrinsically neither 'good' nor 'bad', regarding them instead as pre-wired adaptive developments rooted in now largely superseded environmental contexts. Traditional nativist doctrines typically incorporate old-fashioned essentialist differentiations between human groups (especially men and women), along with a complex *hierarchy* of natural entities and the idea that what is natural is also *good* -hence the controversial character of the noted Vatican document.

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biological differentiations between the genres as reactionary speculation that can only hurt the life prospects of women.

The above exchanges resonate with at least one important debate in contemporary philosophy of science. Past conceptions about scientific freedom have allowed researchers to hurt disadvantaged people. An infamous case in point occurred in the 1930s and 1940s in Tuskegee, USA, where hundreds of black inmates were (without their knowledge) deliberately infected with syphilis to see what happened. It didn't do them any good. Far from tolerating such excesses, we now insist on enforcing some moral constraints on the ways scientific research may be conducted. But, how deep into scientific practice is it wise to let those constraints reach? On one influential view, a research project may deserve moral opprobrium if even contemplating the ideas it involves may be likely to have bad effects on some people. One common target here is the field of Darwinian psychology, a contemporary form of nativism busy with research into differences in mental skills between the genres, races, and lineages, to the despair of its detractors.

Critical reactions to nativist proposals—from the sociobiological speculations of E. O. Wilson in the 1970s to the more elaborate psychobiological proposals subsequently advanced by Dennett, Pinker, and others—gravitate around two main issues. One (very big one) has to do with the methodological difficulties faced by hypotheses about psychogenetic predispositions: inherited traits often having "maturation" periods of many years, distinguishing between inheritance and learning from experience can be tough. The second issue has to do with the moral impact of nativist inquiries—research freedom can conceivably go too far in certain sensitive areas, particularly in the less than perfect societies in which we live and expect to live in the foreseeable future. Time and again during the last century the general public was rushed into believing that scientific investigations had revealed all sorts of "unpleasant truths" about the existence of natural differences between some human groups. Repeatedly, the allegations in question made their way into the media and the establishment—such that members of some race, sex or class were marred by unmodifiable tendencies to inferior performance in some generally valued area and that, therefore, any policy of eradicating inequalities affecting such people would be doomed to failure. Repeatedly, however, the allegations were eventually recognized to have been groundless, though not before some damage had been done.

What, then, of the current inquiries of the Darwinian psychologists? What of their more careful, scientifically motivated questions about differences in cognitive and emotional abilities currently apparent between various human groups? Consider, for example, why it is that, despite so much investment in education over the last half century, still the vast

majority of top young mathematicians and theoretical physicists continue to be males. It may all be the result of cultural inertial forces from the past. Or, it may be something else—including perhaps that males are, on average, genetically more inclined than women toward the mentioned fields.

For more than two decades the critics of nativism have complained about the social dangers of such biological proposals, especially because of the easy resonance of such inquiries with old discriminatory practices against some of the targeted human groups. Recently Philip Kitcher has clarified and furthered this reaction with a consequentialist argument against the conduction of certain kinds of scientific research. One of his concerns is the damage already done by past conceptions about gender and race. More generally, however, Kitcher is concerned about all scientific inquires likely to have negative consequences for any human group whose standard of living is presently well below average, particularly cases in which (Kitcher 2001, 93–108):

> (Ka). The low standard of living of people in a group G originates, to a significant extent, from some view C erroneously held in the past (for example, that women or some human races are by nature intellectually inferior in every respect).
>
> (Kb). Even though C is now officially rejected, it lingers on dangerously in the society, because of the existence of a strong tendency to inflate evidential support in favor of C (epistemological asymmetry).
>
> (Kc). The society in question is politically biased toward C, in the sense that news of results contrary to C would not lead to any social action in favor of G, whereas the slightest rumor of results favorable to C would rise the popular and official credibility of C, with damaging consequences for G (political asymmetry).

In contexts like the above there is no denying that the practice of science calls for enhanced political and legal alertness on the part of society. The question is whether more precautions than those currently in place need to be taken on behalf of potential victims, and if so which ones. According to one liberal point of view, the prevailing context provides enough grounds for morally condemning nativist inquiries very broadly. And yet, wouldn't such a reaction hurt precisely the kind of knowledge-search that has manifestly done so much to free us from dogma and superstition in the past? Kitcher is not impressed by such a rejoinder. In his view, a society can simultaneously value knowledge yet ignore the results of a line of investigation; or simply refuse pursuing that line, if there is reason to think that doing so may undermine some important form of life in that society:

> Behind the often evangelical rhetoric about the value of knowledge stands a serious theology, an unexamined faith that pursuing inquiry will be good for us, even when it transforms our schemes of values. It's time to abandon that theology too. We need agnosticism all the way down. (2001, 166)

2. An Argument. My concern in this paper is with the moral status of inquiries conducted under (Ka) through (Kc) above. Do our current social realities provide reasonable grounds for deeming such inquiries *morally condemnable*? To make the matter manageable, I will focus on just one specific kind of potentially disturbing Darwinist investigations: those about presumed correlations between gender and certain analytic skills (the approach would be similar for investigations into other presumed correlations, say, between race and IQ). From the 1970s on, all such explorations have been the subject of scathing, often fair, critical reactions by many influential scientists and philosophers, conspicuously Richard Lewontin (1975), the late S. J. Gould ([1980] 1989, 1981), and Philip Kitcher (1997). These reactions have recently received a boost from a cleaner and more general argument articulated by Kitcher, to the effect that there can be no right to free inquiry in problematic cases like the ones at hand (2001, Chapter 8). Kitcher does not present his argument in formalist fashion, but the logical flow seems clear enough. Let T stand for any potentially problematic nativist view; and let G stand for people with the characteristics typified in (Ka) through (Kc) above. The key premises may then be sketched as follows (Kitcher 2001, 103):

> (K1). Far less controversial than any duty to seek the truth is the duty to care for those whose lives already go less well and to protect them against foreseeable occurrences that would further decrease their wellbeing.
>
> (K2). Scientific research is fallible and has social consequences; so, whenever a research project is expected to have significant social impact, it is appropriate to raise the standards of evidence to the highest reasonable levels.
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> (K3). Strong political and epistemological biases of the sort summarized in (Kb) and (Kc) unfairly tilt public acceptance in favor of T.
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> (K4). If belief in T were to become widespread, then it would be practically certain that the quality of the lives of people of type G will be further reduced, partly through the withdrawal of existing

programs of social aid, partly through public expressions of the idea that people of type G are inferior to others.

(K5). It is extremely dubious that, in current societies, there is political will for public investment in programs aimed at offsetting deleterious consequences of T; furthermore, it is unclear what such programs would do.

(K6). In situations where free inquiry would increase the burden on those who are already disadvantaged, there can be no right to free inquiry.

Premises (K1) through (K5) lead comfortably enough to the following partial conclusion (C1):

(C1). Research into the truth of T is virtually guaranteed to increase the current burden on G.

The sought conclusion then results from (C1) and (K6):

(C2). There can be no right to free inquiry into the truth of T.

Two important corollaries follow in addition: (i) Given (K1), inquiries into T deserve moral opprobrium; and (ii) However, because of the biases noted in (K2), it would be a mistake to try to punish such inquiries, as that would tend to help rather than hinder popular support for T (for example, by linking T with martyrdom, encouraging rumor, and so on).

3. Fallibilism, Texture, and Moral Dimension. Many past nativist investigations did have bad consequences. The question is whether, as Kitcher suggests, all such inquiries—however careful at the methodological level—are just as likely to hurt people who are already disadvantaged. I wish to suggest that the bad consequences envisaged in Kitcher's argument seem a very unlikely concomitant of research in contemporary liberal democracies. The case of societies with institutions less well protected against strong political and epistemic biases is admittedly different, but not in ways that help the argument.[3]

There is both philosophical insight and human kindness in Kitcher's general argument. There is also much welcome clarification of the import of earlier antinativist critiques. However, I find the argument unconvinc-

3. Precisely because of the noted asymmetries, in such societies serious scientific research into the condition of the disadvantaged would function as a source of personal and social improvement for the latter—not least because of the relative independence of world-class scientific standards from local powers. It seems dubious, therefore, that in societies severely contaminated by prejudice the disadvantaged would realistically benefit from discouraging any kind of serious research.

ing, because several of its premises ring spurious. I will discuss all the ones I find problematic not in order to overkill the argument, but because I think the premises in question err in ways that help us better understand the epistemological character, informational structure and prospective moral projection of contemporary scientific claims.

Let us begin with the claim that we have a "duty to care for those whose lives already go less well and to protect them against foreseeable occurrences that would further decrease their wellbeing" (K1). It is a very appealing claim, of course, but also a difficult one to accept without reservation. In particular, there is the question about how we are supposed to find out why certain people are disadvantaged. The issue about the lives of human groups is as much a matter of social as epistemological concern. For more than half century now the dominant point of view has been "nurturism," an extreme form of sociologism that identifies the sociocultural environment as the sole determinant of behavioral phenotypes. Nurturism is at the heart of many of the social programs implemented in the last 50 years, unfortunately with mixed discernible results (not least in the field of education). Despair, gullibility, demagoguery, bureaucratic expediency, and the fact that liberal socialism expresses a life project that is very easy to imitate and take advantage of but exceedingly difficult to embrace with authenticity, all these factors seem to contribute to the disappointing results of many nurturist programs.

So, the question arises: Might nurturism be perhaps fundamentally flawed, as Darwinian psychologists suggest? Some of the possibilities considered by the Darwinists sound nasty—such that, perhaps, some of the differences in key intellectual abilities between some human groups may be traceable to genes and their specific Darwinian histories. We thus get (K2)'s precautionary clause: Whenever a research project is expected to have significant impact on human beings, it is appropriate to raise the standards of evidence to the highest reasonable levels. That, we hope, is how research into developments like new medical drugs should proceed, and it seems reasonable to demand that psychological research follow similar constraints. It would mean grading virtually all the conjectures issued thus far by Darwinian psychologists as still lacking proper credibility, but that seems fair game. Relevantly, it would also mean exposing many of the nurturist conjectures assumed by current social programs as old 'poppycock' at best—think, for example, of such old winners as that, 'just with proper training and counseling', any physically normal newborn baby can actually be turned into a John von Neumann, a Wilhelm Furtwangler, a Richard Feynman, or anyone you want.

However, there is more to research on human beings than scientific standards. There are human ideals, human feelings, and also the daunting realization that scientific fallibility adds danger to inquiry. Still, one cannot

ignore the way scientific research has dramatically expanded our horizon of possibilities since the seventeenth century. Furthermore, and this is vital, it is far from clear that trying to learn about human nature from a Darwinist perspective is more dangerous than trying to learn about human individuals or human groups from any other perspective. Whether (and how) a line of inquiry impacts on current ideals of social justice will depend primarily on the levels of maturity and spiritual refinement prevailing in the society in question. Again, more to the point, it seems dubious that the disadvantaged would actually benefit from discouraging any kind of serious research, especially in societies marred by the kind of political and epistemic asymmetries contemplated in (K3).

Now, Kitcher's defense of (K3) stresses the insidious power of external factors in the public acceptance and rejection of scientific claims, so I need to tread carefully here. It is not in question that scientific debates and inquiries can be co-opted by political agendas. Prime exemplifications abound in the form of discrimination against women, 'mob racism', and the phenomenon of 'Scientific Creationism', to mention a few varieties. However, I think something significant needs to be added: The noted cases, along many others like them, also attest to the actual power of civil society to severely limit the impact of mob epistemology through legal containment. For instance, in the United States Creationists cause trouble enough as it is, yet not nearly as much as they might if the popular biases that fuel their influence were allowed to expand freely into social action. Applied to Darwinist research, it would be ridiculous to deny the existence of a lamentable background of psychological and political biases. Kitcher is right in condemning such biases, but why does he doubt they can be legally contained? In other 'human oriented' scientific fields, anticipated negative consequences of an excessive sort are routinely dealt with through sensible public investment, which certainly seems to help in medical and technological areas. So, why should similar precautions fail in the case at hand? There seems to be ample reason to think the problem posed by potential nativist-driven excesses can be seriously helped by laws against discriminations based on unwarranted claims. Existing laws to that effect are far from perfect, but at least in the recent past they have significantly assisted people who had been unjustly denied opportunities, and there is no obvious reason why such laws should not continue to improve. Now, premise (K5) rejects this kind of response from two complementary but different angles, the first of which has to do with Kitcher's particular understanding of social and political biases; the second has to do with fallibility. But let us consider first the consequentialist core of the argument.

Premise (K4) is central in this regard. Its credibility hinges on whether the terrible consequences it envisages are indeed a likely possibility. The

argument's soundness depends heavily on specific context. Let us, then, focus on Darwinian conjectures about natural differences in social and psychological dispositions between men and women. Two observations come immediately to mind. First, we are talking about a perspective whose structure and motivation are rooted in current evolutionary biology, and so not just any conjecture will do as a working hypothesis. To begin with, there is no room for genetic determinism, since biology accepts that phenotypes are shaped jointly by genes and the environment. Furthermore, evolutionary claims about complex phenotypes are primarily about tendencies, and as such they are compatible with virtually any given single case outcome imaginable within the relevant total range of performance. For instance, the Darwinian suggestion that women might be, in general, less naturally gifted than men for original thinking in mathematics or theoretical physics is fully compatible with the most accomplished individual in those fields being in fact a woman (the outstanding Amalie Emmy Noether providing a splendid case in point). Indeed, in Darwinist conjectures, reference to natural tendencies is characteristically indirect in at least two ways: (1) The relevant probabilities are second order, in that they correspond to averages over probabilistic tendencies at the individual level; and (2) at the individual level, tendencies operate against the backdrop provided by the environment and past experience on the one hand, and "Baldwin effects" on the other (from low levels in the zoological scale on, behavioral tendencies forged by evolution allow, within certain margins, for adjustment through parallel learning; see, e.g., Dennett 1995, Chapter 3).

My second observation regarding scientific conjectures about natural differences concerns the alleged way in which contemporary nativist research might compromise any individual person's freedom to exercise his or her abilities, or to choose and define a life project. How exactly might contemporary nativism do that? Not very easily, it would seem. Darwinian hypotheses are primarily about origins, not about future developments or 'plans', let alone desirable or undesirable ones. Properly Darwinian conjectures are silent about what human beings should do, individually or at any collective level. By itself, the project of trying to understand human nature in Darwinist terms simply cannot lead to claims about how anyone should act or be treated. Being a Darwinian approach, Darwinian psychology is strongly focused on the past, specifically on possible natural-historical differences underlying differences in skills and dispositions presently found between various groups (see, e.g., Richards 2000). If so, however, there is no reason to fear that such investigations will ever logically challenge any ideals human beings may hold, individually or collectively. Now, perhaps Kitcher's point is that present policies about what to do in relation to some human groups are, as a matter of fact, based in part

on assumptions about the nature of people in those groups, in which case any scientific support for those assumptions will, as a matter of fact, encourage the policies. But, again, do we have any compelling reason to believe this? Exactly which policies are we talking about, and precisely how could they be encouraged by the highlighted nativist investigations? If anything, in the United States, nativist "rumors" about handicapped human groups have been in the air for decades, yet discrimination has ostensibly decreased during the period.

Darwinian findings simply lack the necessary logical force to challenge human projects. On the other hand, they can (and seemingly should) be brought to bear on our teleological musings. Nativist findings can, for example, help us assess the viability of ends we may like to pursue. We need not wax mystical about this. The recommended exercise would be akin to the use of, say, information about gravitational fields in directing artificial satellites. As with the latter, once a goal (however 'non-natural') is seriously on the table, the next sensible step is to take advantage of whatever "natural forces" happened to be accessible. So, Darwinian findings may conceivably upset ongoing human projects, but only in the sense of revealing that they may have been grounded in ill informed initial beliefs.

The crucial question, of course, is whether Darwinian speculations are virtually guaranteed to worsen the situation of the already disadvantaged. This brings us to premise (K5). Importantly, Kitcher seems to believe that the epistemic and social contexts of science overlap strongly enough to render the scientific decision process utterly vulnerable to bias contamination. Even in his more 'scientistic' phase of the late 1980s and early 1990s, we find him suggesting that one cannot fruitfully separate the two contexts (Kitcher 1993). He is not alone in this—there is a strong trend of current opinion against the old distinction. But, how credible is this trend? Fruitful levels of separability between epistemic and social contexts seem to be habitually achieved in the more developed natural sciences, where decisions about what ideas to accept, reject or bracket are grounded in rational and informational resources internal to science at its most cosmopolitan. At least in the natural sciences, methodological procedures can be—and, when managed properly, usually are—effectively screened off from social and political influences. While cases of premature acceptance do occur, they generally come to be regarded quickly enough as cases of negligence or worse.[4] Which, again, is one major reason why, in

4. This valuable insight is at the heart of Dudley Shapere's detailed works on how, in the advanced sciences, questions about theory acceptance, rejection and agnostic bracketing can be (and usually are) tackled exclusively on the basis of the knowledge and scientific evidence available at the time, ultimately on the basis of *reasons* as opposed to just "causes." See, e.g., Shapere 1974, 1991.

rigorous scientific circles, Darwinian nativist hypotheses do not yet convince. They don't convince because, evidentially, they remain below the standards required for proper scientific acceptance—not least because they are peculiarly hard to test (see, e.g., Sterelny and Griffiths 1999, Part V). The point is that, in serious contemporary science, reason-based decision making, and reason-based decision making only, is what persuades. And yet, premise (K5) seems to arbitrarily presuppose that (a) modern societies cannot sufficiently trust the epistemological rulings internally yielded by any scientific community, and in any case (b) we cannot realistically expect societies to develop the necessary legal resources to prevent the kind of abuses nativist research might encourage. Given this arbitrariness, the pessimistic import of (K5) must be denied. Admittedly, societies where the rule of law is either too weak or where the administration of justice is too corrupt constitute a different case, but surely in such societies scientific rumor would be the least of their problems.

Still, admission that science is fallible would seem to give (K4) some residual credibility. In the end, aren't Darwinist explorations virtually bound to yield 'false positives' sometimes, along with negative consequences of the sort envisaged by the critics of Darwinian psychology? This is the 'fallibility angle' I mentioned earlier in connection with premise (K5). Even if one can fruitfully separate the epistemic and social contexts of Darwinist projects, one still has to contend with the tentative character of scientific claims. Suppose one day Darwinian psychologists finally manage to put together a genuinely convincing survey and it turns out that a certain human group is, as a matter of biological hardware, initially less favorably endowed than others for some highly valued ability. The burden this would place on that group certainly seems to be a legitimate source of worry.

Here, however, are two key points. Firstly, fallibility is not an 'option' for us; we cannot advance any of our causes without some risk. Secondly, one aspect of the contemporary natural sciences, not sufficiently celebrated, is the rich theoretical structure and texture of its assertions. It is a point dear to defenders of the unification view of explanation, not least Kitcher (1983). In good biology, as in good physics and chemistry, research involves not just discovery of correlations and production of explanations, but also greater elucidations of causal networks linked to the phenomena studied, along with a better sense of direction for subsequent explorations. This is true in the case of research about quarks, black holes, Darwinian histories, geomagnetism, oncogenes, degenerative diseases, and more. So, isn't this true also in the case of inquiries into Darwinian nativist claims? Are there any specific reasons for believing that Darwinian nativist conjectures will not point to ways of helping those it might come to present as 'naturally disadvantaged'? Even if the scientific news turned out to be

very bad for some given human group, there is reason to expect this will come along with an array of biological and genetic pointers of theoretical and practical significance. Suppose, for example, that at some point it became impossible to scientifically deny that women are, on average, less naturally gifted than men for some celebrated aspect of human excellence (or vice versa). Some might hastily conclude that women (or men) should henceforth be regarded as totally hopeless in the specified respect, regardless of training and education. Yet we already know this conclusion to be ridiculously excessive. With proper training, practically all human beings can be brought to master proper college level mathematics and such. Nor would it be correct to conclude that individual women (or men) cannot reach high in any significant area in which they rank low as a group, for we also know this to be false. And, of course, something else is false as well, namely the intimation that our distinctly human traits are simple, one-dimensional features. All the cherished human qualities (not least 'intelligence') turn out to be richly multilayered. There are countless ways of being 'intelligent'—enough to make almost everyone of us "above average" in some respect or other.

So, exactly what sort of disturbing news might we expect from Darwinian psychology? The discernible horizon seems to allow for no more than complex possible assertions about differential propensities in different human groups. As such, Darwinist research, like research into oncogenes, may admittedly cause some suffering in the short run. This, however, is only part of the story. As with oncogenes, precisely because of the texture of belief in contemporary natural science, no matter how distressing a research result might prove to be for some people, there is reason to expect that it will also to point to the design of correctives—chemical, genetic, educational—to be made available to interested individuals. And so, rather than sweepingly casting general opprobrium on Darwinian psychologists for their potentially disturbing ideas on human nature, we should perhaps concentrate far more than we do at present on controlling the intellectual quality of social action. Is this an illusory hope? Kitcher obviously believes so. But, to repeat, what objective reasons are there for thinking that way? Contemporary liberal democratic societies, imperfect though they are, seem to have been moving in the right direction in recent times. We could go faster, of course—for example by instituting more stringent laws against basing social policies on views that still lack proper scientific evidence.

And so, at least regarding the research line considered in this paper, the premises of the reviewed argument fail to convince—albeit, as suggested, in interesting ways that bring into focus important facts about the texture of theoretical belief in the contemporary natural sciences, the role of inquiry in fallibilist contexts, and the moral dimension of scientific

research. If the above analyses are reasonably correct, then one cannot agree that Darwinian-nativist investigations, however carefully conducted, can be deemed morally condemnable in any general way.

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