
Letters from Readers

Why the Jews?

TO THE EDITOR:

The survival of Judaism despite millennia of oppression continues to confound both the friends and the enemies of the Jews, as well as many Jews themselves, though for different reasons. For Jews and their friends, it is a sign of great good fortune or a confirmation of a special place in God's universe. For their enemies, it is a problem to be solved. For Charles Murray, apparently, the staying power of the Jews is merely an example of natural selection ["Jewish Genius," April].

Despite the facetious last sentence of his article ("The Jews are God's chosen people"), there is no God in his analysis of Jewish survival, only the great secular solvent of Darwinian selection, the tautological insight that hereditary traits contributing to survival will themselves survive and increase over generations. Specifically, in Mr. Murray's view,

it is inherited Jewish intelligence, as selected by pogroms, libels, quotas, and the Holocaust, that has permitted the survival of the Jews and their religion.

The power and novelty of this argument lie in its removal of the burden of understanding anything about what it means to be Jewish. Can there be a more insulting way to look at Jews—not at the content of their character or their tradition but at the fact of their having been genetically sculpted by outside forces? Fortunately for Jews, and for all others whose free will has mattered to them, Mr. Murray's biology is as failed as his putative generosity.

No religion, after all, can be inherited; any brain can have any thought. Religion is perpetuated not by the transmission of DNA but by persons or groups who embrace a way of life and teach it to their children. For Judaism, moreover, achievement trumps biology. Consider this passage from the

Mishnah (redacted in the 2nd century C.E.) discussing a hierarchy for certain privileges: "A Priest has precedence over a Levite; a Levite over an Israelite; an Israelite over a bastard. . . . When? When they are all equal [in learning]. But if the bastard is versed in the law and the High Priest ignorant, the bastard scholar has precedence over the ignorant High Priest."

Mr. Murray betrays a childish longing for simple explanations, if one that is understandably seductive in an era when Jews have claimed so many of the mountaintops of achievement. It is tempting to tie a bow around Jewish accomplishment by willing it to the next generation as a "genetic inheritance." But his syllogisms obscure the world as it really is.

Consider that women comprise some 50 percent of the world's population, but fewer than 5 percent of Nobel Prize winners (one of Mr. Murray's favorite

metrics). Sweden, with only one tenth of a percent of the world's population, has contributed approximately 5 percent of Nobel laureates. Are Swedes therefore smarter than women? The United States has 5 percent of the world's population and 21 percent of Nobel winners. Are Americans smarter than Swedes but far less smart than Jews, who while constituting a fraction of a percent of the world's population can boast of 30 percent of Nobel laureates since 1950?

If only life were this neat. But the fact is that a significant proportion of Jewish Nobel laureates have also been U.S. citizens, and that U.S. citizens of all racial, religious, and ethnic stripes enjoy more access to top research facilities and academic resources than the citizens of other countries. The second most-represented category of Nobel laureates, not surprisingly, is European academics, who have been similarly con-

nected to well-endowed centers of learning.

We forget at our peril that it was not very long ago that basic courses in calculus and physics were not routinely offered to women. Higher math was the property of “male genius”—and white male genius at that. If one hypothesizes that neither “black” nor “female” genius exists, their emergent manifestations will be perpetually exceptionalized, held at bay, and shunted beyond the pale of the rest of the population. If we really “do the math” (as Mr. Murray advises) about *past* Nobel winners, nothing is as vulgarly simplistic as this Trojan Horse of his, so gaudily adorned to look like revelation.

ROBERT POLLACK

PATRICIA WILLIAMS
Columbia University
New York City

TO THE EDITOR:

We sympathize with the overall themes of Charles Murray’s essay, but we have reservations about some of his scenarios for the evolution of Ashkenazi intelligence. Our own model of elevated Jewish intelligence posits that it is a consequence of Jews’ economic niche in medieval Europe north of the Alps (from around 800 C.E.). Before that period of rapid evolution there is no special sign of unusually high intelligence in the historical record of the Jews. Mr. Murray, following work by Maristella Botticini and Zvi Eckstein, disagrees, and looks back to antiquity for the origins of this phenomenon. There is no obvious critical test to confirm his hypothesis over ours, and we are all reduced to arguing by anecdote.

Mr. Murray suggests that

the creation of the Hebrew Bible and, later, of Christian theology as presented in the New Testament are signatures of a population with high intelligence. But while the Bible is indeed a cornerstone of our civilization, is it necessarily evidence of a population with high IQ? Revered documents have come from populations that did not stand out in terms of intelligence—take, as one example, the Book of Mormon and its followers. We would also be inclined to attribute the New Testament mostly to Greeks rather than to Jews.

Another piece of evidence adduced by Mr. Murray is Joshua ben Gamla’s ordinance in the year 64 C.E. mandating community schools for Palestinian Jewish males. But it is not so clear that this had much force. Some literature suggests that it was not widely implemented. (One thinks of our own “No Child Left Behind” law: an earnest statement of good intentions but of little actual consequence.) Certainly there were traditions of literacy among ancient Jews, and the responsibility for it fell more and more to the community over time. But literacy does not require high IQ.

There is a startling absence of any stereotype in classical writings that Jews were “smart.” In Menahem Stern’s comprehensive anthology of classical references to Jews by Greek and Latin authors, not a single one attributes unusual intelligence to them. Finally, the particular alleles (genetic forms) related to intelligence that we think were favored by selection are young, most of them around a thousand years old. By Mr. Murray’s reckoning, they should be much older.

Mr. Murray suggests that “boiling off” was a common phenomenon among the Jews in medieval times—those who were not good at being Jewish fell away and joined the outside community, leaving high intelligence concentrated within. But there is no historical documentation of this among Ashkenazi Jews. If it was a common occurrence, we should expect to find traces of Middle Eastern DNA among the Gentile populations in Poland, Lithuania, and Russia. So far, none has been reported, so we are skeptical of the hypothesis. Within a decade or so, high-resolution genetic data from Eastern Europe and the Middle East should allow a proper test. Indeed, the only real resolution of our differences with Mr. Murray will come from data-driven quantitative models, not from swapping impressions.

There are hints that the selective process that we believe we identified among the Ashkenazim also occurred among the Sephardim of Spain and Portugal, though to a lesser degree. Certainly the experience and achievements of Spanish and Portuguese Jews in London and Amsterdam were similar to those of the Ashkenazim. But Sephardim from other lands show no sign at all of IQ elevation; indeed, this is a serious social and political issue in Israel today.

GREGORY COCHRAN
HENRY HARPENDING
University of Utah
Salt Lake City, Utah

TO THE EDITOR:

Charles Murray puts forward two basic ideas to explain what he asserts is the high native intelligence of

Jews. One (as described in an article by Gregory Cochran, Jason Hardy, and Henry Harpending) is the idea of occupational selection, which holds that “the high IQ test scores of Ashkenazim, along with their unusual pattern of abilities, are a product of natural selection, stemming from their occupation of an unusual social niche” over the last millennium. But this is the logical equivalent of asserting that the giraffe has a long neck because its ancestor occupied an environmental niche that strongly selected for long necks, which is the classic fallacy of Jean-Baptiste Lamarck that gives Lamarckianism its name.

Mr. Murray’s second, preferred hypothesis is that Jews are smarter than the average because in ancient times one had to be smart to be a Jew. It is difficult to get past the absurdity of this notion in order to comment on it. It has a companion in the idea one hears voiced from time to time that Christians are more compassionate because one has to be more compassionate to be a Christian. The reasoning in both cases offers little enlightenment.

DANIEL N. HAINES
New York City

TO THE EDITOR:

It is possible that Charles Murray overanalyzes the issue of elevated Jewish intelligence. In any sample, random inequalities will dictate that one subset will emerge at the high end of a normal distribution. There need not be any special reason for this other than statistical probability and the inevitable results of measurement itself.

To the Jews’ initial skewing toward high intelligence

may be added the anthropological phenomenon of human tribalism and the sociological phenomenon of additive advantage. To wit, the rich get richer and the smart get smarter. The Jews may be just the unintended—albeit lucky—inheritors of the initial random inequality and nothing more.

MARC MAYERSON
*University of California
Los Angeles, California*

TO THE EDITOR:

Charles Murray notes that “only about 10-20 percent of Jews were farmers by the end of the first millennium,” the rest having migrated to urban occupations in which intelligence was more of an asset. This raises a different question: how did the Jews survive at all in cities?

Given that disease prevented pre-modern urban populations from replacing themselves and forced cities to rely on a constant replenishment of people from rural areas, one would expect the Jews, intelligent or not, to have dwindled rapidly once they lost their rural base.

Does not Jewish survival suggest that the Jews must have been selected for resistance to disease? And is it not possible that such resistance is related to intelligence? Perhaps research will find that the genes favoring resistance to typhoid are linked to a predisposition toward Tay-Sachs (a signature of Ashkenazi Jews), as well as to enhanced reasoning abilities. If so, “Jewish genius” may be only an accidental byproduct of an evolutionary adaptation to an environment of urban squalor.

DAVID RANDALL
Brooklyn, New York

TO THE EDITOR:

Charles Murray misses one point in his fascinating article. To cite heredity as a means of explaining why one trait (high intelligence) is more prevalent in one group (Ashkenazi Jews) than in another (the surrounding Gentiles), one does not have to demonstrate that the trait is promoted in the one group; it is enough to show that the other group selects less for it. In other words, the effect of environmental pressures on the intelligence of non-Jews must also be considered.

Consider the reproductive fate of the best and brightest of Christendom in the Middle Ages. Many men of intelligence became priests or monks, a group with a very low rate of reproduction. Many also entered the military, where they were killed in war.

Another avenue that bears exploration is the role of homosexuality. While homosexual Christians could take refuge in the priesthood, homosexual Jews were not released from social pressure to marry and reproduce. If homosexuality is linked in any way to intelligence—as it has been linked to artistic achievement—then here is another factor that might have disfavored the gene pool of Christians.

JONATHAN WEINBERG
Brooklyn, New York

TO THE EDITOR:

Charles Murray speculates that the intellectual demands that Judaism made upon its adherents caused many Jews of lesser intelligence to fall away from the religion. But one could argue that Jewish history has trended in the opposite direction. Throughout the ex-

ile of the past 2,000 years, Jews’ chances for success and even physical survival were far greater when they joined the religion and culture of their host majority. In many periods, it has been precisely those Jews with higher intelligence, and thus a greater capacity for assimilation, who have opted out of the fold.

ELIMELECH SHALEV
Nahariya, Israel

TO THE EDITOR:

Arthur Koestler and others have asserted that a good number of the Ashkenazi Jews of Eastern Europe descended from the Khazars, a Turkic people that adopted Judaism as a state religion around 740 C.E. If this theory is valid, I wonder if it makes idle much of Charles Murray’s speculation about the ancient genetic roots of Jewish intelligence.

KAREN D. NITZSCHKE
Gettysburg, South Dakota

TO THE EDITOR:

In playing up the role of genes, Charles Murray pays insufficient attention to the role of the Jewish tradition itself in nurturing intelligence. Ancient Judaism taught that the written law was incomplete by itself, and that the people’s obligation was to study and develop the oral tradition. This contrasted sharply with other religions in which the law was fixed and its study confined to a clerical elite.

JONATHAN KURTZMAN
Brookline, Massachusetts

TO THE EDITOR:

Charles Murray discusses the occupations of Ashkenazi Jews in Europe as a factor in their intelligence, but he does not discuss the role of Europe itself.

Despite the many cruelties visited upon the Jews of the continent, European civilization nurtured a creativity unmatched in the rest of the world, as Mr. Murray himself has demonstrated elsewhere. After European Jews were emancipated in the 19th century, what they displayed with special intensity was precisely such creativity. I suspect that there is a direct correlation between the success of a host country and the achievement of its Jews.

ROBERT W. WILSON
New York City

TO THE EDITOR:

“No other religion [than Judaism] made so many intellectual demands upon the whole body of its believers,” writes Charles Murray. But early Buddhist texts, like the Theravada sutras of the 5th and 6th centuries B.C.E. or the Mahayana writings of the author Nagarjuna (2nd century C.E.), make intellectual demands upon their adherents that are at least as extensive and (harrowingly) complex.

GLENN D. BARNES
Wayne, Pennsylvania

TO THE EDITOR:

Charles Murray’s article has the right balance of hard data and speculation. But he seems to have missed the most obvious (if still somewhat speculative) factor in elevated Jewish intelligence “from the time of Moses.” I refer to the second of the biblical Ten Commandments, which forbade the use of visual and plastic arts and directed the Jews’ energies toward texts. Generally speaking, the latter make far more demands upon intelligence per se than the former. This would also partly explain why to

this very day Jews have only average visuo-spatial acuity, as Mr. Murray himself notes in passing.

SAM LEHMAN-WILZIG
*Bar-Ilan University
Ramat Gan, Israel*

TO THE EDITOR:

I would add the factor of language to Charles Murray's consideration of Jewish intelligence. Ashkenazi Jews were one of the only peoples to have been literate in two languages: Hebrew, which was read from right to left and often without vowels, and the local Indo-European language, which would have been read from left to right with vowels.

Reading from left to right, we rely more on our right eye as we move across the page. The right eye, in turn, is controlled by the left side of the brain, the seat of literal-logical intelligence. By the same token, reading from right to left involves more the interpretive-creative right side of the brain. It is no accident, for example, that Hebrew and other languages that go from right to left can do without vowels and have the reader depend on context—interpretive skills—to identify words. (If vowels were removed from English, only context would help determine if *ct* meant *cut* or *cat*.) An impact of the fortuitous but accidental environmental factor of reading both ways might have been to create a new kind of intelligence, one that blended logic and creativity in equal degrees.

Mr. Murray takes note of differences in IQ between Ashkenazi and Sephardi Jews. Indeed, residing in lands where Arabic (read from right to left) was the dominant language, the latter did not have the dual-

directional advantage of their Ashkenazi brethren.

STEPHEN H. SCHWARTZ
New York City

TO THE EDITOR:

The data cited by Charles Murray suggesting that Jews are merely average when it comes to visuo-spatial skills is belied by Jews' extraordinary historical success in chess. Seven of fourteen chess champions since the late 1800's have been Jewish (or, as with Garry Kasparov, half-Jewish).

CHRIS SPECK
Durham, North Carolina

TO THE EDITOR:

Charles Murray is on safe ground in testing the Cochran-Hardy-Harpending hypothesis of high Jewish IQ by seeking evidence beyond the Ashkenazim in Europe and going back past the Middle Ages to antiquity. In a review of nearly 100 studies of South Asian/North African IQ, Richard Lynn has shown that although IQ scores of Sephardi Jews are lower on average than those of Ashkenazim, they are higher than those of the populations that surrounded them historically. Clearly we are dealing with something deeply rooted in the Jewish past.

J. PHILIPPE RUSHTON
*University of Western Ontario
London, Canada*

TO THE EDITOR:

Charles Murray's consideration of the historical sources of higher-than-average Jewish intelligence and cultural achievement is the most informed and intelligent on the subject that I know of. That it is written by a non-Jew is, I believe, instructive for many of us who tend to take pride in Jewish achievements. We

must always keep in mind that the overwhelming majority of great cultural creators of mankind have not been Jewish, and that achievement is by no means a Jewish monopoly.

We should also be aware that a number of factors—rising rates of intermarriage, the increasing insularity of some religious Jews—raise considerable questions about whether Jewish cultural and creative achievement will be as disproportionately great in the next 200 years as it has been in the previous 200.

SHALOM FREEDMAN
Jerusalem, Israel

TO THE EDITOR:

Charles Murray writes that "a group's mean intelligence," as measured by IQ tests, "is important in explaining outcomes such as mean educational attainment or mean income." Twenty years ago, before the economic boom in Ireland, the mean income of Irish people was low. Now it is one of the highest in the world, and the percentage of young people in higher education has risen from 11 percent to over 50.

For various historical reasons, the Irish were unable to realize fully their abilities and intelligence—by which I mean something much more than just IQ. As for IQ tests themselves, while the Irish used to score relatively low, a series of tests carried out by the BBC in 2003 found that they scored higher in IQ and general knowledge than the English, Welsh, and Scots. All in all, it seems that mean IQ, average income, and educational attainment have all risen with a general flowering of the culture.

DAVID QUIN
Dublin, Ireland

TO THE EDITOR:

As an Irish Roman Catholic, I enjoyed Charles Murray's excellent essay on Jewish accomplishment. Am I envious? Not really. After all, the Jews play a useful role in diverting wrath away from the Irish and Scots who have worked their way into so many powerful positions in American life, and have not been found out because of all the eyes fixed on the Jews.

EOGHAN HARRIS
Dublin, Ireland

TO THE EDITOR:

Charles Murray continues to make thoughtful and imaginative contributions on important questions in human biology. It is a lonely road that he travels, one that has exposed him to vituperation from much of the intellectual community. Modern biology is going to force us to examine critically some of the entrenched philosophical notions underpinning Western democracies and to develop guiding principles that are scientifically defensible and allow for the maintenance of cooperative societies.

I suspect that much of the aversion to science that is so widespread in the United States is motivated by fear of what it will force us to recognize and think about. Thanks to Mr. Murray for his courage in continuing to focus his intellect and his pen on the distribution of intelligence in human populations.

PHILIP BROMBERG
*University of North Carolina
School of Medicine
Chapel Hill, North Carolina*

TO THE EDITOR:

"Jewish Genius" is vintage Charles Murray: it pro-

vokes, stimulates, amuses, and challenges while illuminating what many fear to take on.

SIDNEY HELFANT
*City University of New York
Brooklyn, New York*

CHARLES MURRAY writes:

I am honored that Robert Pollack, director of the Center for the Study of Science and Religion at Columbia University, and Patricia Williams, professor at the Columbia Law School and a MacArthur Fellow, have spent so much effort attacking “Jewish Genius,” but their very eminence makes their letter mystifying. Why do they resort to personal insults? Even more mystifying: why is their letter so heedless of the text of my article?

In their first two paragraphs, they assert that I address how Judaism has survived despite millennia of oppression. But that is not remotely my topic. Then they assert that I attribute that survival to intelligence. As it happens, I do *not* believe that intelligence explains the survival of Jews and Judaism, but readers of my article would have no way of knowing my opinion on the matter—I never discuss it. Robert Pollack and Patricia Williams first invent my topic and then invent my thesis.

It gets worse. More than half of my article is devoted to discussing the selection factors that may have led to the elevated Jewish IQ that in turn helps explain (and here is my actual topic) disproportionate Jewish accomplishment in the arts and sciences. Yet here is how they summarize my position on the selection factors: “Specifically, in Mr. Murray’s view, it is

inherited Jewish intelligence, as selected by pogroms, libels, quotas, and the Holocaust. . . .” Now they have invented my selection factors. I do not even mention libels, quotas, and the Holocaust (it would be odd to say that the Holocaust produced high Jewish intelligence prior to the Holocaust). As for pogroms, I explicitly argue that the winnowing-by-persecution theory, so widely assumed to be the explanation for elevated Jewish IQ, is *not* likely to have had a major effect. What can have put these selection factors into their heads? How can they ignore the ones I discuss at such length?

In the third and fourth paragraphs of my correspondents’ letter, the indifference to my argument becomes genuinely bizarre. They apparently believe they are disputing me when they write that “religion is perpetuated not by the transmission of DNA but by persons or groups who embrace a way of life and teach it to their children.” But my whole case for elevated Jewish IQ prior to the Middle Ages rests precisely on the centrality of Jewish law, the texts by which Judaism is transmitted, Judaism’s requirement that fathers teach that tradition to their children, the high intellectual demands all this entails, and the implications for the self-selection of people who remain within the community. With all that before their eyes, Robert Pollack and Patricia Williams write that my explanation for elevated Jewish IQ removes “the burden of understanding anything about what it means to be Jewish.” I do not choose the word “bizarre” lightly.

Regarding the question of disproportionate Jewish accomplishment in the arts and sciences, they are not heedless but selective, focusing on Nobel Prizes and conditions achieved by Jews only in the last half-century. Do Jews living today in Europe and the United States “enjoy more access to top research facilities and academic resources than the citizens of other countries”? Yes, and it is a relevant consideration. But the period that I called “one of the most extraordinary stories of any ethnic group at any point in human history” was the 19th century and first half of the 20th century, when Jews were laboring under social and professional discrimination despite legal emancipation. And the comparison group that I used to measure Jewish overrepresentation during that time was not the world population but—stated clearly in the text, hard to miss—the North American and European populations.

But I cannot think that Robert Pollack and Patricia Williams really believe that Jews are not overrepresented at high levels of achievement. Even their own numbers for American and Swedish Nobel Prize winners serve to illustrate how extraordinary the Jewish record has been.

WHAT A pleasure to turn to the letter, also critical but at a very different level, from Gregory Cochran and Henry Harpending, two of the authors of the article about the source of elevated Ashkenazi IQ that occupied such an important place in “Jewish Genius.” We all agree about the speculativeness of my supplements to their presentation of the Ashkenazi story. With that

as the starting point, I have these reactions to their criticisms:

- I see the Hebrew Bible as a massive intellectual achievement, whether judged by its insights into human psychology, complexity of prose, narrative drive, beauty of poetry, or any number of other intellectually demanding criteria. That it is revered is not the point here. Moreover, the Bible was produced not by a single anomalous genius but by uncounted authors over centuries of time—a sign of a culture with unusual human capital. As for the New Testament, unless one wants to argue that Jesus was not the source of his own teachings, and that Paul did not really play the role in formulating Christian theology that he appears to play, I do not see how one avoids concluding that the foundation of the New Testament’s spiritual and intellectual power is Jewish.

- My basis for saying that Joshua ben Gamla’s mandate for universal schooling was widely implemented relies on the scholarship of Maristella Botticini and Zvi Eckstein, and I would have to see the unspecified countervailing evidence before I reassess that position.

- I take issue with the blanket statement that “literacy does not require high IQ.” This is true if literacy is defined as the ability to read and understand the *National Enquirer*, but not if literacy is defined as the ability to read and understand the Hebrew Bible and rabbinic literature—and that is what it took to be a fully observant Jewish male after the first century C.E.

- When it comes to ancient references to the Jews,

I am struck not so much by silence about Jewish intelligence—Greeks and Romans did not readily acknowledge excellence in anyone but themselves, and intelligence itself was not the articulated construct that it is today—as by remarks about Jewish commercial aptitude. From time out of mind, Gentiles have complained about being bested in the marketplace by Jews. This sounds like an IQ-driven phenomenon to me.

Once Messrs. Cochran and Harpending move to their genetic evidence, they are the experts and I am not. I look forward to seeing the results of the analyses that genetic advances are making possible. My falsifiable hypothesis is that today's Jews who are closest genetically to the Sephardim of the Golden Age of Spanish Jewry (roughly the 10th through the 12th centuries C.E.) will have elevated IQ.

DANIEL N. HAINES raises the question (also part of Robert Pollack and Patricia Williams's critique) of whether the natural-selection argument is tautological. If it is said that natural-selection arguments can lead to just-so stories, then I agree: we observe a distinctive trait today, whether in Jews, men, women, or the Inuit, and then work backward to find a plausible evolutionary explanation for it. But the explanations themselves are causally linear, not circular. To say that being a good Jew entailed meeting certain intellectual demands is a factual statement about the content of Judaism; to say that people who were unable to meet those demands tended to fall away from Judaism is a causal statement about incentives

and the human personality; to say that people who possess high IQ are better able to thrive in urban occupations is a causal statement about the source of economic success in urban occupations. Separately, each of these statements lends itself to empirical exploration. Together, they constitute noncircular causal logic.

Marc Mayerson's point about random inequalities and the subsets they produce certainly applies to all sorts of phenomena. Statisticians armed with such mathematical knowledge have been wreaking havoc with conventional wisdom about things like hitting streaks and "clutch" performances in sports. It is difficult, however, to apply this explanation to a phenomenon like disproportionate Jewish accomplishment, which persists across many generations and extends into diverse fields. The same problem prevents the Matthew Effect (what social scientists, referring to Matthew 25:29, call the rich-getting-richer phenomenon) from explaining Jewish accomplishment. Within a single life, the Matthew Effect can be real. A lucky break early in a career can have cascading positive consequences. Across generations, however, a group had better have a systematic advantage working for it that survives the idiosyncrasies of a particular time or place. The ideal combination is a group genetic advantage plus cultural pressures to marry within the group.

David Randall makes an excellent point about the challenges to survival in the medieval city. I am not competent to comment on his speculations about selection for resistance to disease, but

another causal sequence is available: the people with the best chance of escaping and surviving disease in cities were the rich, with their better sanitation, nutrition, living spaces, health care, and options for fleeing a plague. The relationship of IQ to commercial success and of commercial success to better living conditions gave high-IQ urban Jews a significant health advantage that surely contributed to overall reproductive fitness.

Jonathan Weinberg's hypothesis about the adverse effects of clerical celibacy on Christian IQ is plausible and has often been invoked. I wish someone would subject it to quantitative demographic modeling, but, as far as I know, no one has. Mr. Weinberg's hypothesis about homosexuality is new to me. I have never seen any data on IQ among homosexuals, so I will have to put it into the category of "what an interesting idea" without being able to take it any further.

I am similarly intrigued by, and equally unable to be helpful about, Elimelech Shalev's suggestion that success and survival were associated with *leaving* Judaism, and that in many periods the smartest Jews left the fold. Is it in fact true? I am dubious, but I refer the question to experts in Jewish history.

I do not see how the possible contribution of the Khazars to the Ashkenazim, cited by Karen D. Nitzschke, changes anything. The validity of my speculations depends solely on evidence that Jews in general, not just the Ashkenazim, developed elevated IQ. Whether I am right or wrong is independent of the Khazars.

At last, with Jonathan

Kurtzman, a reader returns to a point that I know something about: the roles of nature and nurture in fostering IQ. Unfortunately, it is also a topic that requires a lot of space to explain and document adequately. The abbreviated version is this: a substantial proportion of IQ is shaped by environmental influences, but not the kind of environmental influences that first come to mind. Such things as reading to children, having many books in the house, and valuing education actually have a small causal role. The big factors are genes and the "nonshared environment"—a *mélange* of poorly understood influences like events in the womb and accidents of upbringing. In this context, the importance of the Jewish tradition in nurturing intelligence (as opposed to being a selection factor for intelligence) is unlikely to be large. But a test of Mr. Kurtzman's hypothesis is possible if anyone can find the needed data: compare the IQ's of adults raised in observant and non-observant Jewish homes.

Robert W. Wilson's suggestion that Jewish achievement is affected by the success of its host country has a distinguished intellectual pedigree in the form of Raphael Patai's *The Jewish Mind* (1977), an analysis of what Patai identifies as the six great historical encounters between Jews and other cultures. In my own *Human Accomplishment* (2003), I argue that the form of individualism fostered by Christianity had a positive effect on Jewish accomplishment—that is, once Christians got around to ending their legal suppression of the Jews.

I must disagree with Glenn D. Barnes's assertion about the intellectual demands that Buddhism imposes on its adherents, if by adherent one means the average person who considers himself a good Buddhist. During six years of working in Thai villages and living within the Thai community in Bangkok, I met no lay person who knew more than the Buddhist equivalent of Sunday-school stories about the teachings of his religion. The Buddhist texts are indeed as harrowingly complex as Mr. Barnes says, and the practice of Buddhist meditation can be a profound intellectual and spiritual experience, but reading the texts and meditating are optional. Being a Buddhist in good standing is easy.

SAM LEHMAN-WILZIG's point about the Second Commandment's effect of focusing Jewish intellectual attention on texts is fascinating, and does indeed neatly fit the discrepancy between Jewish visuo-spatial and verbal ability. But in trying to evaluate how much effect the Second Commandment might have had, I think of Islam, which imposed an even more sweeping proscription of images without producing comparable effects. On the other hand, Islam proscribed so many verbal endeavors as well (e.g., realistic fiction) that perhaps it is not a useful comparison.

Stephen H. Schwartz's hypotheses about the significance of dual literacy in languages that are written from left to right and vice versa, and languages with and without vowels, are also fascinating, especially their codicil about the Sephardi

Jews who moved to Arab lands where the second language was also written right to left. I am not competent to discuss the neuroscience of his argument, but the limited effects of shared environment in general (see my response to Mr. Kurtzman) lead me to be cautious about accepting the word "create" in Mr. Schwartz's statement that using both sides of the brain in this manner would "create a new kind of intelligence." But we are agreed that the requirements of being a Jew living in Europe could select for that kind of intelligence.

Chris Speck asks how the average visuo-spatial skills of the Jews are to be reconciled with the dominance of Jews in world-class chess. For purposes of illustration, one might think of intellectual skills as moving on a spectrum from purely visuo-spatial through mathematical and logical to purely verbal. Jews have elevated scores not only on measures of verbal aptitude (which includes memory, extremely important at the higher levels of chess), but also on measures of mathematical and logical aptitude, which are extremely important to calculations of lines of play. Jews are just average on the visuo-spatial items in IQ tests that correlate with the ability to visualize chess positions. But "just average" means that the same proportion of Jews will be at the top percentiles on visuo-spatial skills as Gentiles, while higher proportions will be in the top percentiles on the mathematical, logical, and verbal skills that also contribute. Probabilistically, a higher proportion of Jews than Gentiles may be expected to have the complete package of excep-

tional skills that produces chess champions.

Richard Lynn's review of studies of Sephardi IQ as cited by J. Philippe Rushton offers a potential strategy for exploring the vexed question of non-Ashkenazi Jews: compare their scores with non-Jews who have surrounded them historically. That work could be extended by calculating not raw IQ means, but ratios of Jewish to non-Jewish IQ's within culturally meaningful geographic areas. Doing that calculation accurately presents many methodological difficulties, and good data may be too sparse, but the intriguing hypothesis to be explored is that the ratios will be roughly the same everywhere. The estimated Ashkenazi mean of 110 translates to a ratio of 11:10 in Europe and the United States. If non-Ashkenazi Jews with a mean of 100 were historically surrounded by a people with a mean of 91, the ratio would be identical. Since the IQ means of the non-Jewish populations of North African and Middle Eastern countries are estimated to be well below 100, the hypothesis is not implausible on its face.

SHALOM FREEDMAN's first point is of course correct: Jews are disproportionately represented in the ranks of outstanding achievers but, in raw terms, non-Jews are in the great majority. I proudly join Eoghan Harris in noting that among them are Scots and Irish, and even the occasional Scot-Irish. Mr. Freedman's worries about intermarriage are justified if the question is the survival of a robust Jewish culture, but less so with respect to IQ. On av-

erage, Jews do not marry randomly selected Gentiles, but ones they meet in college or workplace, which in turn means spouses whose own mean IQ is also considerably above the Gentile mean. Increasing cognitive stratification independent of ethnicity or social origins is the ignored story of today's evolving class structure—the story that the late Richard Herrnstein and I tried to bring to public attention in *The Bell Curve* (1994).

David Quin's recounting of the Irish story has many parallels with that of the Jews: the latent ability was always there, but for a long time conditions limited its expression. In earlier decades, Irish potential was hidden by lack of educational opportunities and the overwhelmingly rural character of Ireland. (Everywhere, IQ scores show a marked gradient from rural to urban areas, for reasons related partly to education and partly to the greater intellectual stimulation of urban areas.) But long before the recent Irish economic transformation, the reality of that potential had been proved by the Irish who had emigrated to the United States. As someone who has been visiting Ireland for forty years (my sister married a Limerick man), I should add that I have never doubted Irish verbal ability from the first time I sat in a workingman's pub and overheard the conversational gymnastics going on around me.

My thanks to Philip Bromberg and Sidney Helfant for their kind words, but I am happy to report that no fortitude was required this time. Unlike so many other fraught topics

involving group differences, this one is, or should be, purely celebratory. "Jewish Genius" was wonderful fun to write.
