

ing, graceful ring-lets; that majestic beard, those rosy cheeks and coral lips? Where that . . . noble gait? In what other quarter of the globe shall we find the blush that overspreads the soft features of the beautiful women of Europe, that emblem of modesty, of delicate feelings . . . where, except on the bosom of the European woman, two such plump and snowy white hemispheres, tipt with vermillion (in Stanton, 1960, p. 17).

Louis Agassiz—America's theorist of polygeny

Ralph Waldo Emerson argued that intellectual emancipation should follow political independence. American scholars should abandon their subservience to European styles and theories. We have, Emerson wrote, "listened too long to the courtly muses of Europe." "We will walk on our own feet; we will work with our own hands; we will speak our own minds" (in Stanton, 1960, p. 84).

In the early to mid-nineteenth century, the budding profession of American science organized itself to follow Emerson's advice. A collection of eclectic amateurs, bowing before the prestige of European theorists, became a group of professionals with indigenous ideas and an internal dynamic that did not require constant fueling from Europe. The doctrine of polygeny acted as an important agent in this transformation; for it was one of the first theories of largely American origin that won the attention and respect of European scientists—so much so that Europeans referred to polygeny as the "American school" of anthropology. Polygeny had European antecedents, as we have seen, but Americans developed the data cited in its support and based a large body of research on its tenets. I shall concentrate on the two most famous advocates of polygeny—Agassiz the theorist and Morton the data analyst; and I shall try to uncover both the hidden motives and the finagling of data so central to their support.* For starters, it is obviously not accidental that a nation still practicing slavery and expelling its aboriginal inhabitants from their homelands should have provided a base for theories that blacks and Indians are separate species, inferior to whites.

Louis Agassiz (1807–1873), the great Swiss naturalist, won his reputation in Europe, primarily as Cuvier's disciple and a student of

* An excellent history of the entire "American school" can be found in W. Stanton's *The Leopard's Spots*.

fossil fishes. His immigration to America in the 1840s immediately elevated the status of American natural history. For the first time, a major European theorist had found enough of value in the United States to come and stay. Agassiz became a professor at Harvard, where he founded and directed the Museum of Comparative Zoology until his death in 1873 (I occupy an office in the original wing of his building). Agassiz was a charmer; he was lionized in social and intellectual circles from Boston to Charlestown. He spoke for science with boundless enthusiasm and raised money with equal zeal to support his buildings, collections, and publications. No man did more to establish and enhance the prestige of American biology during the nineteenth century.

Agassiz also became the leading spokesman for polygeny in America. He did not bring this theory with him from Europe. He converted to the doctrine of human races as separate species after his first experiences with American blacks.

Agassiz did not embrace polygeny as a conscious political doctrine. He never doubted the propriety of racial ranking, but he did count himself among the opponents of slavery. His adherence to polygeny flowed easily from procedures of biological research that he had developed in other and earlier contexts. He was, first of all, a devout creationist who lived long enough to become the only major scientific opponent of evolution. But nearly all scientists were creationists before 1859, and most did not become polygenists (racial differentiation within a single species posed no threat to the doctrine of special creation—just consider breeds of dogs and cattle). Agassiz's predisposition to polygeny arose primarily from two aspects of his personal theories and methods:

1. In studying the geographic distribution of animals and plants, Agassiz developed a theory about "centers of creation." He believed that species were created in their proper places and did not generally migrate far from these centers. Other biogeographers invoked creation in a single spot with extensive migration thereafter. Thus, when Agassiz studied what we would now regard as a single widespread species, divided into fairly distinct geographical races, he tended to name several separate species, each created at its center of origin. *Homo sapiens* is a primary example of a cosmopolitan, variable species.

2. Agassiz was an extreme splitter in his taxonomic practice. Taxonomists tend to fall into two camps—"lumpers," who concentrate on similarities and amalgamate groups with small differences into single species, and "splitters," who focus on minute distinctions and establish species on the smallest peculiarities of design. Agassiz was a splitter among splitters. He once named three genera of fossil fishes from isolated teeth that a later paleontologist found in the variable dentition of a single individual. He named invalid species of freshwater fishes by the hundreds, basing them upon peculiar individuals within single, variable species. An extreme splitter who viewed organisms as created over their entire range might well be tempted to regard human races as separate creations. Nonetheless, before coming to America, Agassiz advocated the doctrine of human unity—even though he viewed our variation as exceptional. He wrote in 1845:

Here is revealed anew the superiority of the human genre and its greater independence in nature. Whereas the animals are distinct species in the different zoological provinces to which they appertain, man, despite the diversity of his races, constitutes one and the same species over all the surface of the globe (in Stanton, 1960, p. 101).

Agassiz may have been predisposed to polygeny by biological belief, but I doubt that this pious man would have abandoned the Biblical orthodoxy of a single Adam if he had not been confronted both by the sight of American blacks and the urgings of his polygenist colleagues. Agassiz never generated any data for polygeny. His conversion followed an immediate visceral judgment and some persistent persuasion by friends. His later support rested on nothing deeper in the realm of biological knowledge.

Agassiz had never seen a black person in Europe. When he first met blacks as servants at his Philadelphia hotel in 1846, he experienced a pronounced visceral revulsion. This jarring experience coupled with his sexual fears about miscegenation, apparently established his conviction that blacks are a separate species. In a remarkably candid passage, he wrote to his mother from America:

It was in Philadelphia that I first found myself in prolonged contact with negroes; all the domestics in my hotel were men of color. I can scarcely express to you the painful impression that I received, especially since the

feeling that they inspired in me is contrary to all our ideas about the confraternity of the human type [*genre*] and the unique origin of our species. But truth before all. Nevertheless, I experienced pity at the sight of this degraded and degenerate race, and their lot inspired compassion in me in thinking that they are really men. Nonetheless, it is impossible for me to reprocess the feeling that they are not of the same blood as us. In seeing their black faces with their thick lips and grimacing teeth, the wool on their head, their bent knees, their elongated hands, their large curved nails, and especially the livid color of the palm of their hands, I could not take my eyes off their face in order to tell them to stay far away. And when they advanced that hideous hand towards my plate in order to serve me, I wished I were able to depart in order to eat a piece of bread elsewhere, rather than dine with such service. What unhappiness for the white race—to have tied their existence so closely with that of negroes in certain countries! God preserve us from such a contact! (Agassiz to his mother, December 1846.) (The standard *Life and Letters*, compiled by Agassiz's wife, omits these lines in presenting an expurgated version of this famous letter. Other historians have paraphrased them or passed them by. I recovered this passage from the original manuscript in Harvard's Houghton Library and have translated it, verbatim, for the first time so far as I know.)

Agassiz published his major statement on human races in the *Christian Examiner* for 1850. He begins by dismissing as demagogues both the divines who would outlaw him as an infidel (for preaching the doctrine of multiple Adams) and the abolitionists who would brand him as a defender of slavery:

It has been charged upon the views here advanced that they tend to the support of slavery. . . . Is that a fair objection to a philosophical investigation? Here we have to do only with the question of the origin of men; let the politicians, let those who feel themselves called upon to regulate human society, see what they can do with the results. . . . We disclaim, however, all connection with any question involving political matters. It is simply with reference to the possibility of appreciating the differences existing between different men, and of eventually determining whether they have originated in one or more parts of the world, and under what circumstances, that we have here tried to trace some facts respecting the human races (1850, p. 113).

Agassiz then presents his argument: The theory of polygeny does not constitute an attack upon the scriptural doctrine of human unity. Men are bound by a common structure and sympathy, even

though races were created as separate species. The Bible does not speak about parts of the world unknown to the ancients; the tale of Adam refers only to the origin of Caucasians. Negroes and Caucasians are as distinct in the mummified remains of Egypt as they are today. If human races were the product of climatic influence, then the passage of three thousand years would have engendered substantial changes (Agassiz had no inkling of human antiquity; he believed that three thousand years included a major chunk of our entire history). Modern races occupy definite, nonoverlapping, geographic areas—even though some ranges have been blurred or obliterated by migration. As physically distinct, temporally invariant groups with discrete geographical ranges, human races met all Agassiz's biological criteria for separate species.

These races must have originated . . . in the same numerical proportions, and over the same area, in which they now occur. . . . They cannot have originated in single individuals, but must have been created in that numeric harmony which is characteristic of each species; men must have originated in nations, as the bees have originated in swarms (pp. 128–129).

Then, approaching the end of his article, Agassiz abruptly shifts his ground and announces a moral imperative—even though he had explicitly justified his inquiry by casting it as an objective investigation of natural history.

There are upon earth different races of men, inhabiting different parts of its surface, which have different physical characters; and this fact presses upon us the obligation to settle the relative rank among these races, the relative value of the characters peculiar to each, in a scientific point of view. . . . As philosophers it is our duty to look it in the face (p. 142).

As direct evidence for differential, innate value Agassiz ventures no further than the standard set of Caucasian cultural stereotypes:

The indomitable, courageous, proud Indian—in how very different a light he stands by the side of the submissive, obsequious, imitative negro, or by the side of the tricky, cunning, and cowardly Mongolian! Are not these facts indications that the different races do not rank upon one level in nature (p. 144).

Blacks, Agassiz declares, must occupy the bottom rung of any objective ladder:

It seems to us to be mock-philanthropy and mock-philosophy to assume that all races have the same abilities, enjoy the same powers, and show the same natural dispositions, and that in consequence of this equality they are entitled to the same position in human society. History speaks here for itself. . . . This compact continent of Africa exhibits a population which has been in constant intercourse with the white race, which has enjoyed the benefit of the example of the Egyptian civilization, of the Phoenician civilization, of the Roman civilization, of the Arab civilization . . . and nevertheless there has never been a regulated society of black men developed on that continent. Does not this indicate in this race a peculiar apathy, a peculiar indifference to the advantages afforded by civilized society? (pp. 143–144).

If Agassiz had not made his political message clear, he ends by advocating specific social policy. Education, he argues, must be tailored to innate ability; train blacks in hand work, whites in mind work:

What would be the best education to be imparted to the different races in consequence of their primitive difference, . . . We entertain not the slightest doubt that human affairs with reference to the colored races would be far more judiciously conducted if, in our intercourse with them, we were guided by a full consciousness of the real difference existing between us and them, and a desire to foster those dispositions that are eminently marked in them, rather than by treating them on terms of equality (p. 145).

Since those “eminently marked” dispositions are submissive-ness, obsequiousness, and imitation, we can well imagine what Agassiz had in mind. I have treated this paper in detail because it is so typical of its genre—advocacy of social policy couched as a dispassionate inquiry into scientific fact. The strategy is by no means moribund today.

In a later correspondence, pursued in the midst of the Civil War, Agassiz expressed his political views more forcefully and at greater length. (These letters are also expurgated without indication in the standard version published by Agassiz's wife. Again, I have restored passages from the original letters in Harvard's Houghton Library.) S. G. Howe, a member of Lincoln's Inquiry Commission, asked Agassiz's opinion about the role of blacks in a reunited nation. (Howe, known best for his work in prison reform and education of the blind, was the husband of Julia Ward Howe,

author of the "Battle Hymn of the Republic".) In four long and impassioned letters, Agassiz pleaded his case. The persistence of a large and permanent black population in America must be acknowledged as a grim reality. Indians, driven by their commendable pride, may perish in battle, but "the negro exhibits by nature a pliability, a readiness to accommodate himself to circumstances, a proneness to imitate those among whom he lives" (9 August 1863).

Although legal equality must be granted to all, blacks should be denied social equality, lest the white race be compromised and diluted: "Social equality I deem at all time impracticable. It is a natural impossibility flowing from the very character of the negro race" (10 August 1863); for blacks are "indolent, playful, sensuous, imitative, subservient, good natured, versatile, unsteady in their purpose, devoted, affectionate, in everything unlike other races, they may but be compared to children, grown in the stature of adults while retaining a childlike mind. . . . Therefore I hold that they are incapable of living on a footing of social equality with the whites, in one and the same community, without being an element of social disorder" (10 August 1863). Blacks must be regulated and limited, lest an injudicious award of social privilege sow later discord:

No man has a right to what he is unfit to use. . . . Let us beware of granting too much to the negro race in the beginning, lest it become necessary to recall violently some of the privileges which they may use to our detriment and their own injury (10 August 1863).

For Agassiz, nothing inspired more fear than the prospect of amalgamation by intermarriage. White strength depends upon separation: "The production of halfbreeds is as much a sin against nature, as incest in a civilized community is a sin against purity of character. . . . Far from presenting to me a natural solution of our difficulties, the idea of amalgamation is most repugnant to my feelings, I hold it to be a perversion of every natural sentiment. . . . No efforts should be spared to check that which is abhorrent to our better nature, and to the progress of a higher civilization and a purer morality" (9 August 1863).

Agassiz now realizes that he has argued himself into a corner. If interbreeding among races (separate species to Agassiz) is unnatural and repugnant, why are "halfbreeds" so common in America

Agassiz attributes this lamentable fact to the sexual receptiveness of housemaids and the naïveté of young Southern gentlemen. The servants, it seems, are halfbreeds already (we are not told how their parents overcame a natural repugnance for one another); young men respond aesthetically to the white half, while a degree of black heritage loosens the natural inhibitions of a higher race. Once acclimated, the poor young men are hooked, and they acquire a taste for pure blacks:

As soon as the sexual desires are awakening in the young men of the South, they find it easy to gratify themselves by the readiness with which they are met by colored [halfbreed] house servants. . . . This blunts his better instincts in that direction and leads him gradually to seek more spicy partners, as I have heard the full blacks called by fast young men (9 August 1863).

Finally, Agassiz combines vivid image and metaphor to warn against the ultimate danger of a mixed and enfeebled people:

Conceive for a moment the difference it would make in future ages, for the prospect of republican institutions and our civilization generally, if instead of the manly population descended from cognate nations the United States should hereafter be inhabited by the effeminate progeny of mixed races, half indian, half negro, sprinkled with white blood. . . . I shudder from the consequences. We have already to struggle, in our progress, against the influence of universal equality, in consequence of the difficulty of preserving the acquisitions of individual eminence, the wealth of refinement and culture growing out of select associations. What would be our condition if to these difficulties were added the far more tenacious influences of physical disability. . . . How shall we eradicate the stigma of a lower race when its blood has once been allowed to flow freely into that of our children (10 August 1863).*

Agassiz concludes that legal freedom awarded to slaves in manumission must spur the enforcement of rigid social separation among races. Fortunately, nature shall be the accomplice of moral

H. D. Cope, America's leading paleontologist and evolutionary biologist, illustrated the same theme even more forcefully in 1890 (p. 2054): "The highest part of man cannot afford to lose or even to compromise the advantages it has acquired by hundreds of centuries of toil and hardship, by mingling its blood with the lowest. . . . We cannot cloud or extinguish the fine nervous susceptibility, and the mental force, which cultivation develops in the constitution of the Indo-European, by the fleshly instincts, and dark mind of the African. Not only is the life of the Indo-European extinguished, and the life of mere living introduced in its stead, but the possibility of resurrection is rendered doubtful or impossible."

virtue; for people, free to choose, gravitate naturally toward the climates of their original homeland. The black species, created for hot and humid conditions, will prevail in the Southern lowlands, though whites will maintain dominion over the seashore and elevated ground. The new South will contain some Negro states. We should bow before this necessity and admit them into the Union; we have, after all, already recognized both "Haity and Liberia."* But the bracing North is not a congenial home for carefree and lackadaisical people, created for warmer regions. Pure blacks will migrate South, leaving a stubborn residue to dwindle and die out in the North: "I hope it may gradually die out in the north where it has only an artificial foothold" (11 August 1863). As for the mulattoes, "their sickly physique and their impaired fecundity" should assure their demise once the shackles of slavery no longer provide an opportunity for unnatural interbreeding.

Agassiz's world collapsed during the last decade of his life. His students rebelled; his supporters defected. He remained a hero to the public, but scientists began to regard him as a rigid and aging dogmatist, standing firm in his antiquated beliefs before the Darwinian tide. But his social preferences for racial segregation prevailed—all the more because his fanciful hope for voluntary geographic separation did not.