

JOSEPH HENRY

Scientist and Christian

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When I first browsed nineteenth-century remembrances of Joseph Henry, he seemed too good to be true.

His scientific colleagues likened him to Benjamin Franklin. His Smithsonian affiliates equated him to Nestor, the Greek leader celebrated for contributing wise counsel. His students from his earlier decades at the Albany Academy and Princeton College felt that he matched Lord Byron in handsomeness. And, in the ultimate compliment of most nineteenth-century Americans, his friends identified his moral deportment with that of Jesus.

His admirers literally put him on a pedestal--a seven-foot granite pedestal--when they erected a larger-than-life statue of him in front of the Castle [Smithsonian Institution Building]. During your next stroll on the Mall, notice the statue's iconographic cues: the magisterial academic gown; the tome on which Henry's hand securely rests; and, most of all, his fixed look--solemn but beneficent. This bronze figure blazons not only the authority, dignity, and mystique of knowledge but also the rectitude, purity, and benevolence of Christian principle. "There will never be a time," an acquaintance wrote following the statue's 1883 dedication, "when the eye will not rest with pleasure upon the folds of the drapery, when it may not receive a sacred inspiration from the calm and uplifted gaze which so fully recalls the living form of our vanished friend."

Of course, memorials to Henry tell as much about the persons creating them as about Henry. But these tributes also capture something of Henry's essence. As I delved further into the archival record, I found ample evidence that Henry did at times live up to the hyperbole of his eulogists.

He displayed scientific brilliance, designing a powerful electromagnet that would trigger his and British researcher Michael Faraday's landmark experiments on what became known as electromagnetic induction. Also, as an adored professor in Albany and Princeton,



Stained glass window in Albany's First Presbyterian Church

he excelled in teaching--instructing a generation of lawyers, clergyman, and doctors about not merely the concepts of natural philosophy but also its moral and religious implications. And, while Secretary of the fledgling Smithsonian Institution, he manifested administrative sagacity as he negotiated Washington political pitfalls and buttressed the nation's lagging scientific enterprise. Finally, he exhibited Christian virtue, striving daily to live a life of duty, service, and self-sacrifice.

memorializing site of Joseph Henry's baptism. The window's ennobling iconography--a beatific Henry instructing twelve disciples at the Albany Academy--is reinforced by captions at bottom of left and right panels: Master Scientist and Devout Christian. First Presbyterian Church.

But as I dug still deeper into the historical record, I discovered that, of course, Henry was not too good to be true. As might be expected, the archives revealed a more fallible, if not flawed, Henry. This finding in no way diminishes Henry's professional triumphs and personal virtues. Instead, his foibles and frailties make him ultimately a more compelling person. We can glimpse the contrast between the bronze Henry and the flesh-and-blood Henry through two examples, one involving his scientific record and the other concerning his personal temperament.

To be sure, in his research on electricity and magnetism, Henry achieved and sustained the high respect of especially those American and foreign colleagues with whom he had close personal relationships. He never, however, progressed to the point of winning top recognition among more impersonal, elite segments of the broader, international scientific community. Indeed, Henry's published research record, although notable, was patchy. He often failed to report his findings promptly and in widely accessible outlets. Moreover, he often failed to grasp--or, at least, to report--the fuller import of his laboratory gleanings; his pattern was to focus undividedly on a line of investigation only after another researcher announced results involving a similar or identical line.

While somewhat idiosyncratic to Henry, these shortcomings reflected in part the onerous teaching loads and meager scientific resources, material and institutional, of the mid-nineteenth-century United States. Although he cultivated his overseas contacts, he failed to attain even an honorary, foreign membership in either the Royal Society of London or the Paris Academy, the foremost scientific societies of the two countries with which he maintained strongest ties. Most British and French savants did not deem him another Franklin.

Unquestionably, in personal temperament Henry displayed a fervent commitment to duty, service, and self-sacrifice. In accepting the secretaryship of the Smithsonian in late 1846, for example, he downplayed the prestige of his new station and repudiated any implication of personal or even professional fulfillment. Instead, insisting that he had made no effort to obtain the post, he voiced an altruistic rationale for conceding to others' calls to serve as Secretary. He had accepted, he maintained, out of duty to the nation and to science.

This high-minded rationale, with its connotation of self-sacrifice and moral obligation, contrasts sharply, however, with a set of baser issues that Henry repeatedly raised in his more intimate correspondence with friends and relatives--issues of salary and recognition. He told his brother that he would not entertain the suggestion of moving from Princeton to Washington unless the salary were generous; he also said that, if award of the secretaryship were dependent on scientific reputation, then he was undoubtedly entitled to the situation. The rationale of dutifully acquiescing to the secretaryship also contrasted with Henry's

earlier hints to colleagues about his discontent with existing levels of reward and recognition as a Princeton professor. Nevertheless, he consistently cited duty, rather than self-fulfillment, as his motive for accepting the post.

As his letters and other writings clearly show, Henry believed the rationale--believed that he was selflessly fulfilling a moral obligation. For decades, he had been placing duty and altruism at the core of his personal value system. This stance was an expression of, however, not merely his innate temperament or American culture's prevailing republican and Protestant values. The stance also had psychological shadings traceable to childhood traumas.

The traumas, which Henry kept hushed most of his adult life, arose from a tragedy in his working-class family: his father's alcoholism and death due to delirium tremens. Henry emerged from a troubled youth with a deep need for approval and affirmation. But he masked public expressions of this egocentric side of his personality. Instead, he imposed on himself a regimen of service to others. Cloaking his personal desires, he consistently invoked what he perceived to be his moral duty as his motive for following a particular course of action--whether in professional or personal endeavors.

And lest any hint of self-fulfillment or self-gratification should surface publicly, he routinely offered self-abnegating reconstructions of the circumstances behind his actions. Thus, he repeatedly justified his acceptance of the Smithsonian secretaryship in terms of self-sacrificing duty to the nation and science rather than, as he unguardedly intimated to friends and relatives, increased salary and deserved recognition.

To replace idealized images of Henry with historically based portrayals is not to demean his life and career. Instead, we start to fathom how a boy from a family of modest means in a nation of scant scientific resources attained national and international distinction in the esoteric field of natural philosophy. We begin to grasp the ways in which he helped mold, and was molded by, a complex of intertwined scientific and cultural currents on local, national, and international levels. To understand this complex is to understand further the character of scientific inquiry in the modern world and the place of science in American society.

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