

Objective measurement

—by Ilse Genovese

Thomas Jefferson’s ambition for many years was to found a great university that would serve as “the future bulwark of the human mind in this country.” It was not until he was more than 70, after he retired from a long life of public service, that Jefferson found the time to fulfill this ambition.

As a skilled architect, Jefferson was aware that an institution such as he contemplated must be given appropriate architectural expression. Jefferson’s concept was an “Academical Village,” where students lived in close proximity to the professors and their classrooms.

As a scientist fascinated with “objective measurement,” he knew that his revolutionary compound design had to be based on “ground truth.” And so, on July 18th, 1817, Jefferson rode from his home at Monticello, Albermarle County, to the hill in the vicinity of Charlottesville to survey the site purchased for his Central College. He carried with him a sophisticated theodolite made by the Englishman Jesse Ramsden, one of the most prominent instrument makers of the 18th century.

The survey of the “Lawn” of today’s sprawling University of Virginia is the culmination of Jefferson’s involvement with surveying—and easily the most consequential of the surveys he had personally conducted.

Unlike many of his contemporaries, Jefferson was a tireless promoter of all the arts—ranging from science and technology to the humanities—



A map Jefferson drew to show the location of the Monticello plantation in relation to the towns of Charlottesville and Milton, VA. [Special Collection of the University of Virginia Library.]



The “Lawn” with the Rotunda.
[University of Virginia Library.]

as well as the public institutions and policies that strengthen them. Jefferson understood that “objective measurement” is a crucial tool in public policy, and he recommended its use whenever possible. Consequently, for the Land Ordinance of 1785, he advocated a system of rectangular surveys to be conducted prior to any sales or settlements, in order to enhance the fairness of land acquisition.

Jefferson’s appreciation of the role of surveying in society came from his father, a surveyor who bequeathed to his 14-year-old son surveying equipment and maps, and William Small, his professor at the College of William and Mary, who encouraged young Jefferson’s natural inclination for quantitative and scientific thinking.

Even though Jefferson was never a professional field surveyor, he made significant contributions to the profession of surveying in America through appointments, policy directives, and recommendations. Often, the impact of these contributions has not been fully appreciated by the public, but surveyors are acutely aware of their effect on our Nation’s public and private enterprise.

In 1780 and 1781, for instance, he recommended a method for extending the Mason-Dixon Line to, and along, the western meridian (as specified in William Penn’s original grant) to the Ohio River. Also in the 1780s, he made a map of Virginia by synthesizing data from several sources, and then calibrated this map to the prime meridian centered on Philadelphia. The Jefferson



Jefferson's statue in the Flagler Court of the Darden School of Business.
[www.upress.virginia.edu]

Stone, laid near the Washington Monument in 1804, is a visible demarcation of the first meridian of the United States.

As President, Jefferson made scientific attainment a criterion for appointments—as in the case of Jared Mansfield whom he had appointed Surveyor General of the Northwest Territory—and for the surveying institutions he had created—e.g., the Office of Surveyor General of the Mississippi Territory to which Isaac Briggs was appointed in 1803. Three years later, Jefferson proposed the creation of another scientific office, the Survey of the Coast. The surveys began in earnest in 1816, and the proposed Survey developed into the oldest scientific institution of the U.S.—the U.S. Coast and Geodetic Survey, now part of NOAA. Even the success of the Corps of Discovery expedition to the West owes Jefferson. He insisted that one of the principal explorers, Meriwether Lewis, receive survey training in Philadelphia before setting off on the journey.

These acts and other accomplishments serve as a

reminder of Jefferson's impact on the growth of our Nation. His Declaration of Independence is a permanent expression of the democratic aspirations of all Americans. His focus on education helped create the underpinnings of a unique system of self-governance. His lifelong championing of objective measurement through surveying and other scientific methods is an expression of the foresight, energy, and actions required of both individuals and nations to succeed.

One such modern expression is Jefferson's sculpture donated to the University of Virginia by the Darden Class of 1974 and dedicated in September 2007 in the Darden School of Business.

The statue depicts Jefferson at the age of 74 surveying the land of University of Virginia. There is no other stature, anywhere, of Jefferson at that age—and in surveyor's clothes. Finally, at the end of his public career, Jefferson realized a lifelong dream of founding a national university; the cornerstone of Central College, the foundation of today's University of Virginia,

was laid on October 6, 1817. The placement of the statue is not without significance either. In existence since 1955, the Darden School of Business is a “professional school working to improve society by developing leaders in the world of practical affairs” (www.darden.virginia.edu).

The creators of the statue are Daub & Firmin Studios, LLC. Rob Firmin wrote an extensive account in the December 2008 issue of *The Old Dominion Surveyor* about the original survey of the University by Jefferson which helped inform the company's work on the sculpture.

Jefferson's efforts to raise the quality of American higher education have paid off. Many of the graduates of the University of Virginia and a good number of other technical colleges and universities throughout the U.S. have either led our Nation in the past or will do so in the future. ■



“Well informed people can be trusted with self-government,” Thomas Jefferson, Paris, 1789.