

Seventy-fifth Anniversary of the Founding of Weston Observatory

by

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This afternoon we are assembled at what, in 1930, was Weston College, a house for the spiritual and academic training of young men for a special kind of career, the Jesuit priesthood. Here they prepared “to travel to any part of the world where there is hope of accomplishing work for God’s Greater Glory” to quote our Founder, Ignatius of Loyola. The operative words are not just to do “good work for God’s glory” but to engage in works chosen selectively to be for God’s Greater Glory.

So today we celebrate not only the birthplace in Boston for the education of young men for the Jesuit priesthood, but, in the vision of its first Jesuit Rector, Emmet P. Tivnan, he included a facility and faculty for the study of earthquakes, the Weston College Seismological Laboratory. This would be a facility where interested young men would learn the basics of the natural sciences including seismology. This was the newly founded branch of the Earth Sciences that leaped into prominence as a result of the 1906 San Andreas Earthquake and fire that devastated San Francisco.

The practice of seismology became attractive to many young Jesuits trained in mathematics, geology and/or physics who saw an opportunity to hone their scientific skills in this new science for a small investment in basic instruments. That is how at least three of our famous Jesuits, Dan Linehan, Jim Devlin and Martin F. McCarthy got started. Additionally influential public officials encouraged Jesuits to become active in seismology in 1909 and again in 1921 after the disruptions of World War I. Their reasoning was that they recognized that scientists of the Jesuit order could act as a group with corresponding influence and credibility. They saw that Jesuits in seismology could be mobilized in an earthquake catastrophe so as to transmit information on disastrous tremors in the earth as a centralized group. This concept was grasped by the Jesuits Father Odenbach, by key administrators of relevant United States government agencies, and by Jesuit Superiors. Fr. Odenbach, at John Carroll University, Cleveland, in correspondence with Jesuit Provincial superiors and endeavoring to recruit Jesuit scientists into the new field of seismology, wrote as follows: “Professor Willis L. Moore chief of the United States Weather Bureau, remarked to me that he thought the Society [is] in a position to lead all other institutions in developing the new science... Owing to its network of colleges in all parts of the world and the centralization of its government it could do work of quality impossible to any other institution.”

To put our 75th anniversary into a larger perspective I should note that scientific research coupled with education in science has been important to Jesuits since 1572. While we remember the 75 years of achievement by Weston Observatory staff, let us remember that scientific research and education in science have been consistently regarded by the Jesuit leadership as of very great importance.

The consuming interest that Jesuits and their companions have shown for geological and astronomical phenomena is traced essentially to the founding of the Society of Jesus in 1540. By 1572 the Jesuit, Christopher Clavius in the Roman College started an important tradition of Jesuit research in mathematics and astronomy. Several factors are seen as responsible for the success in science of Jesuits, in addition to college and university teaching of mathematics which they regarded as fundamental. Additionally they developed a communications network because missionary activity took Jesuits to new and remote countries where they observed previously undocumented natural phenomena. As a result Jesuits, early on, were aware in a timely fashion of discoveries by fellow Jesuits throughout the world. Finally the discipline of geometry, as mathematics was then termed, was readily applicable to astronomy, cartography, and was a central field of study in the humanistic program of the curriculum.

By 1582 the Jesuit, Mateo Ricci a student of Clavius set out to prepare himself to be admitted into China. Realizing that the Emperor and other leaders in China had a high regard for philosophy, art, music and science, Ricci prepared himself thoroughly in these fields. The Imperial officials reluctantly admitted these foreigners, but were attracted to them because the Jesuits spoke impeccable Chinese, and displayed specially prepared maps and astronomical instruments. By 1610 Ricci was appointed by the Emperor, Wan-li as Imperial astronomer. This meant that these Jesuits were permitted to carry out their scientific research and their religious activities at will.

In time, Ricci and his Jesuit successors, Verbiest and Schall von Bell, using geometric and trigonometric concepts brought about “a revolution in the sciences of astronomy, the design of astronomical instruments, map-making and the intricate art of making accurate calendars. Besides calendars, the Jesuits were inveterate mapmakers and were continually traveling around the empire improving their understanding of the location of and contours of that magnificent mountainous landscape. Because they were esteemed scientists, these pioneers in China laid a solid basis of outstanding scholarly and religious contributions before they were cut short by the expulsion of all foreigners in 1948.

This year 2005, marks another important, widely celebrated Jesuit milestone because it highlights the 50th Anniversary celebration of the life and accomplishments of one of the most prolific and accomplished modern Jesuit scientists and mystics, Teilhard de Chardin. From 1929 to 1947, Teilhard served by invitation of the Director of the Geological Survey of China, as a working Advisor to its Director. Teilhard is very well known for his voluminous writings on Spirituality and during his lifetime was celebrated for his monumental contributions to research in geology and paleontology throughout the vast region of China as well as Burma, India and beyond. Teilhard’s scientific accomplishments compare most favorably with the best work of talented researchers, many of them throughout the world being his personal friends.

Let me conclude by asking you to join me in a prayerful invocation. God, Creator of our Earth and Universe we invoke your blessing on our lives and our work: past, present and future. We pray, as Solomon did, for wisdom as we work to unravel the secrets of Nature

still locked up in tectonic plates and in supercontinents. Our God, Creator of the Earth and Universe, we thank you for these gifts and blessings that are now ours because of the life and wisdom of St. Ignatius. Since he founded the religious order of Jesuits 465 years ago, we have been blessed abundantly by the integrity and singleminded work of their lives as well by the inspiration that comes to us from our lay-Companions of Jesuits who are attracted to participate with us as friends in the Lord. We ask this through Christ our Lord. Amen.