MAUNSELL WHITE III: LOUISIANA INVENTOR AND VICTIM OF THE MATTHEW EFFECT

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Running head: J. Maunsell White III

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Victim of the Matthew Effect

When the public sets a war memorial up
Do those who really sweated get the credit?
Oh no! Some general wangles the prestige! –
Who, brandishing his one spear among thousands,
Did one man's work, but gets a world of praise.

Euripides (ca. 484-406 B.C.)

There are numerous instances in history where the person contributing the most to an effort does not receive the credit deserved; someone else basks in the limelight. In the words of an unknown philosopher, "the soldiers do the fighting, but the general gets the credit."

Sociologist Robert K. Merton expresses a similar idea known as the "Matthew Effect." Merton coined the name of this effect from the Gospel according to St. Matthew: "For unto everyone that hath not shall be taken away even that which he hath." According to Merton, the Matthew Effect consists "in the accruing of greater increments of recognition for particular scientific propositions to scientists of considerable repute and the withholding of such recognition from scientists who have not yet made their mark." ²

A prime example of the Matthew Effect originated during the era known as Scientific Management (circa 1898). The soldier of this period was MAUNSELL WHITE III; the general was the infamous "Father of Scientific Management," Frederick Winslow TAYLOR. WHITE and TAYLOR were co-discoverers of the TAYLOR-WHITE Process for treating tool steel.

This discovery revolutionized metal-cutting techniques and paved the way for mass production methods.³ As economic historian Carl N. Degler comments:

One of the many innovators in this field (machine-tool industry) was Frederick W. TAYLOR, who in the 1880s and 1890s invented a whole series of important machine tools, but whose major contribution was the development of techniques for making high-speed machine tools. The higher the operating speed of a machine tool, the greater the amount of work it could perform, but high speeds also heated the tool to the point where it softened and lost its cutting ability. Working with J. (sic) Maunsel WHITE at the Bethelehem Steel Company, TAYLOR in 1898 developed a process whereby the steel tool retained its hardness even when running very fast and hot. TAYLOR's processes and tools are still standard in the machine shops of the world.4

The significance of this discovery to TAYLOR's career is well expressed by biographer Daniel Nelson:

The discovery of high speed tool steel had a substantial impact on TAYLOR's career. It increased his stature among engineers, spurred additional inventions, and advanced his metal-cutting investigation. Two other effects were even more important in the long term. The money he received from the sale of the high speed steel patents was the largest single increment to a fortune that provided the financial base for the diffusion of scientific management.... Equally important, the interest that high speed steel generated among engineers and manufacturers projected TAYLOR into the role of propagandist for his work. anticipating his 'second' career (as the Father of Scientific Management).5

Despite WHITE's contribution, the literature of the Scientific Management era, as well as

more contemporary offerings, fail to acknowledge his role in this discovery. TAYLOR is typically given sole credit for developing high speed tool steel. Research suggests, however (other protests aside⁶), that WHITE played at least an equal role in this important discovery. It would thus appear that the Matthew Effect has struck again!

The Family Beginnings

The American heritage of Maunsell WHITE III originated when his grandfather, Maunsel WHITE, 7 came to the United States from Ireland in 1790. After working for several years in Louisville, WHITE came to New Orleans in 1800 via a flatboat. His voyage down the Mississippi lasted 60 days! WHITE's account of his first visit to New Orleans in a letter published in 1845, appeared in the October, 1858 De Bow's Review:

The population of New Orleans was rated at that time about six thousand including blacks and whites. There was not to be seen on the banks of the Ohio, from the foot of the rapids to the mouth, but a small settlement, called Red Banks; another called Yellow Banks, Fort Massac, and a cabin below the rock and cave. From the mouth of the Mississippi to Bayou Sara and Point Chicot on the right, Brownsburgh, Natchez, and Adams on the left, were all of human habitation that were seen until you arrived at Point Coupee' and the coast. All the rest was a dreary waste, over which the bear and the crocodile held their sway, unless interrupted by the occasional sojourn of an Indian tribe.8

As a resident of New Orleans, White was not content to be an observer. He was the type of citizen that got involved. During his lifetime, he dominated business and political circles. According to Koenig,

He engaged in commerce accumulating a large fortune and became one of the state's largest and wealthiest sugar planters.... White had influential friends, among them Presidents' (sic) Andrew Jackson and Zachary Taylor. He was a captain of the Volunteer Regiment of the Louisiana Blues and fought in the Battle of New Orleans. 9

Although WHITE was an astute businessman, he did not live by the philosophy that nice guys finish last. He was one of the most respected businessmen in the New Orleans area. As De Bow states:

Col. WHITE continued, for almost half a century, to hold a place among the most respected merchants of New Orleans. In the zenith of its prosperity, no

home was wider known throughout the valley of the Mississippi; and in no period of its history was its credit or character tarnished by a breath. The word of Maunsel WHITE was his bond. 10

Many examples of WHITE's kindness and good character occurred throughout his lifetime. He was always willing to offer his help. Eaton reports the following event:

Many years after his (WHITE's) arrival in America when he heard that an Irish gentleman who had been kind to him in his youth was threatened with the fore-closure of a mortgage on his home, Jockey Hall, he sent thirty bales of his cotton to Liverpool to be sold to relieve the man's financial distress.

Another example of WHITE's beneficence involved a business deal with Andrew JACKSON. As Eaton relates:

On another occasion when JACKSON complained that WHITE's firm had sold his cotton too quickly, thereby causing a loss, the New Orleans agent credited him with the difference between the price at which it was sold and the current price. Thereupon, JACKSON sent to WHITE a letter of gratitude beginning with 'My dear Col,' in which he first praised him for his brave and soldier-like conduct on the battlefield of Chalmette and then praised him for his action in regard to his cotton. 12

Finally, WHITE's generosity was probably most evidenced with his funding in 1848 of the first endowed chair of commerce and statistics at any American university. This was some two decades before the founding of the first school of business at the University of Pennsylvania in 1881 by financier Joseph Wharton. Koenig recounts:

WHITE was also an administrator of the University of Louisiana which later became known as Tulane University. He and his wife established, with generous donations, a Professorship of Commerce at the University in 1848, which was the first in any American university. ¹³

WHITE's intentions in solidifying this professorship were explained in his letter to

University Board on January 28, 1848:

My object is to secure an endowment for a chair of Commerce, Public Economy, and Statistics, in the University. These matters have not, so far as I am informed, been made the subject of especial study in any of the Institutions of this country or in Europe
It will be the proud satisfaction of New Orleans to have taken the lead of all other commercial cities of the world in this matter, and it may be confidently affirmed that this important department of knowledge could be prosecuted with higher success and efficiency in no other city. To her, commerce is the all and all of prosperity, and she the spontaneous, youthful, yet vigorous offspring. 14

Maunsel White's Political Involvement

White was not only involved in business matters, but was also actively concerned with political issues.

The Biographical Dictionary of American Business
Leaders summarizes his political involvement by stating:

In politics WHITE was a staunch Southern Democrat, and from 1846 to 1850 represented his parish in the state senate. He was drawn into politics by his zeal for the preservation of southern rights and the institution of slavery. He shared the expansionist views of many southerners, even desiring to annex Cuba. WHITE was very upset by the Wilmot Proviso, but he was also a strong Unionist, as evidenced by his financial interests in the North. 15

Maunsell White III -- "A Brilliant Mind"

Maunsell WHITE III (hereafter MW III), the son of Bettie BRADFORD and Manual WHITE, Jr., was born on March 15, 1856, on his grandfather's plantation, Deer Range, situated in Plaquemines Parish on the Mississippi River about 40 miles in a southeastern direction below the city of New Orleans. MW III possessed great intelligence as evidenced in his early years by the fact that he never attended elementary or high school prior to attending college. During his youth, he had a personal tutor on the plantation. MW III attended Georgetown University where he graduated as class valedictorian.

Upon completing his degree requirements at Georgetown, he enrolled in the Metallurgy Doctorate Program at the Stevens Institute, graduating with the class of 1879. MW III's brilliance was not only reflected in his educational background, but also by his photographic memory. It was said that he could recite from memory Hamlet, as well as other Shakespearian plays, in their entirety.

MW III's Contribution to Scientific Management

After MW III graduated from Stevens Institute, he went to work for the Bethlehem (PA) Iron Company. It was at Bethlehem where WHITE and TAYLOR discovered the TAYLOR-WHITE process for hardening tool steel. In many ways, TAYLOR and MW III were quite opposite, complementing one another in form and character. Whereas, TAYLOR was a true product of old New England, MW III was unmistakably old New Orleans. As described by TAYLOR's official biographer Frank B. Copley, MW III was a "true" son of the Crescent City. "A bon vivant and a connoisseur in both food and drink, he took life easy, and over his glass loved to exercise his skill as a raconteur."16

The important fact that is too often unacknowledged is that TAYLOR may have never discovered this high speed tool steel without MW III's aid. Before receiving MW III's assistance, TAYLOR had ruined three of Bethlehem Steel lathe's in his attempt to test different steel alloys. Just eight days after WHITE had joined the experiments (October 23, 1898), the discovery of the high speed steel tool techniques, which later produced the TAYLOR-WHITE process patent, occurred. Nelson describes the events leading to the TAYLOR-WHITE discovery:

Taylor began to improve the 'smaller engineering elements' of the machine shops in the fall of 1898. His initial effort was to standardize the cutting tool used in the plant. Five years before, at the Cramp Shipyard, he had studied the relationship between different alloy steels and tool performance and had concluded that Midvale 'self hardening' chromium alloy steel was superior to other makes. At Bethlehem he resumed these tests in an attempt to determine whether a better steel had appeared in the intervening years. Performing the lathe work himself, he decided by mid-October that the Midvale steel was still preferable to other brands and should be used for all Bethelehem machine work. 17



MAUNSELL WHITE III