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Heroes of Noble Purpose

By Richard Junker

Working on "The Competency Framework: Designing Your Future" series[1] for *Actuary of the Future* made me think of my noble purpose and the heroes that were my personal inspiration. The glory of my heroes—and others—can inspire us as actuaries today, help us find our own noble purposes, and make creating a five-year plan for personal growth (part of the Competency Framework) meaningful and motivating.

In searching for heroes, reading biographies of famous people and the classics can inspire us to approach their eloquence; to emulate the poetry of how they put their ideas across to mobilize their public; to elevate our own characters by their examples; to be fully equipped to make moral and ethical judgments; and to master the primary tool, our majestic English tongue.

You may ask why we need heroes. The most compelling reasons we need them are because heroes:

- Reveal qualities we are missing.
- Save us when we are in trouble.
- Pick us up when we are down.
- Light a dark world, giving us hope.
- Give us great stories of who we are.
- Give us wisdom.
- Deliver justice.[2]

By now, you have acquired your own heroes, be they scientists, artists or athletes, or even come from a comic book. Learning of their lives, we discover how they found the noble purpose that drove them to extraordinary accomplishment, to overcome intimidating hurdles.

I invite you to consider four of my heroes, inspired by the traits they possess that actuaries treasure: intellect, vision, artistry, interpersonal versatility and courage.

JOHANNES KEPLER

I encountered Johannes Kepler in all his glory when I visited the Galileo Museum in Florence, Italy. Surfeited on art museums, I switched to science museums. The Max Caspar biography of Kepler presented itself to me in the bookstore. I spent over half my time at the museum reading the book and bought it on arriving home.

Kepler was a trained seminarian. In his early 20s, he realized his superior mathematics skills directed him to serve his god in ways other than as a priest. *His noble purpose was to worship his god for his wondrous creation, and to point humanity to peace through contemplating the beauty of the firmament as revealed through mathematics.* His fondest dream was that his revelations would introduce all to the geometric perfection of the world God gave humanity, that they might focus on its beauty and order. Thus would he divert the people and nations of the world from fighting and feuding.

Astronomy, his chief sphere, was for him the delight of the human race. Heavenly speculations, he was convinced, quench the thirst of minds and impress on custom a growing appetite for the divine virtues. Secretly they bend the wills of man, tame his disorderly cupidity so that, because he is accustomed to the lovely order in geometrical and astronomical things, thereafter he also "gains a love for justice, moderation, decency and graciousness."[3]

Kepler allied with Tycho Brahe, the Danish telescope maker who was the first human to see the marvels of the heavens past the inconstant moon. Kepler was devoted to Copernicus, who astounded the world of the 1400s with the conclusion that the planets rotate around the sun, not the earth. Applying mathematics to all of Brahe's disjointed planetary measurements, Kepler concluded that the planets orbited the sun not in perfect circles, but in ellipses, with the sun as a focal point for every planet. He teased out the mathematics of gravitational attractions between two planetary bodies of differing masses.

He fretted a full decade against publishing results, measuring and measuring again. He knew he faced the sure wrath of the Catholic Church, which would be affronted to think that God's perfect creation could possibly admit anything but perfect, circular orbits. Given Kepler's large family, he dreaded the same excommunication that had greeted his contemporary Galileo, with his scientific heresies and penchant for self-promotion.

Kepler wrote three timeless treatises on astronomy over more than 30 years, struggling against penury, undependable benefactors, illnesses, isolation, scarcity of printing presses, religious persecution and wars, all while raising his family.

Caspar died in 1956, having devoted his entire life to curating Kepler's works, artifacts and contacts, mastering every element

of his scientific writings. His book devotes a full section in the appendix to the *character* of Kepler. Kepler was a person of great charisma, a consummate networker in an intensely disconnected world. How blessed we are today, with our extraordinary velocity of knowledge sharing!

ALEXANDER VON HUMBOLDT

If my son Brian had not attended Humboldt University in Berlin, I would never have learned of Alexander von Humboldt, German aristocrat and naturalist extraordinaire. *His noble purpose was to understand in all dimensions the integrated organism that is planet Earth, from plants to vulcanism to the social institutions of humans.* Not nearly so renowned today, he was for decades the most famous scientist in the world. The centenary of his birth was celebrated worldwide, including in every large city in the U.S., in 1869, just 10 years after his death.

More places in the world are named for him than any other person. Humboldt was Charles Darwin's inspiration. Humboldt traveled in his early 20s over a five-year period, up the Orinoco River from Venezuela, proving the existence of connection to the Amazon River in the deep jungle. He invented the concept of thermoclines, variations of temperature in bodies of water or mountainous terrain. He proposed the notion of Pangea, that all continents were once connected, based on similarities of mountains he climbed in the Andes, the Alps and the Far East. (Flora at increasing elevations bore remarkably similar patterns worldwide.) His wanderlust and physical vitality even into old age were remarkable.

For actuaries, his foremost contribution is his masterful use of language. His best-selling nature travel books, and his marathon lectures all over Europe without need of notes, inspired countless young scientists to dedicate their lives to growing mankind's knowledge of nature. Darwin's *The Evolution of Species* is treasured for its clear, beautiful and poetic writing style. Darwin modeled his writing on his hero Humboldt's books. Humboldt lived much of his life in Paris, the world's center of scientific pursuits. His constant goal was winning sponsors for world explorations, such as to India and the Himalayas. Throughout his life and in his writings on South America, he decried the institution of slavery. Simon Bolivar was a contemporary in Humboldt's circle of intellectuals in Paris and drew inspiration from his writings and lectures for liberating South America from the oppressive rule of Spain.

Humboldt advocated not just empirical study for understanding nature but adding imagination in interpreting why phenomena occur. He was the lifelong friend of his countrymen Friedrich Schiller and Johannes Goethe. All shared a love of literature, their native tongue and science. They were *polymaths*.

ADA LOVELACE

I chanced on the existence of Ada Lovelace soon after reading Walter Isaacson's book *Steve Jobs*. Given also Isaacson's past duties as managing editor at *Time* magazine and president and CEO of the Aspen Institute, I pounced on his next book, published in 2014, *The Innovators: How a Group of Investors, Hackers, Geniuses, and Geeks Created the Digital Revolution*, the history of the invention of the computer and the internet.

Lovelace's story is engagingly told in *The Innovators*, yet another triumph of Isaacson, who also authored biographies of Benjamin Franklin, Albert Einstein and, most recently, Leonardo Da Vinci. Lovelace is his own preeminent hero among the legends of computing history—he opened with her in the first chapter and closed with her in the final chapter.

Lovelace was the daughter of the British poet Lord Byron. He was an impetuous man who ran off to fight the Turks for the Greeks in 1821 and died when Lovelace was only 8. She acquired ample other reasons in her tender years to be inclined to melancholy. With her mother's strong concurrence (none of that Byronic poetical nonsense for her daughter!), she concluded while a teen to take up a difficult subject to keep her personal demons at bay: mathematics. Lovelace's precocious talent and fortunate connections led her to Charles Babbage, known as the "father of computers." She was his assistant. Despite heavy investment support from the British government, his Analytical Engine was never completed.

Lovelace found her noble purpose when she was asked to supplement a manual on the working of Babbage's Analytical Engine. Her *Notes*, an elaborate 19-page addendum, contain what is regarded as the first computer program, an "algorithm to be carried out by a machine." She defined the subroutine concept and the if-then statement, which were first implemented more than 100 years later with the invention of the first computing machines.

Like Humboldt, she had a mindset of "poetical science," as she referred to it, which she directed at considering how society could relate to the technology of computing by collaborating. She had in mind much more than processing numbers. She was the visionary who inspired our current world, which has digitized every aspect of modern living from pictures to words.

WILLIAM SHAKESPEARE

William Shakespeare is recognized as the most profound master of human psychology up to Freud, and his characters are unique in maturing emotionally throughout every play. He is a master storyteller, a skill ever more recognized as essential to powerful business communications. His works are recognized as the foremost achievement in the English language, our own preeminent

tool of human commerce. It would seem a tautology that members of a learned profession such as ours would be conversant with the 38 plays of Shakespeare, as were master communicators and leaders Lincoln and Churchill. And yet, not so.

We know Shakespeare today as the preeminent artist of the past millennium. Yet his mission was not to create timeless art. He was a businessman foremost, working first for the interests of his family and the Stratford community far from London.

From the proceeds of his theater ventures, Shakespeare invested heavily in property and grain. Theater was the driver of his economic engine. As is true still today, to make money in theater required an astute business sense to solve problems, many of which Broadway impresarios do not face today. Famines and pestilence were common in his era; plagues shut down the theater business often. Theater was not a respectable business and was periodically forbidden to operate. Funding sources were volatile, ranging from penny admissions of groundlings to the support of impulsive and easily distracted royalty. Competition for actors was fierce. Throughout all such threats to solvency, his unique storytelling genius bailed him out of every financial crisis.

It is believed that William Shakespeare started his writing career in 1592. By then he was already a well-established actor with a stellar reputation. His fellow players were clever too, but none could fill the maw of an audience hungry for new amusements; none could create material like Shakespeare. By luck, by diligence, by his stellar ability to improvise on the spot, by his ability to win devoted admirers of his craft, Shakespeare's noble purpose—his mission in life—became clear. Already stagestruck, caught in the roar of the greasepaint, the smell of the crowd, he fell into his noble purpose: to entertain London (and the world) with his pen. Truly, this man is an inspiration to all actuaries seeking to achieve *versatility*.

MBA programs frequently apply Shakespeare's plays to teach essential interpersonal effectiveness in business skills, the same skills our Competency Framework seeks to address. The Nashville Shakespeare Festival offers business classes with topics such as confrontation, leadership, communication and weathering a storm.[4]

Shakespeare's intricate and ancient vocabulary is daunting, but not nearly so daunting as learning a foreign language or numerical analysis. As with learning any skill, momentum grows. Attacking a play from many angles is the solution:

- Read the play.
- Speak the words aloud—*Shakespeare never meant his plays to be books!*
- Listen to a recording.
- Attend a live performance.
- Read a compact review of the play.[5]

WHO ARE YOUR HEROES?

Now you have considered this actuary's slant on what one might learn from studying the lives of one's personal heroes, to identify their unique virtues that matter to you.

Inspired with your own noble purpose, you are ready to turn next to the Personal Planning Workbook, as addressed in the third article in the Competency Framework series.[6]

The essence of professionalism is expressed in Precept 1 of the American Academy of Actuaries' Code of Professional Conduct:

> An Actuary shall act honestly, with integrity and competence, and in a manner to fulfill the profession's responsibility to the public and to uphold the reputation of the actuarial profession.[7]

The Competency Framework is a powerful tool for helping all actuaries achieve their core duty as professionals: to act with integrity and competence. Identifying your heroes will facilitate that duty.

The editors and I welcome your feedback. The goal of the Competency Framework series has been to address your questions and needs, and to help all actuaries of the future design a future they will find meaningful and rewarding. ■

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ENDNOTES

1 Junker, Richard, and Curtis Lee Robbins. 2016. The Competency Framework: Design Your Future. *Actuary of the Future*, no. 39:18; Junker, Richard, and Curtis Lee Robbins. 2017. The Competency Framework: Design Your Future (Part 2). *Actuary of the Future*. no. 40:18; and Junker, Richard, and Curtis Lee Robbins. 2017. The Competency Framework: Design Your Future (Part 3). *Actuary of the Future*. no. 41:16.

2 Allison, Scott T., and George R. Goethals. 10 Reasons Why We Need Heroes. Commentary and Analysis, May 17, 2013, *https://blog.richmond.edu/heroes/2013/05/17/10-reasons-why-we-need-heroes/.*

3 Caspar, Max. 1993. *Kepler*. London: Dover Books.

4 *https://www.nashvilleshakes.org/business-workshops/.*

5 Sparknotes' *No Fear Shakespeare* puts the Bard's language side-by-side with a translation into modern English—the kind of English people actually speak today. (Sparknotes. 2003. *No Fear Shakespeare*. New York: Barnes & Noble.)

6 Junker, Richard, and Curtis Lee Robbins. 2017. The Competency Framework: Design Your Future (Part 3). *Actuary of the Future*. no. 41:16

7 American Academy of Actuaries. Code of Professional Conduct. Jan. 1, 2001. *http://dev.actuary.org/files/code_of_conduct.8_1.pdf.*

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