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Heroes of Noble Purpose

By Rich Junker

Editor's note: This article originally appeared, with minor differences, in the November 2018 issue of Actuary of the Future.

In “Gearing up for Designing Your Future,” published in the May 2017 issue of *Actuary of the Future*, the author cited four heroes as his personal inspiration. This article is the successor, showing the glory of these heroes and how they can inspire us actuaries today, as we strive to live our best lives.

Identifying your own Noble Purpose as an actuary and in your life makes creating a five-year plan for personal growth meaningful and motivating.

What will you gain from reading biographies of famous people and the classics? To aspire, to approach eloquence, to emulate the poetry of how they put their ideas across to mobilize their publics, to elevate our own characters by their examples, to be fully equipped to make moral and ethical judgments, to master the primary tool, verbal communication.

You may ask “Why do we need heroes?” The most compelling reasons include

- heroes reveal qualities we are missing,
- heroes save us when we are in trouble,
- heroes pick us up when we are down,
- heroes light a dark world, giving us hope,
- heroes give us great stories of who we are,
- heroes give us wisdom and
- heroes deliver justice.¹

By now, you have acquired your own heroes, be they scientists or artists, maybe even athletes or comic book heroes. Learning of their lives, we learn how they found the passion that drove them to extraordinary accomplishment, to overcoming intimidating hurdles. They found their personal Noble Purpose, the guidepost to where they aimed to be in five years, where they aimed to be in 30 years...



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

JOHANNES KEPLER

I encountered this man in all his glory when I visited the Galileo Museum in Florence. 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 that his superior mathematics skills directed him to serve his god otherwise than as a priest. **His Noble Purpose was to worship his god for the 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, is for him the delight of the human race. Heavenly speculations, he is convinced, quench the thirst of minds and impress on custom a certain similarity to the divine works. Secretly they bend the wills of mankind, 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.”²

He allied with Tycho Brahe, the Danish telescope maker, 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 Tycho Brahe's disjointed planetary measurements in space, 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 of his genius.

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

His biographer Max Caspar died in 1956, having devoted his entire life to curating all of Kepler's works and artifacts and contacts, mastering every element of his scientific writings. His book devotes a full chapter in the appendix to the character of Johannes 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

My son Brian attended Humboldt University in Berlin, Germany, or 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. In 1869, just 10 years after his death, the centenary of his birth was celebrated worldwide, including every large city in the U.S.

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 in deep jungle. He invented the concept of thermoclines. 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, I feel his foremost contribution is his masterful use of language. His best-selling nature travel books, also the marathon lectures all over Europe without need of notes, inspired countless young scientists to dedicate their lives to growing mankind's knowledge of nature. He invented the word *scientist*. Darwin's *The Origin 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 India and the Himalayas. In his writings on South America and throughout his life, he decried the institution of slavery. Simon Bolivar was a contemporary in Humboldt's circle of intellectuals in Paris, and he drew inspiration from Humboldt's writings and lectures for liberating all the countries of 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 watching the movie about Facebook, "The Social Network." Walter Isaacson wrote that book, which I inhaled immediately. Given also his past duties as editor in chief at *Time* magazine and technology editor for the *Wall Street Journal*, I pounced on his next book, published in 2014, *The Innovators*, the history of the invention of the computer and the internet.

Ada Lovelace's story is engagingly told in *The Innovators*, yet another triumph of Isaacson, author also of biographies of Steve Jobs, Benjamin Franklin, Albert Einstein and more recently, Leonardo DaVinci. Ada 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.

Ada 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 he died when Ada was only eight years old. Ada acquired ample other reasons in her tender years to be inclined to melancholy. Accordingly, 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. She chose mathematics. Her mother remarried well, to Lord Lovelace. Ada's precocious talent and fortunate connections led her to Charles Babbage, known as the "father of computers." She was his assistant. Unfortunately, despite heavy investment support from



the British government, Babbage’s analytical engine never performed to exalted expectations. Yet Ada’s association with him made her immortal.

Ada 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, gained her immortality. The supplement contained 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 over 100 years later with the invention of the first computing machines.

Like Humboldt, she likewise had a mind-set of “poetical science,” 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 that has digitalized every aspect of modern living from pictures to words.

WILLIAM SHAKESPEARE

The Bard is recognized as the most profound master of human psychology up to the era of Freud. His characters are unique in growing in character throughout every play. He is a master storyteller, the skill ever more recognized as essential to powerful business communications. His works are recognized as the

foremost achievement in the English language. 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.

MBA programs frequently apply Shakespeare’s plays to teach essential interpersonal effectiveness business skills, the same skills our Competency Framework seeks to address.

Acknowledged, making Shakespeare’s treasures accessible is not immediately rewarding. The intricate and ancient vocabulary is daunting. That said, it’s not nearly so daunting as taking on 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:
 - » Great Courses lectures by university professors, or
 - » Harold Bloom’s and Isaac Asimov’s books.
- Attend a workshop for professional development that uses Shakespeare.

Now you have considered this actuary's slant on what one might learn from studying the lives of their personal heroes. Ideally my words have sparked you to contemplate your own heroes as well, to identify their unique virtues, the ones that matter to you.

Inspired with your own Noble Purpose, you are ready to turn next to the Personal Planning Workbook, addressed in "The Competency Framework: Design Your Future, Part 3."³

The essence of professionalism is expressed in Precept 1 of the Code of 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.

The Competency Framework is a powerful tool for helping all actuaries achieve their core duty as professionals—to act with integrity and competence.

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



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SUGGESTED READING

- Asimov, Isaac. 1970. *Isaac Asimov's Guide to Shakespeare*. New York: Doubleday.
- Bloom, Harold. 1998. *Shakespeare: The Invention of the Human*. New York: Riverhead Books.
- Caspar, Max. 1993. *Kepler*. London: Dover Books.
- Connor, James A. 2004. *Kepler's Witch: An Astronomer's Discovery of Cosmic Order Amid Religious War, Political Intrigue, and the Heresy Trial of His Mother*. New York: Harper Collins.
- Humboldt, Alexander. 2004. *Personal Narrative of a Journey to the Equinoctial Regions of the New Continent*. Toronto: Penguin Random House Canada.
- Isaacson, Walter. 2014. Chapter 1: Ada, Countess of Lovelace, pages 7–35. In *The Innovators*. New York: Simon and Schuster.
- Kinney, Clare. 2007. *Shakespeare's Tragedies*. The Great Courses <https://www.thegreatcourses.com/courses/shakespeare-s-tragedies.html>.
- Saccio, Peter. 1999. *Shakespeare: Comedies, Histories, and Tragedies*. The Great Courses <https://www.thegreatcourses.com/courses/shakespeare-comedies-histories-and-tragedies.html>.
- Sparknotes. 2003. *No Fear Shakespeare*. New York: Barnes & Noble. This resource puts Shakespeare's language side by side with a translation into modern English.
- Wulf, Andrea. 2015. *The Invention of Nature: Alexander von Humboldt's New World*. New York: Vintage Books.

ENDNOTES

- 1 Allison, Scott T., and George R. Goethals. 10 Reasons Why We Need Heroes. *Heroes: What They Do and Why We Need Them*. May 17, 2013, <https://blog.richmond.edu/heroes/2013/05/17/10-reasons-why-we-need-heroes/> (accessed September 11, 2020).
- 2 Caspar, Max. 1993. *Kepler*. London: Dover Books.
- 3 Junker, Richard, and Curtis Robbins. 2017. The Competency Framework: Design Your Future (Part 2). *Actuary of the Future*, no. 41:16–18. <https://www.soa.org/globalassets/assets/library/newsletters/actuary-of-the-future/2017/may/aof-2017-iss40.pdf> (accessed September 11, 2020).