

## Defining and Defending the Renaissance Man

Roger L. Franz

Grinnell College Class of 1971

Grinnell graduates are given the opportunity to discover who they really are from many different angles. For many, interest and achieving excellence in a specialty answers the riddle of later life through a dominant direction. The college is fortunate to have launched the careers of specialists who have achieved the highest academic and social honors and who are contributors and leaders in their chosen field.

Somehow I was always interested in a multiplicity of fields, but nonetheless feel I have found my calling and have lead a meaningful and productive life. I sincerely thank the Grinnell College Alumni Award of 1981 for helping name my “condition.” The message I took from this honor was respect for the utility of a Renaissance Man. (My apologies here for the term since I include women here as well, although the 14<sup>th</sup>-16<sup>th</sup> Centuries of the original European Renaissance were quite bleak in this regard).

You probably already have your own image of a RM, but allow me to offer a few defining attributes: wide interests; knowledge of many different things; expert in different subject areas in both the arts and sciences. Some would add, besides intellectual accomplishments, social and physical as well.

If this all sounds very familiar it is not unlike what one could expect from anyone with a Liberal Arts education. In these few paragraphs I will not trace the history of our great legacy, but rather let me jump back to the Renaissance itself for some further detail, then give some examples of how thinking like a RM can be enriching and fun, as it has been for me.

One of the cultural backdrops to those living in Renaissance times was that there was as yet no clear distinction between deductive principles that explained their world (tagged as magic or today); and the new inductive reasoning based on science that was just emerging. From our current perspective we clearly see a separation of the arts and sciences. But it was natural for a genius like Isaac Newton to study astrology and alchemy while developing the laws of physics. Or for Leonardo da Vinci to create enduring art and design conceptual flying machines. Fraternities like that of the Rose Cross blurred boundaries of self-improvement through alchemy and what would later become the science of chemistry.

As another example, Freemasonry – originating in those times or before, and practiced by many of America’s founding fathers as well as leaders of today – names Seven arts and sciences which are illustrative more of a continuum than of extreme opposites: grammar, rhetoric, logic, arithmetic, geometry, music, and astronomy. Interdisciplinary Study is not a new term at all.

Alchemy led to chemistry, but dropped the connection to the experimenter who developed a personal perfection into gold in the process. Astrology led to astronomy, but severed the human connections between the lives of the stars and their emotionally rich mythologies.

The ability to easily bridge the two pillars is, I believe, key to the RM. door. Art and science were one, back in the days before they split up into how we think of them today. Of course, one must still be aware of the difference between fact and fiction! But being illuminated by art and science, or emotion and math, do not have to be exclusive. Visiting both playgrounds can enrich your life.

Let me illustrate how we can walk the two paths at the same time. The ancient arts proposed four basic elements: air, earth, fire and water. You may need to imagine that these words have deep mystical and emotional meanings, as would be the case of the historical RM. These Four Principles can help explain with powerful simplicity a scientific fact like photosynthesis. During the day a plant takes energy from the sun (fire) to yield oxygen (air) from water. And at night carbon dioxide (air) is reduced and fixed as carbohydrates (earth) using stored energy (fire) from the day. Conveyed in these terms the process has some emotional feel yet is still based on facts.

Another example of RM. thinking could be based on numerology; we have just mentioned Four, and prior to that, Seven. Current science teaches 3 particles in chemistry (proton, neutron, electron; a Trinity) while subatomic physics adds 6 quarks and 6 leptons (the Twelve). If you lump the W and Z bosons together, there are 4 of them- a modern Four.

Dr. Fabiola Giannotti, who led the team of more than 3,000 specialists searching for the Higgs boson or “God particle” in the CERN–Atlas project, must be a Renaissance Woman, since she noted “... physics is art, aesthetics, beauty and symmetry.” (Quoted by Lizzy Davies, “Higgs boson announcement: CERN scientists discover subatomic particle,” *The Guardian*, July 4, 2012). Their scientific papers announcing the Higgs were less emotional, but I couldn’t agree with her more. No further defense is needed.

As a final note, I am not afraid to introduce technical words into a poem when I write under my pen name, r.f.Lee. Terms that were once highly technical may become common in everyday use of language. After all, someone in distant history first used the word “fire” when it was a brand new technology. We hardly flinch when mentioning “light speed” although it took Albert Einstein to define it in a modern context. And so on. But back to poetry, it was T.S. Eliot who concluded *The Four Quartets* with this diverse image of physics and beauty:

“And the fire and the rose are one.”

Let’s keep on bringing Renaissance thinking.