

A Positive Outlook is Healthy!

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The thesis statement in the “angst” article in the March 2011 issue of the Benchmarks is:
Those sources of angst that impact the surveying profession should be identified, analyzed, discussed, and addressed in a concerted effort to identify ways the surveying profession and its members can participate more fully in the generation, storage, manipulation, analysis, display, and use of 3-D digital spatial data – especially with regard to the identification, location, and preservation of (property) boundaries throughout the United States.

At the end of the March 2011 article I stated my intent to highlight several points in a subsequent (this) article by drawing on the following resources:

1. The 4 rules of logic as used by Rene Descartes for solving problems.
2. Examples from the book, *Outliers – the Story of Success* by Malcolm Gladwell. (This book was on the NY Times non-fiction best-seller list more than 100 weeks.)
3. Implications of “right brain/left brain” thinking as described in Daniel Pink’s book, *A Whole New Mind*.

The overall point of this article is given by the title, “A positive outlook is healthy.” Let’s not be naïve or ignore the therapeutic value of an occasional “gripe session” but neither should we portray a Pollyanna approach in which everything is sunny and roses. Hopefully, the reader will accept an appropriate middle ground for the discussion.

Many readers know that René Descartes (1596-1650) was a French mathematician who gave us the Cartesian Coordinate System. He was also a famous philosopher perhaps best known for his quote, “*Cogito, ergo sum*” (I think, therefore I am). Many have written about Descartes and it is easy to read about him on Wikipedia. “Google” notwithstanding, most of my information comes from two books:

- “Wisdom of the West” by Bertrand Russell (1959), Crescent Books, Inc., Louisville, KY.
- “Descartes’ Secret Notebook” by Amir D. Aczel (2005), Broadway Books, NY.

Bertrand Russell summarizes Descartes’ four rules of logic as:

1. Never accept anything except clear distinct ideas (that is, question everything).
2. Divide each problem into as many parts as are required to solve it.
3. Thoughts must follow an order from the simple to the complex and where there is no order, we must assume one. (An unstated corollary is that when we run into a discrepancy following one assumption, we need to back up and try something else.)
4. When done, we should always check thoroughly in order to assure that nothing has been overlooked.

I have found these four rules to be quite helpful in addressing many problems. At times others become impatient because I take time to ask too many questions. But it is always helpful for me to understand clearly what the problem is and to know specifically what parameters apply to the development of a solution. I found Descartes' approach especially helpful when teaching computer programming.

I have been a long-time admirer of Descartes, but my admiration was enhanced recently when I read Aczel's story about Descartes' secret notebook. Imagine, if you will, the challenges of getting others to see your point of view. Now, consider the consequences of your efforts. Do you need to fear for your life for stating and/or publishing your ideas and/or beliefs? Descartes did! Descartes was a contemporary of Galileo who was under house arrest the last 10 years of his life for writing the *Dialogue* in support of the theories of Copernicus who held that the Sun, not the Earth, was the center of the solar system. Descartes was quite familiar with Galileo's circumstance and was careful not to incur the wrath of the Inquisition during which time people were burned at the stake for disagreeing with the Catholic Church. Was Descartes a member of the banned "Rosicrucians"? The story of his secret notebook provides a number of clues.

Although Descartes was independently wealthy and pretty much free to do what he wanted, he was born of a Protestant family but baptized and raised as a Catholic. He spent his entire adult life trying to appease each side and both sides were skeptical of his true beliefs. Descartes died under suspicious circumstances while serving in the royal court in Sweden and his private/personal effects eventually made their way back to Paris. Some years later the German mathematician Leibniz gained access to some of Descartes' writings, including his "secret" notebook. Leibniz had only limited time with the documents and took copious notes. But seemingly, most of the contents of Descartes' secret notebook have been lost forever.

Ironically, Descartes was adamantly opposed to the medical practice of blood letting. However, it seems his death, at age 54, was ultimately brought on by that very practice. Science and education today may both be challenging but our problems pale in comparison to the challenges faced by our scientific forefathers, some of whom feared for, and others who paid with, their very lives.

Moving on to *Outliers*: To some degree, we've all been told that to be successful we should work hard, get an education, and follow the golden rule in our interactions with others. I am not suggesting otherwise but, in Chapter 1 of *Outliers*, Malcolm Gladwell states, "I will argue that there is something profoundly wrong with the way we make sense of success." The Wikipedia entry for *Outliers* notes that Gladwell typically writes from a contrarian point of view but I'll suggest that he does a good job of making his point with a number of compelling arguments and examples. A Wikipedia quote is, "When asked what message he wanted people to take away after reading *Outliers*, Gladwell responded, 'What we do as a community, as a society, for each other, matters as much as what we do for ourselves. It sounds a bit trite, but there is a powerful amount of truth in that, I think'."

Just a reminder: In this article we are looking for ways to reduce the angst in our professional lives and to be successful. There are others, but I mention just two examples used by Gladwell – the Beatles and Bill Gates. Both examples come under “The 10,000 Hour Rule” as described in chapter 2. In this chapter Gladwell describes various factors that contribute to the success of several persons and notes that the amount of time devoted to practice, not talent or skill, is largely responsible for the ultimate success of the high achievers. Whether a musician, athlete, neurologist, or criminal – 10,000 hours of concentrated practice is a prerequisite to the mastery associated with being a world-class expert. For the Beatles, most of the 10,000 hours were accumulated in non-stop performances in strip clubs in Hamburg, Germany between 1960 and the end of 1962. For Bill Gates, he began programming computers while in the eighth grade at Lakeside School in Seattle and continued through high school. In each case (Beatles and Gates), a fortuitous set of circumstances contributed to the opportunity to stay engaged. So, was it luck (the circumstances), skill (an innate ability), or unrelenting exposure to content that was ultimately responsible for their success? In the rest of the book, Gladwell makes the case that world-class success must include a huge amount of hard work in addition to other contributing factors. To put 10,000 hours in perspective, a full-time job entails about 2,080 hours per year. Five years of full-time concentrated effort does not guarantee, but appears to be a pre-requisite for, success. Gladwell makes other points as well.

In the January 2011 issue of *Benchmarks* I described the book, *A Whole New Mind* by Daniel Pink. Here again, there is much more in the book than I can summarize for these articles. In the previous article I made reference to the right brain/left brain phenomenon and described arrival of the “conceptual age.” This time I want to draw ideas from the end of the book and, in so doing, encourage everyone to read the entire book.

The last chapter in Pink’s book is called “Meaning” in which he takes a philosophical look at what we as humans can do to find more meaning in life. Having been associated with engineers and surveyors all of my professional life, I’ve gained some ideas about what surveyors use to find meaning in life. My comments should be interpreted as tongue-in-cheek but, maybe surveyors are unique in this, it seems that nothing provides a surveyor more satisfaction than spending a day in the field (away from the telephone) and finding that lost or elusive corner on which the entire description or project depends. Gathering, evaluating, and presenting evidence is very worthwhile and many surveyors are good at it. It seems the challenge many surveyors face is getting the client to realize the value or benefit of the corners we find and to pay us willingly for the work we do.

But, back to Pink’s view of finding meaning in life, he makes the case for becoming involved in something bigger than ourselves – beyond the accumulation of things or station in life. He makes the point about taking spirituality seriously and closes by describing the therapeutic value of walking a labyrinth. Yeah, I know, that sounds rather touchy-feely but if it helps any of us improve our mental health (happiness) or to find ways of dealing constructively with the angst in our lives, the purpose of writing this article has been served. Thank you for reading it.