

Can Angst be Used as a Force for Progress?

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**Angst is a gloomy, often neurotic feeling of generalized anxiety or depression.
Definition from Webster's New World Dictionary – College Edition**

In one way or another, we all encounter angst and look for ways to handle it. That discussion is better left to the psychology professionals and the reader is referred elsewhere for ideas to cope with angst (for example, <http://www.margaretwheatley.com/>). The view promoted here is to acknowledge angst from various sources and to focus on communication and education as proactive methods for dealing with angst in our professional endeavors.

“Asking the right question is more important than having the right answer” is a motto that I used often during academic advising sessions with students, both at the Oregon Institute of Technology and at New Mexico State University. I adapted that motto from a conversation I had with Dr. John D. McLaughlin at the 1984 Surveying Educators Conference at Fresno, California, in which he suggested that most (professional) disagreements are the result of asking the wrong question. I recently recalled that 1984 conversation with him in an email exchange and admitted that I am still learning how to ask better questions. Back then he was one of the foremost leaders in surveying (geomatics) education but he is now President Emeritus of the University of New Brunswick. A recent article describing his on-going professional activities can be accessed at –

http://www.gim-international.com/issues/articles/id1584-The_Property_Story_Chapter_Four.html

The title of this article asks an important question. I believe a legitimate answer to that question is “Yes, angst can be used beneficially.” But my answer is not as important as what the reader believes is a good answer. So far, there is not much to discuss. A better question is, “How Might the Surveying Profession Benefit from the Angst We Encounter?” An answer to that question goes far beyond a simple “yes” or “no” response. Although I share my views on that question, ideas from others certainly need to be added and included in a comprehensive discussion. For now, I will identify general sources of angst and then narrow the list to several specific sources. In response to those, I will offer suggestions as to how our consideration of those issues may foster a better evaluation of what we do and how we do it. The goal is to improve our competitive position both locally and globally in a wide range of professional activities involving the use of spatial data. I am convinced that surveying need not stand on the sideline of that discussion; but with vision, communication, education, dedication, and a lot of hard work, the surveying profession can fill and is filling a vital niche in the broad range of spatial data services needed and used by modern society.

Maybe the following thesis statement should have been the first sentence in this article. ***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.***

Angst can be characterized as a feeling of hopelessness with regard to ones perceived inability to solve problems. When looking at big picture issues, the solutions are generally viewed as a governmental and/or bureaucratic prerogative in terms of collective rather than individual input. Possible sources of angst of that type include (there are many others):

- International politics – how do we sympathize with others in their efforts to establish a better form of government? What price should they (we/anyone) be willing to pay for an acceptable level of independence and/or liberty?
- National politics – whether our sympathy lies with Democrats or Republicans, it seems that following each election one party or the other claims the voters sent them to Washington to do it right or better. The implication is, “vote for me and I’ll solve your problems.” Are we convinced that voting for one party or the other will make life better or reduce the angst?
- Economy – a significant part of the American dream has been that each generation has the opportunity, by diligence and hard work, to enjoy a better standard of living than our predecessors. The recent recession has shattered that dream for many. Who gets the blame or who is empowered to “fix” the problems? If I knew the answer to that, I’d be happy to share same.

My comments and examples should not be construed as discouraging anyone from participating in the collective (governmental) process needed to solve big picture problems. The distinction may be artificial, but I want to focus on sources of angst more closely related to our professional lives. Again, the list is incomplete but, from a professional perspective, I believe we can mitigate the angst and realize more pride of ownership in our collective accomplishments if our professional actions are focused on “doing it for ourselves” rather than “doing it to ourselves.”

- Educational – Two views, teacher and student, are required for this category. From my perspective as a teacher, I enjoyed sharing in the learning process with many students but I cringed whenever I witnessed a student blowing it off and wasting the opportunity to gain knowledge that could serve a lifetime. From the student’s perspective, most of them came to class regularly, participated in discussions, and did their homework conscientiously. No serious angst there. But there were other cases in which assignments were approached with hostility and in which exams were written poorly. For those

students, the educational angst may have ended with walking across the stage and being handed a degree – if they made it to graduation.

- Technical – Perhaps the best way to describe technical angst is to quote Alexander Pope (1688-1744) who stated:

“A little learning is a dangerous thing.
Drink deep, or taste not the Pierian spring:
There shallow draughts intoxicate the brain,
And drinking largely sobers us again.”

A lot could be said about the challenge of keeping up with technology. For some it is a source of angst, not so for others. A typical statement (to which I can relate) is that kids today know much more about remote controls and cell phones than their parents. The point here is that learning modes and life experiences are very different now than as few as 20 to 15 years ago. Question – In what way has learning how to learn changed? I believe that question deserves a lot of discussion and that educational activities should be modified accordingly.

- Professional – What expectations are encountered in surveying practice that are (or appear to be) unreasonable? Are they expectations of using new technology, keeping equipment maintained and calibrated, meeting a demanding schedule, staying within cost constraints, being able to “prove” the quality of ones work, incomplete legal descriptions, inadequate deed research, or any of many other issues. Before cell phones were so prevalent, it was not uncommon to hear a surveyor state something to the effect, “I sure had a good day. I was in the field working on my own and did not need to answer the phone.” There are many sources of professional angst that range from logistics to legal to administrative to business to project and personnel management. But, hey, isn’t that what running a business is all about?

Probably the best example of professional angst I’ve encountered lately is the proposal by Texas Governor Rick Perry to eliminate the Texas Board of Professional Land Surveying. That has caused consternation among many and efforts are being made to show that such a move would not be in the best interest of the citizens of Texas. I’d say that angst is a good motivator.

Another source of professional angst is, in my opinion, confusion over (or absence of) a clear understanding of what surveying is and what surveyors do. There are many good definitions of surveying but according to David King, a simple definition is “Surveying is what surveyors do.” A comprehensive definition of surveying includes additional concepts relating to measurements, the location of features on or near the earth, and boundaries. The problem is that boundary determination is the only activity that is unique to the surveying profession. Yes, surveyors use measurements and make maps

but many other disciplines also work with spatial data and in some cases are more accomplished at those activities than many surveyors.

A friend recently sent me a list of professional organizations (I added several more) that, in one way or another, attach their professional identity to spatial data. It would be unconscionable to suggest that surveyors join only one organization and/or restrict our activities to boundary location. Surveyors do much more than that. We need to recognize that surveyors legitimately interact with other disciplines and professionals in those related areas. The question is how to do that successfully. Can angst motivate that discussion?

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| NSPS – National Society of Professional Surveyors | www.nspsmo.org |
| WFPS - Western Federation of Professional Surveyors | www.wfps.org |
| AAG – Association of American Geographers | www.aag.org |
| GITA – Geospatial Information and Technology Association | www.gita.org |
| ASPRS - American Society for Photogrammetry & Remote Sensing | www.asprs.org |
| MAPPS - Management Association for Private Photogrammetric Surveyors | www.mapps.org |
| AAGS - American Association for Geodetic Surveying | www.aagsmo.org |
| CAGIS - Cartography and Geographic Information Society | www.cartogis.org |
| GLIS - Geographic and Land Information Society | www.glismo.org |
| GMD - Geomatics Division, American Society of Civil Engineers | http://www.asce.org/Topics.aspx?taxid=2147483871 |
| URISA – Urban & Regional Information Systems Association | http://www.urisa.org/ |

More recently, Mike Daly of Gallup, NM forwarded a list of seminar topics (listed below) proposed to be offered for New Mexico practicing surveyors. Given unlimited time and resources, how many of the seminars would you attend? Or, more importantly, which of the seminars, if any, do you believe to be an effective aid in reducing the angst in your professional practice to the point of your being willing to pay to attend same? Feedback from NMPS members is solicited.

Boundary Analysis
Construction Staking
Control Surveying
Digital Leveling
Easements
Highway ROW Surveying

Integrating GPS & Terrestrial Surveys
Liability for Land Surveyors – Problem Areas
Machine Control
New Technologies – Specify
NM Minimum Standards
Real Time Networks
State Plane Coordinates
Survey Field Practice and Techniques
Surveying Estimating
Theory of Location in Simultaneously Created Boundaries
Using Leica Software
Using Topcon Software
Using Trimble Software
Working with GIS
Writing Legal Descriptions

The intent of this article is to stimulate thought and discussion. The way forward from here could follow any of many paths. In a subsequent article I hope to outline a number of specific suggestions. For example with regard to the thesis statement in this article, I want to:

1. Look at some practical rules of logic as used by Rene Descartes for solving problems.
2. Review some lessons from the book, “Outliers – the Story of Success” by Malcolm Gladwell (it has been on the NY Times Best Seller list for the past 100 weeks).
3. Revisit some implications of Daniel Pink’s book, “A Whole New Mind.”