

Common Sense and Logic

Earl F. Burkholder, PS, PE, F.ASCE

Global COGO, Inc. – Las Cruces, NM 88003

www.globalcogo.com & eburk@globalcogo.com

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What is the difference between common sense and logic? Even if sometimes appearing so, common sense and logic are not mutually exclusive. Does a conclusion based on common sense carry more weight than a conclusion based on logic? How do we react in those cases when logic prevails over common sense? Ideally, any conclusion we reach is supported by logic and common sense both. If that is not the case, which is better or more defensible (especially when evaluating evidence) - a common sense solution based on faulty logic or a logical conclusion that violates common sense?

Sometimes I get discouraged by the gloom-and-doom I hear. I get tired of wringing my hands and complaining about things that are not what they should be. That applies to news, politics, survey education, the future of surveying, and other issues. What might it take to re-focus our discussions such that we can all feel inspired, challenged, and willing to contribute to positive solutions? One answer might be “avoid partisan politics.” I’ll admit – I’m looking for a more proactive answer.

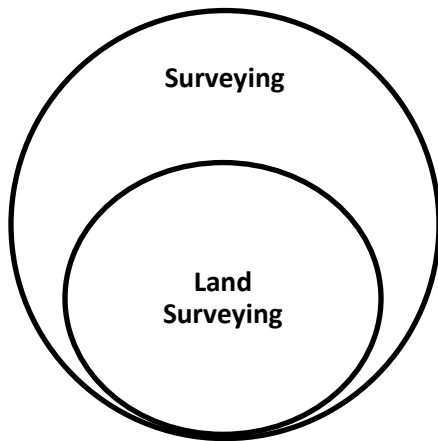
Let’s start with the just completed NMPS Annual Conference on March 24 & 25, 2017 at the Sandia Resort and Casino in Albuquerque. Chris Pappas, Patty Floyd, Shelley Robertson, and others deserve our appreciation for organizing and hosting an excellent meeting. Yes, sometimes we take our conference for granted and don’t realize just how beneficial it really is. That was brought home to me, in part, by Steven P. Douthett (Chris’s Uncle) from Virginia who ask about the total number of surveyors in New Mexico and the number of NMPS members. He then compared those numbers to the number of attendees at the Conference. It seems that even though there are many more surveyors licensed in Virginia, Mr. Douthett was envious of the percentage NM of surveyors who belong to NMPS and was impressed by number of NM surveyors who actually attend our conference. True, those ratios could be greater. That is a challenge we can all help address. But, compared to statistics from at least one other state (yes, I too am a native Virginian) we, NM surveyors, can be proud of our level of participation.

Moving on – I can’t cover them all, but several issues from the conference really inspired me. First, I sat in on one of Tony Nettleman’s 2-hour sessions. He talked without repeats for two full days. I missed much of what he said but, in my opinion, he nailed it. Yes, I am prejudiced by the fact that Tony graduated from NMSU with a Surveying Engineering Degree but he has done far more than just graduating from NMSU. Tony is well grounded in survey law and land surveying principles. One could argue with several points he made (after all, he is a lawyer) but, for me, his presentation reinforced the importance of the surveyor’s role in protecting the real property rights of millions of people in the United States. I’ll come back to this later but the danger I see (here I go wringing my hands) is that fundamental concepts of boundaries will suffer if we focus too much attention on details of GPS data collection at the expense of learning more about boundaries. Remember, the role of the Board of Licensure is to protect the public against incompetent practice.

Neither did I hear all of John Palatiello’s presentations but, in my opinion, he too was spot-on. John said that we surveyors have an image problem that needs to be addressed. In his role as a federal lobbyist (and several other survey-related executive functions), John is uniquely positioned to see and understand many of the challenges facing the surveying profession. Of various points he made, John admonished us to embrace new technology and to use it competently. In a one-on-one exchange with John, he also insisted that I, like other surveyors, need to do a better job of telling someone what time it is rather than explaining how a clock works. I agree that our message needs to be tailored to the audience but I am also reminded of John Harrison’s experience in the 1700s when he presented his chronometer to the Board of Longitude to solve the navigation

problem - <http://www.pbs.org/wgbh/nova/longitude/>. That brings me back to the common sense and logic question. How can surveyors do both – that is . . . how can we faithfully honor the legal principles so fundamental to land ownership in a manner consistent with competent use of digital spatial data?

I show a circle rather than a box. In his session, John illustrated several points using one box contained within another. The larger box illustrated those activities that can legitimately be called “surveying.” The smaller box included those activities called “land surveying.” The digital revolution and computerization of everything has had an enormous impact on many things – for surveyors, the use of 3-D digital spatial data. I believe I am in full agreement with John that the surveying profession at large needs to embrace the challenges of operating in the full box. It appears that surveyors in New Mexico are not the only ones facing those challenges.



Revisit the concepts of common sense and logic. Many of us take pride in being able to use common sense. I have no quarrel with that. On the other hand, Some take issue with the consequences of logic. I am not an attorney but I understand that conforming to the rules of logic and “following the evidence” are fundamental to a successful legal practice.

I have done some computer programming in my career and, since retiring from teaching, I have audited several computer science classes. Attorneys do not have a corner on logic. Programmers delve into the use of Boolean expressions, logical operators, and truth tables as a matter of course. Sorry, but common sense seems to be left at the door. A successful computer programmer adheres to strict rules of logic. That may be the reason for the anonymous internet quote “common sense is a flower that does not grow in everyone’s garden.”

The discussion of rejuvenating the surveying program at NMSU is another part of the conference that I found enormously beneficial. I’ll admit to being somewhat skeptical when I learned that the “new” plan for surveying is a 2+2 program in the NMSU Engineering Technology Department – I believe that the surveying profession deserves better and even more convinced that citizens of New Mexico also deserve better. But, when looking at existing surveying enrollment numbers and stewardship of resources, when weighing the possibility of not having a 4-year surveying degree in New Mexico, and when learning of the coordinated effort to salvage (rather than eliminate) the existing program, I changed my mind. I remember a high school teacher’s admonition “two kinds of people don’t change their minds – fools and dead ones.” Not admitting to being either dead or a fool, I’d rather be part of an effort to “do it for ourselves” than participate with those who insist on “doing it to ourselves.”

Several other points will be made in a subsequent article. Following is a “teaser” for same.

I have enjoyed employment in the surveying profession since 1968. Twenty-five of those years were devoted to teaching in the college classroom. Whatever success I had there was because I knew the material and because I enjoyed sharing the learning experience with students. But, what about the art/science of teaching – pedagogy? Oh my . . . so much more there to understand. I’ll also describe my fascination with a recent book, “Make it Stick: the science of successful learning” (2014) by Peter C. Brown.

I’ll also attempt to tie all that in with common sense/logic, with Palatiello’s points, with the ‘disruptive innovation’ of the digital revolution, and with the challenge of technical competence in the “larger” surveying arena faced by surveyors, the state boards of licensure, and policies of the NCEES. And, oh yes, completely self-serving, publication of the 2nd Edition of “The 3-D Global Spatial Data Model” due out in July 2017 – see www.globalcogo.com/SecEd.html - will be tied in as well.