



Author Michael Pallamary has compiled the writings and lectures of the late Curtis M. Brown. These works are published in *The Curt Brown Chronicles*.

Surveyors Service to Society

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Technically, I have retired. From a practical point of view, I am still a land surveyor. Although my introduction may have given the impression that I spent more time in the office than in the field, it is not true. By far, the majority of my time was spent packing a transit, chaining lines, and brush cutting. Like most backwoods people, I was not very fond of running a large office. I believe I retired early to get rid of administration problems.

Recently I was asked, "What one thing, above all others, does the land surveyor offer?" My answer is *knowledge*. Many people can measure; few have sufficient knowledge to know where and what to measure.

In 1933 when I graduated from college, I had what was considered an excellent education. Photogrammetry was barely mentioned. I was not exposed to matrix problems. Of course, we used logs to solve all of our problems. Hand crank calculators were the best available. Unknown and un-invented were the electronic-measuring devices and electronic computers. By today's academic standards we were undereducated in the sciences and overeducated in how to do its subjects.

Things change. I recently took time to study some of my old records in retrospect. I found sheet after sheet of traverse computations with sine, cosine, bearing, distance, latitude, departure, double meridian distances and area all neatly tabulated by hand. Out of curiosity, I took one complex traverse, ran it through my electronic computer and found that I could do the job in one-tenth of the time shown on my old time sheets.

Some years ago we "brushed" a line one-mile long and measured it all in two days with three men. A short time

ago we re-measured the same line with modern equipment and knowledge and found that it could be done in one-half hour with two men. We also found a small error in our original work.

The moral to this story is that if *we try to do today's job with yesterday's knowledge, we will be out of business tomorrow*.

It is my opinion that the half-life of my college education was ten years; that is, half of what I learned in science and engineering was obsolete or insufficient ten years later. No man in business can afford to stand still; he either gains knowledge by continual study or he falls to the wayside. Ignorance is voluntary misfortune.

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Within the United States, surveyors have been able to convince the legislators that registration benefits the public. At no time has the object been to give the surveyor an exclusive franchise for the purpose of earning more money. The state has been willing to legislate registration laws on the condition that the public be protected from the incompetent and the unscrupulous. In exchange for this exclusive franchise, surveyors have public obligations. It is not unreasonable that the public should expect surveyors to devise systems whereby the certainty of property line location is assured. The public should look upon the surveyor as a fair and impartial person who places boundaries where they belong, regardless of who he is working for. Two

surveyors, each contending for a different location for the same point, can only cause degradation of standing.

If surveyor organizations continually fight for legislation that benefits their self-interests and increases their prospect of financial gain, it can be expected that the public will contemplate rejection of the surveyors' exclusive rights. We, as surveyors, must not view things in the light of what would be most beneficial to us; we must think in terms of what is beneficial to the public.

We must grow, not swell. With these thoughts in mind, what can we do that will benefit the public and yet at the same time,

if possible, be of benefit to surveyors?

In the matter of locating boundaries, to me, there is nothing more important than preservation of evidence. Examinations for registration prove a surveyor's competency to make measurements; they prove a person's proficiency in mathematics. Letters from qualified people may prove the examinee's integrity and honesty. But this alone is not sufficient; a surveyor must understand the laws of evidence. Every boundary survey must start from a point on the surface of the earth, and the validity of that starting point is dependent upon evidence.

The law is exact and specific: Wherever the original surveyor set his original monument, that spot is the

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correct location for that corner. If we are to preserve that original position, we must have a continuous chain of records from the time of the original setting of the monument to the present. The original surveyor may have set a wooden stake that was later replaced by an iron pipe. At a later date the iron pipe may have been removed by highway construction and new reference points set. Who can prove what happened without a continuous chain of records stating what was done? Without question, more property line disputes arise from loss of evidence than from any other cause. The surveyor locating property lines from incomplete evidence can find himself paying out large sums for erroneous monumentation.

Mutual interest of both the public and the surveyor demands that evidence of monument positions be filed as public records. This produces harmony and exchange of knowledge between surveyors.

Contrary to the thinking of some, these provisions of the law have proved to be of far greater benefit to the surveyor than they have been a detriment. Quite often in my former office we got referral work merely because the adjoiner identified my license number on a property corner. The major benefit from the usage of numbers on monuments is the free exchange of information. A proper location for a corner can only be determined after an evaluation of all the evidence. By the time the second surveyor arrives on the scene, part of the evidence that the first surveyor observed may be gone. If the first surveyor is identifiable by a license number on his monuments, a telephone call usually brings a satisfactory explanation of differences in location.

The old concept that the surveyor's records are his personal secret—not to be disclosed to anyone—is gradually dying out. In California's Owens Valley we have two lakes. One is fresh and trout are in it. Trees spread their branches over it and children play along its shores. A river flows into this lake and out to a second lake. Here, in the second lake, are no fish and no children's laughter. Travelers choose other routes. Neither man, beast, nor fowl will drink of its waters. There is a difference between the two lakes. The first lake receives fresh mountain water. For every drop that flows in, another drop flows out. The other lake is shrewder. Every drop it gets, it keeps. The first lake receives and gives; the second lake receives, does not give, and is salted to death. Are we going to be like the first lake and receive and

give information, or are we going to be like the second lake and jealously hoard professional information?

The law of every state should provide a place for the filing of surveyor evidence records and, under certain circumstances, it should be mandatory for the surveyors to file their records.

In some cities and counties the surveyors are surprised to find that no one will accept their plat records. The Forestry Department of the U.S. Government has been instrumental in trying to get laws passed to provide public depositories for their records. The acts in Minnesota, Wisconsin, and Montana probably had their inception from foresters engaged in public land surveys.

Knowledge is a useful tool, and it is of value only when it is used. In the business world, if you cannot convince others that they should pay you to raise your knowledge, you may never have the opportunity. The fundamental precept of all human relationships is that it is not sufficient to be right, you must also persuade. An idea that must be acted upon by others is useless until such time as others can be persuaded to act upon it. That is the art of letting others do what you want done. A man may be a veritable Encyclopedia Britannica so far as his store of knowledge is concerned, but all of his mental efforts will be of no avail unless he can convey to others what he knows and thinks.

Within the last 10 to 15 years, engineers, surveyors, and many others have been doing a lot of soul searching. It seems that everyone wants to have a magic name attached to their particular service. Some have been exceptionally vocal in proclaiming themselves as professional people. We have all kinds of so-called professions: professional boxers, professional baseball players, professional real estate brokers, and the oldest profession. Even proclaiming yourself as being a professional man has its dangers. One time in riding down an elevator with my wife, a shapely thing got on at the 10th floor, gave me that sexy look and said, "Mr. Brown I haven't seen you recently." My wife's frozen glare could have stopped a clock. After Blondie got off at the third floor my wife asked, "What was that?" I said, "Just someone I met in a professional matter." My wife asked, "Whose profession, yours or hers?"

I have not yet heard a doctor, attorney, priest, or professor saying I am a professional attorney, doctor, or professor. Everyone knows they are. It is

a failing of people that they want the title without the effort, the degree without the education, heaven without probation. People usually get what they earn.

No one acquires standing by self-proclamation. Because of behavior, knowledge, integrity, ethics, skill and service to others, people have acclaimed doctors as belonging to the professions. It is others who bestowed the title upon them. If surveyors behave and act like professional men over a long period of time, then and only then will the public and their peers recognize them as such. It is the total picture of an individual that determines his standing; surveyors cannot be biased towards their own interests.

What is the future of land surveying? It is whatever you make it. You are the ones who are carrying the ball. You can tell some people by their mortgages, others by their deeds. As Shakespeare once said,

*Men at some times are masters of their fates.
The fault, dear Brutus, is not in our stars
But in ourselves, that we are underlings.*

For thousands of years surveying has depended upon its members as individuals for those creative achievements of mind that have guided it along the path of professionalism. When an idea comes, where does it originate? From the crowd? Never. The individual? Always. It is he and he alone who transmits ideas to his fellow men. Wisdom and virtue cannot be forced from a crowd. There is no such thing as general intelligence. There is only individual intelligence communicating ideas to individual intelligences. There is no such thing as group professionalism; there is only a composite of individual professional standings.

One thing is certain, if we are going to acquire a standing or position in society, we must earn it individually by our own efforts. No man can acquire honesty by merely saying, "I am honest." No man can acquire respect by saying, "I should be respected." No man can acquire an education by merely saying, "I am educated." Our individual actions, effort, and behavior are the proof of what we are. The sum total of all our individual actions is proof of what we are as a composite group, and the composite group is no better than the individuals. I hope that each of you, as an individual becomes recognized as a professional man, then all of us as a group will be acclaimed as a profession. *A*

*(Note: for full version of this article, see
The Curt Brown Chronicles)*