

REFLECTIONS

By Robert W. Lucky

Famous People

I was giving a talk at a high school, trying to convince the students that engineering would be a good career choice. To bolster my case, I showed a picture of a group of engineers around a dinner table at a banquet. I pointed to each engineer and told the students what that particular person had accomplished. I neglected to mention that this was an awards dinner and so it might have been expected that the achievements of the participants were significant, but I wanted to give the idea that every engineer had the potential to do great things.

A hand in the audience went up. “How do you know so many famous people?” asked the student.

I have forgotten what inane answer I gave the student, but I have since considered the matter. It really is an interesting question, having more to do with age and the nature of our profession than it does with me personally.

To begin with, we really don't have famous engineers. Rather, we have famous engineering achievements. Everyone knows of such milestone developments as the transistor, the laser, the integrated circuit, the micro-processor, the Internet, the World Wide Web, the cell-phone, the GPS, and so forth. They just don't know who was responsible for these things. Arguably, the transistor was the greatest invention of the last century,

but I venture that if you stopped 25 people on a city street and asked them to name the inventors of the transistor, not a single person could do it. Yet every person would know that Edison invented the electric light. Apparently, many of our great names are lost in antiquity.

That said, how do I know so many of these unknown yet “famous” people? Part of the answer is simply time. When I started my career, the engineering world was a smaller place, and it was concentrated in a few centers, most of which were in the United States. Today, of course, this is no longer true. I was also fortunate to be in one of the central nodes of our profession, at Bell Labs. Such nodes still exist today, but I believe they are at a handful of great universities. The world passes through such places, and everyone who is—or will be—famous is at one of these places at one time or another.

Reflecting on the student's question, I realized that I had known many of these people before their great achievements. I never thought then that anyone I knew would become famous outside the engineering world, yet afterward I was not surprised

by their relative celebrity. I knew it all the time, I told myself.

We are fortunate to be a part of a profession where famous achievements happen regularly. I suppose there are famous achievements by accountants, for example, but I just don't know of any. Moreover, many occupations are local, with all your acquaintances nearby. One of the rewards of engineering is being an integral part of a worldwide network of like-minded people. I have always said that the great pleasure of my engineering career is having known and worked with the best and the brightest from all over the world.

The best answer to the student's question, however, is simply the IEEE. The mechanisms within our organization tend to identify incipient greatness at an early point. IEEE conference planners are invariably

aware of emerging technologies and the people leading these emergent fields. Those are the people invited to give special talks at our conferences and to write featured papers for our publications. Those are the people whose exploits become the subjects of the coffee-break chat within our world. Indeed, I was aware of a number of people who would become famous even before they had left school. The word was already out that their thesis work was something special. Later I would meet them regularly at IEEE events throughout the years. In retrospect, I now feel that I grew

up with these people and that they enriched my life.

I wonder, though. If some young engineer reading these words today were to be asked such a question many years in the future, would his or her answer reflect the same experience as mine? Will we still have great achievements that people everywhere will hold in awe, and will it still be rather ordinary for other engineers to have known personally the architects of these achievements?

While I'm sure there will be a steady supply of great engineering achievements in the future, it is possible that the credit for these will be more diffuse than it has been in the past. It is also possible that because our profession is now more global and increasingly based on electronic communication, there will be less face-to-face interaction among engineers. If we were to lose those personal connections, I think our profession would be diminished. ■

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