Technology Show, I started daydreaming about cache, and a day’s worth of adventure in the woods. Connection and its promise of automated dollars, a bigger basement, and a much more where that is,” Joshua gleefully explained as he headed—correctly—to the next cache. It was a delightful day in the sun and the woods, and it got me thinking about how much—and how fast—things have changed since I was a kid. I can remember the excitement of using a com pass; now my kids can find their location using satellites.

As much as I enjoy reminiscing, it’s even more fun to envision the potential of the future, and naturally, I wonder about the future of steel. When I wandered through the exhibition hall at the recent International Manufacturing Technology Show, I started daydreaming about what I could make with a few hundred thousand coordinates. I dutifully wandered through paths, threading my way to the correct location, only to invariably find that my kids had beaten me to it (“Oh, that’s the woodpecker tree, I know where that is,” Joshua gleefully explained as he headed—correctly—to the next cache). It was a delightfully day in the sun and the woods, and it got me thinking about how much—and how fast—things have changed since I was a kid. I can remember the excitement of using a compass; now my kids can find their location using satellites.

So what will the steel industry look like? Will we move towards incredible precision? Some of the people selling laser cutting equipment don’t measure tolerances in inches—they measure in microns. Yet their equipment still slices through steel like a hot knife through butter. Think about what you can accomplish with that, and then think about the headache of working with other materials that have far wider tolerances.

Will we move towards automation on the job site? How many people remember the ATLSS Connection and its promise of automated construction in the 1990s? While that effort didn’t bear fruit, there’s at least one manufacturer who has a remarkably similar connection on the market today, though without the automation part. Or maybe we’ll gain efficiency by moving everything to the job site—from steel produc tion to fabrication to erection. It brings a whole new meaning to the term “mini-mill”!

Will there even be such a thing as a “pure” steel-framed building in 20 years? Is there really such a thing today? I can remember writing about a building a few years ago that had won awards from AISC, the Portland Cement Association, and The Masonry Institute. I called it a steel building; others said it was concrete; and some said it was masonry. How often today do framing systems use the best features of a variety of materials? There are a lot of mid- and high-rise buildings taking advantage of concrete cores and steel floor framing. Depending on the economics of the hour, joists may or may not be the most economical roof framing system. Maybe we’ve entered a new age of “hybrid” construction.

We often think of building construction as a staid industry, but today we’re in a period of rapid change. Building Information Models seem like the wave of the future based on their economic promise; but they also have the potential to reshape the structure of a building. In the 1960s and 1970s we saw a number of ground-breaking structural systems. Does Frank Gehry’s work indicate the coming of a new architectural age and the Hearst Building in New York a blossoming of new creativity in structure? Advances in modeling were crucial to both and hold promise for much more.

Just as the portable GPS system has reshaped orienteering, changes in fabrication equipment and engineering software are heralding a new era of design creativity. I’d love to hear from you about what you think the future will hold. Drop me a note at melnick@aisc.org. Or, come down to New Orleans next April for the Steel Conference. It’s the perfect place for a cup of coffee, a beignet, and some dreaming about the future.