WHAT ARE YOU DOING with your brief moment in time?

Dan Goods is using much of his moment as a visual strategist for NASA’s Jet Propulsion Laboratory. Dan was the Wednesday keynote speaker at the 2018 NASCC: The Steel Conference, which took place in April in Baltimore. And he posed this question to the audience after reminding us all that our time, on a cosmic scale, is rather brief, to say the least. In his presentation, “Seeing the Unseen,” he reflected on his personal journey to get people to view big or complex concepts in ways that make them easier to understand. For example, to comprehend the vastness of the universe, consider the Milky Way. Then think of six rooms, representing the universe, full of sand, with each grain representing a galaxy.

If that’s too much of a mind-blowing/late-night/existential/why-are-we-here type of discussion, let’s simplify things and go with: What did you do with your brief time at NASCC?

If you attended Rob Connor’s Friday T.R. Higgins Lecture, “Towards an Integrated Fracture-Control Plan for Steel Bridges,” a) You spent your time wisely, and b) You witnessed a perfect illustration of someone following Goods’ strategy of taking a technical and often-misunderstood concept (fracture-critical members) and making it interesting and relatable for not only engineers but also the general public. Rob stressed the overuse of FCMs in bridges and the resulting inefficiency, noting that redundancy is good but not when taken to extremes. As an example, he commented that an airplane with one wing is a problem, but two wings is plenty. “You didn’t fly here in an airplane with 12 wings,” he remarked.

The concept of seeing the unseen was in motion on the exhibit hall floor as well, with multiple exhibitors using virtual reality (VR) to make it easier for customers to visualize buildings in new ways. Software providers Trimble and Aveva both had VR viewers on hand to allow attendees to “walk through” projects. At
Trimble's booth, attendees could actually don a hard hat with an attachable VR viewer. AISC member detailer Anatomic Iron also took advantage of VR technology—based on Trimble and Autodesk software as well as a proprietary video game engine and using an Xbox control for navigation—to demonstrate new ways of showing models and completed buildings to designers.

Also in (rapid) motion on the floor were two university steel bridge teams demonstrating the build portion of the National Student Steel Bridge Competition (NSSBC). Attendees got a look at just how fast these teams can put together an all-steel bridge, piece by piece and within stringent parameters. If you've never been to a regional or national competition, it's worth checking out. The national competition happens every year over Memorial Day weekend on a different university campus, and this year's version took place at the University of Illinois at Urbana-Champaign. For more information on the competition, visit www.nssbc.info. You can also get an inside look at last year's competition in “On to Oregon!” in the August 2017 issue (visit the Archives section of www.modernsteel.com).
The new SpeedCore sandwich plate core wall system, developed by Magnusson Klemencic Associates, was another highlight of the show. The innovative system was featured as a sample (fabricated by AISC member Supreme Steel) at the AISC booth and was also explained in a session “Innovative Composite Coupled Core Walls for High-Rise Construction” (see “Core Solution” in the February 2018 issue). The composite steel-and-concrete solution is set to revolutionize high-rise core construction thanks to its ability to potentially shave months off a project schedule.

Another buzzword at this year’s show—less exciting and more worrisome—was “tariffs.” But in the immortal words of The Hitchhiker’s Guide to the Galaxy: Don’t panic! The session “Special Sites Require Special Solutions,” presented by AISC director of government affairs Brian Raff, discussed the implications of the much-discussed tariffs on the steel construction industry. A few takeaways: Concrete buildings also contain large amounts of steel; there are always outside forces that impact construction and this is just the latest one; construction costs should only see a marginal increase as a result of the tariffs; prices will likely level off in the coming months; and the domestic steel industry has plenty of supply to meet construction demand. (You can also visit www.aisc.org/tradetalk for more on how tariffs and trade issues will impact your steel projects.)

And of course, how could we not mention Thursday’s keynote speaker, Lincoln Electric’s Duane Miller, who gave the audience his “Important Lessons I’ve Learned During The Past 40 Years.” I’d say that Duane has forgotten more about welding than most people will ever know—but I’m not sure he’s forgotten anything. (And I’ll add that if you put him in front of a bunch of students who know nothing about welding, he would likely talk several of them into the profession.) The top-rated speaker year in and year out at NASCC, Duane conveyed valuable lessons not only related to welding, but also in terms of career and personal growth. Some of his most memorable advice was this trifecta: 1) Get all the facts. 2) You’ll never get all the facts. 3) Some facts... aren’t. Another highlight for the audience of more than 2,000 was having AISC president Charlie Carter on stage to bend one piece of steel and break another piece in two, in a demonstration of perceptions of ductility.

Speaking of numbers in the thousands, this year’s conference set not only a new record but also a new milestone, putting attendance above 5,000 for the first time ever—and not by just one or two people. The show attracted 5,175 attendees (which follows last year’s previous record attendance of 4,597 in San Antonio). For many, that number seemed like something that might always remain unseen. But now we’ve seen it.

And that brings us back to Dan Goods’ keynote address. When introducing Dan, Brad Fletcher of Atlas Tube, who sponsored the presentation, emphasized an important point about the people in our industry: “There’s a lot of artistry in steel. We are artists as well as craftspeople.” And Goods offered a follow-up to his question about how we’re all spending our brief moment in time: “What you do matters.”

Keep both of these statements in mind throughout your upcoming projects and life in general, and you’ll no doubt begin to see more of the unseen then you ever thought was possible.

You can view photos from this year’s conference on AISC’s Facebook page in the “2018 NASCC: The Steel Conference” photo album. If you missed the conference, recordings of most of the sessions are now available at www.aisc.org/educationarchives. Next year’s conference will take place April 3-5, 2019 in St. Louis. For more information, visit www.aisc.org/nascc.