I first met Jerry when I arrived at Caltech in 1997, fresh from the Australian wilderness. I well remember the intimidating first meeting with the world-renowned Professor Marsden, at that time at the pinnacle of his career. I had nothing of importance to impart to him, of course, and so I went to his office for the first time without any clear expectations.

I certainly did not expect to hear what Jerry told me, which for the first ten minutes consisted of a detailed explanation of the weather systems currently active off the coast of Western Australia, and the likely predictions for rainfall in the coming weeks. Jerry’s fascination with weather ensured that he was always a reliable guide in matters meteorological, both in Australia, California, and wherever I happened to travel.

My first view of Jerry’s office also presented me with a view of two pieces of technology that were key tools for Jerry and his collaborators, namely Macintosh computers and $\LaTeX$. Everyone who has worked with Jerry is aware of his enthusiasm for $\LaTeX$, and the wonderful books, papers, and talks that he produced with it.

I was extremely fortunate to be student of Jerry’s at Caltech. By the time I arrived, there was a very substantial group of students, postdocs, and visitors working here, not to mention an extensive group of remote collaborators. Despite the huge number of people with whom he interacted, Jerry always managed to have enough time for each person. You could go to him and spend an hour working through
a problem in great detail, and he would always explain concepts without rushing, and also with a kind approach and no hint of condescension. He would always be challenging, however, and would push you to think further and more deeply.

He probably never knew this himself, but in the Steele building basement (where the student offices were), there was a phrase that was in frequent use: the “Jerry Effect”. This referred to the euphoric feeling that you would get after a meeting with Jerry. After being stuck and confused over a difficult question, you would sit down with Jerry and he would lay out a much higher-level view of the problem, making connections and analogies of which you were unaware, and then send you away ready to make some really serious progress.

In my case this feeling would typically last about an hour and a half, but it was amazing while it was there.

Jerry’s choice of problems was always superb. He seems to have had an unerring sense of what would result in interesting results, and he saw further than almost anyone else I know. He inculcated in me the idea that we should always strive for elegance and beauty in the theory, and that this way would lead us down the correct path. He was never dogmatic, however, and was not above making some temporary simplifications to get started on a new problem.

Jerry’s belief that there should be deep underlying geometric principles extended to his more recent work on numerical and computational techniques, which was a significant focus during his time at Caltech. He was certain that looking for elegance and consistency in discrete-time and discrete-space systems would result in significant developments, and of course he turned out to be correct. This was an extremely fruitful research direction for many of us who worked with Jerry during his Caltech years.

Developments resulting from Jerry’s focus on discrete systems include discrete mechanics, variational integrators, and discrete calculus, all of which have had significant impact on computational methods for solid mechanics, fluid dynamics, dynamical systems, and many other areas. Jerry confidently predicted that developing a rigorous and consistent theory of discrete mechanics would lead to important results, and seeing this transpire was an amazing experience for me.

As well as his impact on my research and knowledge, Jerry also had a significant influence on my personal life. I first met my wife when she was a visiting student at Caltech, and, as visiting students do, she eventually left and returned to her native Germany. Jerry immediately told me “this is no problem, you just follow her”, and he sent me off as a first-year graduate student to spend summer in Germany. Throughout my time as a graduate student, Jerry was happy for me to spend months at a time in Germany, a truly remarkable level of trust from an advisor, and one for which my wife and I will be forever grateful. Of course Jerry had substantial personal and professional ties with Germany himself, and I was later to enjoy meetings at Oberwolfach and visits to Jerry and Barbara’s house in Hämelschenburg.
One small incident from that time really revealed to me Jerry's wry sense of humor. I was learning German, and for practice I would write emails in German to my then girlfriend. On one fateful day I confused the addresses on my outgoing emails, and I discovered just after I sent the email to my girlfriend that it was actually going to Jerry. He was extremely tactful in his reply, but he did make it very clear that he understood German just fine himself.

Since I left Caltech, Jerry has been an enormous influence on my career, just as he has been for many other young researchers. He was always keen to encourage and support young people in the field, and he was outstanding at building connections. Many of my collaborators even today are people whom I first met via Jerry, or met at meetings that Jerry organized. I know that this is typical of others as well, and Jerry's enormous group of collaborators has been a source of many new bridges between people.

Jerry's tireless energy is reflected not just in his huge number of collaborators, but also in his amazingly prolific production of books, and his constant editorial and organizational activities. Everywhere I go, everybody knows Jerry, and his name is always associated with great work and great kindness.

In closing, I can only say that I have been so fortunate to have been Jerry's student, and it was truly a formative experience in my life. I will miss him terribly.

Matthew West, Urbana, IL