

Notes for talk at Jim Schmerl's
85th birthday celebration, 4/22/2025
Matt Kaufmann

Although I appreciated the invitation to participate in this celebration of Jim, I was a bit nervous about accepting it. That's because with one brief exception it's been about 40 years since I've done research in mathematical logic, so I have virtually nothing technical to say. But I wanted to contribute because Jim's a great guy. So I'll just tell some stories.

You're all welcome to correct and add to anything I say -- Jim, that goes for you, too. Jim is a helpful guy and I've never been shy about asking him for help, and here I am, doing it again. Feel free to add anything, whether true or false, to what I say.

I might have first met Jim in the late 1970s at a conference hosted by the University of Connecticut, but I got to know him better shortly after that during a couple of meetings for authors of a book called *Model-Theoretic Logics*. At the second meeting, Jim and I were having a meal and he mentioned that his department had an open visiting position for a year. He didn't seem to be suggesting anything by that, but I asked whether I might apply for it. He seemed a bit surprised, but working with Jim seemed like a great thing to do, and I wound up visiting him in the 1982-83 academic year.

And it was really fun working with Jim -- I was right to spend that time at UConn (I guess you all know that's the University of Connecticut, not somewhere in Alaska). A highlight for me was a time when we'd been trying to figure out the same problem, and one morning when we met up in his office, we were both excited to announce that we'd both figured it out. That was fun.

We were working with a notion weaker than recursive saturation, which we called "lofty". Jim raised a question -- Jim is really good of course at raising questions -- on whether there is an ω_1 -like lofty model that is not recursively saturated. Jim, do you know, is that still open after more than 40 years?

Not long after I left academia and the world of logic research,

I got a paper in the mail, called "Remarks on Weak Notions of Saturation in Models of Peano Arithmetic", which ultimately appeared in the JSL in 1987. The thing is, I didn't know anything about this paper until I got it in the mail -- yet I was shown as a co-author. I seem to recall asking Jim why it made any sense for me to be a co-author, since I didn't write any of it. I don't recall his exactly what he said, but my recollection is that he was determined to make me a co-author because, he said, it was a continuation of the work we did on lofty models. I think the main explanation for my co-authorship is actually that Jim is a generous colleague. He was generous in other ways too, such as giving me rides to out-of-town seminars when I was visiting UConn in 1982 to 83.

By the way, Jim once suggested a paper that would settle all questions about Erdos numbers: Erdos Numbers Are Trivial, by Everybody.

Jim had a nice house, not far from where I was renting a room that year. I think maybe his oldest daughter was in 8th grade and his twin daughters were in 6th grade. I remember that he had a small dog that kind of looked like a dust mop. The little dog's name was Bruiser. (Actually Roman and I collaborated on recalling that name, so now I have some joint work with Roman as well!) My point here, other than to illustrate Jim's sense of humor by calling that little dog "Bruiser", is that Jim was living a complete life, doing the whole family thing while he was busy with his research and teaching. He also cleared trails in his spare time. Maybe he still does.

I think Jim cared a lot about teaching, and what I think I remember is his interesting view on grading. Namely: Corporations use student grades to help them to decide whom to hire, but it's not the university's job to do their vetting for them. So if Jim felt like giving everyone an A, that's the corporations' problem. (I don't know if he actually did that.) I think Jim was ahead of his time, given the way corporations worm their way into so much now, like putting their names on football bowl games. Did you know that there is actually a Pop-Tarts Bowl? I'm waiting for the Rose Bowl to be renamed "The Lysol Toilet Bowl".

In 2014 I got drunk at a conference dinner and asked Ali Enayat,

who spoke earlier today, to invite me to spend the following summer in Gothenburg, to have some fun going back to my logic roots. He graciously arranged that. In preparation, I picked up Roman and Jim's book, *The Structure of Models of Peano Arithmetic*. Those guys; wow. I made it part way through the introduction. That book is an amazing accomplishment.

You all know that Jim is a super logician. During my stay at Connecticut I learned that he also did serious research in graph theory. That could explain his reaction when I told him in 1987 of a computer-checked proof I'd done of the exponent-2 Ramsey theorem, using software I'd been developing. He seemed puzzled by why it was exciting to have proved something so trivial. Our careers had diverged -- I was excited about mechanizing mathematics, but Jim was excited about actual mathematics, just as he has continued to be through all these years.

I've seen the great relationship Jim has with his wife, Sue. One time they stopped in Austin, Texas (where I was living) for a visit on their way back east from their usual winter stay in Tucson. They joined my wife Holly and me for a meal at a Mexican restaurant. I don't remember how it was decided to go to that place -- it was pretty random. But it was memorable, not only because Jim and Sue were there, but also because a Mariachi band came to the table and played for us. Holly really dislikes Mariachi music but I think we all enjoyed how it contributed to a festive time. We enjoyed spending time with Jim and Sue and seeing their great relationship.

Of course I have to mention Jim's 2025 National Champion UConn Women's Basketball team, and their overwhelming 23-point victory in the finals over a very good South Carolina team. Congratulations, Jim! Maybe in a moment you'll talk about what that means to you.

I want to close by saying Thank You, Jim, for taking me under your wing in 1982, and for your friendship over the years. Happy Birthday! And thank you all for listening. With the remaining time I hope you'll share some more stories.