

A STUDENT'S TRIBUTE TO CASPER GOFFMAN

By Clifford E. Weil

In the fall of 1959, some 15 students began their graduate programs in mathematics at Purdue University. Most signed up to take a course in analysis from Casper Goffman, which was scheduled to meet at 8:00 am (as we learned later, Cas's choice). Cas would enter the classroom each morning with several pieces of chalk in one hand and a partially-smoked cigar in the other. (Smoking in the classroom was permitted in those days.) He walked along the chalkboard distributing the pieces of chalk as he went. When he reached the far end of the room, he would take the one piece of chalk remaining in his hand, break it in half and begin his lecture. When he stated a theorem to prove, he would stop, take a book of matches from his pocket, and relight his cigar taking just a few puffs. This ritual was likely to give him time to organize how he would present the proof because while he was writing the proof, he never puffed on the cigar again. In this year-long course he covered a substantial amount of material and taught us, by example, how to write good mathematics.

At first Cas impressed us as being rather tough. As we learned later his toughness was just a facade designed to determine for himself and for us if we were capable of becoming research-oriented mathematicians. Some of the students discovered early on that they weren't interested in such a career path and were pleasantly surprised that Cas was eager to help them find more suitable professional goals. He wrote appropriate letters of recommendation for these individuals. Others decided to stop after a masters degree and again Cas was instrumental in helping them find appropriate courses to take and advising them on other possible employment opportunities.

Those of us who continued into an advanced course with Cas were treated to the same pace and quality of presentation, but a new element was added: his wit. For example, when he introduced Fourier Series to us he said that at the time, others were working on power series; an area where Fourier made no contributions. So when he introduced Fourier Series, he immediately became the leader in the field. Then he paused for just the right length of time and said, "which just goes to prove that if you can't join 'em, beat 'em." During that class and on other occasions as well, we were treated to other such light-hearted moments.

In our second year at Purdue, Cas and Chris Neugebauer started a seminar, which resulted in at least five Ph.Ds. In the seminar we learned how to read a research paper, present the results to others, ask questions about the work,

and, if we were lucky, answer the questions. Cas and Chris chose the papers to be presented and did so, I believe, with the knowledge that those papers would generate reasonable unsolved problems.

While working on my thesis with Cas, I learned more from him than just mathematics. At one point he told me that he considered himself to be primarily a teacher. Such a comment from some one who was such a prominent mathematician made a lasting impression on me. I knew that he was an excellent teacher from my contact with him and freely admit that I used him as a model for my teaching style. But I learned from undergraduates that I had as students that they also felt that Cas was an excellent teacher. On another occasion, I was present when Cas and other faculty members were discussing the rather abrasive behavior of a mathematician they knew. Cas asked one question that put the entire discussion in perspective; “Is he that good that he can be that bad?”

Cas and Eve were very good to his students, as they were to all of their friends. They entertained us at their home and, what was very impressive to me, when my family and I were in Tallahassee, FL for a summer institute sponsored by the NSF they invited us to dinner. They came to see us during my first post-doctoral appointment and Cas came to Michigan State several times to give talks. He felt a strong personal commitment to his Ph.D. students, helping them whenever he could, even long after they had left Purdue. I know many of them and they all agree that Cas was the best thesis advisor a person could have. For my part I’ve tried to be as good a thesis director to my students as Cas was to me.