

Tribute to Joe Diestel

Seán Dineen

October 10, 2017

Joe was passionate about everything: his family, friends, mathematics, social gatherings, Banach spaces, Kent State University, vector measures, baseball, tensor products, traveling, Grothendieck's inequality, practical jokes and stories. He was even passionate about the fact that he never learned to drive. He was serious about everything and, yet, everything was fun to Joe. To Joe there was a tale behind every theorem, a person behind every example, a community behind every mathematical theory, interconnections between any two mathematical areas and, whatever the social or scientific occasion, he delighted in telling the tale to whoever would listen. Joe roamed the world as an ambassador extraordinaire, explaining to the mildly initiated the works of Grothendieck, James, Pelczynski, Pettis and Pisier. Today we are lucky he recognized and developed his gift as a communicator and that he chose to share his many insights with us.

Joe had an uncanny ability to empathize with his audience whether it was a first year class, a group of mature academics from diverse disciplines, a social gathering in a pub, or a room full of union activists. Formally, he shared his gift by writing those wonderful books, by organizing conferences, by attending conferences, by giving endless seminars, by arranging many visits to Kent State University and by being a very nice person to everyone he met. His enthusiasm transferred itself to his surroundings and it is no exaggeration to say that he enticed many a budding mathematician to follow him into analysis.

In 1976 Joe decided that he would spend a year abroad. On hearing that Ireland, following some rotational formula, was due a Fulbright Fellowship in the sciences, he applied and as a result visited University College Dublin for the academic year 1977-1978. I met him for the first time when he arrived in Ireland and we shared an office, F209, during his sabbatical year. Joe

made himself at home in Dublin very rapidly. Almost immediately most of the mathematics faculty were swept up in Joe's enthusiastic seminars - he gave at least three every week. At the time, he was writing chapters in what later became *Sequences and Series*. In those far off days before h-numbers, email, mobile phones, citation indices, rankings and rampant managerialism our university had well-attended faculties and academics from across the disciplines had more than a nodding acquaintance with one another. It was the custom in those days after lectures, seminars and meetings and before going home, particularly later in the week, to visit the Common Room for some socializing. In the Common Room, Joe, with his endless stories and anecdotes and willingness to engage anyone on any topic, soon got to know at least half the academics in the university and that year, under his tutelage, the mathematics faculty became very adept at the game of darts.

Joe lecturing style was lively. He kept his audience in suspense by promising dramatic revelations later and he made claims, sometimes outlandish, e.g. *for fifteen years nobody understood the proof of this theorem*, that were delivered with such conviction that we immediately believed them. His elementary courses were very well attended because of their entertainment value. I was very impressed to overhear, while in a lunch queue one day, a student of his from a very basic course repeat an entertaining story about Pelczynski at a conference in South Africa. Regardless of what mathematics these students retained after their college days, they at least left with the opinion that mathematicians were interesting and normal and that they had a sense of humor.

Joe's writing style was original, lively, entertaining and a refreshing contrast to what was accepted as standard mathematical prose. Of course, he included what would ordinarily be regarded as the main results of whatever theory he was discussing but additionally he gave insights that would rarely if ever appear in print elsewhere. He resurrected forgotten proofs, he compared different proofs, he presented and analyzed special cases, he pointed out key lemmata and crucial turning points, he showed the relevance, and occasionally the irrelevance, of results to other parts of analysis and mathematics. Joe was able to appreciate that the isolated scholar might wonder why the precise value of Grothendieck's constant K_G was important and so, for the benefit of all isolated scholars, he proceeded to tell the world that, in his opinion, it was only in discussing the failure of the von Neumann-Andô Inequalities that the estimate $K_G > 1$ was ever used.

Joe played around with words and it's not difficult to find examples. A

random opening of his books revealed within two minutes the following examples. He did not avoid complicated computations but when they were difficult or long or tedious he took it personally and called them *grubby manipulations* and *gruesome calculations*. Joe liked to find direct proofs of simple cases of important results - this was one of his approaches to understanding mathematics. Afterwards he would consider if this led to a new proof. Sometimes it did but at times his new proof might turn out to be more complicated than the standard proof. To explain on one occasion that such an approach was possible but not advisable he wrote: *But it should also be clear that such a procedure would inevitably lead us to countenance considerably convoluted combinatorial contortions.*

Joe had stories about everyone but he was less forthcoming about those in which he himself featured. Nevertheless, it would be remiss and an oversight that Joe would not appreciate to conclude this short tribute without a few personal reminiscences. During his year in Dublin, Joe attended a conference in Warsaw and, even though we sat in the same office for three months afterwards, it was a year later that I heard the details about his first night at that meeting. On the way back to his hotel after a night celebrating, Joe decided to cross the road about a hundred meters from a pedestrian(zebra) crossing. He was stopped by two policemen who explained that he should cross at the zebra crossing. Joe, to the dismay of his local guides, insisted that he did not understand what they were saying and kept attempting to cross at a more convenient point. After some time the policemen grew tired of trying to explain to Joe what was required and they arrested him. Next morning his friends, worried about both Joe and their conference, called to the police station where they had, apparently, a conversation that went as follows.

‘We came for the release of Professor Diestel.’

‘You mean that American tourist who didn’t know how to cross the street.’

‘Yes, that could be him.’

‘Well, a week in jail will teach him some manners.’

‘Oh no, you don’t want to risk that?’

‘And why not, he’s just an American tourist.’

‘No, he’s not just any American tourist.’

‘No?’

‘No, he’s not. He’s number 3 in the American Communist Party. Number 3.’

‘I don’t believe you. We’ll check it out.’

‘Well, that’s up to you. But be very discreet. It’s difficult to say how certain people will react if they hear you’re making inquiries about a certain person.’

A half hour later Joe was released.

The conference on Banach spaces that Joe and others organized in Kent in 1986 was one of the most impressive that I ever attended. It began on the Monday of one week and ended on the Friday, almost two weeks later. The only free day was the middle Sunday. The 50 minute lectures began at 8 in the morning and finished at 6 in the afternoon. From 7 until 9.30 in the evening there were short talks, three taking place simultaneously, in the basement of a campus building. It seemed that everyone who was anyone in Banach space theory was there and I found it impossible to miss any lectures. However, after three days I was exhausted and had to be more selective in my attendances. I didn’t see much of Joe during the day but each evening he occupied the 4th classroom in the basement where the short talks were taking place. All evening he offered hospitality from a keg of beer to however happened to wander in to say hello. The corridor was full of anxious nervous speakers, many attending their first international conference, impatiently awaiting their turn to speak. After some encouragement from Joe, they usually partook of his refreshments. The end result was a sequence of uninhibited short talks presided over by unusually affable professors.