

## ON THE DEATH OF PETER SZÜSZ

On February 16, 2008, Peter Szüsz died in Boston, Massachusetts, after a complicated heart operation. He was born on November 11, 1924 in Novi Sad, Yugoslavia, as the son of a Hungarian businessman. Later the family moved to Budapest where Peter spent most of his childhood and youth. During the Second World War he fortunately survived the persecution of Jews in Hungary. After those dark years, he obtained part of his academic education at the University of Munich, Germany, with a scholarship sponsored by an international Jewish organisation.

At the University of Budapest, Peter Szüsz started as a student of electrical engineering, but very soon his unusual talent for pure mathematics was discovered, and he changed his field of studies accordingly. Later on he was a Research Fellow at the Hungarian Academy of Science from 1950 to 1965. During this period he received his Ph.D. at the University of Budapest in 1951 as a student of P. Turán. At the Academy he became a Candidate of Science in 1955, and a Doctor of Science in 1962.

For Peter's research, those years at the Academy were very fruitful. It was much to his liking not to be burdened by any teaching or administrative obligation. Nevertheless, the political climate under communism became more and more unbearable for an absolute individualist like him. Therefore he used a suitable opportunity in 1965 to make his escape to the West. "Ich bin damals durchgebrannt (Then I absconded)", he used to say frequently when talking of this crucial event in his life.

After first holding a position as a Visiting Professor at the Memorial University of Newfoundland, Canada, for a few months, he moved to the USA where he was appointed to a Visiting Associate Professorship at Pennsylvania State University for the academic year 1965–66, and then to a Full Professorship at the State University of New York at Stony Brook (now Stony Brook University). This position turned out to be the final step in Peter's career, and he kept it for three decades until he was retired in 1994. During his sabbatical periods he spent times of research and lecturing at the universities of Copenhagen, Paderborn and Stuttgart.

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In his research, Peter Szűsz remained faithful to the Turán school of probabilistic number theory. The MathSciNet lists 61 papers under his name, covering a variety of subjects including uniform distribution, continued fractions, diophantine approximation, gap series, digit expansions and similar algorithms, and the constructive theory of functions. He was able to use elementary, often combinatorial methods in a highly sophisticated manner. By his own judgement, his most outstanding result was his new proof of the famous Gauss-Kuzmin Theorem on continued fractions (*Acta Math. Acad. Sci. Hungary* 12, 1961), with a big sharpening of the remainder term involved. Among his publications there are joint papers with Th. Cusick, P. Erdős, J. Galambos, S. Hartman, A. Hefes, P.B. Kennedy, K. Klee, K. Lung, S. Monteferrante, A. Rockett, P. Turán, St. Vincze and B. Volkmann. He also had seven Ph.D. students most of whom were quite successful in their subsequent mathematical careers.

In 1973, Peter Szűsz got married to Margarete, nee Wenner, a lady from the State of North-Rhine-Westphalia, Germany. In spite of the difference between their geographical and cultural backgrounds, their marriage was truly happy, with the two personalities complementing each other in many ways. In the absence of children they had two cats, Felix and Tigger, to whom both of them were very much attached. On many trips across the Atlantic, Peter and Margarete brought Felix and Tigger along, thereby presumably making them the most widely travelled cats in the country. So we were prepared to have four guests rather than two staying with us in the house when Peter and Margarete came to visit us in Germany.

After his retirement Peter Szűsz decided to move to Glen, New Hampshire, located in a very scenic, but remote region in the north-eastern United States, far away from the previous center of his mathematical activities. There he spent his remaining years in a spacious house with large windows offering a beautiful, tranquil view on the New England mountains and woods.

Margarete's untimely death in 2002, due to a brain tumor, was the greatest shock Peter ever experienced. It seems to me that he never fully recovered from it. Even though he continued to make trips to Europe occasionally, they became more cumbersome to him, with his health gradually diminishing. And even though he was not without friends, he now spoke more frequently of loneliness in our transatlantic phone calls. Having visited Peter in Glen for a last time in November, 2007, and knowing about the forthcoming risky operation, my wife and I were not surprised by the sad news in February, 2008.

Who, really, was Peter Szűsz as a personality? From which group of persons did he derive a sense of belonging and identity? Frankly, this was a difficult question for him. Due to political reminiscences, he did not consider himself as a Hungarian at heart any more, even though that country had shaped him

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profoundly. (Until his death, Peter spoke Hungarian, German and English quite well, in this order of proficiency.) Nor did he identify with the Austrian or German tradition and mentality, even though his wife was German, and so was the origin of his own family name ('süss' means 'sweet'). Neither did he show any affinity with Israel or the values and traditions which this unique nation stands for, even though his ancestors, generations ago, had been part and parcel of them. Finally, Peter Szüsz did not really regard himself as an American, even though the United States had received him very amenably, giving him not only a new passport but also a new political freedom and a new, high standard of living. (When he first arrived in the States, he immediately received nine offers of university positions to choose from).

Indeed, Peter Szüsz could not really identify with any structured group of people - historical, professional or otherwise. This was a strong idiosyncrasy of his, resulting in a certain degree of isolation from which he suffered increasingly, especially towards the end. But all the more he valued personal friendship based on mutual honesty, modesty and tolerance, regardless of the convictions and traditions which the other person might adhere to. In those rare cases where such friendships developed, Peter went out of his way to foster them.

The only true identity which Peter Szüsz felt was derived from mathematics as such. Therefore, while some of us have, by his passing away, lost a dear personal friend, the mathematical community lost an irreplaceable, distinguished member. He will not be forgotten.

*Bodo Volkmann*