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INTERVIEW WITH RÓZSA PÉTER

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[Translator's Preface. In addition to her pioneering work in recursion theory, Rózsa Péter (1905 – 1977) was deeply involved with precollegiate mathematics instruction in Hungary. This involvement ranged from activity in curriculum reform to textbook-writing to the years she spent on the faculty of the Teachers Training College. So it is not surprising that Péter had connections with Mihály Fazekas High School, which was well-known in Hungary for the calibre of its mathematics students. The following interview originally appeared in issue #4 of the 1970-1 "Diákszó" ("Student Word"), a newsletter of the Young Communist League's chapter at the school. The footnotes are my additions. Many thanks are due to Béla Andrásfai for making the original available to me, and to Éva Tardos for providing helpful information and comments.]

After the 10th Congress of our Party, the situation of women came into greater prominence. I asked Rózsa Péter to respond to questions mainly concerning that situation and Fazekas High School. I hope that many people will find the interview informative.

<u>Interviewer</u>: Our Party passed a resolution on the political and economic position of women. What in this resolution do you consider the most important?

<u>Rózsa Péter</u>: Its explicit declaration that equal rights for women have appeared only on paper, and that this cannot remain so.

<u>I:</u> Despite 25 years of our People's Democracy, very few women work in science, and even fewer women are leading scientists. What do you see as the cause of this, and how could this intolerable state of affairs be helped?

RP: I see the exploitation of women in the family as the main cause. The Party resolution also points out that men too must take part in housework, but I advocated a more radical reform in my TV interview: "The housework is the husband's duty, while the good wife helps him!" And this is not a joke. If they work equally outside the home, then one must allow for the fact that the woman generally is weaker in body and bears biological burdens that the man can never take over from her. Of course, I would not think of applying this principle rigidly; in each individual case one must consider what is an equitable division of labor, taking into account the overall load and their relative strengths.

<u>I:</u> Are you satisfied with the training of mathematicians in Hungary? What is your opinion of the university students who graduated from Fazekas High School?

<u>RP</u>: There is no doubt that in Hungary there are exceptionally good opportunities available that promote the development of mathematical talents. I am thinking not only of the advanced<sup>2</sup> and experimental classes, but also of the many opportunities outside schools, provided by the János Bolyai Mathematical Society and the Society for the Dissemination of Knowledge's Free University; for some of our great mathematicians, it is a labor of love to give personal attention to the development of young people.

To the second half of the question I must respond very enthusiastically. The Fazekas mathematics students brought a completely new atmosphere to the university. I am thinking here particularly of the first graduating class of advanced students; it does a person's heart good to see them. This is due to not only their remarkable talent and love of the subject, but also, above all, to the naturalness — modest and free from any self-importance — with which they maintain their ésprit de corps, help the others, become involved, and always act with integrity.

<u>I:</u> Who is the favorite out of your many wonderful students?

RP: This question puts me in the same position as when I was invited to appear on the radio series "My Favorite Poems". One poem is my favorite for this reason, another for that reason. At first, with me making an effort to select the minimum, my material amounted to  $1^{1}/_{2}$  hours worth — I had 20 minutes available altogether. (The taping has already taken place; a part of the 20 minutes is filled up with me complaining that nothing fits into that time.) Now, of the Fazekas students I referred to a moment ago, several come to mind right away as favorite students of mine — but a large number of them are not my students: I myself, with deep regrets, kept them out of my university lectures, which would not have given them anything new. (My policy is to gear the level of the lecture to the average

<sup>&</sup>lt;sup>1</sup> A 1970 interview on the Hungarian television "Face to Face with Scientists".

<sup>&</sup>lt;sup>2</sup> The "advanced" classes were additional, higher-level courses taken by students who, in effect, majored in the subject (mathematics, in this case).

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student.) But nonetheless they warmed my heart when, after my TV interview, there appeared several of the people I alluded to there. Almost 40 years previously, they had been my 10-year-old little "discoverers". At the now-defunct Teachers Training College I thought of my department as my home, my family, and it is not appropriate to single out members of the family; I chose the young teachers from my best students. (However, I will mention two of them since they are now affiliated with Fazekas High School: Ferenc Genzwein<sup>3</sup> and Mrs. Gyula Komlós.) Among my favorite students that came from the university, there are also two connected with Fazekas High School: János Urbán and Imre Ruzsa. (By now I can no longer call the latter's mathematician son, who comes here, "little" Imre Ruzsa.) There were also some private students of mine who later became great mathematicians, but of only one of them can I say with certainty that I had an influence on his start: Peter Lax, who is now a professor in America. Let me say a little about him.

At 14 he began mainly extra-curricular work on mathematics with me and in a few months became the "unofficial winner" of the forerunner of today's Kürschák Competition, in which only high school graduates took part officially. Soon afterwards his parents took him to America; at that time this was life-saving, but unfortunately after our liberation he did not come back (he just visits here occasionally.) In the weeks before they departed he spent several hours with me every day, acquainting himself with different branches of mathematics and reporting on his own discoveries. Then he telephoned early one morning: "I still wanted to tell you..." — he sketched a beautiful mathematical idea. After that I said: "Oh Pete, and I still wanted to tell you about the whole theory of functions of complex variables!" I started to, but after a while he broke in, sadly: "It will have to wait, because we are leaving now." Later I received a page from him from Lisbon: "We have arrived here after a somewhat interesting trip. En route I read this and this" — nothing but mathematics followed. I learned from others that during the "somewhat interesting trip" their train derailed; as soon as they arrived in Lisbon, an earthquake hit — to him, none of this deserved mention, just what he had read en route out of the mathematical writings that had been recommended to him.

Why don't I name him alone as my favorite student? Sorry to say, he became too American for that.

<u>I:</u> The 4 boy to 1 girl ratio seen in the high school's mathematics advanced classes: do you consider this fortunate?

<u>RP</u>: I fight against this when in lectures and in writings I try to point out the artistic side of mathematics: its beauty and its lively connections with humanity. (The university at Rostock once asked me to give an address, primarily for girls graduating from high school,

<sup>&</sup>lt;sup>3</sup> Genzwein also conducted the television interview mentioned above.

<sup>&</sup>lt;sup>4</sup> A reference to the rise of Fascism in Hungary. In fact, Péter herself was interned in a Budapest camp.

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that would encourage more of them to go into mathematics as a profession.) Girls, by virtue of their emotive disposition, react more sensitively to the — unfortunately rather wide-spread — formalistic teaching of mathematics.

I: Do you have a hobby and, if so, what?

RP: I admitted in my TV interview that my hobby is cooking. My mother was jealous of her housekeeping; she never let me loose in the kitchen, so now I cannot get enough of the pleasure of having my own kitchen. Of course, I only rarely have time for cooking, so I will never get enough practice. But my fantasy is that excellent flavors will occasionally emerge from my lazy, amateurish puttering — for example, I would be able to bring a beautiful pastry dish to Fazekas Week hobby exposition.

I hereby express the thanks of the "Student Word" editors and myself to Professor Rózsa Péter, our beloved Aunt Rózsa, for sparing the time to answer my questions, on top of her many other activities.

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