A Tribute to Professor Helena Rasiowa

in the occasion of her 100-birth anniversary.

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I met for the first time Prof. Helena Rasiowa in 1972-73, visiting Warsaw University and the "First Logical Semester" at Banach Center in Warsaw in which logicians from East and West had the first possibility to meet each other. At this semester Prof. Rasiowa presented lectures on Algorithmic logic. This course differed from all other courses presented at the semester, because it was the first meeting of mathematical logic and computer science, a theme unusual and not so popular to logicians at those times. As far as I remember, Helena Rasiowa was the first Polish logician claiming and advocating that the future of logic is in its collaboration with computer science. Later on, in order to make this idea workable, she founded and headed the journal "Fundamenta Informaticae" as a computer science analogue of another well-known Polish journal "Fundamenta Mathematicae".

Let me note that Prof. Rasiowa's main scientific area was algebraic logic, combining methods from algebra, topology and logic. In this field she, together with Prof. Roman Sikorski, created a school of young logicians developing further the classical Polish tradition in algebraic logic founded by Alfred Tarski. A remarkable new result in this field is the first topological proof of the completeness theorem of First-order logic based on the celebrated "Rasiowa-Sikorski Lemma". Then follow results on applications of these methods in non-classical logic – intuitionistic logic (pseudo-Boolean algebras), modal logic (modal algebras), multi-valued logic (Post algebras), and finally applications in computer science: logics of programs (algorithmic logic), logics and methods of approximate reasoning (Pawlak's rough sets. fuzzy sets).

Soon after my first visit at Warsaw University, I became a Ph.D. student of Prof. Rasiowa and had the great chance to work under her guidance. I remember her not only as a great scientist, but also as great women: she treated her students and young collaborators also as her own children and took care of them as a mother. Those years were unforgettable for me. After defending my thesis, Prof. Rasiowa visited our university several times and helped us to create our own Bulgarian school in logic and its applications. At that time our faculty of mathematics (called "Faculty of mathematics and mechanics") was renamed as a "Faculty of mathematics and Informatics" – a suggestion given to us also by Helena Rasiowa.

Let us remember with love the great scientist and women Helena Rasiowa. God bless her!

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