

A Czech professor in the Caribbean

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Professor Machek has spent half of his fruitful life linked, in one way or another, to Cuba, for he arrived for the first time in our country precisely 35 years ago. He appeared in the island somewhat by accident, as a victim of that style of his that, probably, has caused him more than one problem: his incapacity to say “no” when something is asked of him. Though he is profoundly cultured, Joseph is a man deeply Czech and absolutely praguensian; he loves his country and his city in a very special way, and enjoys them with that quiet style of his that many of us know. I have the impression that only there does he feel truly comfortable. Once he expressed to me his conviction that “life has to be lived *allegre ma non troppo*”, a phrase that certainly reveals an essential feature of his personality.

Maybe all of these things explain the fact that he has never been attracted by the possibility of traveling abroad, to the extent that, even though he was born in such a centric European enclave, you could count on the fingers of one hand the countries he has visited.

Some years ago, intrigued by the fact that in the 60's he would have come to this informal and noisy tropic, so distant from his natural style, I asked him about that mysterious event in his biography. He told me that once, at the end of the 50's, a functionary of his university asked him to go for a couple of years to collaborate in an anglophone country of Africa; he declined the invitation, but not absolutely (I don't know if he has ever been able to say no to anything in an absolute way, unless, of course, it were a dishonest proposal). In order not to decline completely, he answered that he would go if it were a Spanish speaking country, because at the time he was studying Spanish on his own, and felt that such an experience would help improve his knowledge of that language. Little did he suspect then that he was going to fall into the trap of his own kindness. Therefore, a few years later, he was unable to refuse

when the same functionary informed him that there was a Latin-American country where he could be useful.

Cuba had at that time a certain tradition in pure Mathematics. Some important Cuban scholars had studied in France and the United States, and had left a trail in our University. But regarding Statistics there was hardly any knowledge; we didn't count with professors, nor books, nor did we have any experience beyond some conventional rudiments. Machek was the man most responsible for the radical change in this situation.

In this circumstances, his contribution was essential to the structuring of the syllabus of this specialty. He taught practically all the courses: the basic themes of probabilities and the first courses on inference, as well as sampling, general linear models, experimental design, multivariate methods, etc. His contribution was decisive in the formation of the Cuban professorate, and he wrote brochures on almost all these themes. Those documents, which were of remarkable technical clarity and depure Spanish, are still consulted, and were the primary groundwork for books that some of his students published afterwards. Machek's mastery of our language (one of five or six he is fluent in, what makes him a true polyglot) was crucial to the achievements of these goals; in fact he has mastered it to the extent that he frequently puzzled his colleagues and students with subtle questions rather typical of a linguistic.

Machek has left a lot of anecdotes that pass from student to student. His limitless kindness not only includes the conventional aspects linked to his scarce attachment to material benefits, but also to the intellectual sphere. I remember that sometimes, moved by the questions of a student, Machek figured out generalizations, founded solutions and developed elegant and original properties that resulted in theorems of his own creation, which were perfectly demonstrated in those sheets of paper neatly manuscripted with which the student would then retire to carefully study. The next day, when confronted by the questions of that same student in relation to some aspect of the text, it wouldn't be strange for the professor to answer quite naturally: "Look, in that theorem you invented yesterday..." transferring to the student, without hesitation, the fruits of his privileged intellect.

Sometime after his arrival at our School of Mathematics, Machek met Mercedes. At the time she was a student of the school and of himself, and she has been his cheerful and loving partner in life ever since.

Thanks to that special link, after he concluded his work at the University of Havana, he returned more than once to our country during the 70's and 80's. He was then connected mostly to our Ministry of Public Health, particularly to its Division of Statistics, and later on, to the Institute for the Development of Health, in order to work as an expert of the World Health Organization as counselor for the solution of practical problems and in the area of postgraduate education, of which he was strongly fond.

In addition, Machek continued his educational work from Prague. He became the postgraduate advisor for some of us who then had the privilege of studying and preparing our PhD's under his guidance. His great versatility gave him the capacity to advise on any theme: from the area of sampling (as in my case) to studies of mortality and problems associated with the analysis of anthropometric and psychometric data. He was also responsible, to a great extent, for the special feeling of love that developed in some of us towards Czech culture. He taught us everything with that same natural attitude, patient and mastery he used to teach statistics: streets and monuments of Prague, twists of Czech language and breweries, folkloric traditions and musical pieces of the Czech baroque, but always with a profound respect towards our own Cuban culture that he, with his open spirit had learned to enjoy and was continually nourished by. On the other hand, throughout the years, it was a common practice that we would receive by mail (not electronic mail by then) the answers to all our questions. Machek mediated in our professional controversies and reviewed our papers (sometimes he virtually wrote them), though always managing to maintain as much anonymity as possible. So it went for many years, until our professional statisticians began achieving levels of autonomy that would have made it an abuse to continue depending on his mastery.

During all the years of his collaboration with Cuban Public Health, particularly with the Institute for the Development of Health, I have worked intensely in the fields of population growth and development, biological essays, quality control, estimation theory, demographic problems, clinical testing and the processing of epidemiological data. I have not known a statistician in any part

of the world with the amazing capacity of Machek to grasp practical problems presented to him and instantly build a statistical model reliable and fecund. To his exceptional ability of understanding a practical problem of any kind in all its subtlety, one must add his ability of transforming it to probabilistic language, from which it is possible to work eruditely to achieve at last a transparent interpretation and, therefore, an answer.

As if this wasn't enough, all this is made *in situ*: he was never thwarted at unraveling an algebraic or computational problem for lack of a calculator or a table. It was as if he had the tables fixed in his mind; and, in any case, a pencil and a sheet of paper were enough for him to calculate logarithms, square roots or arcsines (with the required level of approximation), acts more fitting of a sideshow magician, except that he does it with the simplicity of someone for whom mathematics is his natural language. In my opinion, only the proverbial modesty of professor Machek has kept him from attaining positions of world-wide fame.

In reviewing our contact with him, I must also offer thanks to those forces of randomness which have placed Professor Josef Machek in my personal destiny and in that of my country.