

STATISTICS : A GRADE CAREER IN ARGENTINA

Silvia Malvicini and Liliana Severino, Argentina

In this paper we intend to give international references about the actual situation of the Statistical Science in Argentina. Even though at an international level it is very difficult to establish the origins of Statistics, there exists very old data about census and gathered information that indicates the developing of it in the world, in Argentina the beginning of Statistics and the creation as a grade career has a date, very precise data and a relevant name that had the great vision to fight for the creation of a grade career in Rosario, Argentina, we are referring to Professor Carlos E. Dieulefait, this was the first career in Latin American and the first of Spanish language.

SHORT HISTORY

We are going to divide this part in two, in the first place we will give a short curriculum of the creator of the career in Argentina and afterwards the developing of the facts that concluded with its creation.

Short Summary of the Curriculum of the pioneer of Statistics Career in Argentina: Carlos Eugenio Dieulefait was born in Buenos Aires on July 27th, 1901 (on July 27th of every year we celebrate the Statistician Day in Rosario, Argentina)

He organized the Statistician career in 1948. Later after when the career became the actual School of Statistics in 1966 at the National University of Rosario, Argentina, he was the "Director of this School at the Faculty of Economic Sciences, till when he retired in 1980.

- He was Honorary Member of the International Statistical Institute (I.S.I.).
- President of the InterAmerican Commission of Statistics.
- Honorary Director of the InterAmerican Library of Theoretical and Applied Statistics.
- Honorary Member of the Royal Statistical Society.
- Honorary Member of the Société Statistique of Paris.
- Honorary member of the International Union for Scientific Studies of Population
- Honorary President of the InterAmerican Statistical Society.
- Member of the American Statistical Society (A.S.A.)
- Fellow Member of the Mathematical Statistical Institute
- Vice-president for two periods of I.S.I..
- Counsellor of the Argentine Scientific Society.

- President of the Statistical Education Commission
- President of the Statistical Section at the International Conferences, jointly with Prof Borel and R. A. Fisher, in Rome. Italy.
- Member of the Comitato Italiano dell'Università di Roma for the study of population problems.
- Member of the International Econometry Society presided by R. A. Fisher.

He had published more than a hundred papers and articles in his especially in books, magazines and journals.

Two editions in four books of the Course in Statistical Methodology .

He had also published papers in the following magazines and journals.

Comptes Rendues Paris Science Academy

Biometrika London University

Metron Rome University

Annals of Mathematical Statistics EE.UU

Journal of the Italian Institute of Acturials

San Marcos University Magazine of Science

Annals of the Argentine Scientific Society

Journal of IASI. Washington an many more.

From 1960 till 1969 was Counsellor of the Federal Inversion Council

Historical evolution of Statistics as a grade career

We will begin with the words of Prof. Dieulefait at the VII General assembly of the IASI (InterAmerican Statistical Institute) that took place at Santo Domingo, Rep. Dominicana, on November 1977: Development of the Statistical Profession in the occidental hemisphere: Some references of the Argentine Case.

“statistics as an activity for registration of information preceding Statistics as a discipline for analyzing and judging of the registered information. In Argentina from an Institutional point of view, the first official Statistical Organization appears as an important part of the Customs Direction where it has originally its physical beginning. After that , as National Direction of Statistics and Census, even though it changes its denomination several time, till the one that has now , national Institute of Statistics and Census. under the Ministry of Economy.

In 1921, in EE.UU. is included in the list of Professions and at the same time in Argentina, started to develop a certain significant activity at the University level education, when at the Faculty of Economic Science of Buenos Aires National University (UBA) begun giving lessons of Statistics the well known mathematician as Dr. Hugo Broggi.

In 1928 at Cordoba took place a very important National Meeting of Statistics, where were fixed recommendations and rules to ensure the uniformity and comparability of statistical work.

By that time at the Faculty of Economic, Commercial and Political Sciences of Rosario, begun a Course of Statistics given by the author of this notes as a free professor. In general lines those courses followed the steps of the course of Prof. Broggi, were mixed in a certain way, themes of statistical methodology with applications and reference to other disciplines specially in Economy.”

On November 20th, 1929, Prof. Dieulefait sent a note requesting for the creation of a Cabinet of Statistics, that by a resolution of January 7th., 1930 started its activity at the Faculty of Economy, Commercial and Political Sciences, in those days depending on the Litoral National University, in Rosario, Argentina, which objectives and rules where fixed on May 30th, 1930.

On October 24th, 1932, the Directive Council of the same Faculty, created the Institute of Statistic, under the direction of Prof. Dieulefait, that in that occasion said: “Our Institute, till now without any cost in the expenses of the country, was supported by a vocational group of professors and assistants, ex-students, today distinguished experts and enthusiastic of the method, part of their daily work is reflected in this lines. Much more that what is said here, could have been done, But how many, had been the times that the deep and serious meditation of theoretical things must leave way to the care of endless details?

In this way, a reduced number of people, with scarcity of men as and with no money at all, our Institute had made contact with almost all divisions in the country and the principals abroad, trying to join them in the aspiration of updating the first ones and making efforts to understand and even made a contribution in the progress of the second ones.

In our country, the statistical scientific activity is almost null. Only exists divisions of a certain merit, but of a singular application, that makes that statistics is more under

this conditions, a far instrument of elaboration-sometimes just a simple graphic or a percentage- instead of a prolific methodology as we see it appear in the various books of the civilized countries.

At the way we are going, without exaggeration, it will be necessary to use English texts to know the numbers of our dynamic economy, or German texts to know about the fluctuation of our series and who knows, perhaps, to Japanese books to know something about our population in our extended territory

Nineteen years without a national census, and without any sign of doing one, in an organic, economic and scientific way. One hundred and twenty three years of independent life and without a statistical scientific special book- not counting the three sporadic censuses – that we show ourselves to the world, where we know ourselves, through the severe language of the numbers, the only vocabulary in which nowadays are written the days of the nations.

Giving this bitter declaration, its deep negative content, doesn't smash the intensive faith we have. Because there are some eloquent symptoms that indicate a wake – up of Statistics in Argentina ”

That is that this spirit of fight and tenacity gave its fruits, on March 12th, 1948 (this year, 1998, we celebrate its 50th anniversary) by resolution N° 106, it was created the career of Mathematics Statistics at the Faculty of Economic, Commercial and Political Sciences , depending at that moment of the Litoral National University, in Rosario, Argentina that considered is a duty of the University to include in their study plan those disciplines , which study results necessary to the economic development and potential of the country.

That the preparation of professionals specialized at this hour, as it was proclaimed by the InterAmerican Statistical Congress, in Washington on past September that recommended to the Universities to create statistics careers with different aims. This Institute with the Atheneum of Mathematics Statistics students, published the articles Demographic Analysis and Algebraic Analysis.

In 1957, after great changes in our country, was made a new Plan of study of the career, till 1966 when was created the first School of Statistics in the country with the purpose of satisfying the actual and future requirements in the field of its speciality , and is the one that today is still at the Faculty of Economic Sciences and Statistics , of Rosario's National University.

“But we would not have exact idea of the Argentine Statistical movement, if we omit to mention the Argentine Statistical Society, founded years ago after a meeting at Cuyo’s National University, that after different moments of parenthesis, we always wish that it will come up with more force under the impulse of new lovers of our discipline, as in a book was defined by Prof. Karl Pearson, as it can be conceived as a Superior Grammar of the Sciences. (Prof. Carlos E. Dieulefait)”

AIMS AND OBJECTIVES OF THE ACTUAL CAREER

Title: Bachelor in Statistics

To form a professional in a branch of the applied mathematics, closely connected with actually all disciplines that form part of the scientific work.

To follow as a fundamental aim to form skilled professionals in the use of methods for recollection and analysis of quantitative information, processing a solid basis in mathematics, probability and statistics, skilful in computation, able to resolve problems in a vast and always growing number of activities that are needed from that of the Statistical System of official statistics, till those related with the technological research, able to work in groups with professionals of other areas (medicine, economy, psychology, etc.) to do creative research and with a very good quality, as well as to practise teaching in all levels of education in this discipline.

INCUMBENCIES

As it was resolved in Resolution N° 1560 of 1-9-80 of the Ministry of Culture and Education, are established the following incumbencies for the profession of Statistician: Elaboration of methodologies to organize systematically the official and private statistics.

- Planning, programming, organizing, collecting, analyzing and publishing of private and public and sample surveys.
- Organize and make work the statistical aspects of official and private registers.
- Planning, programming, organizing, collecting, processing and publishing of statistical work and research and /or that require the use of all techniques based on stochastic laws, public and private.

REGULATION OF STATISTICAL PROFESSION

On January 8th, 1981, it was approved at Province of Santa Fe, Argentina, the Law N° 8738, that rules the exercise of the professionals in Economic Sciences, includes in it article N° 20 the profession of Statistics, Doctor in Statistics or equivalent title.

Since December 1994, due to the work of Statisticians in different Commission of discussion at IRAM (Argentine Institute of Standardization) agent in Argentina of the International Organization for Standardization ISO- gave in its Norme N° 35002, recommendations about the specific subject of opinion surveys, and in its point 3.2.5 Professional that did the work: *“It must be indicated the name of the statistician responsible of the design, organization and analysis of data.”*

ACTUAL STUDY PLAN OF THE CAREER

The grade career, actually has 23 subjects and a final thesis, it lasts 5 years, and gives the grade career title of Bachelor in Statistics.

NOTE

As actually in Argentina under the Federal Education Law, the subject Statistics has been incorporated in all levels of teaching in the area of Mathematics, this is a challenge to all statisticians, because the preparation of the teachers in charge of the school levels, has just begun, and is a wish of all the professionals in this subject that the transmission of the basic contents of this science, not to be deformed, helping in this way to the development of the most advanced techniques in the actual society.