IN MEMORY OF SIMONA BALBI, A DIALOGUE THAT CONTINUES BEYOND A LIFE

Simona was one of my first students, and I had a beautiful and fruitful collaboration with her that lasted nearly four decades. Her contributions have become one of the core elements of the 'Neapolitan school of data analysis' that is recognized worldwide today.

I had the pleasure to meet Simona in the late 1970s. At that time she was a brilliant student in one of my first courses in Statistics and Data Analysis at the Faculty of Economics and Business Administration, the University of Naples. In 1982, I came to know her better as the supervisor of her dissertation thesis, 'Problems of stability in factorials methods', from which her remarkable aptitude for research, based on insight, rigour and critical spirit, had already clearly emerged.

Her passion and capacity for statistical research increased and consolidated in the years after her graduation, during the fruitful period of her fellowship at the Institute of Statistics and Demography, where she had the opportunity to meet masters, such as V. Amato, J. Nelder and J.P. Benzecri, as well as to participate in the international schools on Data Analysis and Informatics that I recommended to her (1981, Naples; 1982, Dubrovnik). There she met, among others, representatives of the French school of 'analyse des données', E. Diday, L. Lebart, A. Morineau and G. Saporta, with whom she had the opportunity to interact during her university career. Simona's work at the Research Department of the MedioCredito Centrale (1985-1990) contributed to her professional growth and led to her academic career

in 1990 as a researcher at the Federico II University of Naples.

Simona completed her statistical training with studies at the University of Montpellier (1991), Cologne (1999) and Paris-Dauphine (2012). She soon attained the position of associate professor (1998), being among the first five in a competition of over 130 applicants, and a few years later (2001) she was awarded the title of full professor at the Federico II University of Naples.

Her students greatly appreciated her elective courses and respected her clarity and dedication. Among the courses she taught were: Statistics and statistical inference, Statistical methods for data mining, Text analysis, Market analysis, Statistical quality control and Statistical methods for evaluation. In addition, she chaired the Bachelor's and the Master's courses in Statistics and Informatics at the Federico II University for about 10 years, contributing enormously to the training of a generation of young statisticians.

Simona's major research contributions focused on methodology for the analysis of multidimensional data, and specifically on the problems of stability and the enrichment of factor configurations by means of external information, as well as on repeated surveys and the analysis of data panel. Moreover, she contributed to the development of issues in text analytics and text mining in a significant way, as well as her work on sensory data analysis and network analysis. From a substantive point of view, Simona contributed to innovative issues for market analysis, statistical quality control and social statistics.

She also participated in the following editorial activities: co-editorship (with J.C. van Dijkum and J. Blasius) in the SAGE series 'Research Methods for Social Scientists', co-editorship (with L. Fabbris) of the Italian Journal of Applied Statistics and membership on the editorial board of Modulad.

Also of note was Simona's international activity for the European Commission as Project Evaluator of SUP-COM and EPROS/DOSIS under the 4th and 5th framework programmes.

Simona was particularly active in scientific societies, such as the Italian Statistical Society (SIS), the Association for Applied Statistics (Deputy Chairman from 2014), the International Association for Statistical Computing, the International Federation of Classification Societies (CLADAG), the International Association of Survey Statisticians, the International Statistical Institute, the International Sociological Association (2006-2010) and RC33 Research Committee (Vice-President).

We still cannot believe that Simona has left us. Many department colleagues knew of her long-lasting and silent battle against the disease. We stood at her side with discretion, certain that Simona, with her courage, serenity and sweetness, would prevail yet again. Unfortunately, it was not so.

A. Basile, former dean of the Faculty of Economics, remembered Simona on the occasion of the first council of the Department of Economics and Statistics after she passed away: 'In the years of her disease, except in the moments when it was just impossible to be present, Simona was always active in our Department, regularly, as if nothing were going on, tackling with force and dignity the weakness she was exposed to. She continued to cultivate her strong vocation as a scholar and teacher'.

Simona leaves a great void among her colleagues from the Federico II University and from other universities, many of whom gathered at the Church of San Francesco at Via Aniello Falcone to celebrate her last farewell with great emotion.

Among them was Roberto Serpieri, co-ordinator of the Doctorate in Social Sciences and Statistics, who said: 'I am deeply saddened for the loss of a colleague and friend Simona Balbi. Sorrow comes to my mind when I remember this person who was passionately involved in research and showed great dedication in teaching her students. She contributed to our PhD programme since its inception, with tireless dedication despite the weariness and suffering she endured in recent years. It will be difficult to fill that void, but we will renew our commitment by remembering her example in life and as a teacher'.

Many messages of affection and deep esteem have been received from Italian and foreign scholars who had the pleasure of knowing and working with Simona, appreciating her great human qualities and scientific accomplishments. Ludovic Lebart writes: 'Je suis vraiment très triste, Simona était si douce et sensible. Grande perte pour l'analyse des données, la statistique textuelle, pour CARME et pour Naples. Tout le monde l'aimait'.

Her death has caused great sadness among her beloved students, who are still in disbelief at her passing. Simona Baronale says: 'I learned the sad news of the death of Professor Balbi, news that struck me deeply. We appreciated her humanity, her strength and nobility of soul, in addition to her superior intelligence, experience, competence and professionalism. I will always cherish the memories of her wonderful lessons, her valuable advice and availability. She never denied anyone, even when she was fighting her final fight. I will treasure her teaching that has had such a significant impact on my life'.

Dear Simona, you have left us with a smile. That is how we wish to remember you. May your love for research and teaching represent the way forward also for your disciples. I commit myself to lead them, your behalf, with a loving hand and in harmony with a dialogue that continues between us beyond life.

Carlo Lauro

IN MEMORY OF A MENTOR

I met Simona Balbi for the first time in 1997 when she taught my Advanced Statistics course. Not yet forty years old, she had to explain to us how to design a questionnaire and carry out a statistical survey. Our paths crossed again in 2001 during the supervision of my final dissertation, and with my admission to the Statistics PhD programme, our scientific collaboration began.

Remembering these 20 years together in a few lines is not easy. Simona gave a lot to the Federico II University of Naples as both a brilliant researcher and a passionate educator. The feeling of emptiness left by her absence, both human and academic, is unbridgeable. I have had the great privilege of sharing many professional and private moments with her, and I am proud to count myself among her students. Her legacy goes far beyond what she taught me when I was taking my first steps in my academic career. She was honest and correct, dutiful and scrupulous. It was impossible to know her and not love her. Of course, it is easy to pay tribute to those who are no longer with us, but like everyone else we also had our share of misunderstandings and quarrels. Perhaps, though, these quarrels helped to strengthen our bond even more.

Working with Simona was not easy. It was necessary to adapt to her schedules and rhythms, which were more nocturnal than diurnal. Above all it was necessary to be ready to accept the occasional fierce criticism or earful. With her students she was always caring but could also be unexpectedly severe. As students, we always sought her approval. She was like a loving parent, speaking well about you only in your absence, while often sarcastically and pointedly dismantling your certainty in person. The day before her disappearance, when we told her that we had sent the corrections for an article submitted to an important journal, she sent us a short message congratulating for our work. Together with Germana Scepi, our co-author, we joked that she did not seem herself answering in this way. Simona always wanted to have the last word, and this was not only because of her higher academic position. She really could revolutionise and improve every single sentence and every single paragraph we wrote, thanks to her experience and her ability to see problems with clarity. Even when we worked laboriously to finish a paper, she was never fully satisfied. We will always live with the regret of not having been able to take advantage of many more opportunities to learn from her However, this thought also comforts us because it will mean that her hand still guides us in our work.

Simona's most significant research interests were in textual data analysis. Her

research was among the first in Italy, in the manner of the French school of J-P. Benzecrì, L. Lebart and A. Salem, to investigate the statistical aspects involved in studying the collection of documents written in natural language. The paper *Textual data analysis for open-questions in repeated surveys*, published in the proceedings of the 6th IFCS Conference in Rome, dates from 1998 and strongly influenced her subsequent scientific production. There were many conferences and projects in which textual data was considered, often for the first time, thanks to her work. If today the analysis of such data is a popular issue in the field of Italian social statistics, this is undoubtedly due to Simona's contribution. She chaired two ministerial research projects, in 2002 and 2005, at the research unit in Naples, giving an original and innovative contribution to the analysis of textual data and always arousing curiosity and lively interest among scholars. In a 2006 study on the university educational offer commissioned by the National Evaluation Committee of the University System (currently ANVUR), her textual data analysis of the stated aims of the Italian academic courses produced results of such relevance that they formed the core of the conclusive research report. Unfortunately, she was unable to participate in the final conference in which the outcomes of another study on *omertà* were presented. She studied this phenomenon with an enthusiasm that went far beyond mere scientific interest. She was invested in this area of research both as a social scientist and as someone who relished the opportunity to work with young researchers.

Simona has been both a mentor and a friend to many of us. Carrying on her legacy will be an honour and a responsibility. We hope to live up to this task and to continue communicating the passion for the subject that she taught us.

Michelangelo Misuraca