# Introduction to the Workshop on Data Analysis and Classification in honour of Edwin Diday by Pierre Cazes (University of Paris-Dauphine)

The organizers of this event dedicated to you, dear Edwin, have honoured me by asking me to make the introduction of this Workshop. I'm not sure I'm the best person to do that, but it is with great pleasure that I accepted.

Let me first tell you a few personal words, before briefly summarising your career, your scientific contributions, and your contributions to the data analysis community.

### Some personal words

I met you during the academic year 1968-1969. You were working at INRIA, and I just got a position at the ISUP, and at the Laboratory of Statistical Mathematics of Professor Benzécri (where we used to do data analysis, and not at all statistical mathematics). I made a presentation at INRIA on correspondence analysis in front of the senior Researchers of this institute, and starting from the academic year 1969-1970, you regularly took some students from the ISUP and the Benzécri's classes (DEA), in "stage" as well as PhD. Among them, it's my pleasure to cite Anne Schroeder, Yves Lechevallier, Gilles Celeux and Patrice Bertrand.

In 1971 or 1972, we participated at a small colloquium on data analysis organized by the Benzécri's Laboratory, in a monastery built by Le Corbusier, near Lyon, in l'Arbresle, where we slept in a very small room, in two beds close one from the other. It is there that I heard you talking about "formes fortes" (strong patterns) in cluster dynamics for the first time. I understood immediately what you meant, but Benzécri asked you to explain your thought more precisely.

### Your career

You defended your PhD in Mathematics at the University Paris VI (which was the faculty of science at this time). I was present at the defence of your state thesis, at the Université Paris VI, in 1972, with Professor J.C. Simon as thesis director, J.P Benzécri and J.L. Lions as members of the jury. Later, Jacques Louis Lions has been president of the French Sciences Academy and his son has been honoured by the Fields medal.

Your thesis was about dynamic clusters. You joined the University Paris Dauphine in 1974 (or 1973) where you became director of Lise Ceremade. You also retained important responsibilities at INRIA until 1995. You have also been recognised by the Montyon Award given by the French Sciences Academy.

# Scientific contributions

I will mention three of them.

- The clustering dynamic method, that proceeds from your state thesis, and that has been developed by numerous PhD students under your supervision.
- The Pyramids, starting from 1984, on which P. Brito and P. Bertrand worked strongly.

• The Analysis of Symbolic Data, since 1986, 1987. This field is constantly developed with a huge number of PhD students.

You wrote more than 140 (44 in international journals; near 90 conferences with reviewing, 11 chapters of books, etc.) papers where these contributions are reported.

You also wrote or published (following the numerous congresses you organized) about 20 books, the last written with L. Billard, and published last year at Wiley: Symbolic Data Analysis. Conceptual Statistics and Data Mining. You had the kindness to dedicate it to me. The next one will be edited by you and M. Noihomme also at Wiley: Symbolic Data Analysis and the Sodas Software.

## Contribution to the scientific community

You have been the person that brings together the French community of data analysis, on the one side, by organizing INRIA congresses in Versailles every two years from 1977 to 1987, and then, from 1987 the colloquia of Symbolic Data Analysis. Some of these colloquia took place in Dauphine.

From another side, you bring also the French community together with your action inside the Société Francophone de Classification (SFC). You are one of the founders of this society and you have been its president. You started the cycle of meeting Journeys of the SFC, that takes place each year, the next one starting to- morrow, at the Ecole Nationale Supérieure des Télécommunications in Paris. You have been also at the beginning and founder of the club MODULAD.

I'm not the best one to talk about your action on the international point of view. I will only notice that after the foundation of the SFC, you have been one of the creators of the IFCS (International Federation of Classification Societies). You have also been scientific director of the SODAS and ASSO projects (between 2000 and 2003) which has gathered many European laboratories and societies.

Finally, you formed many foreign and French researchers and you have directed more than 50 PhD thesis.

## The Future

As you said to me many times, it is not because you will be officially retired in one year, next September first, that you will not continue to work on the formation of young researchers and particularly with those that just started their thesis with you. You will continue to contribute in writing papers, books, etc...

All the scientific community is grateful to you for your constant action over these forty years, for having promoted data analysis and classification, for your genial intuitions, your perseverance, your hard work and your capacity to bring people together.

I am also very happy of the initiative to do this journey, taken by some of your colleagues, among them a lot of old students.

Thank a lot Edwin, and let start the conferences.

**Pierre Cazes**