Birth of CA in Rennes. What's New 40 Years Later?

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In this talk, I will give an overall picture of the birth of Correspondence Analysis (CA) in Rennes, by relying on the 1964-65 mimeographed reports published at the "Centre de Calcul Automatique de la Faculté des Sciences de Rennes" (Computer Center).

The origins of CA date back to 1940 and 1941 at least when Guttman and Fisher established the statistical characterizations of the method. But it was J-P. Benzécri who, during the sixties, made it the pioneering method of the French approach to Data Analysis, with the *geometric presentation* and the *aids to interpretation* and who gave it its definitive name: "*analyse des correspondances*". Although I will not examine all the texts of that period, I will show examples of the first analyses made with the computing means that were then at our disposal: an IBM 1620 computer. I will add some theoretical texts to this brief inventory so as to show the emergence of the *three key ideas* of "l'analyse des données", that are geometric, formal and descriptive.

Following the Rennes period a complete methodology was developed around Correspondence Analysis. It placed the emphasis on the representation of a table of numbers by clouds of points in a multidimensional geometric space. This is that we — Henry Rouanet and I —called Geometric Data Analysis (GDA) following the suggestion of Patrick Suppes (Stanford University).

Since the very beginning, GDA has been applied to a large range of domains, such as medicine, lexicology, marketing research, econometrics and social sciences. In the latter domain, the work of Pierre Bourdieu is exemplary in regard to the "elective affinities" between the spatial conception of the social space and GDA representations. These affinities led Bourdieu and his school to use CA (especially MCA) consistently since 1976.

In conclusion, I will evoke recent developments of GDA, especially for MCA, in connection with research in social sciences
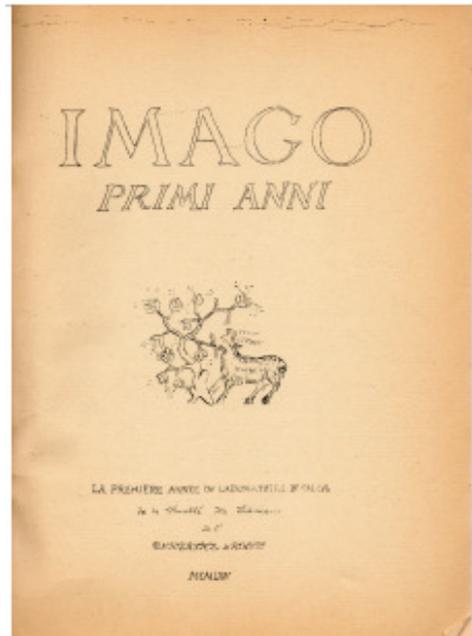
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