## Obituary

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Xavier Polanco (1940-2020)

In Latin America the main figure in the introduction of scientometrics as a field of research and a tool to policy design was Xavier Polanco, who died on June 6, 2020 in Laguna de Aculeo—Paine, Maipo province in Chile, near to his 80s birthday. Xavier was born in Viña del Mar—Chile on 23 June, 1940. He graduated at Pontificia Universidad Católica de Chile in the fields of agronomics and philosophy. In 1972 he received a grant to study a Master of Philosophy at Université d'Aix-Marseille 3 in France. He obtained the Diplôme d'Etudes Approfondies (DEA) at École Nationale Supérieure des Mines de Paris in 1986, as a disciple of Michell Callon and Bruno Latour. One year later he began his professional career as a consultant, working for the Ministry of Science in France (see Latour and Polanco 1987) and as a researcher at the Centre de Sociologie de l'Innovation (CSI) at the École.

In 1990 he started his work in scientometrics at the Centre National de la Recherche Scientifique (CNRS), serving for 17 years in which he enhanced the research collaboration between Europe and Latin America. He began the introduction of informetrics in Latin

American countries with the development of intelligence technologies that combined artificial intelligence and cognitive sciences with

"traditional scientometrics ... to step forward from document analysis (first level or bibliographic level), and also from the analysis of authors or researchers (second level or sociological level) toward studying the knowledge they produce and disseminate (third level or objective knowledge level) (for the) statistical processing of scientific and technological information ... specially for those who are responsible of scientific policies." (Polanco 1997, p. 335)

His footprint in the development of scientometrics for STI policy is highly recognized in Latin America. In the frame of The Network for Science and Technology Indicators-Ibero-American and Inter-American-(RICYT) that began in 1995, he was one of the main intellectuals that always contributed with new approaches and tools. For example, he developed the software Intelligo (funded by the Organization of Ibero-American States) as an open access platform for processing natural language in the field of scientometrics. His ideas about laboratories as a cell of knowledge creation in early 1990 was the cornerstone of a new wave of policies in Colombia that promote the formation of research groups to face the challenging times in the process of economic and commercial opening in Colombia. Twenty years later, Xavier returned to Colombia and formed a team to evaluate the STI policies in research groups combining data envelopment analysis and bayesian networks, to contribute to the development of new policies (Ruiz et al 2010). Polanco always kept in touch and worried about the Chilean vicissitude and social-political processes. On his return to Chile, in 1989 he interviewed Ricardo Lagos, who would later become minister of education and in 2000 president of the country, with the aim to promote new policies in STI. Polanco promoted agreements with the Chilean government to perform informetrics. However, his idea was ahead of the local capacity. His developments in scientometrics had great reception at the academy, especially at the Universidad de La Frontera, where he contributed to train people in STI studies.

Polanco, as a director of Research and Innovation Unit at Institut de l'Information Scientifique et Technique (INIST)–CNRS, began the development of Stanalyst, a software for scientific information mining, clustering and mapping analysis, initially with the French database Pascal and later, as an open platform, for Scientific Library on Line (Scielo) database in Latin America. This development started a new way to perform scientometrics using computational and mathematical advancement to mapping the scientific information (Polanco, François and Lamirel 2001). Also, he performed analysis beyond scientific databases using the information at the Internet (Polanco, Ivana and Dominique 2006).

As one of the main researchers for Latin America in scientometrics, Xavier was a key player in the development of informetrics, natural language processing, neural networks, cybermetric indicators and knowledge representation in mapping STI data. We acknowledge his life and contributions hoping that his legacy keeps growing new generations of researchers in our field.

Luis Antonio Orozco https://orcid.org/0000-0001-7526-4500 luis.orozco@uexternado.edu.co School of Management Universidad Externado de Colombia, Colombia Ronald Cancino-Salas https://orcid.org/0000-0002-0498-4903 Department of Social Sciences Universidad de la Frontera, Chile

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