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Father Busa, pioneer of computing in humanities with Index Thomisticus, dies at 98

In 1946, when computers were few enormous machines, oddly slow for today's standards, and Internet wasn't even an idea, a young Italian Jesuit priest planned to use machines and language elaboration for a titanic enterprise: organizing immense work of Saint Thomas Aquinas.

Thanks to Thomas J. Watson, the founder of IBM, in 1949, when he published his degree thesis in Philosophy at the Papal Gregorian University of Rome, entitled "The Thomistic Terminology of Interiority", father Roberto Busa could start his work. Index Thomisticus was completed just 30 years later, now considered an outstanding mileage in Informatics and computing in humanities.

Born in 1913 in Asiago Plateau of Vicenza, hometown of Federico Faggin (awarded in 2010 with National Medal of Technology and Innovation from U.S. President Barack Obama as one of the fathers of microchip) , father Busa died on August 9th, L'Osservatore Romano, Vatican daily newspaper wrote. And not many remember his pionieristic challenge in his own country.

After attending Episcopal Seminary of Belluno, where he studied Theology with Albino Luciani, the future Pope John Paul I, father Busa later joined the Society of Jesus, where he got a diploma in Philosophy in 1937.

In facing Saint Thomas work, The real challenge for him was lemmatisation (grouping together the different inflected forms of a word so they can be analysed as a single item), something it requires in using computer an algorithmic process of determining the lemma for a given word.

Wikipedia summarizes the fruits of his work, started using punch cards, then magnetic tapes: in 1980 the 56 printed volumes of the Index Thomisticus, in 1989 a CD-ROM version followed, and a DVD version is underway. In 2005 a web-based version made its debut, sponsored by the Fundación Tomás de Aquino and CAEL, While in 2006 the Index Thomisticus Treebank project (directed by Marco Passarotti) started the syntactic annotation of the entire corpus.

In 1998, "in honor of the monumental achievement of the Index Thomisticus, the commencement of which is generally regarded as marking the beginning of the field of computing in the humanities, and the completion of which, one of the field's finest results", father Busa was awarded by Alliance of Digital Humanities Organisations (ADHO). This group includes Association for Computers and the Humanities (ACH), the Canadian Society for Digital Humanities/Société pour l'étude des médias interactifs (SDH-SEMI), Association for literary and linguistic computing. This prize then became Roberto Busa Award , given every three years to recognise outstanding lifetime achievements in the application of information and communications technologies to humanistic research.

The Roberto Busa Award winners have been John Burrows (2001), Susan Hockley (2004), Wilhelm Ott (2007) and Joseph Raben (2010).

UPDATE

Linking this blog as a main source, in The Guardian Higher Education Network, Dr Ernesto Priego, scholar of the Humanities, Arts, Science and Technology Advanced Collaboratory and co-founder and editor of The Comics Grid, explains why father Busa was an outstanding pioneer, who deeply influenced him: "Most people would first think of Ted Nelson and Tim Berners-Lee as the 'founding fathers' of hypertext and the internet. But it is true that Father Busa, an Italian Jesuit priest and theology scholar, anticipated them in connecting the dots between informatics and the written word", he says.