Benedict XVI celebrates 26th World Youth Day 2011 – 18-21 August: Madrid, Spain

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The next WYD in Rio de Janeiro in 2013

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Rain and shine at Cuatro Vientos

GIOVANNI MARIA VIAN

Perhaps the most vivid memory the two million young people, who came from all over the world to take part in the World Day in Madrid, will retain is a moment during the Prayer Vigil. Such as when Benedict XVI, buffeted by the beating rain and barely protected by a few white umbrellas, told his collaborators that he would stay, like the young men and women drenched and huddled in the boundless space of Cuatro Vientos Air Base; it was as if he were expressing his relationship with his *juventud* [young people] in a simple and serene gesture of courage which met with resounding applause on the part of "the Pope's young people", as the throng presented itself in these past few days.

It was no more than a token, if you like, but laden with significance because of a profound truth that refers to the essential: affection for the Pope whose authentic features are becoming ever better known. And this bond, in its turn, expresses the reality of the Church: in Christian brotherhood, which is open to everyone, and in the mystery of the Communion of the Saints, starting with the Patron Saints of the Madrid meeting and including beloved John Paul II, who had the providential inspiration to establish the World Days. Hence the Pope with youth, *contra viento y marea* – against the tide, one might say, to quote the evocative headline given to the meeting by *La Razón*, the daily newspaper which gave the most coverage during the events.

Together, come rain come shine, in the blinding light and the implacable heat of the *meseta* [plateau] once again at Cuatro Vientos, for the Closing Mass concelebrated by the Pope with hundreds of priests and bishops, including dozens of cardinals. A further sign of the most authentic character of the World Youth Days: not only festive and positive mass gatherings, but a new form of the Church's presence and a moment on her journey through time.

After preparation in Spain and in the other countries which in-

Saint John of Avila a Doctor of the universal Church

Saint John of Avila is shortly to be named the 34th doctor of the Church. The Holy Father made this Announcement at the end of the Mass he celebrated with the seminarians in the Cathedral of Santa María La Real de la Almudena, Madrid, on Saturday, 20 August. St John of Avila is the Patron Saint of Spanish diocesan clergy and known as the "Apostle of Andalusia" for his years as a missionary in this region. The following is a translation of the Pope's Announcement given in Spanish.

Dear Brothers and Sisters,

With great joy, here in this Cathedral Church of Santa María La Real de la Almudena, I announce to the

'Index Thomisticus'

Stop, reader! Fr Busa is dead

If you surf on the Internet or use a PC to write an emails, it is thanks to him.

People of God that, having acceded to the desire expressed by Cardinal Antonio María Rouco Varela, Archbishop of Madrid and President of the Bishops' Conference of Spain, together with the members of the Spanish episcopate and other Archbishops and Bishops from throughout the world, as well as many of the lay faithful, I will shortly declare Saint John of Avila a Doctor of the universal Church.

In making this announcement here, I would hope that the word and the example of this outstanding pastor will enlighten all priests and those who look forward to the day of their priestly ordination.

I invite everyone to look to Saint John of Avila and I commend to his intercession the Bishops of Spain and those of the whole world, as well as all priests and seminarians. As they persevere in the same faith which he taught, may they model their hearts on that of Jesus Christ the good Shepherd, to whom be glory and honour for ever. Amen.

The Jesuit who invented computer language and planned the monumental 'Index Thomisticus'

Stop, reader! Fr Busa is dead

If you surf on the Internet or use a PC to write an emails, it is thanks to him. If you can read this article, you owe it to him

Fr Roberto Busa, SJ, died on Tuesday, 9 August 2011 at the age of 97. He was a pioneer in computer linguistics. The following is a translation of excerpts from an obituary written in the Italian daily of our newspaper.

STEFANO LORENZETTO

That a journalist should be given an appointment in Heaven rarely – actually, never – happens at the end of an interview. Yet it happened to me last 28 September. "What do you think Heaven is like?" was the last question I asked Fr Roberto Busa, the Jesuit who invented computer language. "Like the heart of God, immense", he replied. Then he added, "Listen, I'll be waiting for you too in Heaven, don't let me down!", and turning to Maurizio

New York, 1956

Don, the photographer, he said: "And you as well. And if, as I hope, you delay coming, you will find me sitting by the gates, like this". He clasped his hands and began twiddling his thumbs: "Are those guys ever going to arrive?".

Since 10:00 p.m., Tuesday, 9 August, Fr Busa has been waiting for us at those gates. "No hurry", he would be saying, with his Venetian affability.

Roberto Busa was born in Vicenza to parents originally from Lusiana, on the high plateau of Asiago, and, to be precise, in the Busa district from which they took their name.

The eminent scholar who compiled the *Index Thomisticus* died of old age at the Aloisianum, the Institute at Gallarate, Varese. He had lived there since the 1960s, together with the great doyens of the Society of Jesus, including Cardinal Carlo Maria Martini, a friend with whom he conversed frequently.

For many years Busa was a professor at the Pontifical Gregorian University and at the Catholic University, as well as, from 1995 to 2000, at the Polytechnic in Milan, where he gave courses on artificial intelligence and robotics. His research led to the creation of the Roberto Busa Award, the highest honour in the sector. He would have been 98 years old on 28 November.

When Alexander Fleming, who discovered penicillin, died in 1955,

"Stop, Reader! Fleming is dead; perhaps you too owe your life to him", was the headline splashed across the front page of a Milanese evening paper. Today the same invitation could be addressed to all those sitting in front of their computers at this moment.

Were technological holiness to exist, I think I could say that I had the privilege of meeting it: it was personified by Fr Busa. Therefore, Reader, go down on your knees in front of the mortal remains of this elderly priest, linguist, philosopher and computer expert. If you surf on the Internet, it is thanks to him. If you jump from one site to another, clicking on links highlighted in blue, it is thanks to him. If you use a PC to write emails and documents, it is thanks to him. And if you can read this article, it is thanks to him.

The computer originally came into being solely in order to calculate – to compute, hence its name: computer. But Fr Busa breathed into it the gift of words. this happened in 1949. This Jesuit was keen to analyse the complete works of St Thomas Aquinas: one and a half million lines, nine million words (compared to the mere 100,000 of the *Divine Comedy*). He had already compiled 10,000 index cards by hand just for the inventory of the preposition "in", which he considered important from a philosophical viewpoint. He had looked, unsuccessfully, for a way to connect single fragments of Aquinas' thought to

compare them with other sources.

On a trip to the United States Fr Busa asked to meet Thomas Watson, founder of IBM. The magnate received him in his New York office. Listening to the Italian priest's request, Watson shook his head, "It is impossible to make a machine do what you are asking. You claim to be more American than we are!".

Fr Busa then drew from his pocket a business card he picked up with the multinational's slogan, coined by the boss: "*Think*"; followed by: "What's difficult we can do straight away, the impossible takes a little longer". He handed it to Watson with a disappointed shrug.

Busa had touched a raw nerve and the President of IBM retorted "Ok, Father. We'll try, but on one condition. Promise me that you won't change the name of IBM, International Business Machines, into International Busa Machines!"

This challenge between two geniuses resulted in hypertext – the overall structure of pieces of information linked to each other by dynamic connections that may be consulted on a computer at the click of a mouse.

The term "hypertext" was coined by Ted Nelson, in 1965, to hypothesize software that was able to memorize the history of a user's actions. However, as the author of *Literary Machines* admits, the idea was older than the invention of the computer. Moreover as Antonio Zoppetti, an

Rome, 1973

expert in linguistics and computer science, has attested backed by documentation, Fr Busa really did work on hypertext at least 15 years before Nelson.

Between Pisa and Boulder, Colorado and Venice, the Jesuit gave life to a titanic effort that lasted almost half a century, investing 1,800,000 hours, roughly what it would take one man who worked regular trade union hours for 1,000 years. Today the results are available on CD-ROM and paper, in 56 volumes for a total of 70,000 pages. From the first volume, published in 1951, Busa catalogued every single word in the 118 books by St Thomas and in 61 by other authors.

Roberto Busa was the second of the five children of a station master. "We would move from one city to the next: Genoa, Bolzano, Verona", he told me. "In 1928 we arrived in Belluno and I entered the seminary. Albino Luciani was in my class".

Busa entered the Society of Jesus in 1933. He was ordained a priest on 30 May 1940.

In his long life he was acquainted with seven Popes. He had particularly cordial relations with Paul VI, and of course, with his friend John Paul I, "who envied me", he said, "because I had become a Jesuit and he hadn't". Like John Paul I, his dreams of becoming a missionary never came true. Instead the Provincial Superior asked me pointblank: "Would you like to be a professor?". "No", I answered and the Superior replied, "Excellent. You will be one nevertheless". And I was sent to the Gregorian to study "for a lectureship in philosophy on St Thomas Aquinas".

Fr Busa had clear ideas about the origins of computer science: "A mind that knows how to write programmes is certainly intelligent. But a mind that knows how to write programmes which writes other programmes is ranked at a superior level of intelligence. The cosmos is not a giant computer. The programmer is neither the author nor producer. We call God Mystery because in the circuits of daily bustle we cannot meet him. But the Gospels assure us that 2,000 years ago he came down from Heaven".

Fr Busa went to meet him.

On 14 July 1976 Fr Busa presents the "Index Thomisticus" to Paul VI, on the left Mons. Pasquale Macchi and Cardinal Albino Luciani, who was Roberto Busa's room mate in the seminary.