

FUORICOLLANA

Luciano Ammenti

Per litteras ad astra

History of the Automation
of the Vatican Apostolic Library
from Paper to Digital





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Introduction



Mons. Paolo De Nicola
Vicepresidente del Consiglio
Reggente della Segreteria della Casa Pontificia
Enrico

Attaching an handwritten letter to a printed book would seem something outdated and anachronistic, but not so much if it is the book by Luciano Ammenti, entitled *Per Litteras ad Astra, History of the automation of the Vatican Apostolic Library*, whose historical deposit is notoriously built from papyrus, parchments, codices, incunabula and printed books with handwritten autographs.

This apparently autobiographical book could not be cataloged as a strictly scientific production, but it is certainly of high documentary value because the author, head of the Data Center of the Vatican Apostolic Library, hired for this specific task, oversaw its creation and all its subsequent stages, punctuated by arduous initiatives in a nearly twenty-year daring undertaking made of checks, research, people, moments of rethinking and decisive, greatly successful restarts.

It would not have been possible to write this story without his thirty years long approach of daily sharing with the immense historical-humanistic heritage of the VAT. Even in an era, such as the present, which seems to have reached a climax of digitaliza-

tion, such as archiving in SSD (Solid State Drive), it is still crucial to rely and confide in the essential values of mankind: that humanism made of feelings, culture, enthusiasm, commitment, research and creativity that has given us the masterpieces that we intend to convey, unharmed, for well over five hundred years.

In 1980, the VAT felt the urgent need to address two fundamental concerns. The first was a new location for the manuscripts and codices, which occupied even the attic, with its harmful changes in temperature and humidity, and needed to be located in what was then the air-conditioned underground bunker, that was created right under the VAT courtyard.

The second concern was the finding, for example, that the very white parchment pages of the magnificent manuscripts of the Urbinate collection had become very yellow in just forty years, due to unavoidable manipulation for study purposes, hence the need for a photographic and digital reproduction of the whole manuscript deposit.

It is very interesting to note in the “technical-literary” text of the book by Luciano Ammenti, head, instructor, founder and manager of the VAT Data center, that its office itself was positively infected by the humanistic trend, which guided this inspired “technician” toward a literary attitude in composing and expressing himself in the intricate maze of the most sophisticated digital techniques.

To the immense population of users of the new systems, made available to historical and scientific re-

search, is given the opportunity to enjoy the renewed digital and electronic system, born from the very motor of humanity and from humanism itself.

To the author of the text, it will remain the intimate and gratifying satisfaction of having contributed intensely to it, as well as the remembrances and the “memory of the heart”, which are the timeless fruits of humanism.

Roma, 22. II. 2020

+ Paolo De Nigro



Mons. Paolo De Nicolò

*Vescovo tit. di Mariana
Reggente della Prefettura della Casa Pontificia
emerito*

PRESENTAZIONE

Autore una pagina manoscritta ad un libro stampato
suggerisce qualcosa di debole ed anacronistico ma non poi
così tanto se si tratta del libro di Luciano Anzani dal
titolo: "Per litteras ad astra - Storia dell'automanuale della
Biblioteca Apostolica Vaticana dalla carta al digitale" il
cui debito storico è costituito notoriamente da papiri, pergamene,
codici, innumabili e stampati con Autografi manoscritti.

Questo libro, apparentemente autobiografico, non potrebbe essere
catalogato come appartenente alla produzione strettamente scientifica,
ma è certamente di alto valore documentario finché l'Autore,
Capo del Centro Elaborazioni Dati (C.E.D.) della Biblioteca
Apostolica Vaticana, assume proprio in questo specifico com-
pito, ne ha curato la struttura e tutte le successive tappe cos-
tellate da ardite iniziative in una quasi trentennale rocam-
bolesca impresa fatta di tecniche, di ricerche, di persone, di
clari di riflessione e difficili ripartenze di grande successo.

Non sarebbe stato possibile redigere questo testo senza
il trentennale approccio di condizioni quotidiane con
l'immenso patrimonio storico-umanistico della B.A.V.

Anche in un'epoca, come la presente, che sembra arri-
vata ad un culmine della digitalizzazione, come può
essere l'archiviazione in S.S.D. (Solid State Drive)
rimane fondamentale l'impiego ed il ricorso imprescindibile



Mons. Paolo De Nicolò

*Vescovo tit. di Mariana
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Emérito*

lità ai valori dell'uomo: quell'umanesimo fatto di sentimenti,
di cultura, di entusiasmo, di impegno, di ricerca e di creatività
che ci ha regalato i capolavori che intendiamo trasmettere illesi
oltre le prospettive dei cinquecento anni.

Nell'anno 1980 si sentiva nella B.A.V. la urgente necessità di
procedere a due fondamentali imprese. La prima era una
nuova collocazione del deposito dei manoscritti e codici che,
da ambienti anche di sotto-fetto, con stabili nocivi di temperatura
e umidità attitognevano di essere collocati in quello che fu
poi il bunker sotterraneo ampiamente climatizzato che fu
ricostruito sotto il cortile della B.A.V. stessa.

La seconda impresa riguardava altresì la conservazione, ad
esempio, di le bianchissime pagine pergameneate dei me-
dievali manoscritti della Biblioteca Vaticana, nel solo giro
di quaranta anni si erano molto ingialliti anche per l'usura
di studio e relativa imprescindibile manipolazione, da cui
l'esigenza della riproduzione fotografica e digitale del depo-
sito manoscritto.

È molto interessante rilevarne nel testo "Tecnico-letterario"
del libro di Luciano Armenti, capo, istruttore, costruttore e
manager del C.F.D. della B.A.V., che lo stesso è stato positiva-
mente contagiato dal filone umanistico che ha quietato
l'elevato "tecnico" a comporre e ad esprimersi letterariamente



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emerito*

negli intricati dedali delle più sofisticate tecniche digitali.

All'immenso popolo degli usufruttuari dei nuovi sistemi messi a disposizione della ricerca storico-scientifica, è dato di godere dei miriadi sistemi elettronico-digitali provenienti dal motore interno dell'uomo e del suo immaginario.

All'autore del testo rimane l'ultima e gratificante soddisfazione di averci intensamente contribuito, restituendo altresì i ricordi e la "memoria del cuore" che sono i fonti dell'una verità intransigente.

+ Paolo De Nicolò

Roma, 22. II. 2020

1. The Heart

To know a path doesn't just mean that you don't get lost, or that you learn to walk it without experiencing fatigue: you also learn to dwell on aspects of it that it is impossible to consider if you decide to walk quickly, just to go from one point to another.

In 1983, I entered the Vatican Apostolic Library thinking that my superiors wanted exactly that from me, to take them from one point to another: from the times of the medieval amanuensis, made of catalogs compiled in beautiful handwriting, to the computerized future, made of strings of data. Instead, they made me realize that I should have learned to walk the path, first.

Now, with my senses well-trained to walk through the majestic halls of the Library, I can imagine myself back in the reading rooms and be asked to remember the path. I would be able to walk through the same labyrinth of stairs, up and down, as my colleagues and my superiors taught me, with extraordinary patience. I could walk along corridors that only a handful of people in the world have access to, only to find myself once again in the exact spot where, back then, I understood what lied ahead. There, I would shut myself up again, in the silence of trepidation, to

observe the solemn caution with which we entered the manuscripts vault, and I could once again gaze at the volume they held open in front of me.

«Here», said Monsignor Paolo De Nicolò, «this is the Dante Urbinate, the illuminated edition of the *Divine Comedy* commissioned by Federico di Montefeltro, Duke of Urbino».

For two years I had pushed carts loaded with books, noted small details and checked out returns for the printed publications, editions spanning from the invention of printing to the early twentieth century. I had enthusiastically served the world's leading scholars, who always filled the reading rooms, but only in that moment I started to understand what I was asked to do for the Library, and that an undeserved opportunity was about to change my life.



Picture 1: HH John Paul II visiting the Vatican Apostolic Library in 1984.

I could understand the clear meaning of the words of Msgr. Paolo De Nicolò, my mentor, and of the then prefect, HE cardinal Alfons Maria Stickler: «The Vatican Library must be a part of you and of your life. You cannot just serve her: you must love her. Only then she will show you her innumerable wonders, and you will use your ingenuity to show them to many other people, all around the world, more than we have ever reached in the past five centuries.»

I was becoming part of an ancient living organism, born more than five hundred years before. I had to recognize that, inside that body, I was just a molecule in a new organ, connected to all the others and, like them, at the service of something that there was no way to understand with a hasty look, or with a technical analysis.

My mother, like millions of other women and men, had learned the verses of Dante by heart, she declaimed them to me and my sister, when we were children. The greatness that the words of the *Divine Comedy* inspired in us, their eternity, always renewed, all of it had been preserved for centuries in that manuscript, protected in that deep and secret heart, with the uttermost love. Accessing someone's heart means being worthy of it, and the same was true for the Library.

I came from a world of English words and three letter acronyms. RAM. CPU. ALU. I had no idea of what a library did, nor what the abbreviations that appeared on the spine of the printed books meant. Ott. Ala. Vat. Computerizing the Vatican Library was not a job a technician could do. To tell the truth, not even the best team of technicians in the world would

have succeeded, and the example is not hyperbolic. Without having a deep familiarity with that organism, without respecting the professions of librarians, catalogers, paleographers, archivists, restorers, photographers and every human resource available within it, the effort was destined to fail. For the project to succeed, it had to be dealt with by people who were truly part of the library. «Thus», they told me, closing the manuscript, «they will handle tapes just like they handle books.»

Right, the tapes. At the time, it did not seem absurd or outdated at all that the mass storage of data was done mainly on magnetic supports. Specifically, on reels of tapes and on 160MB hard disks. It took about sixty reels to complete the backup of the modern catalog, that is, the one that included only the so to speak “new” books, the ones that were acquired by the Library, day by day.

This meant that a backup took almost the entire working day of the newborn Data Center of the Vatican Apostolic Library. We were, in all, six people: three for the IT part and three for the cataloging part. We loaded the tapes and waited for the right line of text to appear on the flashing monitors, which buzzed like large, industrious insects. Satisfied, we continued our checks, hoping that the tape would not stop or skip.

That’s because tapes only allow for a sequential writing. If the tape stops, you have to start over, you cannot simply continue and then write the missing data there, where it’s missing. When this happened, we complemented the day shift with a sleepless night, watching the reels turn and waiting for the line

of text to appear on the monitor, indicating that normalcy was restored. We had many of such nights, but we never had a significant data loss. Those tapes were our contribution to the Library. One line at a time, one book at a time, I began to understand the vision that the new prefect of the library, Father Leonard Boyle, was trying to convey to us.

Leonard Eugene Boyle was an Irish paleographer. He had lost his mother at 10 and his older brother, from whom he had been raised, at 17. Somehow, in his heart, he found a way not to lose hope. He took his Dominican vows and began to devote himself to what really interested him: the conservation and dissemination of knowledge.



Picture 2: HH John Paul II with the new prefect of the Vatican Library father Leonard E. Boyle in 1984.

In 1984, he was appointed prefect of the Library by Pope John Paul II. The appointment was surprising, but the first Irish prefect could only be appointed by the first Polish Pope. Father Boyle, however, already had thirty years of teaching in Rome and Toronto behind him, and possessed a quality rarely found in sixty years old medievalists: a voracious curiosity for the computer.

He also had a pleasant smile and impertinent eyes, illuminated by his confidence of knowing how to surprise those in front of him. He was looking at me in that very moment, while I showed him how the terminals worked. I told him that, if his aim was to create a complete and searchable catalog of all the entries, the automation of the Library would have required a lot of time and resources, but Father Boyle had already started to smile, to pass his hand through his combed, black hair, one of his few vanities.

He told me it wasn't his only aim. The purpose of that project was to transform the centuries-old function of the Library, without depriving it of its unique features. «The Library exists», he said, «to protect and preserve books. But when they will become too precious, old or fragile, practically nobody will be allowed to browse through them».

«So what are we protecting them for?» I asked.

I could not understand why he had become so serious, or why he hesitated to answer me, but I waited. I was sure he understood the question.

«A library», he said, «is not a hideout for books, it is the place where knowledge lives, through the sharing, studying and spreading of texts. We must give ac-