27 June 1998 - World of Learning and a Virtual Library By BARRY JAMES NYT https://www.nytimes.com/1998/06/27/style/IHT-world-of-learning-and-a-virtual-library.html

Outside specialist circles, few have heard of Paul Otlet, a visionary Belgian who sought to put all human knowledge on 3-by-5-inch library cards in a temple of learning that he called the Mundaneum.

Yet, as a new museum in Mons shows, Otlet's century-old concept preconfigured the Internet. Rescued from neglect, the Mundaneum has found a permanent home here in a converted 1930s department store and annexes for research and storage. Boxes crammed with the tons of documents and publications collected by Otlet and his followers fill about 6 kilometers of shelf space, awaiting classification. Vast iconographic resources, including hundreds of thousands of posters, postcards and glass photographs, remain largely unexplored.

"It will take us more than 100 years just to sort out and scan the newspapers into computers," said Daniel Lefebvre, an archivist.

Otlet appears to have been the first to realize that information exists independently of the medium that contains it and that any artifact can be considered a primary source. Today, the stretching of the concept of a document to embrace a wide range of sources and experiences has become a guiding principle of Internet communication.

Otlet also realized the importance of associating different strands of information to connect what is known to what is potentially known. On the Internet, this is known as hyperlinking, or the ability to move from one idea to another by clicking on a link in a document or picture.

In the 1930s, Otlet predicted that "electric telescopes" would enable users to consult books stored in distant libraries. He envisaged that people would read texts on screens. He thought that machines would one day be used to retrieve data reduced to their analytical elements — was he thinking of digitalization? Otlet also had a notion of multimedia that even now is ahead of its time. He thought that touch, taste and smell as well as sounds were valid information sources. He helped mold modern library science. He introduced the standard microfiche and in 1934 wrote "A Treatise on Documentation" that remained the standard reference work until the advent of

electronic information storage and retrieval.

Various moves over the years and the destruction of parts of the collection have robbed Otlet's filing system, which once contained more than 12 million cards, of any unity it may once have had. He pleaded for the Mundaneum to be kept intact, but 70 tons of material were destroyed in 1970, followed by a further 23 tons in 1980 and six containers-full in 1993.

The designers of the museum faced the challenge of how to convert the hundreds of battered, dusty filing cabinets packed with cards full of arcane and disjointed knowledge into an exhibition that would attract the nonspecialist public. They have created a phantasmagoric library, with a revolving, four-meter-high globe, a telescope, printing press, Linotype and time-worn wooden desks. At one point, cards spill out of their cabinet in an artful display suggesting the chaotic state of the collection.

Just inside the door is a re-creation of Otlet's office, a jumble of books, papers, a battered typewriter, an old top hat. Otlet did not believe in keeping a tidy desk — pictures show his bearded visage peeping over disorderly ramparts of paper.

This juxtaposition of order and chaos forms a backdrop for an examination of Otlet's ideas, times and circle of acquaintances. Ambitious as it was, the Mundaneum was not intended to be an end in itself. Otlet wanted it to be the intellectual heart of a great city dedicated to peace and universal brotherhood, a project on which he worked for a time with the architect Le Corbusier.

The story began in 1895, when Otlet and Henri La Fontaine — a fellow lawyer, socialist and pacifist — founded the International Bureau of Bibliography. They believed that knowledge equaled power

and that the classification of knowledge could be a powerful tool for creating progress and peace. The utopian scope of the bureau, therefore, was to compile a universal index of all knowledge. The founders created the Universal Classification System on the basis of the decimal method invented by Melvil Dewey in the United States and defined the 3-by-5-inch (12.5-by-7.5-centimeter) punched catalogue cards that are still used in libraries.

La Fontaine was an ardent feminist and peace campaigner, promoting the principle of international arbitrage that led to the creation of a world court in The Hague, work for which he received the Nobel Peace Prize in 1913. Otlet was equally committed to peace, all the more so after his son was killed in World War I.

The universal exposition in Belgium in 1910 caused Otlet to ask why such ephemeral examples of international goodwill should not become a permanent fixture, and he began badgering the Belgian government to provide a home for his huge card index and collections.

A meeting with the Norwegian sculptor Hendrik Christian Andersen led Otlet to form an even grander ambition. Andersen worked with a team of about 30 architects to elaborate his grandiose plan for a city of the intellect, distinguished by a 320-meter "tower of progress." Otlet proposed that the Mundaneum should become the intellectual hub of such a city, which would be the headquarters of a future society of nations. Several sites were considered, including Tervueren, just east of Brussels, the Hague and Lakewood, New Jersey.

The war made the Belgian government receptive to Otlet's proposals. In 1919, it turned over to him a wing of the Palais du Cinquentenaire in Brussels. However, the victorious powers decided to build the society or League of Nations not in Tervueren as Otlet hoped, but in Geneva.

Later Le Corbusier, after failing in his bid to design the Palace of Nations in Geneva, drew up plans for the great city project. Otlet remained obsessed by the idea until his death in 1944.

Meanwhile, the Belgian government had long lost patience with the Mundaneum. In 1924 it required Otlet to give up much of his space to make way for a temporary exhibition by the rubber industry.

In 1934, the Mundaneum was closed, although the collection remained in place until German troops threw it out to make way for an exhibition of Nazi art. The Mundaneum moved to cramped quarters at the Parc Leopold in Brussels and subsequently to a succession of temporary storage places, ending up in a parking garage from which Belgium's Francophone community government rescued it.

Over the years, volunteers continued to add to the collection, although without a coherent intellectual vision. Now the director of the Mundaneum, Jean-Francois Fueg, hopes to re-create the Mundaneum as a research center by capitalizing and building on those aspects of the collection that reflect the interests of its founders: pacifism, feminism, socialism and anarchism. The Mundaneum, which Le Corbusier described as a panorama of "the whole of human history from its origins," was undoubtedly the first attempt to create a virtual library. But only now does technology hold out the promise of turning that vision into reality.