From HyperOtlet to Hypercards of Knowledge.

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HYPEROTLET

WHO IS OTLET (1868-1944)° ?

- A belgian Lawyer
- A visionary and utopist
- A peace activist
- The father of information science (documentation)
- Author of many writings (Traité de Documentation (34), Monde (35)

- The Son of Edouard Otlet...

mundaneum

HYPERPOTLET

- The realisation of the augmented corpus (hyperdocument) of Le *traité de documentation* by Paul Otlet (1868-1944).
- Historical recontextualization of documentation and information.
- Reflection on the current issues of documentation in the digital humanities and the epistemological debate on current issues a) digital documentation, b) "documentarity" [Pédauque] and c) "documentality" [Ferraris] within a community that can develop a European documentary tradition.
- The development of new reading, consultation and circulation tools inside an innovative digital ecosystem (HyperOtlet 1.0)

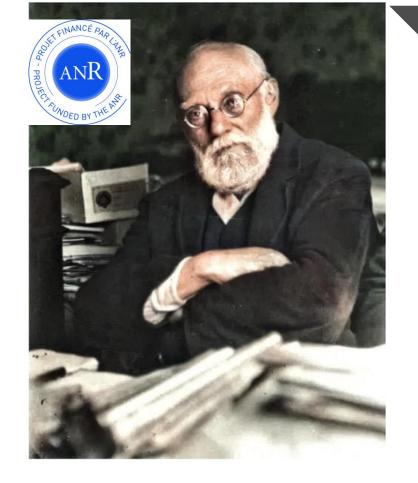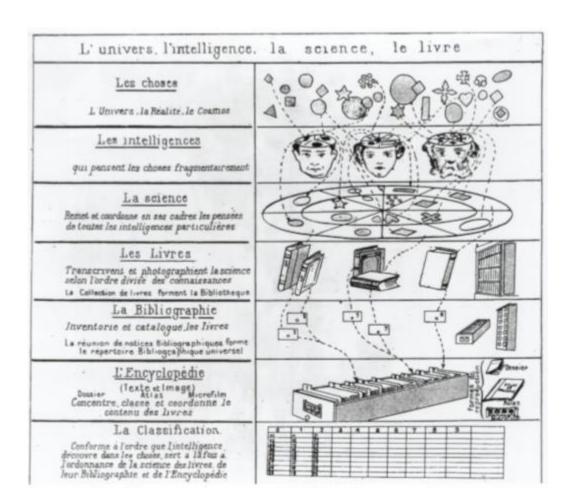**Blog of the project :https://hyperotlet.hypotheses.org/**

HYPERDOCUMENTATION

The famous quote

- On the work desk there might be no books or other documents at all, but only **a screen and a telephone**. Somewhere outside, regardless of distance, would be an immense edifice containing all the books and the information, together with all the resources of space needed to record and manage them, with all of its apparatus of **catalogues, bibliographies and indexes**, with all the information redistributed on **cards, sheets and files**, and with search and retrieval [literally: selection and combination] performed by an appropriately qualified permanent staff (Otlet, 1934, p. 428 ; translated by Rayward, 1994, p. 11).

The former stages before hyper-documentation

- In the *first stage*, Man sees the Reality of the Universe by his own senses. Immediate, intuitive, spontaneous and unthinking knowledge.

- In the *second stage*, he reasons Reality and, combining his experience, generalizing it, interpreting it, he makes a new representation of it.

- In the *third stage*, he introduces the Document which records what his senses have perceived and what his thought has constructed.

- At the *fourth stage*, he creates the scientific instrument and Reality then appears to be magnified, detailed, specified, another Universe successively reveals all its dimensions.

- In the *fifth stage*, the Document intervenes again and it is to directly record the perception provided by the instruments. Documents and instruments are so associated that there are no longer two distinct things, but only one: the Document-Instrument

THE ULTIMAGE STAGE OF DOCUMENTATION

- *In the sixth stage, one stage further and all the senses having given rise to a proper development,* **a recording instrumentation having been established for each, new senses** *having come out of the primitive homogeneity and having been defined, while the spirit perfects its conception, in these conditions we glimpse* Hyper-Intelligence. *"Meaning-Perception-Document" are things, concepts welded together. Visual documents and acoustic documents are completed by other documents, with touch, taste, fragrance and more. At this stage also the* **"insensitive", the imperceptible**, *will* **become sensitive and perceptible** *through the tangible intermediary of the* **instrument-document***. The* **irrational** *in its turn, all that is incommunicable and neglected, and because of that revolts and rises as it happens these days, the irrational will find its "expression" by ways still unsuspected. And* **then it will really be the stage of Hyper-Documentation.***"* (Otlet, 1934).

HYPER HYPER

- Hyper as Massification
- Hyper as en extension
- Different kind of documents (paper, audiovisual…)
- New methods of treatment (statistical machines)
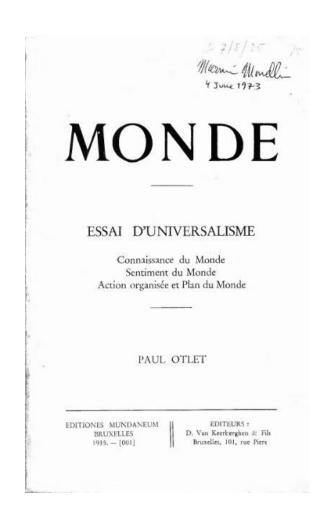- Link between documents (Hyper-document)

HYPER**OTLET**

HYPERDOCUMENTATION versus HYPERSEPARATISM

- *"As the world goes now, on the lines of hyper-separatism, there will soon be only documentation to establish regular and benevolent contact between man"* (Otlet, 1935, p. 387 ; translated by Rayward, 1975, p. 354).
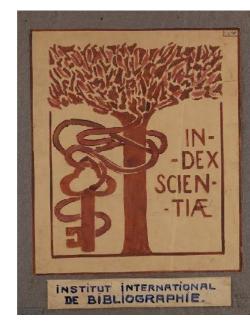
HYPER**OTLET**

THE ULTIMATE PROSPECT

MONDE, ESSAI D'UNIVERSALISME

- The other great book of Paul Otlet.
- An attempt to synthesis of the knowledge of his time
- And a willingness to imagine the future of science, knowledge and human societies
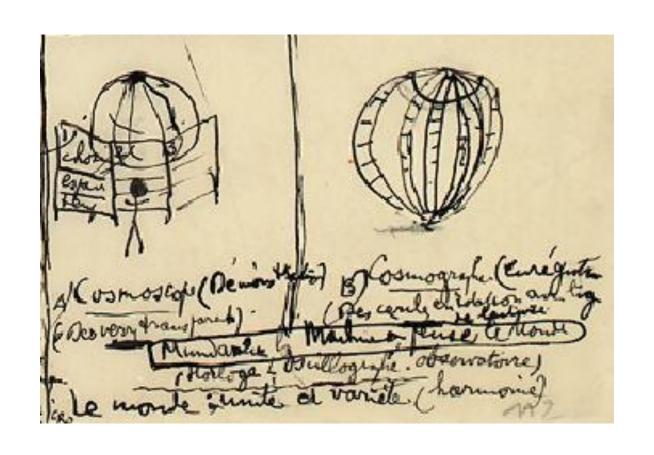
THE ULTIMAGE PROSPECT OF DOCUMENTATION

- *"And here is the **ultimate problem of documentation** (technical and organisational). Man would no longer need documentation if he were assimilated to a **being who had become omniscient**, in the manner of God himself. To a lesser degree, remote instrumentation would be created combining radio, Röntgen rays, cinema and microscopic photography. **All things in the universe, and all things of man, would be recorded** remotely as they occurred. Thus would be established in the moving image of the world, **its memory, its true double. Each one at a distance could read the passage** which, enlarged and limited to the desired subject, would **be projected on the individual screen**. Thus, **everyone in his chair could contemplate creation**, in its entirety or in some of its parts."* (Otlet, 1935)

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COSMOSCOPE

- The ultimate device : the instrument-document

- The Cosmoscope and The Cosmograph
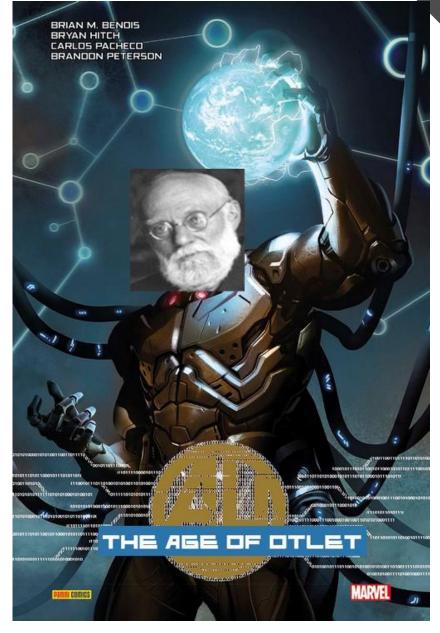
MECHANICAL BRAIN

"We must have a group of related machines that simultaneously or one after the other perform the following operations:

1.   transforming sound to writing;

2.   multiplying this writing as many times as required

3.   establishing documents in such a way that each data has its own individuality and its individuality in relationship with others in the set, so that it may be referred where required;

4.   index of the category related to each data, punching documents according to its indices;

5.   automatically classifying these documents and placing them in a file;

6.   automatically retrieving documents to be consulted and presenting them either before the eyes or in a part of the machine having to do with additional entries

7.   mechanically handling at will any entered data to obtain new combinations of facts, new relationships of ideas, and new operations with the help of numbers.

The machinery that will perform these seven desiderata will be an actual **mechanical and collective brain***"*

[OTLET 34, passage 413.4]. Translated in Le Deuff, 2018)

HYPEROTLET

A TRANSHUMANIST ?

- *The ultimate problem of scientific knowledge: to know so well all reality, its beings, its phenomena and its laws that it is possible to disintegrate all that exists, to reconstitute it, to order it in different ways. The ultimate problem of the technique: One man having only to push a button so that all the factories of the world, settled perfectly between them, start to produce all that is necessary for all the humanity. The ultimate problem of the Society: Freedom creates divergences. In a state limit, more would not need to resort to others. Everyone could get everything he wanted by appealing directly to things alone, and dispensing with men. Thus the machine would have become the liberator of each, its operation being done by one and things being arranged in the right order for this alone.*
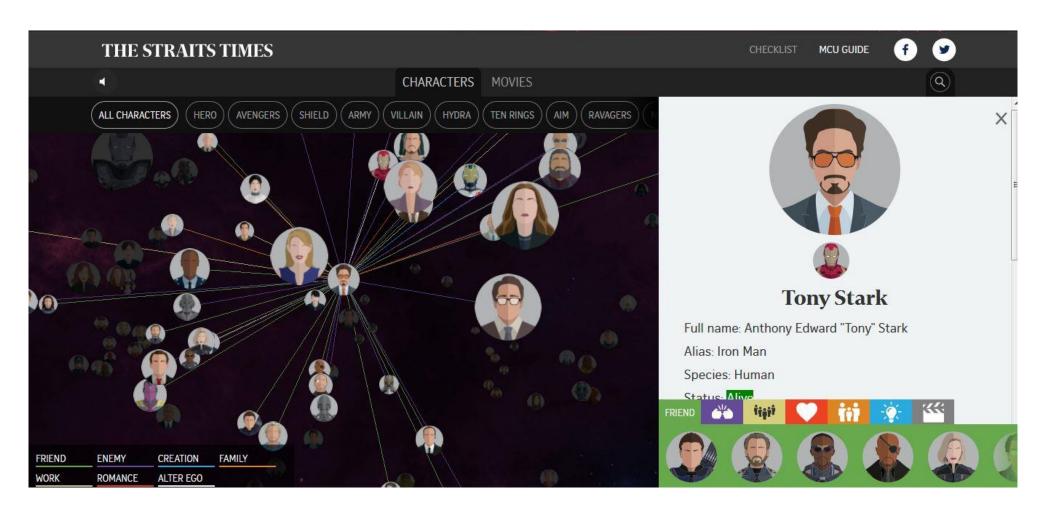
A LEGACY

- In 1944, a collaborator, Valère Darchambeau try to explain the thought of Paul Otlet and his legacy :

- « *Mr. Otlet's mental audacities, his "utopias," some would say, take on their full value when considered in terms of the super-fast mechanical brain that these machines constitute. This multiple and differentiated characterization to which Mr. Otlet would like to end, practically unusable in a valid time by our slow and quickly put off human brains, is likely to be the "code" through which statistical machines will soon reveal (in 5, 20, 50 or x years of unsuspected and unsuspected connections between things*. (Darchambeau, 1944°)

HYPERCARDS OF KNOWLEDGE

HYPERCARDS
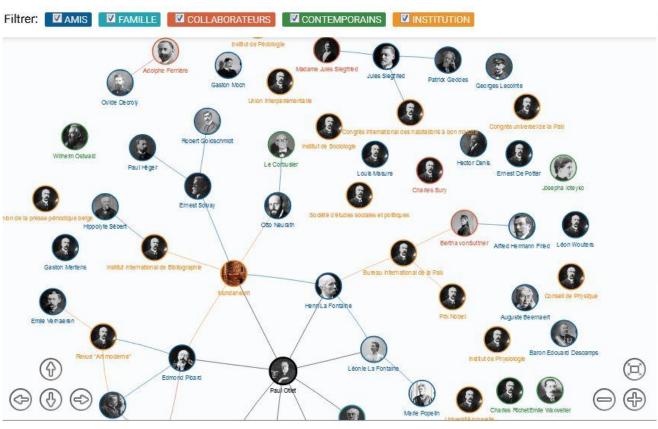
- *The room is filled with a three-dimensional constellation of hypercards, hanging weightlessly in the air. It looks like a high-speed photograph of a blizzard in progress. In some places, the hypercards are placed in precise geometric patterns, like atoms in a crystal. In other places, whole stacks of them are clumped together. Drifts of them have accumulated in the corners, as though Lagos tossed them away when he was finished. Hiro finds that his avatar can walk right through the hypercards without disturbing the arrangement. It is, in fact, the three-dimensional counterpart of a messy desktop, all the trash still remaining wherever Lagos left it. The cloud of hypercards extends to every corner of the 50-by-50-foot space, and from floor level all the way up to about eight feet, which is about as high as Lagos's avatar could reach.*

- *"How many hypercards in here?"*

- *"Ten thousand, four hundred and sixty-three," the Librarian says.*

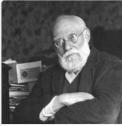- Neal Stephenson, *Snow Crash, 1992*

MARVEL UNIVERSE INSPIRATION

OTLETOSPHERE

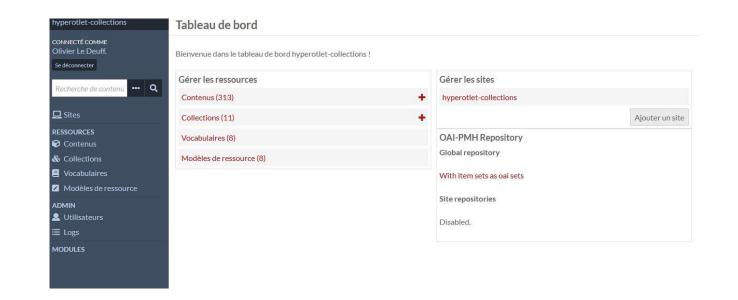HYPER**OTLET**

Otlet as a hub of networks

- UAI (Union des associations internationales
- Fédération internationale de bibliographie (documentation)
- Association for the pacifism
- Feminists association
- Accounting associations
- League of nations
- Solvay institute
- Scholars Associations

HyperOtlet wants to document documentation

- Omeka S database
  - People
  - Event
  - Concept
  - Techniques
  - …

  - With semantics… (foaf, skos…)

HYPER**OTLET**

Hypercards of knowledge
Workpackages ?
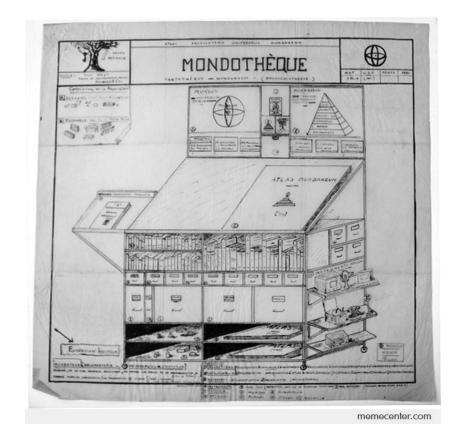
Epistemology of information science

- the study of concepts and their historical and technical evolution
- concepts include "information retrieval" from *statim invenire* to current practices, but also concepts such as "document", "archives", "information" and "data".
- The influence of Otlet on other scholars like Suzanne Briet
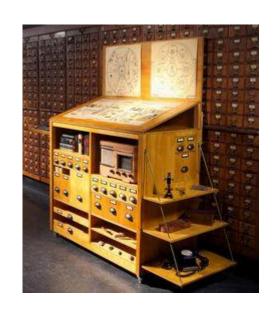- The evolution of information science

The long history of hypertext and knowledge Machine

"it seems clear that Otlet anticipated the kinds of organisation and technology that were to inspire Vannevar Bush's "Memex" . . . Otlet's notion of a mechanical brain, a substratum of memory, an external mechanism and instrument of the mind are anticipations of the functions foreseen by Bush for his Memex. Other work, such as that of Douglas C. Engelbart and the development of the currently fashionable hypertext systems, may also be considered in broad outline and functionality as having been anticipated by Otlet. In this connection it is not irrelevant to note that, in following his notions of "documentation" to their ultimate conclusion, Otlet was to speak of "Hyper Documentation" in terms only slightly more extravagant that those used by hypertext enthusiasts."
(Rayward, 1990, p. 9)

Archeology of the Media (Medium)

- archeology of media and mediations. History of techniques
- Microphotography
- Mondothèque

memecenter.com

The role of women in (and) the documentation.

- Documentation as a cultural logic of emancipation
- Otlet and the role of feminist associations
- Lots of of actors with a few studies (Lyssenko, odderfeld))

VR and Museography. A room of the Mundaneum.

- Reconstitute a room of the Mundaneum

- Based on pictures

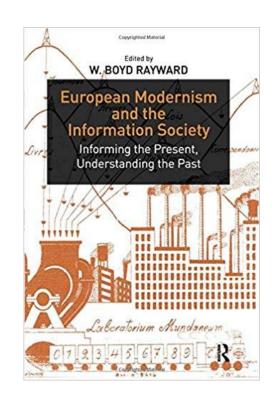- With the integration of the collection of « Atlas Mundaneum »

Anticipation literature and influences on information systems

- Anticipation and knowledge systems
- Hg Wells and the mechanical brain
- From Historioscope to Cosmoscope

HYPER**OTLET**

An european way of knowledge ?

- how to think new infrastructure = peace-knowledge.
- Mundaneum : A lab for peace and knowledge
- Pacifist associations (Lafontaine)

Against Misinformation ?

- "AN INTERNATIONAL OFFICIAL JOURNAL. - The false news, mutual ignorance of the national character, tendentious information, interpretations of inaccurate facts, bias, cause irreparable misunderstandings every day between peoples, all the greater because they do not rely on objective facts and real differences of opinion. The centralized organization of the major telegraphic agencies and telephone numbers, the relationship of these agencies with governments and the higher econo- frequently helped to create such a state of affairs, so that could have said, not without reason, that "the next war would be declared by the press ". Coercive measures or preventive supervision could reach here the desired result. Better, for a purpose of good understanding and peace, to use the same means of and contrast them with authentic versions of facts and presentations contradictory. An international official journal should be published."(1916)

Welcome in a mundaneistic project !