#### **INFORMATION PHILOSOPHY, DOCUMENT AND DNA:** THE "DOCUMENT MAN" AND THE BIOBANKS

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> DIGITALISATION FOR A SUSTAINABLE SOCIETY, GOTHENBURG, SWEDEN, 12-16 JUNE 2017

## 1. Introduction: information, document and gene

Since the nineteenth century, concern with a worldwide knowledge organization records, mainly focused on bibliographic studies, clearly recognizes that order presupposes control, and control presupposes a digitilisation of facts, things and subjects.

The search for a universal bibliographic control, which will have the Belgian Paul Otlet as its maximum expression, will always be confused with a world project of spirits rise in the political and epistemological level, as well as a panoptic project of concentration, vigilance and security of the State. T

The unfolding of nineteenth-century ideas at the level of an information philosophy reveals the most urgent discussions of contemporary dilemmas: the production, ordering, and surveillance of genetic records, recognized as "human documents," sources of information about not only the subject in its singularity, but the plurality of the notion of "humanity."

# 2. Document and language: preambles to DNA as document

The importance of the document to the modern world will be reflected in the relationship between society and science. In the nineteenth century, the word "documentation" gains great prestige among scientists and the various branches of management.

From then on, the quality of the scientific work and the efficiency of the market depends on adequate and accurate documentation. It was not enough, in Lund's view (2009), merely the combination of logical arguments.

It was necessary for the scientist to prove empirically - what it would mean to "demonstrate documentary" - the process and results of his research. This will be the setting for the birth of the first theory of the document, born with Paul Otlet - dealt with by Lund (2009) as a professional document theory.

# 2. Document and language: preambles to DNA as document

From the so-called angeletics, Rafael Capurro (1988) seeks a science of messages and messengers, both within the framework of the message-building phenomenon and in the context of action / sharing of the message (Smith, 2000). His interest, according to Smith (2000), would be to find a unified means of understanding information and understanding the role of information at the heart of human life and global society. It is the attempt of a unified definition to clarify the rationale of the concept of information.

In other words, Capurro (1988, 2008) proposes an information theory that is sustained in the theory of the message. It relates to the view that seizes the information society as a "message society" that evolves technologically and culturally. Information is taken as a message that makes a difference, either as a form or as a kind of offering of meaning. For the Capurrian vision, this theory refers both to the Greco-Latin notion of information, and to the communication perspective.

One of the earliest definitions of biobanks was formulated in 2000 in Iceland and considers biobanks as "a collection of biological samples that are permanently preserved" (ICELANDIC BIOBANKS ACT, 2000 apud RIAL-SEBBAG, CAMBON-THOMSEN, 2010).

However, biobanks do not store any kind of biological samples, these institutions are known to store exclusively human biological samples, as the Norwegian health institute points out: "A biobank is a collection of human biological material" (NORWEGIAN INSTITUTE OF HEALTH, 2012).

Biobanks are basically distinguished by the number of samples stored and the criteria for sample acquisition. One of the largest biobanks in the world is the UK Biobank which has collected DNA samples from about 500,000 British citizens, such biobank, as well as the Estonian biobank and the Qatar Biobank are known as poplation-based (Kelley et al, 2007), for storing samples of citizens of a specific country in large quantities.

But there are biobanks with very specific acquisition criteria such as the Chernobyl Tissue Bank, which stores samples of people who were exposed to radiation during childhood (CHERNOBIL TISSUE BANK, 2017).

Jean Meyriat, as pointed out by Ortega and Lara (2010), is one of the disciples of Otlet and Briet's work on the document concept. In this way, Meyriat developed a kind of complement to the works of Otlet and Briet in dealing with the purposes of understanding document as object.

Meyriat points out that there are two types of document, one that is clearly a document (document par intention), since it is a product developed by man to perform this function, and an object that has come to be considered document (document par attribution), even if it was not created for it, and, due to any need or circumstance, has become informative.

In this sense, Meyriat approaches the condition pointed out by Otlet so that something can be considered a document: the object in question has a function of evidence.

If, as pointed out by Marteleto and Couzinet: "It is necessary to rethink the document as a permanent polymorphous object" (Marteleto, Couzinet, 2013, p.7), it is possible to consider that such biological samples as documents insofar as they will serve as support for documentary evidence for the generation of other documents composed of written records and whose primary function is to be a document, that is, human biological samples have the necessary functions to be characterized as documents, since they present evidence.

#### 4. "Document man": ethics "for" a library of human biovestiges

The current condition of biobanks touches, objectively, the views of the neodocumental perspectives and of Rafael Capurro. In other words, the information philosophy, in the Frohmann and Capurro view, linked to a philosophy of the document and to an intercultural ethics of information.

Frohmann (2000) shows us that a contemporary ethics linked to informational dilemmas depends on the consolidation of a critique of cyber ethics, that is, the relation between cybernetics and morality. In dialogue with Rafael Capurro, Frohmann (2000) identifies a post-cybernetic dialectic between bodies and bytes.

The author states that the question of materiality constitutes a centrality for the construction of a true ethical plan of criticism of informational dilemmas.

## 5. Final remarks

The "libraries of people" are therefore houses recognized as spaces of central ethical tension, where the condition of human alterity must prevail, not of centrality. The biobanks and the condition of the documentary man place us before the limits of barbarism and of a possible humanism.

The plurality proposed by Capurro and Frohmann allows us, in our view, to construct the necessary dialogue on the permanent removal of the risks of a barbarism related to the "non-human" uses of "human beings", that is, to prevent Wiener's cybernetics,

Applied to the development of biobanks, is no longer a possibility of expansion of life and becomes a weapon for its extinction.

# ACKNOWLEDGMENT

This research was developed under the financial support of the National Council for Scientific and Technological Development (CNPq), Brazil, and the Carlos Chagas Foundation for Research Support of the State of Rio de Janeiro (FAPerj), Rio de Janeiro, Brazil.

## THANKS!

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