Universidad Carlos III de Madrid

OpenCourseWare

Theory of Information and Communication

Sara Martínez Cardama

Lisandra Otero Borges

2.2 From Document to Information

The conceptual foundations and the study of information and communication, as approached in this subject, capture the increasing complexity and the universe of interrelationships that these concepts evoke. For a long time, people have studied information. Some studies, such as Shannon in mathematics (which we will see in the following section), have helped us better understand its limits and how to handle them. This course will use a broad definition of information that is not limited to its physical form. Although the idea of information as something concrete, proposed by authors like Buckland, works in some cases, it only fits well with the new forms of information found everywhere.

Information, traditionally understood as a 'document,' has been a cornerstone of the discipline of documentation. However, it is crucial to delve into its informative perspective, viewing it as information recorded on any medium, including the contemporary ephemeral medium of the internet. This dynamic evolution of information, constantly adapting to new mediums and contexts, underscores the fluidity and versatility of the subject.

The concept of Information and Communication in this subject is deeply intertwined with its social perspective. The necessity of coordination and communication to comprehend the world's events underscores our reliance on information and the informational fact itself (Buckland, 2017). This societal dimension of information underscores its profound impact and relevance in our lives.

The term "Information" has become popular in recent decades, leading to the emergence of concepts such as "Information Society" (as we saw in Unit 1) that make its terminological framing difficult. This lack of consensus favors using certain metaphors for its definition; we think of concepts like "Information overload," for example, or others that, while not synonyms, are sometimes used as such. This is the case with Data or Knowledge.

We use Buckland's work (2017) as a starting point because his broad and social conception of the informative phenomenon linked to human experience brings us closer to it. It covers the entire multiplicity of messages, records, or documents and the need for these to constitute reliable sources that enable communication thereof. Buckland does not separate it from a specific cultural context; therefore, he endows it with a more "realistic" character than other conceptions of the informative phenomenon.

This course includes the study of traditionally called documents and their categorization. However, we must recognize all the expressions generated in the current digital environment that generate strong interactions and community participation in their construction. Thus, some questions are often asked in Information and Communication Theory, such as... Can a meme be considered a document? Although, at first glance, we may say no, new types of expression emerge in digital culture and change the conception as a "digital ephemeral document" (García López & Martínez Cardama, 2020). This notion implies a break from the concept of information traditionally recorded on paper or in book form to its conception as the result of any human relationship.

Buckland seeks to reduce the complexity of the starting definition of the concept of Information, classifying it into three dimensions (1991, p. 351):

- **Information as process**: regarding the act of being informed. It refers, therefore, to the "communication of informative facts."
- **Information as knowledge**: This communicated Information potentially alters the individual's knowledge. It is conceived as "Communicated knowledge."
- **Information as object**: From this perspective, Information resembles a physical or virtual medium that conveys meaning. It includes bits, bytes, or books.

It is essential to distinguish communication from mere Information, as communication requires a response from the interlocutor. In contrast, Information only provides some data or discloses news or events. In Information, the act of "sharing with others" is not necessary.

In this sense, to discuss the origin of why these concepts are integrated into the formal studies of Library and Information Science (LIS), it is necessary to address the informative perspective of Documentation, which is nothing other than the conception of Documentation based on the informative process.

In this sense, the origins of Documentation as a science that provided the theoretical and practical foundations of scientific-informative activity are worth noting. This conception is very present in the framing of Documentation in Spanish doctrine (López Yepes, 1978; Coll-Vinent, 1984).

This dependence of the informative environment on Documentation is conceptualized by Moreiro (1990) by pointing out Documentation from a broad conceptualization:

> As a science in formation, of general application, its theoretical baggage and empirical techniques are multidisciplinary. Its primary function is to mediate between informative senders and receivers to ensure the communication of messages and thus enable the generation of new knowledge. To this end, it carries out a transformation process aimed at offering users the information they need through effective and accurate retrieval. This process uses constantly evolving automated techniques and systems that facilitate its object and method.

In Unit 1, we saw the distinction between data, information, and knowledge. Having seen this distinction of concepts, it is necessary to point out the document's role in this scenario. First, documents have always been integral to human intellectual activity. Since ancient times, humans have used various objects or materials to record and preserve their thoughts, from clay tablets to paper. Nowadays, it takes on a ubiquitous dimension in the digital environment, as any medium that records information constitutes a document (Pérez-Montoro Gutiérrez, 2003).

Documents have two distinctive aspects. On one hand, they have a physical dimension; on the other hand, they incorporate informative content or information. This representation and materialization facilitate the understanding of various aspects. On the one hand, it allows us to understand how information can be transmitted: it is represented (or associated) in a document through a code, and its transmission takes place through the material transmission of the document itself (Pérez-Montoro Gutiérrez, 2003).

This concept reflects Otlet's vision of a document as any object in which knowledge can be recorded and possesses an informative property. In the digital realm, it retains this dichotomy but with some characteristics that expand its dimension:

• Hypertextual nature. Concept of hyper document

• Accessibility

• Ubiquity (especially with cloud storage that simulates not depending on a particular medium)

• Modifiability and reproducibility capacity

• Multimedia nature and ability to aggregate and connect with other formats