

Constructing Virtual Libraries

Conceição Maltez

Universidade de Aveiro, Portugal

António Moreira

Universidade de Aveiro, Portugal

In his well-known book *The Library* (1987)¹, Umberto Eco writes about the role of the library which has evolved and changed over the centuries according to the social, historical, and cultural contexts of society in general, adapting to the transformation of mentalities and the conquests brought about by the constant advancement of knowledge and science. From collecting to treasuring, from transcribing, disseminating, lending, and reading, the library has adopted different connotations from those which traditionally directed our minds to the universe of books.

If we look for the definition of “library” in different types of dictionary, we can easily confirm that it stands for a private collection of books or one destined for public reading; a collection of literary works, shelves, a room, or a building where books are kept, or even a collection of different supports of information. Definitions vary but refer to a single designation. With the transformation and evolution of traditional information and knowledge supports, definitions proliferate, referring both to different contexts, and to different meanings, emerging from a concept which is permanently evolving. New adjectives are therefore associated to the term “library”: digital, electronic, numeric, virtual, and so forth, that lose the “reader/user” in a terminological and functional plethora of designations which is amplified by the vastness of the Internet universe.

The purpose of this article is to clarify some of the fundamental concepts associated with virtual libraries; to analyse their functionality and applicability to teaching and research; to reference some information search tools and present a list of sites that allow advantage to be taken of the electronic resources of virtual libraries within the field of education.

The “virtual library” is a dream that many share, something many have imagined but none has seen. The main features of this vision are a vast, ideally universal collection of information and instantaneous access

to that information wherever it physically resides. (O'Donnel, 1994, para.2)

Libraries are essential to the free flow of ideas and to maintaining, increasing and spreading knowledge. As repositories of books and other printed material, they are key to promote reading and writing. (...)

The development of information technologies, and in particular the Internet, has created a completely new environment in which the role of traditional information services must be thoroughly revised. The potential of networking, cooperation and digitisation modify substantially the functions of acquiring, storing and disseminating information and knowledge. (UNESCO and Libraries, 2005)

INTRODUCTION

Like Umberto Eco (1987), Jorge Luís Borges, the author of *Ficciones* (1944) and of the novel “The Library of Babel”, sends us back to a universe and a space constituted by books, in fact one of the very first vocations traditionally attributed to libraries. In the debate that took place on the *Text-e* Web site (between the 14th and 31st of January, 2002), from a text of the responsibility of the BPI² (Bibliothèque Publique d'Information) team: “Babel ou le choix du caviste: la bibliothèque à l'heure du numérique” (BPI, 2002), the image of Borges is precisely evoked, the “boss of librarians”, wandering in a modern library, where texts are displayed, publicised, and manipulated by computers. It is a fact that the introduction of computers in libraries is not recent, either in terms of cataloguing (in the 70s) or the possibility of accessing catalogues by computer (in the 80s). Nevertheless, the appearance of electronic documents and the Internet constitute transformations that introduce both a change in mentalities and attitudes

and the availability of new resources. A sort of “virtual library” also emerges, which does not substitute nor duplicate a real library (BPI, 2002, para. 2). Grunberg (2002), in this same text, highlights the fact that the expression “virtual library” should be discarded since it is too charged with a technological ideology in contrast to the expression “online, available-at-a-distance library”³, which allows the user and her practices to be placed at the centre of the library issue (BPI, 2002, para. 10). Vandendorpe (2002), in spite of rejecting the idea of “virtual” library (inscribed in the reflection proposed by the BPI team), defends this concept, stressing that “virtual” does not necessarily mean appearance or simulation, but rather refers to activities that instead of demanding a physical presence and a relationship with objects, can be executed at a distance by means of a monitor and a keyboard. In fact, the term “virtual”, generally used in different contexts (Synthèse sur la bibliothèque virtuelle, UDET 2000, 1.), without apparently generating great ambiguity, encapsulates various problems of definition which deserve attention, and about which Guédon states the following:

In particular, we must not confuse virtual with “unreal”. Despite appearances, virtual reality is not an oxymoron because virtual is opposed to actual, not to real. The virtual is nothing but potential and, as such, it is reality (possibly) in the making. (Guédon, 1999, p. 10)

In the domain of information technologies, in *Le signet informatique* of the OQLF (Office Québécois de la Langue Française), the meaning of “virtual” (virtuel) refers to a space, a thing, a person, and so forth, that does not exist materially but rather electronically in cyberspace. When the term “virtual” is associated with “library”, it refers to a virtual space since our entry does not imply a physical presence.

BACKGROUND

In fact, when we speak about libraries, the word “virtual” generates even more controversy and ambiguity as we find a plurality of definitions and expressions used in an equivalent form but which address different realities, models, configurations, functions, resources, and concepts. Guédon (1999) clearly distinguishes *digital libraries* from *virtual libraries*, where the term “digital”

points to a coding mode whereas “virtual” indicates a process, an evolution:

Digital libraries, virtual libraries: these terms are often used interchangeably although they should not be. The former refers to a mode of coding, while the latter points to a process, an evolution. In its present binary form, the word “digital” refers to the ultimate attainable form of encoding because it relies on the absolute minimum of two signs. (Guédon, 1999, p. 10)

Also the *Association of Research Libraries*, confronted with the various definitions of “digital library” and the frequent use of equivalent expressions (“electronic library” and “virtual library”), identified a few elements that are common to the various definitions, but which do not, nevertheless, address the distinction between the expressions quoted:

- The digital library is not a single entity.
- The digital library requires technology to link the resources of many.
- The linkages between the many digital libraries and information services are transparent to the end users.
- Universal access to digital libraries and information services is a goal.
- Digital library collections are not limited to document surrogates: they extend to digital artifacts that cannot be represented or distributed in printed formats. (Definition and Purposes of a Digital Library, October 23, 1995)

Apart from the expressions mentioned so far, there are others like *electronic library*, *virtual library*, *digital library*, and *e-library*. An “electronic library” (bibliothèque électronique) is therefore an:

Ensemble de documents accessibles par voie électronique grâce à l’utilisation de technologies numériques permettant d’acquérir, de stocker, de conserver et de diffuser ces documents.

Il existe deux types de bibliothèques numériques: celles qui numérisent elles-mêmes leurs documents et celles qui répertorient les ouvrages numérisés disponibles dans des sites Web.

6 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/constructing-virtual-libraries/17629

Related Content

Semantic Entities in Virtual Worlds: Reasoning Through Virtual Content

Vadim Slavinand Diane Love (2011). *Metaplasticity in Virtual Worlds: Aesthetics and Semantic Concepts* (pp. 90-101).

www.irma-international.org/chapter/semantic-entities-virtual-worlds/50379

An Empirical Investigation of the Impact of an Embodied Conversational Agent on the User's Perception and Performance with a Route-Finding Application

Ioannis Doumanisand Serengul Smith (2019). *International Journal of Virtual and Augmented Reality* (pp. 68-87).

www.irma-international.org/article/an-empirical-investigation-of-the-impact-of-an-embodied-conversational-agent-on-the-users-perception-and-performance-with-a-route-finding-application/239899

A Service Oriented Ontological Framework for the Semantic Validation of Web Accessibility

Rui Lopes, Konstantinos Votis, Luís Carriçoand Spiridon Likothanassis (2011). *Virtual Communities: Concepts, Methodologies, Tools and Applications* (pp. 388-406).

www.irma-international.org/chapter/service-oriented-ontological-framework-semantic/48681

The Effect of Augmented and Virtual Reality Interfaces in the Creative Design Process

Tilanka Chandrasekeraand So-Yeon Yoon (2018). *International Journal of Virtual and Augmented Reality* (pp. 1-13).

www.irma-international.org/article/the-effect-of-augmented-and-virtual-reality-interfaces-in-the-creative-design-process/203064

On Being Lost: Evaluating Spatial Recognition in a Virtual Environment

Tomohiro Sasakiand Michael Vallance (2018). *International Journal of Virtual and Augmented Reality* (pp. 38-58).

www.irma-international.org/article/on-being-lost/214988