Dual Spacization Approach to the Electronic Publishing

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Abstract: *Dual spacization of publishing means emergence of digital publishing in online and offline virtual environments along with analogue publishing. Analogue publishing is a kind of publishing that is produced in the form of physical printed writings as they appear in a single paper, single or many pages newspapers and magazines and books, writings on leaves and pieces of trees, natural skin and leather and artificial papers which are a synthesis of natural material. This kind of publishing had a reified manifestation and could not have been existed without being assisted by material. In this article, at first, differences between digital and analogue publishing will be elaborated, then different dimensions and formats of digital text will be discussed to give transparent picture of the potential and unique capacities and characteristics of the electronic publishing comparing to the traditional publishing systems.*

Keywords: *Digital Publishing, Analogue Publishing, electronic text, numerical text, weblog, podcast, electronic journalism, file on demand.*

Introduction

Dual spacization of publishing along with the capability of electronic (digital) publishing which has been added to print publishing (analogue) have originated an incredible development in the relationship among individuals, groups, human community and published works. Dual spacization of publishing means emergence of digital publishing in online and offline virtual environments along with analogue publishing. Analogue publishing is a kind of publishing that is produced in the form of physical printed writings as they appear in a single paper, single or many pages newspapers and magazines and books, writings on leaves and pieces of trees, natural skin and leather and artificial papers which are a synthesis of natural material. This kind of publishing had a reified manifestation and could not have been existed without being assisted by material.

From the perspective of production methods, analogue publishing has been transformed and transmitted from the traditional and manual publishing to the modern industrial one. In the industrial era the publishing industry enjoyed fine capabilities both in precision and speed, and therefore the pace of publishing increased. Mechanically, all the stages of publishing from typesetting to composing, printing, binding, covering and finally packaging were rendered automatically. On the other hand, this period witnessed another development. Being previously mere a written case and instance, traditional publishing developed to audio and visual publishing in the many forms of analogue tapes and recordings. Analogue publishing operates under the logic of analogue work. Therefore, production, distribution and consumption of analogue publishing are carried out in physical and material format and hence, concepts such as circulation, geography and language are the main themes of the process of production, distribution and consumption of this kind of publishing.

While electronic content considered as a great potential for easing access to the content without any consideration of place and time, it has indeed some challenges in terms of cognitive reflection and learning system (Agudo-Peregrina , Hernández-García and Félix, 2014) as well as research productivity (Rodríguez-Bravo and Alvite-Diez, 2013) which requires further elaborations. In this article, at first, differences between digital and analogue publishing will be elaborated, then different dimensions and formats of digital text will be discussed to give transparent picture of the potential and unique capacities and characteristics of the electronic publishing comparing to the traditional publishing systems.

Electronic Publishing: Conceptual Definition

As digital publishing is located in "online virtual environment," it could be distinguished from "analogue locale environment" by three macro-logics:

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1)   the logic of virtual time versus the logic of linear time;
2)   the logic of virtual work in oppose to the logic of manual work and mechanical physical work; and
3)   Publishing based on the logic of virtual energy versus publishing based on storekeeping and show work.

Virtual publishing is mostly working under the logic of virtual space and pervasive computing system which has a different nature comparing to analogue publishing. One can reflect the characteristics of this type of publishing in 7 characters: 1) digitality; 2) hyperlinking; 3) interactivity; 4) instant communications, transportation and transaction; 5) networking, networking and text sharing; 6) dispersality; and 7) augmentation of text through virtual reality (see Ameli, 1388/2009b). Understanding electronic publishing requires adopting a Dual-Spacization in the sense of vireal or dual globalizations – (Ameli, 1390/2011) and continuum-based approach to analogue (print) and digital (electronic) publishing. In fact, with the emergence of synchronous communications and digital industries, we have been witnessing the Dual-spacization f all material, informational, and service-related phenomena including the publishing industry. This has dualized the production, distribution, and consumption capacities of many phenomena including publishing. Today, publishers in general and publishers of the Islamic world in particular should note that production and publication of books and journals have firstly lost their uni-medial dimension and developed from the industry of writing to the multimedia industry of writing, sound, image and motion pictures. In fact, the publishing industry has developed into a multimedia industry. Secondly, by moving to the virtual space and digital environment, this construction has gained a very vast and comprehensive capacity whose capability of change is based upon the logic of mathematical language, which has indeed raised the possibility of its alteration, proliferation, division, and spread exponentially. For example, the number of book copies published in the digital environment represents an inherent tendency towards infinity and is subject to customer demand. In such environments, no demand will remain unanswered as infinity-tending supply has taken place.

The issue of electronic or digital publishing is raised in contrast to print or analogue publishing. Various definitions of electronic publishing have been provided, as is the case with many other emerging phenomena, each of which emphasize an aspect of the process and highlight it. Some consider electronic publishing as production and storage of different texts, including books and journals, by means of modern technologies. Put otherwise, according to this definition, electronic publishing refers to the process of producing texts comprised of images, tables, equations etc. in the digital way (Mishra and Saxena, 2008). Others categorize electronic publishing in two areas of online and offline and thus regard distribution as the defining characteristic of this new method of publishing in their definition. To offer an example in the online domain, one can refer to the distribution of texts via web-based communication networks as distinguished from the offline domain, which includes publication and distribution of texts via CD-ROMs, DVDs, memory cards etc.

F. W. Lancaster (1989 & 1995) ascribes various understandings of the concept of electronic publishing to existence of multiple stages in the process of its development. In his view, the conceptual range of the term "electronic publishing" covers both simple interpretations – such as using computer and other relevant equipment in a process of production that is far more economical and easier than print-based publishing – and more complex interpretations – like employing all capabilities of the electronic media including motion, sound, and interactional elements, in creating entirely new forms of texts.

In order to explain the development trajectory of electronic publications, he differentiates three distinct stages:
The first stage, which covers the early 1960s, refers to the use of electronic equipment to facilitate the process of publishing different books and texts. At the time, using computers at the stage of producing texts brought about a fundamental transformation in the publishing industry particularly advantageous to publishers, which was mostly due to the existence of such computer facilities as automatic correction of errors, editing, listing, and indexing materials. Yet, apart from a number of advantages like reducing the time and cost of publishing materials, this stage of the growth of electronic publications did not have a considerable impact on the readers' use of texts. The second phase concerns the electronic proliferation and distribution of those texts which had already been published on paper or in print. These electronic copies were identical to their printed source texts and distributed online or through electronic tools such as CD-ROMs. Lancaster (1989 & 1995) describes creation of entirely new and nascent methods by utilizing all capabilities of the virtual space such as hypertext, hypermedia, motion, and sound as the third stage in the development process of electronic publishing.

As mentioned above, electronic media were simply seen as facilitating the publication of texts on paper, but later on with the advancement of communications technologies, distribution and subsequently creation and production of texts underwent wonderful and fundamental transformation. Therefore, one can describe electronic publishing as a modern way of publishing materials which is influenced by electronic and digital media in all stages of

creation, edition, review, publication, distribution, and reading. Widespread use of digital equipment in the process of electronic publishing has opened up vast opportunities and capacities in the interaction between the reader/audience and the text on the one hand, and the reader and author of the text on the other, which will be discussed in detail later in the article.

Characteristics of Electronic Publishing

Among the most important capacities of electronic publishing, one may point to hypertext. Hypertext constitutes links to other parts of the same text or even other texts and websites. Ted Nelson defines hypertext as non-continuous writing. In his view, in hypertext, which is not restricted by continuity and concatenation, new forms of writing can be created. This reflects the structure of what we are writing about better and readers can pursue their own taste or the present line of thought by choosing the route they wish, a method that was seen as impossible until recently (Dehqan, 1385/2006). Of course, this method of writing is familiar to the readers of academic texts who are constantly referred to the end of the page (footnotes) or that of the text (references) (Wyatt, 2003). Some scholars have likened this way of writing to the pattern of associating meanings in the human mind (Dehqan, 1385/2006). Multimediality, which means the use of such elements as sound and moving images along with the main text in order to attract the attention of the audience better and help them understand it more deeply, is another unique feature of electronic publications.

A third capability of electronic publishing is the possibility of updating texts quickly and continuously, which reduces the costs and time of edition and republication of works to the minimum (particularly) for the publishers of reference books. Additionally, using the Internet as a platform to promote and sell the publications leads to greater interaction between publishers and readers. Notably, the possibility of providing feedback by readers in the websites set up by publishers has formed a type of online literary culture, which has in turn modified the function of some websites belonging to prominent publishers from a sheer place to display information to a platform to provide knowledge. There is no doubt that the progress of media technologies and emergence of new communications equipment, electronic publications will gain better unique capabilities and thus take newer and more interactional forms in relation to users.

The Consequences of Dual Spacization and Virtualization of Publishing

The need for print or analogue publishing has always been a genuine and long lasting one. Obviously, digital publishing will not be a hallmark of analogue's publishing's death. However, extended digital access to information and expanded diversity of digital publishing will undermine print publishing. But, the love for getting back to former traditions and frustration of electronic consumption will help traditional resources to stand, while looking pathetically after lost grounds. Yet, daily electronic consumption would leave analogue consumption far behind. Virtual text is a relative eternal text that changed the logic of production, distribution and consumption. Virtual text has the capability to incarnate subjectivity and objectivity in the context of text and relating text to context. Virtual texts link thoughts to reality, ideals to truth and imagination to objectivity.

The biggest and most important consequences of dual spacization of publishing are: 1) virtualization of time for publishing: means widespread publishing that is accessible every time and everywhere which extends the time to eternity; 2) virtualization of the work of publishing: means a publishing production that is carried out only one time in the digital environment and is subject to ubiquitous production, distribution and consumption. In this logic of work, all unnecessary and redundant works that are included in the logic of analogue work because of repetition of single case production, distribution and consumption, are removed from the process; and 3) virtualization of production, distribution and consumption energy of publishing in online and digital environments: means as soon as analogue texts or information are converted to virtual data, the logic of "storing" and transformations leading to production and consumption of energy will change accordingly and the new form of texts and information will change to a "permanent storage." Because of its innate characteristics, not only consuming virtual energy does not reduce its mass, but also this will add on it. Therefore, it is subject to "increasing energy" with the power of "virtual exponential progression." Virtual exponential progression is a kind of escalation with much higher pace than "arithmetic progression" and "geometrical progression" and hence it is like powering a constant by infinity, which goes towards infinity. On the other hand, the belittlement that is common in the virtual and online environment, is a sort that goes towards infinity. If nanometer is billionth of meter, we can coin the term "Nano-virtual" which means belittling phenomena to the scale of one divided by infinity.

Such a sphere for publishing defines two important consequences for all virtual texts. The first consequence is the capability of circulation and user friendliness which goes towards infinity. The second consequence is to being located in a belittled space named "Virtual Single Space" which has offered the option of belittlement towards infinity. Therefore, it could be said that publishing in general will get an important capability by virtualization that first, all the publications in this area will be subject to omnipresence publishing will get omnipresent capability of production, distribution and consumption with only one time production. And on the other hand, by converting these publications to virtual data a source of "indefinite energy" will be provided that transforms erosive energies of publishing to energies with power of "virtual exponential progression" and second, it removes redundant and unnecessary works and activities. With the innate capability of virtual environment, the possibility of networking, interactivity and globalization of text and publishing with an expanded diversity is provided. The hyperlinking and sharing of resources possibility will help all publishing capabilities of the Muslim world to be exposed to world in multinational cooperation and this not only prevent the production of single works, but also helps to access the scattered production across the Islamic world.

Types of Electronic Publishing

Different categorizations of electronic publications have been offered so far. Some have divided the texts that are produced and distributed by electronic means into two information-based and communication-base groups. The categorization is based upon the principal function of each of these publications. For example, CD-ROMs and Internet websites often fall under the category of information-based publications while electronic mails and newsgroups are included in the group of communication-based publications as the major aim of the latter is to establish synchronous or asynchronous interaction between people (Ludwick and Glazer, 2000). Some other scholars believe that electronic publications can be classified into two sets on the basis of their capacities and functions, with the first group including the electronic copies of previous traditional media and the second category containing materials produced and provided by completely newly emerging media.

Electronic books and periodicals, online magazines and newspapers, and even CD-ROMs can be categorized as belonging to the first group, since all these electronic publications were at the outset considered simply as the new forms of traditional media and publications in the virtual space, though they later gained totally distinct capabilities in comparison with the previous media in the course of their development and with the advancement of communications technologies. The second category includes entirely nascent media in the area of electronic publishing such as podcasts and weblogs. In the next part, the article will introduce the types of electronic publications based upon the history of their emergence. Electronic publishing has a far shorter history than print publications, but represents a huge number of continuous developments and innovations. In this part, we will try to examine a part of this eventful and complex process.

Electronic Mail and CD-ROMs

Early electronic mails, which in the 1980s were sent in the form of simple texts and without any image in them, are seen as the first type of publications that were produced and published electronically (Pettenati, 2001). In late 1980s and early 1990s, we witnessed the coming out of CD-ROMs as cost-effective and efficient media – an efficacy they have retained to date – in the area of electronic publishing.

Electronic Quarterlies and Magazines

Following the production of CD-ROMs, electronic quarterlies and magazines emerged as newly emerging phenomena in the digital publishing industry in 1994-95. Some scholars have described electronic periodicals, which have a variety of types including electronic journals and magazines, as some of the most important tools and products of scientific and scholarly research among other media of electronic publishing (Mishra and Saxena, 2008). This is why they have drawn the special attention of libraries and other academic media, to the extent that these days access to electronic journals and magazines is regarded as one of the most important functions of academic libraries. One can classify electronic magazines and quarterlies into two categories: First, those publications that are produced and distributed via web-based (or online) communication networks and, second, the electronic copies of print publications (for example, distribution of PDF files of publications on CD-ROMs or through the Internet). Additionally, electronic magazines are published and made available in the domain of virtual space in various forms. Some of them just provide the table of contents while others also publish the full texts of articles and materials inside them.

Among the advantages of electronic magazines and quarterlies, one can name the possibility of editing, evaluating and refereeing, correcting, and publishing their articles in the shortest time possible. Many also deem the substantial reduction in the cost of publishing texts and their equal accessibility to all users (particularly the access of users in undeveloped or developing countries to the texts produced by developed nations) another remarkable feature of this new type of publishing journals and magazines.

Electronic Journalism

In May 1992, a Chicago Tribune newspaper journalist in the United States posted the first ever copy of an electronic newspaper titled Chicago Online on computer monitors. According to statistics provided by the electronic journal "Editor and Publisher," by April 2001, that is ten years later, over 12000 electronic news media had been established in the US. During the first decade of publishing electronic newspapers, almost all news media set up their websites (Badi'ee, 1384/2005: 165). Freedom from time and place, high speed in communicating news, access to the global literature of words and terms, use of motion graphics, music, sound and image, the possibility of unmediated communication with the audience, mutual action and reaction, personalization, and horizontal and non-hierarchical relations have been described as the unique characteristics of electronic journalism as distinct from traditional journalism (Shokrkhah, 1382/2003). It should also be noted that the rise of Internet industry has brought about two types of digital journalism. The first type consists in the reflection of analogue newspapers or publications in a digital format and in the online environment, while the second type includes online journalism, which has entirely different characteristics. The latter does not require laying out pages on a regular daily basis, but is practiced or carried out in an uninterrupted and continuous environment where the volume of published materials accumulates over time. This type of journalism allows for constant editing as the text can be edited as many times as necessary after being placed on the virtual environment on the one hand, and holds the capacity of storing previous data on it as well as of being linked to other materials already existing in the virtual space on the other. This environment also makes non-centralized journalism at the stages of production, distribution, and consumption widely possible (Ameli, 1387/2005: 481). In fact, with the changing of the nature of time (Ameli, 1388/2009b) and the transformation of linear time into geometrical time as well as the emergence of time as an eternal continuum, linear journalism has similarly turned into geometrical journalism, subjecting the text to eternality and omni-centeredness.

Electronic Books

Electronic book is the product of the big industry of online publishing and contains information and materials that are stored digitally and can be transferred to computers, CDs, DVDs, and posted on the Internet (Asnafi, 1383/2004 citing Ameli, 1387/2008: 464). Also, according to Mason (2008: 98), electronic book is the electronic version of conventional book which one can read on the computer desktop, any type of portable set (such as laptops and pocket personal computers) and in some cases on the hardware equipment exclusively used for reading electronic books (cited in *Ibid*.) The emergence of this type of periodicals itself became a prelude to the creation of electronic books in the virtual space, aimed at utilizing the capabilities and capacities of such a space in the area of digital publishing. Like electronic periodicals, electronic books have been designed in two web-based and offline technology-based (such as CD-ROMs) forms. However, the group of electronic books that have been produced and distributed for use in the virtual space have completely unique characteristics and functions. To offer an example, electronic books are designed in a way that does not necessarily require the reader to follow a linear sequence in reading them. Moreover, in this set of electronic books, we witness continuous updating of texts. This very feature has inclined publishers much more than the past to the electronic publishing of reference books such as encyclopaedias (Wyatt, 2003: 5). These encyclopaedias, which are widely known as electronic encyclopaedias, are ordered and used according to the preferences of readers. The high capacity for interaction between these electronic publications and readers has prompted many to employ the term "user" instead of "reader" or "audience" while talking about these texts.

Weblogs

Weblogs as a type of electronic publication which has the capability of quick and continuous updating emerged in the virtual space in mid 1990s. In late 1990s and with the uncontrollable escalation in the number of weblogs, this kind of publication moved away from functioning simply as a tool of referencing other texts and towards turning into a medium dedicated to the publication and propagation of the thoughts and feelings of their authors (Dickey, 2008, cited). Weblogs are among the newly emerging phenomena in the industry of electronic publishing and seen as a far more modern and up-to-date form of a phenomenon known as desktop publishing. Weblogs are pioneers of push-button publishing and can be classified within the category of alternative media. Unlike such

mainstream news outlets as CNN, The Washington Post, The New York Times, Time, and Newsweek, they do not lie on the map of power and wealth and thus speak without caution, and in the face of those big and paradigm media do nothing but propounding opposition, non-official, and power-independent views (Shokrkhah, 1382/2003: 30).

Some scholars consider weblogs as the newest form of cyber-journalism that manifest themselves in the form of public journalism and therefore will probably lay the foundation stone of cyber democracy (*Ibid*.).

Podcast

The term "podcast" refers to publishing and posting (often) audio files on the Internet which users listen to by using a music-playing set or computer. On the Internet, everybody can make himself heard by others, and podcast is a clear manifestation of such multivocality. Podcasting is a new communication system and method to publish electronic content (in most cases) via sound whereby the user uploads recorded digital programs on the Internet. The term was first used in an article titled "Audible Revolution," written in February 2004 by Ben Hamersley, a journalist who worked for the British paper, *The Guardian* (Azad, 1388/2009: 98). Podcasts can be classified into two groups of audio casts and video casts, of which the latter display images in addition to producing sound. The possibility of using podcasts at any time, in any place, and as many times as is necessary, is regarded as their most significant characteristic compared to other audio and visual media such as radio and television.

Print on Demand (POD)

This new method of publishing, which has come to be known as print on demand, was developed with the advancement of media technologies in the domain of virtual space and electronic publishing industry. In printing on demand, various texts including books and journals are published and distributed only on the order of users. This method is a combination of electronic and print publishing. Some maintain that the spread of this method of publishing will finally change the function of bookshops, in the sense that only one single copy of each book will be exhibited at the bookshops, and once a customer orders a book, he will be provided with a copy of it produced by sophisticated laser printers (Lancaster, 1988). Not only does this method of publishing minimizes the costs involved and the risk of investment loss, but also it enables publishers to update materials in the shortest time and with the least costs possible. Moreover, in this method of publishing, writers do not have to wait until the next edition of publication to be able to edit their books. Printing on demand also makes self-publishing possible, that is, it allows authors to publish materials by themselves and without any help from publishers.

File Sharing

Another way of distributing texts in the electronic publishing industry consists in sharing files, particularly in web-based networks. Though the method was used in the past to exchange information in offices and included using a network of interconnected computers, its spread in the virtual space is considered as a fundamental transformation in the electronic publishing industry. File sharing in the general sense of the term refers to making digital materials available for use free of charge, particularly in the virtual space. One of the controversial issues in this regard is that of copyright. Though all instances of file sharing are not regarded as illegal, in most cases we are witnessing the violation of copyright law in this method of electronic publishing. In other words, file sharing is a legal act in itself, and only when texts (such as films, songs, and computer software) which are protected by copyright law are published and distributed in this way, file sharing turns into an illegal act. In spite of this, according to a research that was conducted in the United states in 2000, 78 percent of Internet users who download music files available in the virtual space did not see the activity as unlawful and 22 percent of Internet users, who constituted 21 million of the US population, used shared files in different websites on the Internet (Lenhart and Fox, 2000).

Implications of Electronic Publishing

The range of the effects of electronic publishing is so broad that involves widespread political and social implications. For example, some scholars have described electronic publications as among those elements which have helped expand and develop the Habermasian public sphere (Dehqan, 1385/2006), while others have highlighted them as having a great influence upon the growth of people's tendency towards self-expression at the social level and the challenges caused by such an inclination (*Ibid*.). Here, we will discuss only those implications of electronic publishing process that have a greater manifestation in the industry of publishing books and magazines. The growth of electronic periodicals (which include electronic newspapers, magazines, and journals) has had widespread consequences. For instance, the user of electronic periodicals have taken the place of the chief editors of traditional periodicals, and this shift of position has made personalization of materials in electronic

newspapers possible, therefore every user can search for and read the news and other materials as they wish (Badi'ee, 1384/2005: 167-8). If academic articles and research projects are published under the supervision and on the basis of convincing scholarly judgments in electronic magazines and journals, they will be greatly welcomed by the academic and scientific community. This is because the high possibility of interaction and exchange of views among authors, publishers, and the audience will culminate in the improvement and enrichment of these texts as a result of reviewing, critiquing, and updating. Additionally, employing other creative and emerging methods (such as the use of images, motion, sound, and hypertext in electronic publications) in order to determine and offer the results of research, particularly in sciences like physics, biology, and music, help convey the meaning of concepts better. The unprecedented increase in the interaction between the readers of a book or journal with its authors on the one hand and with other readers on the other is one of the undeniable corollaries of electronic publishing. McMillan and Downs believe that greater interaction means conscientizating rather than appeasing or convincing the reader, allowing more control for them, communicating bilaterally instead of unilaterally, and doing more activity on the part of the user (Dehqan, 1385/2006: 3).

Furthermore, publication of electronic texts provides for access to a wide range of audience beyond the borders of a country, as the geography of audience in the electronic publishing industry is seen as a global geography (Shokrkhah, 1382/2003).

Conclusion: Penetration of Electronic Publishing in the Muslim World

In mid 1990s, scholars and researchers of communication studies took interest in exploration of religious themes published by Internet users and unique forms of religions in the virtual space. It is almost three decades that the Internet has been utilized as a space where religious rituals are held and religious beliefs are discussed (Campbell, 2006: 3-4). Indeed, users interested in religious issues advocate their beliefs and propagate religious principles and rituals by taking advantage of the capacities and facilities of the virtual space such as various websites on the Internet, chat rooms, and group debates. The Renaissance[1] monthly was established as the first Islamic electronic publication in 1991 (*Ibid.*).

The presence of Muslims in the virtual space was first based upon propagating and disseminating traditional contents of Islamic texts. As Gary Bunt observes in his book titled *Virtual Islam*, at the outset the presence of Muslims on the Internet was limited to disseminating the teachings of Quran and other Islamic texts (by means of the facilities of virtual space such as multimedia broadcasting and hypertext). This early presence, however, developed soon and took more sophisticated and advanced forms, including the presentation of plural perspectives on controversial Islamic issues (Yousef, 1388/2009).

In sum, one can classify the activities of Muslims in the virtual space into four broad categories:

1) Electronic publication of the Quran, *Hadith*, and other Islamic texts,
2) distribution of Islamic software products such as audio files of call to prayer or *Adhan* and recitations of Quranic verses,
3) setting up chat rooms and other debate facilities in the virtual space (with the aim of studying and examining different affairs of Muslims and Muslim societies), and
4) Publishing electronic periodicals.

The website Guided Ways[2] can be considered as an example of the Internet activities defined and carried out in the first group. The runners and activists of this website have described their goal as the propagation of the word of God and tradition of Islam's prophet in two Arabic and English languages and by means of the latest media technologies. Alexa, which provides information about websites on the Internet, has ranked Guided Ways 50291st in terms of fame and popularity among Internet users[3] - the most used and famous website is ranked number one). According to statistics offered by Alexa, residents of Dubai constitute the majority of the user of Guided Ways while its facilities include presentation of Quranic chapters, translation and interpretation of them, and provision of the electronic versions of some *Hadith* books. Among the website on the Internet that supply Islamic software

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[1] Renaissance: A Monthly Islamic Journal (www.renaissance.com.pk)

[2]. http://guidedways.com/index.php

[3]. http://www.alexa.com/siteinfo/guidedways.com#

programs and audio files for reciting Quranic verses, one can name Quranic Audio[1] and Quran Explorer[2]. Quran Explorer offers such facilities as Quran recitation by prominent reciters, translation of the text of Quran into six languages, and audio files of the English translation of Quranic verses, which has caused it rank 28692 on the Alexa website[3].

Founders of Quran Explorer cite their intention of establishing this website as seeking to spread the message of Quran in the human community including Muslims and non-Muslims. In addition to Quran Explorer, the Tanzil website similarly contains recitations of Quranic verses by renowned reciters as well as numerous translations of Quranic texts. Tanzil has the 39049th rank in the world and 4359th in Iran, and has been linked and referenced in around 2197 other websites.

Computer Research Center of Islamic Sciences (Noor)[4] is an outstanding association that digitalizes and produces many software programs of Islamic books and thus can be considered as a great and influential software center for Islamic sources in the world, which is of paramount importance. Another key multimedia website which has a central role in Iran and the Muslim world is Tebyan[5], with a popularity ranking of 21 in Iran and 1510, and enjoys a significant status in terms of connection to other virtual environments. The website has a great capacity which may not be discussed at great length here, but its most distinguished merit is that it has arranged separate provincial sections and in proportion to the needs and demands of each province offers different electronic publishing services and facilities. In the website Muslim Voices[6], trying to boost and promote dialogue and interaction between Islam and other religions has been described as a principal objective of the platform.

The website uses various facilities, particularly podcasts, to rectify the prevalent misunderstandings of Islam and the Muslim community. Websites like Islam Online[7] seek to help raise consciousness of the Muslim communities around the world by publishing and the news of the Muslim. Alexa has ranked Islam Online 438631st in terms of its popularity with Internet users[8]. Apart from publishing social and political news, the website offers economic analysis on the financial issues of the Muslim world. The website of the Islamic Human Rights Commission (IHRC)[9] is also one of the active and important platforms which supplies the multimedia facility of publishing materials and has published numerous human rights reports so far.

Finally and as a concluding note, it should be pointed out that the growth and penetration of media technologies do not necessarily mean equal access to these facilities for all users of the virtual space. One should admit that in spite of the extension of the range of Muslims' electronic activities, such factors as the digital gap and unequal access to media facilities have partly hindered Muslims from competing with other religions, particularly Christianity, in the virtual space. Of course, with the development of network collaborations among publishers of the Muslim world, creating great capacities will become highly possible as I hope the global coalition of Muslim publishers will realize this important objective.

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[1] http://quranicaudio.com/

[2]. http://www.quranexplorer.com/quran/

[3]. http://www.alexa.com/siteinfo/quranexplorer.com#

[4]. http://www.noorsoft.org/

[5]. http://tebyan.net

[6]. http://muslimvoices.org/

[7]. http://www.islamonline.com/

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