THE ROLE OF THE INTERNET IN THE ARCHIVAL DOCUMENTATION OF IGBO TRADITIONAL MUSIC

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Abstract

Ever since the evolution of the internet, a lot has been done in terms of preservation of traditional music of various cultures throughout the world. The exigency of archival documentation of traditional music is to be located in the fact that without such preservation, native musical artefacts may be permanently lost. Although there have been some random and uncoordinated attempts to preserve Igbo music in the internet, the fact is that much has not been done formally in terms of a systematically organised archival/electronic conservation of much elements of Igbo cultural music by well-placed Igbo or Nigerian institutions, such as has been done by such well-known world-famous institutions like the Library of Congress and Smithsonian Institution. In the present study, the author, while adopting the ethno-historical research approach of examination and evaluation of available historical evidence and literatures, seeks to demonstrate the urgent necessity as well as itemise means and methods of effecting an organized electronic codification, cataloguing and archiving of artefacts and items of Igbo cultural music as a way of safeguarding them for future use and reference. As such, this research serves as a contribution to the effort of preserving and promoting not only Igbo music but also, indirectly, Igbo language and other aspects of Igbo cultural identity, as well as preventing their extinction.
Key words: traditional music, archival documentation, culture, internet

Introduction

One of the conspicuous fallouts of the emergence of the internet is the rather ambitious and obviously useful and successful endeavour of digitising artefacts of traditional cultures and thereby preserving them in a retrievable electronic format. This would be for the purpose of future research and in order to prevent these precious cultural data from being lost. In various world-class libraries, lots of artefacts of traditional cultures are preserved via the internet, whether these artefacts be in the form of oral tradition, stories, poetry, songs and various types of musical lore. Items of digital preservation include not only various sorts of books and manuscripts but also audio and visual materials, the visual format embracing both moving and still pictures.

To cite a concrete example, at the famous Library of Congress, digitisation of cultural materials for the purpose of preservation is an important dimension of the services rendered by the library to the United States' Congress as well as to the public. The library which boasts of having "more than 25 million catalogued books, 74.5 million manuscripts, 5.6 million maps, 8.2 million items of sheet music, 4.2 million audio materials, and 17.3 million visual materials" went further in 1994 to inaugurate "the National Digital Library Program (NDLP), making freely available on the Internet high-quality electronic versions of American historical material from the library's special collections" (Billington, 2021). In addition, "by the end of the library's bicentennial year in 2000, more than five million items (manuscripts, films, sound recordings, and photographs) had been mounted on the library's American Memory website, which continued to expand rapidly" (Billington, 2021).Similarly, the Centre for Folklife and Cultural Heritage based in Washington

D.C., which is part of a larger establishment, the Smithsonian Institution, established "for the increase and diffusion of knowledge" is world famous for its most organized and strategic effort of transforming many collections of cultural artefacts into digital format (Smithsonian Institution, 2022).

Nevertheless, from the online survey conducted by the author, it does seem that not much has been done in terms of collection and digital documentation of Igbo cultural music. Indeed, according to Nwamara (2017, p. 4) the effort of "repackaging, reviving and preserving" Igbo cultural music is still on-going but much remains to be done. Accentuating the urgency of preserving Igbo music, Nwamara (2017, p. 5) further argued that:

> Igbo folk music was in the past kept alive through imitation and active performance of the music at appropriate musical events. [Nevertheless,] preservation of the music is needed to ensure its continuity and, as a result, the need for its repackaging and documentation in the most reliable globally accessible and understandable manner.

But the much-needed digital preservation of rich Igbo cultural music heritage is precisely what has been difficult to come by. This lacuna may stem from lack of awareness or obliviousness of the fact that "digitisation [is] the most appropriate strategy for the preservation of sound recordings…" (Nwamara 2017, p. 5) and similar artefacts of Igbo cultural music. Thus, the importance of digitizing Igbo music in order to preserve them for posterity cannot be overemphasised. It is an issue requiring an urgent attention inasmuch as music remains critical and pivotal in the positive construction of the racial identity of any cultural enclave (Orakwe 2015, pp. 45-46; See Monson 2003, p. 4). In other words, preservation of items of Igbo music folklore, especially via digitisation, will prevent their eventual disappearance—which implies a loss of something essential in the making and survival of the Igbo cultural/racial identity—and make these cultural artefacts available for future appreciation, investigation and study.

In this inquiry, we shall first discuss the emergence of the internet and its emplacement within the global social communication network. The reception of the internet in the Nigerian enclave constitutes the next point of discourse. Next, there will be a consideration of the positive aspect of internet data preservation, then a critical appraisal of the current status of internet's role in the archival documentation of Igbo music. This study closes with a prognosis of future possibilities for a fuller utilization of the potentialities of cyber-digital technology for a newer and more attractive presentation, revival and preservation of Igbo cultural music.

The present study is based on the theoretical paradigm of ethno-history. What is involved in this approach is an analytic re-examination and valuation of available historical records as well as literatures. According to Stone (2008, p. 178), citing the online journal, *Ethnohistory* (2006), this approach "emphasizes the joint use of documentary materials and ethnographic or archaeological data, as well as the combination of historical and anthropological approaches, in the study of social and cultural processes and history." Such critical review, while assuming the primacy of written records as historical data (Stone 2008, p. 179), will serve as an aid in evaluating what has been actually done and what still needs to be done with regards to achieving a realistic electronic archival documentation of Igbo music. Ethno-historical approach ultimately will lead to a deeper insight as to how Igbo people have "historically constructed, socially maintained" and individually created and experienced the art of music making (Rice 1987, p. 473 quoted in Stone 2008, p. 181; See Geertz 1973, pp. 363-364). Before going further, there is the need to trace the historical origin and advent of the internet technology.

Historical Emergence of the Internet

As a matter of historically certain fact, the invention of internet stemmed from the techno-scientific drive to create "publicly accessible computer network connecting many smaller networks from around the world" (Britannica, T. Editors of Encyclopaedia, 2021) through which "people can share information and communicate from anywhere with an Internet connection" (Kahn & Dennis 2022). Originally, the internet in its emergence involved the confluence of technologies invented by various establishments and individuals such as Robert Taylor, who introduced the earliest form of internet known as ARPANET (Advanced Research Projects Agency Network), as well as Vinton Cerf and Robert Kahn, whose ingenuity led to the development of the Transmission Control Protocol/Internet Protocol (TCP/IP) technologies (Kahn & Dennis 2022).

Eventually, ARPANET was made to become a broader network that "connected time-sharing computers at government-supported research sites, principally universities in the United States, and it soon became a critical piece of infrastructure for the computer science research community in the United States" (Kahn & Dennis 2022). Going further along the line, ARPANET introduced a novel technology known as packet switching. This is a networking system in which large volumes of transmitted data are taken and broken down "into smaller, manageable pieces (known as packets) that can travel independently over any available circuit to the target destination, where the pieces are reassembled" (Kahn & Dennis 2022). Eventually, the use of satellite came into play and broadened the spectrum of internet capacity, giving rise to the possibility of mobile internet communication although this was—ad interim—at a small scale. The broadening of the availability of the internet was also made possible through the work of the (American) National Science Foundation which in collaboration with the Defence Advanced Research Projects Agency worked "to expand [internet] access to the entire scientific and academic community and to make TCP/IP the standard in all federally supported research networks" (Kahn & Dennis 2022). In its original emergence, the control of the internet was the role of the government but such oversight eventually passed to "a loosely structured group of several thousand interested individuals known as the Internet Engineering Task Force" (Kahn & Dennis 2022).

Reception of the Internet in Nigeria

The internet entered into the Nigerian communication space in 1996 when the Nigerian Communications Commission authorized about 38 internet providers to commence their service in Nigeria. This authorization was followed up immediately in early 1997 when a company known as "Linkserve Limited… began commercial operations in the country" being as it were "the very first internet service provider (ISP) in Nigeria" (Vanguard 2010). Even before this time, there was the Nigeria Internet Group, a body that sprang up in 1995 as a result of a "first internet workshop organized by Yaba College of Technology in collaboration with a number of [Nigeria-based communication and communication-driven] organisations" with the aim or creating an "awareness of the benefits of internet in Nigeria and provide a forum for discussing the future of networking" (Vanguard 2010). Nevertheless, starting from 1996 and for the next four years running, the cumulative percentage of Nigerians who keyed into the emerging internet communication technology stood at zero.

In May, 1999, an advancement of internet communication network within the Nigerian enclave was enacted with an important summit, tagged "AFRINET '99," that was convened by the Nigerian Communications Commission in conjunction with the Nigeria Internet Group with focus "on the sustainable development and utilization of the Internet in Africa" seeking thereby "to create a common forum where African Internet practitioners can come together and discuss policy issues peculiar to Africa" (*Vanguard* 2010). With about 81 internet hosting sites fully operational in Nigeria

and a starting number of 3000 Nigerian internet subscribers at this time, the anticipated increase in volume of internet traffic came gradually but steadily:

> The line lifted off the bottom for the first time at the tail end of 2000. But the figure had been so insignificant; a shocking 0.3%. Between the years 2002 to 2004 it rose to 1.5%. Three years later in 2007, it struck 7% and then rose speedily in the 2008 to touch 15.9% (Vanguard 2010).

Now, the original projection was to make the Nigerian Telecommunications Limited (NITEL) the fulcrum of the novel exploration of internet technology. But the observable historical fact is that the private GSM companies eventually became the bulwark and champions of internet provision even as NITEL seemed to recede in the background. This fact was attested to by no less a personality than the general manager in charge of Enugu zone of NITEL as at 2013, who lamented that "no NITEL exchange is working any longer and no matter how we try, we cannot make it operational to fit into the modern telecommunications technology" (Ujummadu 2013). Needless to say, NITEL eventually got privatised and was sold to NATCOM Development and Investment Limited.

At present, according to available data, as at 2020, only about 36 per cent of Nigerians are hooked up to the internet. This translates to about 74, 210, 251 of the entire Nigerian population (CIA, 2022). With the proliferation of the GSM, the trajectory of internet development in Nigeria is on the side of broadband. This came into focus with high capacity fibre optic cable system that is now functional in Nigeria and Ghana, thanks to the technological initiative of companies like Mainstreet Technologies and Globacom (Internet Society; Vanguard 2010).

Positive Aspects of Internet/Digital Preservation

Having made an exposition on the historical trajectory of internet at both global and local level, it is now possible to examine its capacity for digital preservation of archival material. In doing this, it must be born in mind that "preservation is a crucial element in the whole operation of a records programme" whereas "the aim of archival preservation is to prolong the usable life of useful research information" (Millar & Roper 1999, p. 1). Now, digital preservation consists of "series of managed activities necessary to ensure continued access to digital materials for as long as possible… [and] beyond the limits of media failure or technological change" (Digital Preservation Coalition, 2009). Further, it involves an electronic form of storage that is subject to "the control of a processing unit (such as a computer) designed to make data accessible close to instantaneously" (**Gallinger** *et al.*, **2017**).

But the crucial question is: how far can the internet go in helping to preserve such digitised archival materials? What is the preservation capacity of the internet? Has the internet, in fact, any real worth with regard to a secure storage and easy retrieval of important cultural artefacts like Igbo music and folklore?

At the most fundamental level, a primary observation concerning the capacity of the internet for archival data management and preservation is the reliability of the storage itself. Such preservation storage is principally "designed to contain and manage digital content for long-term use" (**Gallinger** *et al.*, **2017**). But the issue here has to do with the security of the stored item. Fact is that such digitally stored items – most likely – would not be lost. That would be the situation when there is a more ambitious and ample provision for digital storage of Igbo musical items. Such assured security can be defined in terms of **fixity of the stored material, that is,** "the property of a digital object being constant, steady, and stable" (**Gallinger** *et al.*, **2017**). This would be in stark contrast to material preservation of articles, instruments, or recordings of Igbo music in which it is likely that the stored materials might eventually deteriorate and get lost. Millar and Roper (1999, p. 10) give

indications of possible causes of such deterioration:

> Perhaps the most significant factor is the nature of archival materials themselves: many records and archives are composed of materials that are acidic, which means they are inherently fragile and prone to degradation. Other factors in the degradation of archival materials are fluctuations in or excessive levels of temperature and relative humidity; excessive exposure to light; air pollution; water damage; destruction from biological agents such as mould or insects; or abuse and mishandling.

But with the use of the internet for storage—and while not adducing the untenable position that every and any internet material is infallibly and sempiternally safe and secure—it is, however, more likely that such digitized artefacts of Igbo cultural music will less easily suffer alteration or degradation than if they were to be preserved in physical format.

Another beneficial aspect of internet storage is the sheer volume of data it can store at a cheaper cost with a bonus advantage of easy management and ready availability for retrieval. This equally comes with the use of only a relatively small space. A sample of the potential volume of information that can be stored electronically and retrieved through the internet can be seen from the onset of the Library of Congress's National Digital Library Program, which – as has been mentioned above – makes a readily available provision of internet-based high-quality computerised copies of artefacts of American history stemming from the materials available in the library itself. As at the end of the year 2000, the data volume of the digital library amounted to more than a whooping "five million items (manuscripts, films, sound recordings, and photographs)" (Billington, 2021). This is clearly a huge volume of data holdings. Now, concerning the easy storage and fast availability and irretrievability of internet-stored artefacts of culture, Fargion in Nwamara (2017, p. 5) argues that by "adopting the digital format, …cultural items [—which would, of course, include data of Igbo music—] become cheaper to store, easier to manage as well as allowing increased opportunities for access." The undeniable fact is that there is so much volume of material to store when it comes to items of Igbo music: minstrelsy, local folk songs, cultural dances, instrumentations, Igbo traditional as well as Christian religious music. Nevertheless, despite possible hugeness of internet data volume required, the management and easy retrieval of such mass of information still remains in the realm of quick and fast service delivery.

Furthermore, there is also the advantage of **high-performance availability. Involved here is the possibility of stored data being accessible** "to large numbers of simultaneous users," (**Gallinger *et al.*, 2017**). What a great positive wonder it would be if the Igbo musical heritage is so abundantly available in the internet such that it would be easily retrievable to inquisitive scholars simultaneously browsing from various parts of the world! In internet science, such a consistent and simultaneous availability is ensured through the use of cluster of server points in shared internet service, a process by which "two or more server nodes [run] in co-ordination with each other to complete individual tasks as part of a larger service, where mutual awareness allows one or more nodes to compensate for the loss of another" (Clinton, 2019). **High-performance availability** can also be defined in terms of "high performance computing" (**Gallinger *et al.*, 2017**). The exigency and possibility of simultaneous cyber inquiry on Igbo music is predictable based on the fact that much of the Euro-American diaspora presently teems with many second-generation Igbo young people who would naturally yearn to reconnect with their cultural roots when such data of Igbo folklore and music are available. A well-managed digitization and digital preservation of materials of Igbo musical folklore can lead to easier diffusion of Igbo musical heritage in the present era of

globalisation. Such diffusion would no doubt prevent the loss of such musical artefacts in the present world in which cultural assimilation and disappearance of minority cultural elements is common place.

Current Status of Internet's Role in the Documentation of Igbo Music
At this juncture, the question facing us is: to what extent has there been a proper utilization of the internet for an effective documentation of Igbo music data? From the ethno-historical survey and investigations made by the author, much has been written about the exigency of the preserving Igbo musical folklore. But this much has been at the level of theoretical prescriptions with less discourse about practical realization of the prescribed solutions or the prospects thereof. For example, in Nwamara's article on "Repackaging Igbo Folksongs for Global Acceptance," the author duly recognised the "significance of digitisation and web archiving" and that "digitisation [is] the most appropriate strategy for the preservation of sound recordings…" (2017, pp. 4 & 5). Indeed, he made a huge contribution to the discussion about the status quo of material preservation of archival material. But it does seem that the author did not want to deal in depth with the crucial issue of digital preservation, either by way of demonstrating what has been done so far or the way forward with regard to concrete realization of the goal of preserving Igbo musical folklore in digital format.

Besides, some of the literatures reviewed used the futurist word "should" in putting up recommendations for the digitization of Igbo folklore and music, an indication that the digital archiving of Igbo music is a project for and in the future. This usage is verified in an article that mentioned the word "internet" only once, in which the authors, Onuora-Oguno and Nwamara (2014, p. 121) prescribed "the creation of an enabling cultural environment [that] must be pursued for [music] folklore to be sustained," indicating further that "the television should be used as an agent to spread folklore and to export it universally using the internet." In sum, the precise role of the internet or digital technology in the project of repackaging of Igbo musical folklore was not adequately discussed by the authors. Further, on a more practical level, in a sampling exercise with regards to the existence of internet radios broadcasting items of Igbo language, folklores and music, Onuzulike (2014, p. 290) ended with the following result: "even though there were twelve Igbo-related radios that came up, only one Igbo Radio demonstrated enough promise in terms of information content…." This is a clear indication that more has yet to be done for effective realisation of digital preservation and presentation of Igbo music.

On a similar note, an internet search undertaken by the author did not yield a substantial result of any systematically organized database that is strictly and specifically dedicated to Igbo music. This was specifically confirmed to me by a Nigerian professor of music who had once served at the national level of some Nigerian professional music/musicological organisations. He also indicated that only scattered individual efforts at organizing a collection of clusters of items (usually videos) of Igbo pop/traditional dance/music and minstrelsy has been so far achieved, although some more-than-rudimentary effort is currently being exerted at a more systematic and academically favourable digital collection of audio, video and documents of Igbo cultural music artefacts.

Similarly, not much has been done in terms of creating a repository or database of manuscripts of Igbo music online. Here and there in the internet, one stumbles on a website that documents Igbo music pdfs, but such websites are either little known or not at all. Besides, they are a bit unsystematic in their arrangements and presentation of the artefacts of Igbo music. But an ideal world-wide-web preservation of Igbo music folklore will involve the digitisation, documentation and effectively retrievable storage of (free or purchasable) pdfs of Igbo music in staff, solfa and other possible notations, together with free samples of performance of such music in both audio and video formats.

It would also include a written text description of the content, context and meaning of the music or song, the ideal or actual instrumentation as well as detailed information about the composer. Equally important is a statement concerning websites where these Igbo musical items can be purchased for personal or corporate uses.

In recommending the above digital preservation template, one can adduce as a sample the digital preservation of data of western classical music as found in the International Music Score Library Project, (IMSLP also known as the Petrucci Library), as well as the holdings of the Choral Public Domain Library (CPDL). In these easily accessible huge-volume music databases, various versions of printable sheet music can be freely downloaded while it is also possible to listen to different free audio samples of the downloaded music. Presently, there is no such consummate online library that documents items of Igbo music folklore. I argue that such can be and ought to be done at the level of National and State governments as well as in the various universities and higher institutions of learning.

Future Possibilities for a Fuller Digitisation and Archiving of Igbo Music
While it is true that much remain to be done in terms of digital documentation of Igbo music, it must be immediately said that future positive possibilities for doing so as well as the possible gains to be derived therefrom are so abundant and promising. But the starting point for a successful adventure into the arena of digital preservation and archiving must primarily be located in an upgrade or a change of the present attitude with which the Igbo society in general approaches the whole question of archiving itself. Fact is that the issue of setting up archives or maintaining them is ordinarily viewed in the contemporary Igbo society with optics of levity. In other words, the historical significance of archives has not been really much recognized and appreciated. If the contrary were to be the case, governments and non-governmental agencies would have expended huge sums of money in bid to save artefacts of Igbo music folklore from extinction or disappearance. This is the standard practice in all parts of the civilized world.

Practically speaking, each university's music department in Nigeria—but especially in Igbo land—can make a starter, for example, by creating a digital database of Igbo music. This would not be so difficult to do. All it would require is the will to walk the talk as well as commit funds to the setting up and maintenance of a digital archive. A similar feat has been achieved by the Church Music Association of America, in whose main and related websites (musicasacra.com, ccwatershed.org etc.) can be seen and downloaded practically any item of liturgical music that has been in print or circulation since or before the year 1900. These manuscript data are matched by numerous audio and video samples. Similarly, from the personal experience of the author, the Indiana University music database, in Bloomington Indiana, promises to be one of the largest in the whole world. For example, every single—group or individual—music performance [including opera] at the Jacobs School of Music of Indiana University is usually recorded in audio and video format, then digitised and saved in the university's super computer. The author has also worked in the Archives of Traditional Music serving the Department of Folklore and Ethnomusicology as well as at the Archives of African American Music and Culture serving the various African American Institutes and Departments of Indiana University. In these archives, music artefacts are diligently and sustainably collected and handled with maximum delicacy, care and attention. The final destination is usually to preserve them in digital format. If this can be done across the west of the Atlantic, what would prevent music departments in Nigeria from following suit?

In the interim, it is important to state that there is already a folk music bumper harvest that has been made as well as other items waiting to be harvested. So much items of Igbo music folklore have been

collected and preserved mainly in material book or recorded format and yet there are still more waiting to be collected and preserved digitally. Great compliments must be accorded to Igbo musicologists such as Alvan-Ikoku Nwamara, Dan Agu, Richard Okafor, Agatha Onwuekwe, Chris Onyeji, Meki Nzewi etc. for the huge work they have already done in terms of harvesting, repackaging and reprocessing items of Igbo music folklore. Their works have been published and are presently available for purchase as material data. While celebrating the work of these avant-gardes of Igbo art music, it is important to indicate iteratively the exigency for new creations of Igbo folk music. Presently, the situation is that Igbo musicologists and composers principally engage in collecting pre-existing folk melodies, recreating and repackaging them. This can lead one to have the erroneous impression that Igbo folk music is a fixed and static non-expandable repertoire. But the author would argue strongly in support of the fact of Igbo folk music being amenable to growth and expansion.

Nevertheless, it is equally possible that some of the bumper music harvests already made may eventually get lost if they are not converted permanently into digital format and thus preserved for posterity. A classic example of this possible loss is seen in the work history of Igbo composers like Okechukwu Ndubuisi who "was one of the foremost arrangers of folk tunes for solo voices in Nigeria and [whose] works served as a guide to some of the new generation of arrangers of Igbo folksongs" and "whose works, [are] not yet published…" although "efforts are presently being made… to compile them and have them published" (Nwamara 2017, p. 12). Without prejudice to the soft and gentle language of the author of the lines cited above, it is the opinion of the present writer that the fact of Ndubuisi's works not being found in digital format (just as it is the case with many Nigerian art musicians) —and worse still, not being in print—is a most unfortunate scenario because his musical works are precious jewels from the perspective of their sheer creativity, harmony and counterpoint.

Conclusion
The advent of the internet in the mid-1950s has led to a situation in which many dimensions of technology have advanced and improved tremendously. In the present stage of digital technology, talk is now about internet of things, that is, a situation in which material objects and appliances are interconnected in such a way as to be able to communicate among themselves and exchange data and information in real time. Given such a scenario, lovers of Igbo culture and whoever cares for the survival of artefacts of Igbo music cannot afford to fold arms and watch Igbo music folklore go into oblivion. The exposition above indicates clearly that the internet has the great potential of being a safe and secure repository for the preservation of musical items of Igbo culture. Nigerian and especially Igbo music folklorists and musicologists must take up the challenge of collecting and digitising ancient and modern compositions of Igbo folk, religious and art music, whether these compositions are formal or informal. Such collections must be matched up with concrete performance samples, both in video and audio formats. Paradigms of how this can be done already exist in abundance, especially given the exemplary models of world-renowned music databases. Therefore, the necessity and urgency of digitally preserving the items and artefacts of Igbo music culture has passed from the realm of being a desirable ideal to becoming a categorical real life imperative for Igbo music scholars.

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