Introduction to African electronic literature

Richard Ajah*

* Department of Foreign Languages Faculty of Arts, University of Uyo, Nigeria.

Email: richardajah@uniuyo.edu.ng Orcid: 0000-0002-8440-9991

Abstract Résumé

classification of literature faces challenges from new media and ICT, leading to expanded boundaries, artistic innovation, and reader empowerment. Digital humanities, an emerging trend, has created space for electronic literature, particularly in the Global North. However, African electronic literature lacks critical attention, with scholars questioning the Electronic Literature Organization's limited representation of African works like Flash Fiction Ghana and Bent not Broken. This gap underscores the need to explore African electronic literature comprehensively. My study aims to describe and explore emerging African electronic literature and its subgenres. It delves into the origins, subgenre classification, authorship, and the digital infrastructures supporting this literature. Ultimately, it highlights the potential for African autonomy to shape global culture, particularly as other world powers grapple with economic and political challenges.

Keywords: African digital literature, MAELD and ADELD, Digital Humanities, African digital texts

La classification de la littérature est confrontée aux défis des nouveaux médias et des TIC, conduisant à un élargissement des frontières, à une innovation artistique et à une responsabilisation des lecteurs. Les Humanités Numériques, une tendance émergente, ont créé un espace pour la littérature numérique, en particulier dans les pays du Nord. Cependant, la littérature numérique africaine manque d'attention critique, les chercheurs remettant en question la représentation limitée par l'Electronic Literature Organization d'œuvres africaines comme Flash Fiction Ghana et Bent not Broken. Cette lacune souligne la nécessité d'explorer la littérature numérique africaine de manière globale. Mon étude vise à décrire et explorer la littérature numérique africaine émergente et ses sous-genres. Il explore les origines, la classification des sous-genres, la paternité et les infrastructures numériques qui soutiennent cette littérature. En fin de compte, cela met en évidence le potentiel de l'autonomie africaine pour façonner la culture mondiale, en particulier alors que d'autres puissances mondiales sont aux prises avec des défis économiques et politiques.

Mots-Clés: Littérature numérique africaine, MAELD et ADELD, Humanités Numériques, Texte numérique africaine

1. Introduction

Literature has been traditionally classified into prose, poetry and drama. However, with the emergence of new trends in literary studies, these traditional boundaries have been problematized, challenged and deconstructed. They have become elastic, consistently shifting as new literary experiences are articulated and appropriated in multimodal and electronic literatures. Many new concepts are used to evoke electronic literature, referred to as « digital literature », « mediature », « cyberliterature », or « web literature ». Since its creation in 1999, the Electronic Literature Organization (ELO) as "an international organization dedicated to the investigation of literature produced for the digital medium" (www.eliterature.org) has contributed immeasurably to the promotion of literary electronic artworks in the world. Though the epistemological generic walls of African literature are similarly expanding as new trends, technologies, techniques, platforms, public, and practitioners are evolving, dearth of literature on African electronic literature has been underscored and challenged by African scholars (Opoku-Agyemang; Bisschoff; Adenekan; Yeku; Onuoha; Ajah). Though these scholars have made attempts at galvanizing the discursive potentials and possibilities of African electronic literature, none of their studies has been able to generically classify the African electronic literature and situate its advent historically and temporally.

This study identifies, interrogates, positions, and classifies African electronic literature, presenting its platforms, subgenres, and authors. It is divided into five stages. The first phase offers some definitional and classificatory explanations to the notion of electronic literature, though it avoids the conceptual questions surrounding "electronic literature" and "digital literature". The second phase historically situates the emergence of African electronic literature. My hypothesis is strengthened with a geospatial mapping of electronic literature in Africa, while classifying its subgenres and I shall rely majorly on the *Multilingual African Electronic Literature Database* (MAELD) and *African Diasporic Electronic Literature Database* (ADELD) for classification and identification. The third stage identifies literary digital artworks with their authors. The fourth section interrogates the digital platforms that enable the preservation, dissemination and consumption of African electronic literature such as social media, blogs, litmegs, mobile/smart phones, laptops and repositories. The last phrase examines the discursive possibilities and potentials of African electronic literature and its limitations.

1.1.Definition and evolution of electronic literature

Many scholars have used the divide of "born digital" and "unborn digital" artworks to describe what is and what is not electronic literature. By "unborn digital", I mean a "remediated form of a print text" (Yeku 2). In her *Born Digital*, Engberg (4) associates "born digital" with poetic works "made with the authorial intention to specifically engage, question, and explore digital means of poetic and artistic creation". Di Rosario amplifies the identity of digital environment as a characterizing definition of electronic poetry. If existence in a digital setting is a prerequisite for the digitality of literature, can we assure that all literary works formatted in PDF files as electronic copies accessible and readable through Android and computer screens are digital? It can be said that translation of written literature into digital texts in PDF format is easier than creating a born-digital literature with its technopoetics. This term "technopoetics" refers to the writing of a literary work using technological tools and techniques (Levin 342) and ELO sees it as a basic feature of electronic literature which, the organization defines as a born-digital literary art that exploits, as its muse and medium, the transmedia possibilities of the digital (See https://directory.eliterature.org).

In his work, Fletcher agrees that a work of digital literature is only born at the moment when all its elements are gathered in performance. This submission informs that performativity is considered as an integral part of electronic literature because it involves performative interactions such as scratching, checking, twisting, touching, scrolling, and reading that take place between the body and the screen (Fletcher 29). Electronic literature is a digital art. If a digital art, Bisschoff (262) simply puts it as an "artistic work or practice that uses digital technologies as an essential part of the creative and/or preservation, dissemination and exhibition process." U. Pawlicka admits that electronic literature moves from the traditional meaning of writing and reading towards the programming of text, performative reading, and the interactive creation of meaning. Bell *et al* see it as fiction written for and read on a computer screen that pursues its verbal, discursive and/or

conceptual complexity through the digital medium, and would lose something of its aesthetic and semiotic function if it were removed from that medium (Cited in Rowberry 319). In Onuoha's *African Digital Prose*, he uses the term "digital literature", defined as "works of art that are fashioned for digital devices" (23). All these definitions have their merits, depending on the historical experiences of their authors. I conclude that electronic literature is a digital art by its method of production, its mode of presentation, and its means of dissemination.

Di Rosario, Grimaldi & Meza (4) agree that electronic literature developed with the advent of computers and digital technology. The authors left out the history of electronic literature in Africa and Asia and majorly presented the Global North. However, they gave an overview that traces the evolution of digital literature, admitting that in 1952 Christopher Strachey had created what can be considered as the first pieces of digital literature, « Love Letters » through a Mark 1 program. Nevertheless, « Stochastic texts » (1959) by Theo Lutz are considered as the first digital literary text. In 1976 Will Crowther and Don Woods created the first interactive fiction, *Colossal Cave Adventure* while Dave Leblin and Mark Blank, with the help of Tim Anderson and Bruce Daniel, produced *Zork* (1977-1979). In 1980s and 1990s, hypertext fictions emerged. Unlike its original form at creation, electronic literature started to expand to include more graphics, sound files and structures. Although electronic literature scholars have not given much attention to the history of African electronic literature, the globalizing influence of popular culture and digital culture justifies the historical background of African digital artworks.

2.0. Emergence of African electronic literature

Scholars such as Abiola Irele have strongly championed the classification of African literature into oral and print literature and Opoku-Agyemang ("Flash" 1) has added the third category, which is African digital literature. These three taxonomies have markers of divergences and convergences as processes of production, preservation, circulation and consumption are ontologically distinguished. Adenekan and Opoku-Agyemang ("Beyond") as digital humanities scholars have made practical scholarly efforts towards establishing the existence of African electronic literature between 2014-2017 through publications, paper presentations and panel organizations. Opoku-Agyemang ("Flash") affirms that African digital literature is a vibrant field with Nigeria, Kenya, South Africa, Egypt, Tanzania and Ghana among other countries that serve as reference points for this vibrancy. While these accounts have contributed immensely in shaping the discourse of African digital literature, thereby giving it a legitimizing voice, its emergence has not been temporally situated and its typology fully interrogated.

If written literature is greatly linked to Europe's Gutenberg printing revolution, it is essential to state that the birth of electronic literature in Africa cannot be put in proper perspective without the examination of the arrival of computer and technology in African societies. This simply means that I am following the theory of Di Rosario, Grimaldi & Meza on how the birth of computer and technology catalyzes the origin of electronic literature. To historicize African electronic literature, there is need to unpack the epistemological concerns of African electronic literature, it is important to situate the art ontologically in time and space. The history of African electronic literature can equally be traced to the advent of computers, mobile telephony and internet in Africa in the early 2000 with historical hypotheses. Jensen (215) agrees that 11 out of 54 countries had local internet access in 1996, but in 2000, all countries had it in capital cities. Internet access was majorly through mobile/smart phones as many could not own a desktop computer (Bisschoff 261) and it can be properly posited that the advent of these electronic and digital devices gave birth to digital literacies and capacities. Without exposure to the uses of Android and computer applications, it is impossible to apply them for any creative and epistemic use and demonstrating how "digital media has evolved into a critical infrastructure in world literature, enabling the production, circulation and consumption of literature worldwide" (Uimonen 20). Based on these historical evidences on the advent and spread of telephony and Internet Communication Technology (ICT) in Africa, African electronic literature became a literary and artistic reality and experience in the 2000s when creative experimentations culminated into the creation of different genres in different African and Europhone languages.

Electric street lights were installed in Kimberly as early as 1882 (Marwah). It presupposes that household electronic appliances were in public use in South Africa before other African countries and this explains why pockets of digital creativity had kicked off in the late 1990s. In 1996, South Africa's Celestial Games had modernized the first African Video game Toxic Bunny before recording it for Web and Android platforms in 2014. In the early 2000s, queer-hyper drama had been produced in South Africa: Ludolf Parker's Ek's ook mens (2002) and Madeleine Volschenk's Man (2002), both digital texts are created in Afrikaans language (See MAELD & ADELD database). In North-Africa, the Morocco poet Mun'im al-Azraq had published his poetry on the al-Mirsâh (The Anchor) website and this first "visual digital poetry in Arabic appeared in the first decade of the third millennium" (Younis 131). In this poetry such as Saidat Almà ("The Water Lady"), the poet combines "media with colors, pictures, photos, paintings, and music" (Di Rosario, Grimaldi & Meza 20), unlike the first virtual poetry in Northern Nigeria published in 2002 on the KanoOnline creative forum which does not seek to "reflect new media technologies" (Lyakhovich 486). The techno-poetic absence of new media invalidates the description of Northern-Nigerian virtual poetry as digital literature because in the words of Journo, texts produced for e-readers or even sold on mobile apps should not be considered as digital fiction, what Di Rosario, Grimaldi and Meza refer to as "digitized print literature" (5). In the next section hereafter, my classification will majorly dwell on African born-digital works as archived in MAELD and ADELD repository, though there is need to acknowledge the roles that other virtual spaces have played in vulgarizing African digital contents.

3.0. Classification of African electronic literature

Let me follow the old broad spectrum of literary categorization into fiction, drama, and poetry (Klarer 1). However, if I attach "digital" to these categories to give me digital fiction, digital drama and digital poetry, it will not leave me without epistemic risks. This is because different genres of digital literature such as digital storytelling, video games, webnovelas, webcomics among others have emerged to problematize the traditional classification of literature and to dismantle or deconstruct its generic boundaries. In *Generic Instability and Identity in the Contemporary Novel*, Gonzalez and Pittin-Hédon concludes that "contemporary aesthetics is characterized by generic mixing on the level of both form and content. The barriers between different medias and genres have been broken down in all literary art forms, whether it be theater, poetry or the novel" (vii). Consequently, the definition of literature is increasingly becoming more polemic since "visual and acoustic elements are being reintroduced into literature, and media, genres, text types, and discourses are being mixed" (Klarer 3). Being a new trend of literature, attempts at cataloguing African electronic literature whose genres and subgenres are begging for ontological and epistemological delineation and validation will not be without vulnerabilities.

In African Digital Prose, Onuoha makes great strides in classifying African digital prose into digital short stories, flash fictions, infographic prose, social media narratives, blogs narratives, and digital memoirs. MAELD's and ADELD's categories are rather overlappingly overdetailed as it retains immersive storytelling, webcomics and digital comics, blogosphere fiction, queer-hyper fiction, mobile phone storytelling, hyper fiction, hyper novel, and interactive fiction. The difference between queer-hyper fiction and hyper fiction is the insertion of "queer" which is prescriptively thematic rather than techno-poetic. Immersive and mobile phone storytelling can be subsumed as subgeneric types of digital storytelling, though their variations are located in their processes of production and consumption. The Nigerian Joel 'Kachi Benson's Daughters of Chibok (2019) and the Tunisian Digital Mania's Beat the Beats (2015) are models of African immersive storytelling which deploys virtual and mixed reality (AV/VR) technologies in placing the audience in different scenarios, to experience it from different viewpoints and to allow them anticipate what the future may look, feel like, and indeed be like, by being placed into a set of future space scenarios (Doyle). Digital fiction is categorized into interactive fiction (the Zambian Nolan Dennis's A Sun Black, 2020), hyperfiction (The Moroccan Labiba Al-Khammar's Hiza Alhub ("Loves Shoes", 2017); and the South African Lauren Beukes' The Edge, 2004), and Blogosphere fiction (the Nigerian Anthony Azekwoh's The Fall of the Gods, 2017). The Ghanaian LetiArts-Eyram Tawia's Afrocomix (2019)

and the Nigerian Ayo Makinde's $D\acute{u}r\acute{o}$ (2020) pass for digital comics and webcomics sequentially. Like comics, video game is regarded as a narrative.

Generic classification of video games is slippery because the genre is markedly different with its direct and active participation of the audience through the surrogate player-character who acts within the game's diegetic world, taking part in the central conflict of the game's narrative (Wolf). Video game has been popular in African space. Opoku-Agyemang collaborates that Ghana has been associated with video game for a long period, citing Oware 3D, Ananse: the Origin (2014) as Ghanaian samples. Other African video games are the Algerian Diaa El Hak's *The Schema* (2015) and Lamb of Truth (2016), the Egyptian Anura Hanafi's Everything except Yes (2018), etc. The Nigerian Abiola Olaniran's Gamsole which, founded in 2012 and remaining one of the most successful game developers in Nigeria and Africa, has produced over 35 games such as "Gidi Run", "Temple Run", "Monster Ninga", "Sweet Candy" among others accessible on the Windows phones and PC platforms. As at 2015, In an interview with Elly Okutovi published in itweb.africa, Olaniran's venture into video gaming is anchored on his passion to use African lifestyle to create fun experience that can be enjoyed by people from different parts of the world. According to Wikipedia, Gamsole's games have been downloaded over 19 million times across 25 countries in Africa, Asia, Europe and South America to demonstrate that it has been impactful to transcultural and transnational enthusiasts since its creation. Aside the popularity of video games, social media narratives are gaining grounds as products of Twitterature, Whatsapperature, Instagramature, Facebookerature among other different digital platforms. Few of these digital creations are @yrsadaleyward's The Terrible: A Storyteller's Memoir (Nigerian Instagramature), Nana Awere Damoah's My Book of GHC Oats (Ghanaian Facebookature, 2013), Abdelouahid Stitou's Zahrallisa (Moroccan Facebookature, 2013) and Sanlam's Uk'shona Kwe langa (South African WhatsApperature, 2017). Most of social media narratives appeal to multisensorial techno-poetics through multimodal potentialities and performances.

Among different literary genres, digital drama receives fewer creative attentions. MAELD and ADELD have little entries in its repository. No reason is adduced; however, it is possible that the blurring of generic boundaries is responsible for minimal production of digital dramatic works as digital comics, webcomics, and video games are closing up the gap between theatre and prose fiction, and between visual and textual cultures, being a genre that combines "the verbal with a number of non-verbal or optical-visual means, including stage, scenery, shifting of scenes, facial expressions, gestures, make-ups, props and lighting" (Klarer 42). However, hyper drama is identified as a subgenre of digital drama and few examples exist in African electronic literature. The South-African Ludolf Parker produced his Afrikaans queer-hyper drama titled *Ek's ook mens* the same year with Madeline Volschenk's *Man*. Both creative digital dramatic works were released in 2002. Others are Twitterbot drama such as Yohanna Waliya's @korczakDramatist. If digital drama appears unpopular among African digital creators, digital poetry is very popular of all African digital works.

As a genre of electronic literature, digital poetry has a history that scholars connect to the avant-garde experimental poetry and to the discovery of computer and/or internet. It has received enormous critical appraisals. Funkhouser suggests that it is "a new genre of literary, visual and sonic art launched by poets who experimented with computers in the late 1950s" ("Digital poetry" 318). Funkhouser ("Prehistoric" 22) conditions a poem as a digital poem "if computer programming or processes (software) are characteristically deployed in the configuration, generation, or preservation of the text (or combinations of texts)". His definitional explanation gives credence to the creation, not the content, of poetry, thereby prioritizing the artistic effects over the message. More sumptuously, K. Stein, in his Poetry's Afterlife: Verse in the Digital Age, acknowledges its hybridity and synchronicity; he goes on to characterize digital poetry as a mixture of word, image, sound and music into a new language of digital poetic expression. These technopoetic elements are exhibited by the screen's kinetic materiality and performability. Distinct from analogue poetry whose production and distribution depend on publishing houses, bookshops and libraries, electronic poetry owes its poiesis to computer, internet and new media cultures from where emerges its typographic multimodality (Ajah 669). Different terminologies such as computer poetry, e-poetry, cyberpoetry, digital poetry, new media poetry among others have been used to classify this poetic

category of digital literature. As composite and complex appear these critical labels, Engberg identifies a common denominator as the underscoring of a multisensory experience of poetry through visual, auditive, tactile, kinetic, and textual artifice. It means that technopoetics outlines the typology of electronic poetry. If scholars prioritize the analysis of programming codes, machines and the platforms on which the digital poetic text is distributed as contends Pressman (767), it is because their practice is descriptively classificatory. Stein categorizes his afterlife poetry into two major broad spectra: video poetry (docu-video-poetry and filmic poetry/Cin(E)-poetry) and new poetry (fixed-text, computer-based poetry, alterable-text electronic media collaborative/participatory media poetry). The "afterlife-ness" of these digital texts is located in their ubiquity, mutability, hybridity, and virtuality, through their immortality is subjected to the death of their creators and repositories (Ajah 669). In "Digital Poetry" Di Rosario provides another insightful classification of e-poetry. It is classified into dynamic electronic poetry /or Flash poetry, visual e-poetry, generative e-poetry, digital poetry, and collaborative e-poetry. The typology offered above fits into the western models of electronic literature.

MAELD and ADELD databases have curated different digital subgenres in African electronic literature; these are interactive digital poetry, immersive poetry, narrative video poetry, narrative digital poetry, queer-hyper digital poetry, digital kinetic poetry and digital hyper poetry among others digital poems that can be categorized as social media poetry such as Veralyn Chinenye's and Eriata Oribhabor's Facebook poem (Onuoha 58), and video clips poem or Flash poem on YouTube "in which written, visual and audio material is presented together" (Younis 33). Some of the African digital poems are: Stef Bos's hyper poetry Vandaag (South Africa), Christopher's digital kinetic poetry Mandela, Femina, and The Ink Link (South Africa), Olamide Popoola's queer hyper poetry A Fierce Love (Nigeria), Yohanna Waliya's interactive bilingual poetry Momenta, Homo Salus, Véritologie, Chuma Nwokolo's video poetry "Sudan Sudan", Nissmah Rosdhy's narrative poetry *La'ib Alnard* (2013) among others. Al-Amin classifies Al-Amin El-Nasir's digital work "My Dear Friend" as video poetry because "the aesthetics in video poetry are in its mode of presentation such as musicality, imagery, audibility, symbols and many more" (13). If I follow a rather conversative taxonomy of digital poetry as earlier discussed, the artistic processes of creation and consumption of video poem are not techno-poetic enough to be termed a subgenre of digital poetry though it can be published in social media platforms such as YouTube, Twitter, Facebook, etc.

4.0. Publication of African electronic literature: repository, litmeg and social media

The publication of African electronic literature stands on the overlapping supports of media infrastructure: repository, litmeg and social media. *Multilingual African Electronic Literature Database* (MAELD) and *African Diasporic Electronic Literature Database* (ADELD) were created and curated by Yohanna Joseph Waliya in 2020. It is a strong foundation for the dissemination and preservation of African digital works. The repository is furnished with place-author-work interactive map and it contains 300 records highlighting works of over 100 artists in a handful of languages across 32 African countries. The database has a broad spectrum of what constitutes African electronic literature today.

The repository explains African digital works in the perspective of the African cultural intersections with technologies of literary discourse, as any digital-born literary work infused with African themes, events, emotions, cultural colours, worldviews, heritage, storytelling, virtual, mixed, augmented and extended reality (VR, MR, AR and XR), created either by Africans or robots using programming language, digital tools (hardware and software applications), 3D reality modelling, artificial intelligence and/or using digital platforms and devices as its reading media. Reading in this context can comprise of a range of intellectual, kinetic and bodily practices including playing, watching, clicking, executing, interacting programming, and immersive experience (in case of virtual, mixed, augmented and extended realities). The MAELD and ADELD two-in-one database is open to all genres of electronic literature and other genres of experimental digital writing as we have noted above.

MAELD's and ADELD's definition of African electronic literature is comprehensive as works are majorly classified under genres, platform, and language. Platform can be blog, web,

Android mobile, etc. Other genres are mobile phone storytelling, facebookature, blogosphere Flashfic, video game, blogosphere fiction, webcomics, queer-hyperfiction, queer-hyperpoetry, queer-hyperdrama, instagramature, twitterature, twitterbot, blogosphere poetry, digital kinetic poetry, narrative digital poetry, hypernovel, mobile phone book, whatsApperature, and queer-auto fiction. Linguistic diversity that reflects Africa's voices distinguishes the repository. Digital literary works in English abound from English-speaking countries; Mohamed Al-zraq's Saüdat Almâ, Labiba Al-Khammar's Hizâ Alhub, etc. are in Arabic; and Ousseni Nikiéma's Les contes de Dunia Vol. 1 (2020), Irooko Games' Les aventures de Béhanzin (2016) are examples of francophone works. My review of MAELD and ADELD problematizes ELO's directory and internet site that only shows a few of African digital works, works such as Flash Fiction Ghana (e-lit Resource), Bent not Broken: A Family Remembers the War in Liberia and Sierra Leone among others. It can be said that ELO's directory is not a true representation of African digital literary production all over the world.

Few scholars have studied digital platforms and African literature. Suhr-Syfsma offers enlightening account of digital literature in Africa, though his work only centres on "African digital litmag". He recognizes *Enkare Review*, *Saraba*, *Bakwa*, and *Jalada* as digital literary magazines or little magazines where African literary works are published. However, there are other online literary magazines such as Derek Workman's *The Kalahari Review* (Botswana), Nyana Kakoma's *Sooo Many Stories* (Uganda), Nana-ama Kyerematen's *Afridiaspora* (Ghanaian in Diaspora), Troy Onyango's *Lolwe* (Kenya), Othuke Ominiabohs's *Masobe Books* (Nigeria), Ngozi Cole's *Poda Poda Stories* (Nigeria), *Doek* by Mutaleni Nadimi and Remy Ngamije (Namibia). There are equally *African Voices*, *African writing online*, *Meskot*, *The Street Writer* (TASW), *Q-zine* that publishes English and French works among many others. Projects such as *Gaborone Book Festival* (since 2018) and *Library on Africa and the African Diaspora* (LOATAD, since 2017) have equally stimulated reading and digital culture in Botswana and Ghana.

African digital magazines have been useful in ensuring African presence in digital literary space. Most of African fiction, non-fiction and poetry works were published there before the curation of Waliya and Boyd's MAELD and ADELD. Browsing their website and their content shows their dynamism, vitality, currency or bankruptcy. However, the mortality rate of some of these platforms appears to be high as the absence of their URL in the server gives explanations to their lifecycle or permanency. Their impermanence is associated with the notion of obsolescence, a concept that Fletcher (36) uses to describe tragic mortality of hypertextuality. Many have features that look promising. Digital publishing platforms such as Sarabamag and Doek! have rich literary contents and contributions. Sarabamag is rich in poetry collections. Sanya Noel's "For a While", Okwudili Nebeolisa's "Questionnaire for a Man from Another Man", Ayo Akinyemi's "A Witness Burden" and "Peace in a Time of War" of some of its collections, published between 2018 and 2019. Though they are simple poetic verses, these digital poems are accompanied by photographs and have attracted over 200 viewers each. These poems are structured in traditional poetic style, though read through social media and online media apparatuses. Unlike the Nigerian Yohanna Waliya's digital poetry, the Zambian Noland Dennis's interactive fiction, the Tunisian Digital Mania's immersive storytelling, the works published in African litmegs cannot be referred to as "born digital" since computer programming or processes (software) should be implicated in the composition, generation, or preservation of the digital works (Funkhouser 22).

Social media platforms such as WhatsApp, Twitter, TikTok, YouTube, Facebook among others have been beehives of creative activities of young Africans since the advent of Internet Communication Technology (ICT) and multimedia infrastructures where African digital works are published. Aside the theory of Affordances that helps us understand how users explore the potentials of social media to enhance their capabilities (Egessa, Liyala and Ogara 324) and its FAIR (Findability, Accessibility, Interoperability and Reusability) data advantages, the cost of maintenance of social media for individuals remains minimal and accounts for its attractiveness for creative users of its virtual space. Despite the enormity of African digital works in virtual spaces, African electronic literature is not attracting enough critical reviews.

5.0. Critique of African electronic literature

Literary attentions on and critical engagements with African electronic literature remain unimpressive. However, few scholars have discussed different genres of African digital texts. The doctoral works of Opoku-Agyemang, Isong, and Sykes center on Ghanaian electronic literature, the influence of new media on African digital literature and digital storytelling in Cape Town respectively, setting the discursive stage for critical interventions and appreciation of the new mode of African literature. Yeku, Suhr-Syfsma and Journo explain how African digital spaces such as Bakwa, Saraba, Jalada, Hekaya, Brittlepaper among others have become publishing infrastructures for the dissemination of literary works. While both works highlight how the web 2.0 or internet technology has spiced up accessibility and consumption of African creative expressions, most of the works sampled cannot be categorized as digital artworks because they are products of remediation. However, they demonstrate an aesthetic movement from monomodality to multimodality, from materiality to virtuality, and from traditionality to digitality.

African electronic literature is studied under the umbrella of digital humanities and capacity building in this new area is limited in Africa. however, critical discussions on African digital literature are gathering momentum. An attempt to review all these works on African digital literature within a limited space is impossible, yet a cursory look can be cast on few of those dealing with individual and collective works of digital African authors. Reed and Hill, Reitmaier, Bidwell and Marsden, and Marsden et al among others have discoursed digital storytelling in South Africa, demonstrating the scholarly awareness on and the growing popularity of the new genre. Ajah demonstrated the discursive potentials of Yohanna Waliya's bilingual digital poetry, poems such as "Véritologie", "Homosalus", "Climatophosis" and "Momenta" that have received little or no critical receptions. Onuoha focused his critical searchlights on Veralyn Chinenye's Facebook poems as part of social media poetry. Opoku-Agyemang ("Flash") examined Flash Fiction Ghana and Al-Amin interrogated the aesthetic elements of Chuma Nwokolo's video poetry. It is hoped that with more critical awareness on and engagement with African digital texts, institutions will encourage the development of African electronic literature and its pedagogy in African universities.

Conclusion

This study had the objective of presenting African electronic literature with its growing genres as a way of validating its existence and sensitizing its reading public. It acknowledges the growth of African digital expressions and the roles the new media and the internet technology play in the production, publication, propagation, consumption and preservation of these digital works. In the publication and preservation of African electronic literature, repository, litmeg, and social media have been identified as digital infrastructures; however, with the first two whose servers and clouds are individually managed, the question of the mortality comes to mind. The case of social media platforms such as Twitter, WhatsApp, Facebook, TikTok, Instagram, etc. is different because they are maintained by blue-chip organizations. Ajah had admitted that the rate of deaths of some of these platforms appears to be high as the absence of their URL in the server gives insights into their aborted lifespan. Their transience is connected to Fletcher's concept of obsolescence as the tragic death of hypertexts. Until the pedagogy and scholarship of African electronic literature in African universities and institutions, maintenance and sustainability of litmegs and repositories, left in the hands of individual and collective proprietors, will be difficult. These digital infrastructures need to be institutionalized to guarantee the lifecycle and curtail the impermanence of African digital works.

Works Cited

Adenekan, Shola. African Literature in the Digital Age: Class and Sexual Politics in New Writing from Nigeria and Kenya. Boydell & Brewer, 2021.

Ajah, Richard Oko. "Multimodality, Performance and Technopoetics in Johanna Waliya's Bilingual Digital Poetry", edited by M. E. Ekpenyong & I. I. Udoh, *Current Issues in Descriptive Linguistics and Digital Humanities*. Springer-Nature, 2022, pp.669-685. https://doi.org/10.1007/978-981-19-2932-845.

- Al-Amin, Mohammed El-Nasir. "Aesthetic of Video Poetry in Chuma Nwokolo's "Sudan Sudan" by Al-Amin El-Nasir." *African Journal of Social Sciences and Humanities Research*, vol5, no.1, 2022, pp.11-18.
- Bisschoff, Lizelle. "The Future is Digital: An Introduction to African Digital Arts." *Critical African Studies*, vol.9, no.3, 2017, pp.261-267. https://eprints.gla.ac.uk/14749227.
- Di Rosario, Giovanna, Grimaldi, Kerri. & Meza, Nohelia. "The Origin of Electronic Literature: an Overview." *Texto Digital, Florianopolis*, vol.15, no.1, 2019, pp.4-27.
- Di Rosario, Giovanna. "Digital Poetry: A Naissance of a New Genre?" *Carnets* (Online), Première série 1, numéro spécial, 2009. https://journals.openedition.org/carnets/3762.
- Di Rosario, Giovanna.. *Electronic poetry: Understanding Poetry in the Digital Environment*. University Library of Jyvaskyla, 2011.
- Di Rosario, Giovanna. "Analysing Electronic Poetry: Three Examples of Textualities in Digital Media." *Primerjalna Knjizevnost (Ljubljana)*, vo.36, no.1, 2013, pp.25-39.
- Doyle, D. "Immersive Storytelling in Mixed Reality Environments." *Conference Paper*, 2017, DOI: 10.1109/VSMM.2017.8346299.
- Egessa, Mathew., Liyala, Samiel, & Ogara, Solomon. "Affordances Theory in Information and Communication Technology for Development (ICT4D) Research." *International Research Journal for Modernization in Engineering Technology and Science*, vol.03, no.01, 2021, pp.324-332.
- Engberg, Maria. Born Digital: Writing in the Age of New Media. Uppsala University, 2007.
- Fletcher, Jerome. "Performing digital literature." *Caracteres. Estudios Culturales y Criticos*, vol.4, no.2, 2015, pp.18-42.
- Funkhouser, Chris T. *Prehistoric digital poetry: An archaeology of forms, 1959-1995.* University Alabama Press, 2007.
- Funkhouser, Chris T. "Digital poetry: A look at generative, visual, and interconnected possibilities in its first four decades, edited by R. Siemens & Schreibman, S, *A Companion to digital literary studies*. Wiley-Blackwell, 2013, pp.318-335.
- Gonzalez, Madelena & Pittin-Hédon, Marie-Odile (ed.). *Generic Instability and Identity in the Contemporary Novel*. Cambridge Scholars Publishing, 2010.
- Isong, Anitie. *The Influence of New Media Technologies in African Literature*. 2018. De Montfort University. Dissertation.
- Jensen, Mike. "Making the Connection: Africa and Internet." *Current History*, vol.99, 2000, pp.215-220.
- Journo, Aurelie. "Literary Networks and Digital Media in Contemporary African Literatures." *Africa 2020: Artistic, Digital and Political Creation in English-Speaking Countries*, vol.19, no.1, 2021, https://doi.org/10.4000/erea.12822.
- Klarer, Mario. An Introduction to Literary Studies. Routledge, 1999.
- Levin, Orna. "Techno-poetics in Micro-stories of the Digital Age: The case of Alex Epstein." *Digital Scholarship in the Humanities*, vol.35, no.2, 2020, pp.342-352.
- Lyakhovich, A. V. "Emergent Poetry of Northern Nigeria within Digital Space." *Vestnik of Saint Petersburg University. Asian and African Studies*, vol.13, no.4, 2021, pp.484-497.
- Marsden, Gary et al. "Digital Storytelling in Africa." *International Journal of Computing*, vol.9, 2010, pp.257-265.
- Marwah, Hanaan. "Who's Got the Power? The Electrification of Africa." *The History of African Development*, 2016. www.aehnetwork.org/textbook/
- Onuoha, Onyekachi Peter. African digital prose. Ebony Books and Kreations, 2020.
- Onuoha, Onyekachi Peter. Literary hereditary and variation in selected Facebook poems of Veralyn Chinenye and her collaborative authors. *International Journal of Pedagogy Innovation and New Technologies*, vol.5, no.1, 2018, pp.58-68.
- Opoku-Agyemang, Kwabena. Beyond Oral/Digital: Ghanaian Electronic Literature as a Paradigm for African Digital Textuality. 2017. West Virginia University. Dissertation. .
- Opoku-Agyemang, Kwabena. "Flash Fiction Ghana, African digital literature, and imagining domestic relationship." *Postcolonial Text*, vol.15, nos.3 & 4, 2020, pp.1-18.

- Pawlicka, Urszula. "Towards a History of Electronic Literature." CLCWeb: Comparative Literature and Culture, vol.16, no.5, 2014. https://doi.org/10.7771/1481-4374.2619
- Pressman, Jessica. "Machine Poetics and Reading Machines: William Poundstone's Electronic Literature and Bob Brown's Readies". *American Literary History*, vo.23, no.4, 2011, pp.767-794.
- Reed, Amber & Hill, Amy. "Don't Keep it to Yourself": Digital Storytelling with South African youth." *International Journal of Media, Technology and Lifelong Learning*, vol.6, no.2, 2010, p.268-279.
- Reitmaier, Thomas, Bidwell, Nicola, & Marsden, Gary. "Situating Digital Storytelling within African Communities." *International Journal of Human-Computer Studies*, vol.69, no.10, 2011, pp.658-668.
- Rowberry, Simon. "The Rise of Electronic Literature". Continuous, not Discrete: The Mutual Influence of Digital and Physical Literature." *Convergence*, vol.26, no.2, 2018, pp.319-332.
- Saintsbury, George. *A short history of French literature*. At the Clarendon Press, 4th Edition, 1892.
- Stefans, Briam Kim. Fashionable Poise on Digital Poetics. Atelos, 2003.
- Stein, Kelvin. Poetry's Afterlife: Verse in the Digital Age. The University of Michigan Press, 2010.
- Suhr-Syfsma, Nathan. "Reading for Lyric in the African Digital Litmag." *Social Dynamics: A Journal of African Studies*, 2021. Do1:10.1080/02533952.2021.1958306.
- Sykes, Pam. *Digital Storytelling and the Production of the Personal in Lwandle*, 2019. University of the Western Cape. Dissertation.
- Szczesna, Eva. "The Semiotics of Cyberculture: The example of Artistic Discourse." *Kultura I Spoleczentwo* tome 63, no.3, 2019, pp.45-62.
- Uimonen, Paula. "Muse and Power: African Women Writers and Digital Infrastructure in World Literature." *Anthropology and Humanism*, vol.44, no.1, 2019, 20-37.
- Waliya, Yohanna J. "Digital Activism and 'Botification' of Janusz Korczak's Concepts in 'Twitterature, edited by A. Odrowaz-Coates, *What Would Korczak do? Reflection on Education, Wellbeing and Children's Rights in the Times of COVID-19 Pandemic*, The Maria Grzegorzewska University, 2020, pp21-40.
- Waliya, Yohanna Joseph and Alexander. MAELD & ADELD. Africanelit.org 2021. https://africanelit.org
- Wolf, Mark. J. P. "Genre and the Video Game", edited by Mark. J. P Wolf, *The medium of the video game*. University of Texas Press, 2000.
- Yeku, James. "Deference to Paper: Textuality, Materiality, and Literary Digital Humanities in Africa." *Digital Studies/Le Champ numérique*, vol.10, no.1, 15, 2020, pp.1-27.
- Younis, Eman. "Rhetoric in Visual Arabic Poetry: From the Mamluk Period to the Digital Age." *Texto Digital*, vo.11, no.1, 2015, pp.118-145.

Important webography

https://www.eliterature.org https://itweb.africa/terms https://www.wikipedia.org

Short Bio

Richard Ajah is a professor of French, Francophone African literature, cultural studies and digital humanities at the Department of Foreign Languages, University of Uyo, Uyo, Nigeria. where he graduated with *First Class* and with several academic awards as the *Best-Graduating Student and University Valedictorian* in 2004 Convocation Ceremony. He obtained *M.A degree with distinction* and a **Doctorate** from the University of Ibadan as *Education Trust Funds (ETF) Scholar*. He has been Keynote Speaker, Lead-paper Presenter and Resource Person in professional and Academic gatherings. Prof. Richard Ajah has been involved in the organization of Lagos Summer School in Digital Humanities (LSSDH), University of Lagos, Nigeria. He was an executive member of *Global Outlook: Digital Humanities, Canada* and he is the National Treasurer, *Digital Humanities Association of Nigeria (DHAN)* and *Coordinator, Digital Humanities Unit of the Faculty of Arts (DHuFArt), University of Uyo, being part of African and Nigerian DH community*. His DH scholarship has been in the area of computer-assisted literary analysis (CALA) in African literature.



Multilingual African Digital Semiotics & E-lit Journal (MADSEJ) licensed under CC BY 4.0 Deed