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# EDITORIAL: Digital Automation in Language, Translation and Cultural Studies

The *Multilingual African Digital Semiotics and E-Lit Journal* (MADSEJ) presents Volume 2, Issue 2 (2025), with contributions that explore the evolving relationships between digital technologies, language, cultural representation and knowledge production in African societies. This issue brings together research on smartphone-supported language learning, digital translation in Nigeria, and the algorithmic visibility of Francophone African cultural heritage. Although these contributions address different subjects and adopt distinct methodological approaches, they share a concern with the ways digital environments transform linguistic practices, cultural expression and access to knowledge in the era of digital and post-digital revolution.

MADSEJ is committed to spearheading interdisciplinary scholarship at the intersections of African electronic literature, digital culture, semiotics, Digital Humanities, computational approaches to language and literature, and emerging technological practices. Within this intellectual framework, the present issue considers digital transformation not merely as the introduction of new tools, but as a process that raises important questions about representation, participation, linguistic diversity, cultural memory and the circulation of African knowledge. Its contributions demonstrate the relevance of examining digital technologies through locally grounded perspectives and critical approaches to their social and cultural implications.

Alhassan and Danko, both of the Shehu Shagari College of Education, Sokoto, present the use of smartphone to teach oral production of French language to the Hausa speakers. Their article titled *Le smartphone au service de la production orale en FLE: une approche actionnelle auprès d'apprenants haoussaphones du Shehu Shagari College of Education de Sokoto*, grounded in the action-oriented approach of the Common European Framework of Reference for Languages (CEFR), the study adopts a quantitative comparative design involving 90 learners divided equally into experimental and control groups. Oral production is assessed through fluency, pronunciation and intelligibility, lexical resources, grammatical accuracy, task achievement and interaction. The results indicate a mean improvement of 5.04 points out of 25 in the experimental group, compared with 2.04 points in the control group, with a statistically significant difference ($p < .001$). The study contributes to discussions on mobile-assisted language learning and the pedagogical uses of digital devices in multilingual educational environments. Research on mobile-assisted language learning similarly identifies the potential of mobile technologies to support speaking proficiency and pronunciation development (Li 2-3; Metruk 16259). The authors, however, appropriately recognise that the independent effect of smartphone technology cannot be separated from the pedagogical activities incorporated into the intervention. This qualification is important because it locates technological effectiveness within the broader relationship between digital tools, instructional design and learner participation. In this study, the authors have proven to us that smartphones provide the students with affordances of learning not tools of distractions and addictions.

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Muhammad and Olowoloba equally explore digitality for translation of Nigerian languages local. In their work captioned *La Traduction à l'ère du numérique au Nigeria: enjeux et contributions au développement socioculturel et économique***,** they investigate the contribution of digital translation to sociocultural inclusion and economic communication in Nigeria. Drawing on Christiane Nord's functionalist approach, which understands translation as a purposeful activity shaped by the communicative needs of particular linguistic communities, the study adopts a qualitative and documentary methodology. It examines digital translation, machine translation, low-resource languages and localisation. The authors argue that digital translation can facilitate access to information, ameliorate the visibility of Nigerian languages and enhance communication in digital economic activities. Its analysis also identifies important conditions for achieving these possibilities, including the availability of linguistic resources, the suitability of technological tools, community participation and the needs of target audiences. These concerns resonate with research on machine translation for Nigerian languages, which highlights the persistent challenges associated with limited linguistic resources and the development of multilingual technologies especially local language models N-Atlas, IgboBERT, etc (Nwafor and Andy 648; Nwafor and Nguyen 44-53). By bringing translation into discussions of digital inclusion and development, the article underscores the importance of linguistic accessibility in the construction of more inclusive digital environments. It also acknowledges that establishing the direct economic effects of digital translation requires further empirical investigation.

As for Chimene-Wali and Ayibakuro, their paper discusses beyond languages and translation to understudy the algorithmic oppressions and the conditions under which African cultural heritage becomes visible, marginalised or forgotten within digital platforms. The paper introduces *algorithmic amnesia* to describe the processes through which digital systems may render African cultural materials, particularly those associated with Francophone Africa, less visible or accessible. Drawing on critical algorithm studies, postcolonial theory and pragmatics, the authors investigate linguistic bias, data asymmetry and content moderation through case studies involving music discoverability, oral tradition preservation and search engine representation. They further propose *pragmatic sovereignty* as a framework for resistance, considering community-led data practices, locally grounded artificial intelligence systems and policy advocacy. This contribution engages directly with debates in Digital Humanities and digital semiotics by questioning how algorithms and platform infrastructures influence cultural representation and the circulation of knowledge. Research on algorithmic power and African indigenous languages has similarly drawn attention to unequal linguistic visibility within global digital environments (Chonka et al.). The article therefore invites critical consideration of the conditions under which African cultural heritage is represented, discovered, preserved and transmitted through contemporary digital systems.

Considered together, these contributions reveal three interconnected dimensions of Africa's digital transformation. The first addresses the pedagogical possibilities of mobile technologies in language education; the second examines the role of digital translation in multilingual communication and inclusion; and the third interrogates the algorithmic structures that shape the visibility of cultural heritage. Their convergence lies in the recognition that digital technologies do not operate independently of language, culture and society. Rather, they participate in the organisation of communication, the production of knowledge and the conditions through which individuals and communities engage with digital environments.

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This convergence is particularly significant for African Digital Humanities. The development of digital resources, language technologies, electronic platforms and computational methods creates new possibilities for documenting, analysing and circulating African cultural and linguistic materials. At the same time, it raises questions about whose languages are represented, whose cultural expressions become discoverable, what forms of knowledge are prioritised, and how communities participate in the construction of digital infrastructures. The challenge is therefore not simply to increase technological adoption, but to develop critical and context-sensitive approaches that recognise Africa's linguistic plurality and cultural specificity.

The contributions in this issue also reinforce the importance of methodological transparency and responsible scholarly interpretation. Quantitative assessment, documentary research and critical analysis of algorithmic systems offer different ways of investigating digital transformation. However, the strength of their conclusions depends on the quality of their evidence, the clarity of their analytical procedures and their recognition of methodological limitations. Such rigour remains essential to the development of credible and sustainable scholarship in Digital Humanities and related fields.

For MADSEJ, the questions raised by these studies extend beyond the immediate subjects of language teaching, translation and cultural heritage. They speak to the broader intellectual responsibility of African scholarship to document, interpret and critically engage with the transformations affecting contemporary knowledge systems. They also reaffirm the importance of interdisciplinary research that brings together linguistics, literary and cultural studies, translation, communication, computational methods and digital technologies.

As digital platforms and artificial intelligence continue to influence the production and circulation of knowledge, African researchers must remain active participants in shaping the conceptual, technological and ethical frameworks through which these developments are understood. The preservation of linguistic diversity, the visibility of African cultural expressions and the equitable participation of communities in digital knowledge production are essential dimensions of this endeavour. In this regard, Digital Humanities should not be understood solely as the application of computational tools to humanistic inquiry, but also as a critical space for examining how digital systems transform cultural memory, interpretation and representation.

We express our sincere appreciation to the authors whose contributions make this issue possible, as well as to the anonymous reviewers whose scholarly assessments support the journal's commitment to academic quality. We also acknowledge the editorial team, institutional partners, contributors and readers whose continued engagement sustains MADSEJ as a platform for multilingual and interdisciplinary research.

With the publication of Volume 2, Issue 2 (2025), we reaffirm our commitment to scholarship that investigates African digital cultures, electronic literature, digital semiotics, language technologies and the wider implications of digital transformation. We invite researchers, practitioners and students across Africa and beyond to contribute to these conversations through rigorous, innovative and contextually grounded research.

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We hope that this issue will stimulate further interdisciplinary dialogue and contribute to the development of African-centred approaches to digital knowledge, cultural representation and technological futures.

**[1]Richard Oko Ajah (Editor of MADSEJ)** **[2]Yohanna Joseph Waliya (Co-Editor)**

[1]University of Uyo, Uyo, Nigeria.
[2] The Nigeria French Language Village, Interuniversity Centre for French Studies, Ajara-Badagry, Nigeria.

[1]E-mail: richardajah@uniuyo.edu.ng

[2]E-mail: yohannawaliya@frenchvillage.edu.ng

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## Author's Short Bio

Richard O. Ajah is a Professor of French, African Literature, Cultural Studies, and Digital Humanities in the Department of Foreign Languages, University of Uyo, Nigeria. His scholarly interests encompass African, Maghrebian and comparative literatures, migrant and diasporic writing, digital humanities, and the intersections of literature and technology. He has published widely in scholarly journals and edited volumes and has contributed to research on postcolonial literature, multimodality, technopoetics, and African digital literary studies. He is actively involved in promoting interdisciplinary research that connects literary and cultural studies with emerging digital technologies. He also serves on the editorial board of several academic journals and contributes to the development of Digital Humanities scholarship in Nigeria and Africa. He is the Coordinator of the Digital Humanities Unit of the Faculty of Arts (DHuFARTs), University of Uyo, Nigeria

Yohanna Joseph Waliya is a Nigerian scholar, digital poet, writer, and lecturer whose work lies at the intersection of French literature, electronic literature, and Digital Humanities. He is a PhD candidate in French Literature and Digital Humanities at the University of Lagos and a Lecturer at the Nigeria French Language Village, Badagry. His research explores electronic literature, digital culture, computational creativity, generative poetry, artificial intelligence, and the materiality of algorithms, with particular attention to African digital literary practices. He holds a B.A. in Modern Languages from the University of Calabar and an M.A. in French Literature from Ahmadu Bello University, where his research focused on Twitterature and Twitterbot poetry. He has also received advanced training in AI and Research at the Digital Humanities @ Oxford Summer School (DHOxSS) and Centre for Digital Humanities University of Lagos. Waliya writes creatively in French and English and works across poetry, fiction, drama, and digital media. His scholarly and creative interests include neuro-poetics, interactive literature, social media literature, digital hermeneutics, and emerging forms of computational writing. He is also engaged in initiatives promoting multilingual African electronic literature and digital scholarship via curating MAELD&ADELD. Waliya is the author of the Award-winning digital poetry Climatophosis

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