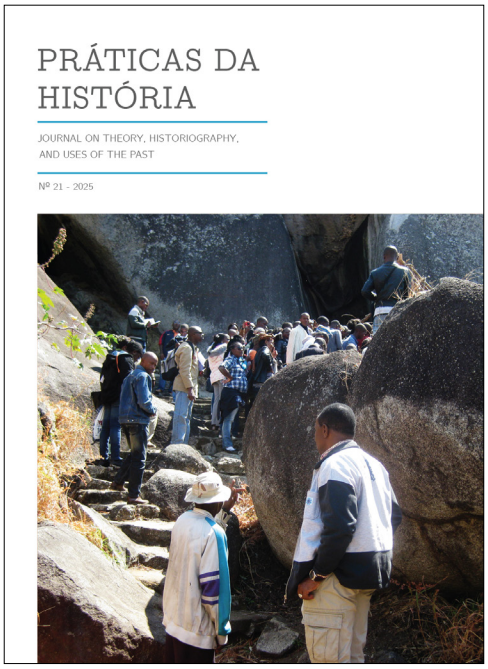


# Cyber GRIOT: From Oral Tradition to Digital Reconstruction

**Gourab Chatterjee and Mukulika Dattagupta**

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## Cyber GRIOT: From Oral Tradition to Digital Reconstruction

Given the absence of scriptural documentation in many African societies, the Enlightenment-era conception of history and oral memory represent distinct, often conflicting epistemological frameworks. While the former relies on verifiable textual records qualified as 'facts', the latter is a subjective realm of personal and communal reconstruction. This interplay exposes the power structures shaping historical narratives and certain identities. The advent of the internet and AI further complicates matters, blurring the relationship between history as a 'recorded past' and memory as an 'undocumented' understanding of chronology. This article examines the digital storytelling program GRIOT, developed by MIT Professor Fox Harrell, to investigate AI-human historiography and the role of memory within this framework — determining whether memory, as captured and modified in digital space, preserves history or reinforces specific ideological narratives.
Keywords: Memory, Oral History, African Literature, Digital Culture, Cyberspace.

## Cyber GRIOT: Da tradição oral à reconstrução digital

Dada a ausência de documentação escrita em muitas sociedades africanas, a conceção da história da era do Iluminismo e a memória oral representam estruturas epistemológicas distintas e, muitas vezes, opostas. Enquanto a primeira se baseia em registos textuais qualificados como "factos", a segunda é um domínio subjetivo de reconstrução pessoal e comunitária. Esta interação questiona o papel da memória e do esquecimento na formação das narrativas históricas e nas estruturas de poder que moldam determinadas identidades. O advento da Internet e da Inteligência Artificial complica esta situação, confundindo a relação entre a história, enquanto "passado registado", e a memória, como compreensão subjetiva "não documentada" do tempo. Este artigo analisa o programa GRIOT, desenvolvido pelo professor do MIT Fox Harrell, para investigar a historiografia IA-humana e o papel da memória neste processo — questionando se a memória, capturada e modificada no espaço digital, preserva a história ou reforça narrativas ideológicas específicas.
Palavras-chave: Memória, História Oral, Literatura africana, Cultura digital, Ciberespaço.

# Cyber GRIOT: From Oral Tradition to Digital Reconstruction

Gourab Chatterjee and Mukulika Dattagupta*

## Introduction

Time, intertwined with textual space, may contribute to the temporal dimension of a narrative in at least three distinct ways: the time that produces the text, the time the text describes, and the time during which the text is consumed. In all these aspects, the temporality of the narrative interacts with its historicity, embedding a complex network of temporal layers within it. Oral verbal arts or orature (a name given by the Ugandan linguist Pio Zirimu), being essentially performative and characterized by its "integration of art forms",[1] as observed by Thiong'o, adds further nuance to this process. Orature appeals to different sensory organs by employing diverse channels of communication and thus creates different formal scopes for the interaction of time within the textual space, which may not be documented in scripts but is reflected in diverse other manifestations. The participatory, collaborative, and fluid nature of orality allows it to serve as a carrier of history embodying its multiple subjectivities and dynamic transformation. Memory plays a significant role in this entire process. Joubert writes:

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1 Ngũgĩ wa Thiong'o, *Penpoints, Gunpoints and Dreams: Toward a Critical Theory of the Arts and the State in Africa* (New York: Clarendon Press, 1998), 117.

> Oral cultures seem ... to use more activity-based knowledge and memory, which they extract largely from their 'performed' lifestyles. Memory, through oral art, represents actively collective experiences: what is memorable to remember in a particular community, and how it will be remembered – indeed, serving as a vehicle in the preservation of the past.[2]

Orality, which manifests itself into diverse forms including oral epics, songs, idiomatic expressions, puzzles, narratives, and so on, and can hardly be reduced to a singular cultural practice, records time through memory. It documents time while simultaneously redefining, reinterpreting, and reorienting temporality, history, and memory in myriad ways. Through the collective effort to narrativize time via performances, orality probes into the subjective understanding of history and genealogy (as it has been used in Foucauldian discourses) and creates a complex network of textuality reflecting and documenting past and contemporary. Orature documents memory not as an individual or personal engagement with time, not something belonging to a distant past, like Aristotle's definition of memory as "time elapsed".[3] Instead, it portrays memory as a communal inheritance, "an active reproduction of the past",[4] akin to Paul Ricœur's interpretation of *anamnesis* in his study of the Aristotelian notion of memory and recollection[5] Once integrated into the art form, this communal and collective memory supplements the grand narrative of history and gets interweaved with the identity of the community. Orature creates an epistemology to archive the beliefs, practices, and worldviews of a community. Akinyemi identified orature as a "vast field of knowledge", "a complex corpus of

2 Annekie Joubert, "History by Word of Mouth: Linking Past and Present through Oral Memory," in *Historical Memory in Africa: Dealing with the Past, Reaching for the Future in an Intercultural Context*, ed. Mamadou Diawara, Bernard C. Lategan and Jörn Rüsen, 27–52 (New York: Berghahn Books, 2010). 29.

3 Richard McKeon, ed., *The Basic Works of Aristotle* (New York: Random House, 1941), 607.

4 Myrian S. Santos, "Memory and Narrative in Social Theory: The Contributions of Jacques Derrida and Walter Benjamin," *Time and Society* 10, no. 2–3 (2001): 169. https://doi.org/10.1177/0961463X01010002.

5 Paul Ricoeur, *Memory, History, Forgetting*, trans. Kathleen Blamey and David Pellauer (Chicago: University of Chicago Press, 2004), 19.

oral arts created to recall, honor, and preserve the past" and "a verbal legacy contributing significantly to cultural and national identity."[6] This complex corpus, inherently intermedial, evolved along with the change in the mode of artistic production and, in the passage of time, incorporated different media, including the use of music CDs by the Alter-Native poets in Nigeria, making performance poetry by poets like Lesego Rampolokeng, and playing kora in music videos by singers such as Toumani Diabaté.

However, the digital turn in the history of orature seemed to add more layers to the practice of orality. The interactive space provided by Web 2.0, where users can generate content, allows it to be compared with orature. Ngugi notices that "[i]n the electronic space, or the virtual space, orality in general and orature in particular are coming back."[7] To him, "[t]he lines between the written and the orally transmitted are being blurred in the age of the internet and cyberspace"[8] as it replicates the performatory and collaborative nature of orature. This new oral space, which Thiong'o termed as 'cyborature', not only altered the traditional understanding of orature but also changed the epistemological landscape as well as the way memory is reconstructed within its textual space. Digital memory which is "not fixed to durable objects, not constrained by the limits of time and place",[9] builds a vast shared space of subjective, personal, and collective lived experiences, digitally documented in various media, accessible from different spatiotemporal locations.

D. Fox Harrell, a professor of Digital Media and Comparative Media Studies at MIT, identifies that this intermedial, collaborative, and shared space of the internet, which resembles orality in general has the potential to "play roles in constructing ideas that we unconsciously accept as true and institutive of reality yet are in fact imaginatively grounded

6 Akintunde Akinyemi, *Orature and Yoruba Riddles* (New York: Palgrave Macmillan, 2016), 1.

7 Ngũgĩ wa Thiong'o, "Notes towards a Performance Theory of Orature." *Performance Research* 12, no. 3 (2007): 7. https://doi.org/10.1080/13528160701771253.

8 Ngũgĩ wa Thiong'o, *Globalectics: Theory and the Politics of Knowing* (New York: Columbia University Press, 2012), 84-85.

9 Abby S. Rumsey, *When We Are No More: How Digital Memory Is Shaping Our Future* (New York: Bloomsbury Publishing, 2016), 160.

constructions based in particular worldviews."[10] In other words, computational media, with the help of artificial intelligence, can re/store and generate a memory-informed epistemological system that reflects a community's behavioral patterns and belief system sedimented (as discussed by Merleau-Ponty in his *Phenomenology of Perception*) through generational practices and rituals. He designed a computer program, namely GRIOT (named after the group of West African historians and storytellers), that integrates narrative, poetry, and games to narrativize history, mostly by taking elements from the creator's subjective understanding of memory, experience, and reality. This program combines the user's phantasmic behavior with the feedback given by Artificial Intelligence to generate verbal expressions. GRIOT was implemented in *Living Liberia Fabric*, "an interactive, web-based narrative supporting the goal of lasting peace after years of civil war (1979-2003)."[11] The narrative used a "West African-based GUI metaphor that arose through a combination of empirical fieldwork and research into cultural needs, values, histories, and aesthetics."[12] This process of creating, restoring, and generating memory in the digital space, not only in collaboration with the community's members but also with the machine, problematizes and complicates the human understanding of memory and history. The primary objective of this article is to look into the way digital space and Artificial Intelligence intervene in the epistemology of memory and how it is invoked in oral performances. It seeks to explore how the place of memory in historiography is redefined in the digital space. It also attempts to find out the ideological groundings of computer programmes and whether they impact the formation of memory, thereby becoming instrumental in altering the historiography.

10 D. F. Harrell, *Phantasmal Media: An Approach to Imagination, Computation, and Expression* (Cambridge: MIT Press, 2013), 29.

11 D. F. Harrell *et al.*, "A Cultural Computing Approach to Interactive Narrative: The Case of the Living Liberia Fabric," in *Computational Models of Narrative: Papers from the AAAI Fall Symposium, November 11–13, 2010, Arlington, Virginia*, ed. Mark Finlayson. Arlington: AAAI Press, 2010), 18.

12 Harrell *et al.*, "A Cultural Computing", 18.

## History and Memory

Aristotle, in his discussion of memory, categorized it into two types: an experience that is involuntarily remembered and one that is actively recalled. Paul Ricœur identified three distinct epistemological phases of historiographical development within this Aristotelian framework of memory: "from the stage of witnessing and of the archives [...] through the usages of 'because' in the figures of explanation and understanding; [to] the scriptural level of the historian's representation of the past."[13] These three stages, as noticed by Ricœur, underscore the narrativizing potential of memory. Bernstein and Loftus write:

> Memory is inherently a reconstructive process, whereby we piece together the past to form a coherent narrative that becomes our autobiography. In the process of reconstructing the past, we color and shape our life's experiences based on what we know about the world.[14]

Memory not only reconstructs past events into often logical historical accounts but also acts as a form of resistance in order to preserve the undocumented, unregistered past, which may have escaped from the grand narrative of history. Wole Soyinka, who states that "[a] people who do not preserve their memory are a people who have forfeited their history",[15] evidently demarcates the boundary between the domain of memory and that of history. These two distinct but interdependent and interrelated epistemological categories are often conjoined together with a process of "forced memorization"[16] to celebrate the historical account, which always reflects the intricate power relations among different social positions that are the driving force behind the

13 Ricœur, *Memory, History, Forgetting*, xvi.

14 Daniel Bernstein and Elizabeth Loftus, "How to Tell If a Particular Memory Is True or False", *Perspectives on Psychological Science* 4, nº 4 (2009), 373.

15 Wole Soyinka, *The Burden of Memory, the Muse of Forgiveness* (London: Oxford University Press, 1999), 58.

16 Ricœur, *Memory, History, Forgetting*, 85.

formation of the 'logical' narrative of history as well as the construction of truth. The historical narrative's claim of truth, which, according to Foucault, is "undoubtedly the sort of error that cannot be refuted because it was hardened into an unalterable form in the long baking process of history",[17] is often challenged by the 'not-so-logical' and subjective understanding of past through memory.

Memory, on the one hand, has the potential to destabilize the coherent and linear narrative of the documented past with its claim of 'objectivity' and 'factual reliability', and on the other hand, it reconstructs the past through its multiple subjectivities, fragmented realities, and suppressed voices. Naubudere observes, "[t]he process of historical memory should therefore contribute towards the re-empowerment of people so that they can face one another in dismantling ideologies of superiority and dominance that lead to conflicts and wars."[18] Thus, suggesting that memory may undermine the discourse that assigns identities to people and provides space for an alternative identity formation and a counter-history that may not align with the dominant voices. In the relationship between memory and history, while the former reflects a representational distance, the latter, by engaging actively in the process of looking back and recollecting, make the past a part of the collective epistemology of the community. Yoruba understanding of memory is always a communal activity which is performative in nature. It emphasizes on the spiritual aspect. The sense of collectivity seems to contradict the western model of understanding memory as an individual's mental act. According to Barber, in Yoruba context memory functions like a text, which a performer needs to grasp before his/her performance.[19] In Ubuntu philosophy too memory is an intersubjective communal repository, celebrating the essence of personhood by acknowledging the presence of beings and their connections with other

17 Michel Foucault, *Language, Counter-Memory, Practice: Selected Essays and Interviews*, ed. Donald F. Bouchard, trans. Donald F. Bouchard and Sherry Simon (New York: Cornell University Press, 1977), 144.

18 Dani W. Nabudere, *Ubuntu Philosophy: Memory and Reconciliation* (Kigali: Centre for Basic Research, 2005), 7.

19 Karin Barber, "Text and Performance in Africa," *Oral Tradition* 20, no. 2 (2005): 272.

persons in the community. As it has been argued by Jewsiewicki and Mudimbe that, collective memory, which "does not signify facts about the past", is "a meaningful configuration of selected, negotiated events around 'sites of memory'."[20] Andreas Huyssen echoes them while he talked about the dynamic nature of collective memory which is "always subject to subtle and not so subtle reconstruction".[21] To him, collective memory can hardly be distinguished from the way the past is inherited by a society and the history is preserved. Its memory "is negotiated in the social body's beliefs and values, rituals and institutions".[22]

The narratives, emerging from collective recollection of past events, thus emerge as a discursive space that embeds the ideologies and values of the community. Orature, as it has been discussed by Ngugi wa Thiong'o, often represents that space.

## 'Orality' and Historiography

'Textuality' is often associated with something that is scripted; in other words, it is printed in form. This particular understanding of 'textuality' seems to place the understanding of 'orality' at the opposite pole, and thus these two terms appear to be contradictory in nature. Often the analytical approach towards the relationship of 'orality' and 'textuality' imbibes this sense of contradiction in it. According to Sen,[23] there are certain markers that showcase this difference in approach. For instance, 'orality' is first associated with the 'verbal art' form and then is understood to be relevant to the pre-literate or even non-literate phases of society. 'Textuality' on the other hand is associated with 'literature', which is scriptable or printable and thus is considered as the creative expression of literate society. Similarly, 'orality' becomes the marker of

20 B. Jewsiewicki, and V. Y. Mudimbe, "Africans' Memories and Contemporary History of Africa," *History and Theory* 32, no. 4 (1993): 10. https://doi.org/10.2307/2505629.

21 Cited in Tim Woods, *African Pasts: Memory and History in African Literatures* (Manchester: Manchester University Press, 2012), 263.

22 Cited in Woods, *African Pasts*, 263.

23 Soumen Sen, "Orality and Beyond," *Jadavpur Journal of Comparative Literature* 43 (2005–2006): 63–72.

backwardness, whereas, 'textuality' turns out to be the marker of advancement. This hints towards the social positionality of 'orality' and 'textuality', which Ngugi wa Thiong'o termed as 'aesthetic feudalism'.[24] These two are different forms of creativity and of aesthetic manifestations of verbal arts. Harrell's work presents a possibility where computational techniques could interact with human experiences and human expressions through language to produce a textual manifestation of artistic expression, also creating a room for intertextuality.

'Orality', which is inherently participatory and characterized by the absence of a singular authorial locus, is frequently problematized as a mode of historiographical documentation, particularly with regard to questions of authenticity, which enjoys a longstanding association with individualized authorial authority; hence 'textuality', as a single-authorial form, is perceived as having a greater claim to authenticity. However, the authorship of 'orality' belong to the entire community. It is the members of the community who are responsible for the survival of 'oral narratives' by passing them down verbally from generation to generation. In 'orality' a story is told and re-told and during this process, additions, omissions, and modifications take place as per the requirement of the time and space. Though this process of telling and re-telling makes an 'oral narrative' liable to changes, but, at the same time, these changes are made not by any single individual, rather these are the changes that are brought in by the community in accordance to the spatiotemporal shifts. It is also the community that endorses these changes in the 'oral narrative'. While this lack of authorship often puts the authenticity of 'orality' under the scanner, it is this particular aspect of 'orality' that problematizes the idea of 'authenticity' itself, thereby revealing 'orality' as a necessary resource for the historiographers to consider while working with the communal history. This lands 'orality' at the very important juncture where it builds a complex relationship with the evidentiary foundation of 'textuality' and contributes to the understanding of the community's history.

24 Thiong'o, *Globalectics*, 61.

The distinctions between 'textuality' and 'orality', according to Sen[25] are arbitrary. She also refers to these demarcations as artificial as they are the result of the impositions made by the ever-changing power dynamics among the communities. Taylor[26] while commenting on the same, said that 'orality' tends to retain the conventional aspects of stories, whereas, 'textuality' engages with different experiments in the literary manifestations of creative expression. In report on the GRIOT system in 2005, Harrell begins with a discussion on the poem generated by the system named "The Girl with Skin of Haints and Seraphs", where the lines seem to vary widely, keeping the theme still quite coherent. Probably it was because of the system that has the capability to return to the central figure, in this case it is the girl with a blended identity that has been fed to it. Thus, this particular poem though sounds improvisational at the same time it also sounds thematically quite unified.[27] Taylor, though, seems to refer to a particular difference as the obvious one, as 'orality' is more concerned with the preservation of the knowledge systems, and 'textuality' has the tendency to keep itself charged with the production of the new content. According to Brooker,[28] as per the conventional understanding of 'orality' seems to be the carrier of the original meaning, whereas, 'textuality' is related to the delayed understanding of the same.

In their work, Blackburn and Ramanujan,[29] while talking about verbal artists, made it quite clear that stories do not emerge individually or singularly from nowhere. The stories always evolve from one another. 'Orality' has this pattern where stories are born from one story and the process continues. The process is also true for 'textuality', where again stories do not exist separately rather, they are connected

25 Sen, "Orality and Beyond".

26 Archer Taylor, "Folklore and the Student of Literature", in The Study of Folklore, ed. Alan Dundes (Englewood Cliffs: Prentice-Hall, 1965).

27 D. Fox Harrell, "Shades of Computational Evocation and Meaning: The GRIOT System and Improvisational Poetry Generation," in *Proceedings of the 6th Digital Arts and Culture Conference* (Copenhagen: IT University of Copenhagen, 2005), 1.

28 Peter Brooker, *A Glossary of Cultural Theory* (London: Bloomsbury, 2003).

29 Stuart H. Blackburn and A. K. Ramanujan, eds., *A Glossary of Cultural Theory* (Berkeley: University of California Press, 1986).

to one another. Thus, at this juncture, it is important to understand and recognize the continuum between the two. From this discussion, it might be derived that 'orality' and 'textuality' are not actually watertight categories, continuously borrowing elements from one another. To understand this relationship, it becomes necessary to acknowledge the dynamic exchange between the two, insofar as texts continually constitute both their own pre-texts and the contextual conditions through which they are understood. The conventional demarcation based on power dynamics between orality and 'textuality' where the former is positioned in a marginal state, and the latter enjoys the hegemonic privileges, must be questioned at this very juncture, as the sense of intertextuality, that comes into being with the dialogue between 'orality' and 'textuality'. Thus, the expanse of intertextuality could be felt at every stratum of the society and its creative expression. Systems like GRIOT are contemporizing the possibilities of intertextuality by percolating within academia and affirming the understanding of digital humanities within its realm.

From the above discussion, it may be derived that a complete rupture in the dialogue between 'orality' and 'textuality' is hardly possible, as these categories are characterized by their interdependence and thus, create a platform of intertextuality. It could be considered that the two often seem to coexist. According to Singer,[30] most of the historians do consider 'orality' as an important medium. They refuse to look upon it as just a reflective memory, rather they tend to put emphasis on the negotiations between the past and the present into which an oral historian often engages in, while passing down a piece of information. Oral narratives could be considered as the reservoirs of human history surviving in various communities as they tend to archive information about the respective community. Oral narratives too, engage in the act of recording and accumulating events relevant to various human activities.

30 Wendy Singer, *Creating Histories: Oral Narrative and the Politics of History-Making* (Delhi: Oxford University Press, 1997).

It is important to note that 'memory' is greatly associated with orality and thus again with the question of 'authenticity'. 'Memory' is also associated with a biased narration, but at the same time, the same association could also be applicable for the written document too, as hegemony at both the power and cultural levels might be at work here as well. Sometimes oral narratives may also respond to any established and conventionally documented history. Thus, oral narratives may be a helpful medium in creating an alternative historiography.

It is important to recognize that historiography is not about archiving past events. Historiography is also about the formation of a society and its cultures. The communities, which lack the scriptural form of documentation, have an extremely strong and robust body of oral narratives, which contributes to their historiographical practices and help them register their past not through writings, but through memorization and narrativization of memories. It could be said that oral narratives participate in the historiography of the 'people's history'. According to Sen,[31] every community has its own history. The failure in recognizing this idea occurs when the understanding of historiography is limited to written documentation, negating the practice of oral documentation. He also adds that 'people's history' is the real history,[32] as it imbibes the lifestyle, religion, socio-political institutions, and economy of a community.

For instance, in the Indian context the term *katha*, which could be translated into English as story, could be used as a medium to develop a better understanding of historiography. It might be said that history is actually the story of the dominant community. Story, on the other hand, seems to give voice to the marginalized. It archives their knowledge systems and creativity. Through stories, these communities set up a dialogue between their past and present. In 'orality' story is not limited to fiction, it expands itself as the narrative of living cultural contexts of the respective community. Stories thus participate in the

31 Sen, "Orality and Beyond".

32 Sen, "Orality and Beyond", 70.

formation of a 'collective memory' of a particular community. 'Collective memory' could act as a powerful medium of historiography. In other words, 'orality', participates in historiography through 'collective memory'.

## Digital Space and Memory

With the advent of various technologies, people have gradually changed their ways of storing memories. This in turn has also had an impact in the way they interact and negotiate with their collective memory. Currently, people depend on and use use digital platforms extensively. These digital spaces have gradually turned into the spaces of collective memory. Digital spaces seem to have changed even the way memories are formed and archived. For obvious reasons, this has an impact on the ways collective memory is studied. According to Yasseri,[33] this intersection between collective memory and digital spaces could have both expected and unexpected outcomes.

Collective memory is often interfered with by authority in order to form a homogenized nation. Across the world, the involvement of the respective governments in shaping the collective memory of the nation is quite noticeable. They often take up projects of memorialization, such as memorials, museums, and so on. This could be seen as an attempt to initiate a dialogue between the national memory and the national past, as they both participate in the formation of the identity of the nation. As it was discussed earlier about the memorialization projects that are often taken up by governments across the globe, tend to archive the events of the human past. This could thus be read as the participation in the negotiation with the socio-political understanding of the politics behind the formation of identity. This also highlights the power dynamics of social representation.[34]

33 Taha Yasseri, Patrick Gildersleve and Lea David, "Collective Memory in the Digital Age," 2022, https://arxiv.org/abs/2207.01042.

34 Jay Winter and Emmanuel Sivan, eds., *War and Remembrance in the Twentieth Century* (Cambridge: Cambridge University Press, 1999).

The advent of information technology and its impact in enhancing the academic interest in collective memory should be recognized at this juncture. Digital spaces often turn into platforms for the formation of cosmopolitan memories. Cosmopolitan memories add to the complexities of social memory. It engages in the continuous process of questioning the memory-based knowledge of the past of the common mass and at the same time becomes a part of the production of memory in digital spaces. Discussion on digital spaces opens up the room to talk about screen memory, a very relevant aspect of digital platforms. Screen memory makes the understanding of social memories more complex in nature. Rothberg's[35] concept of 'multidirectional memory' too seems to be extremely relevant when the discussion about the formation of memories in the digital space takes place. The understanding of the conventional memory in culture has now eventually shifted to the cultures of memory. This shift seems to be a result of the advent of digital spaces that gradually emerged with the rise of advanced information technology. This could also be read as the impact of globalization that has become so very material in every sense again with its engagement with the newly emerged digital spaces. Digital spaces tend to provide room for the development of the concept of collective memory at a global scale.

Digital spaces have not only limited themselves in archiving memory, rather they have evolved as a different knowledge system. It has also created opportunities for revisiting the realms of collective memory and thus redefine collective memory. Digital space facilitates an interaction between the collective memory and the present, as it is also the platform for daily communication among the netizens. When considering netizens' access to digital spaces, it is crucial to recognize that they do not emerge from a single nation or community; rather, they come from diverse locations across the world, entering into dialogue with one another. In doing so, they engage with collective memory in the present moment while simultaneously contributing their own

35 Michael Rothberg, *Multidirectional Memory: Remembering the Holocaust in the Age of Decolonization* (Stanford: Stanford University Press, 2009).

experiences and modes of identification to the evolving understanding of the world around them. This is how 'collective memory' eventually turns itself into a global set of memories. It cannot be ignored that at its initial stages, it was promoted to serve the purposes of the political interests of a few dominant authorities. It was thus used in the formation of the National Identity. This may trigger the sense of hegemony and might also act as the starting point of an etymological understanding of the term cosmopolitan. 'Collective memory' is never neutral, as digital spaces are capable of providing room for the creation of new communities. In the digital spaces, these community members could further be found to be anonymous, though they too contribute in the formation of 'collective memory'. Probably this could be read as the liberalizing aspect of 'collective memory', which is becoming possible in the digital spaces, as the conventional boundaries seem to blur. It could now be derived that 'collective memory', through digital spaces, participates in the mapping of cultures and communities. This process is probably not possible without the use of language. Harrell in his report of 2005 on GRIOT, refers to Gilles Fauconnier and Mark Turner's theory of conceptual bending, which talks about mind spaces and argues that human mind has the tendency to bend concepts from different mental spaces. Mapping is one such aspect of this bending of spaces that could link the connecting elements from these spaces. He adds, "Although concepts are often viewed as packets of meaning, really they arise from connections across multiple meanings that are dynamic and distributed."[36]

Digital spaces have altered the conventional ways of human memory. It seems that human memory is more and more device-based. It no longer exists with its organic essences as it mostly now remains stored in digital spaces, to which a comparatively larger number of people could have access. The way digital spaces are used and to the degree to which humankind uses it, must also be brought under consideration during the discussion. In the current world, it seems that digital spaces

36 Harrell, "Shades of Computational", 2.

have a major impact on human memories. For instance, people nowadays do not tend to memorize phone numbers as they now depend on the digital memory of mobile phones for the same. In classrooms students could hardly be found taking down notes or doing assignments in pen and paper, they rather prefer to record the lecture again in the form of digital memory on their mobile phones and refer to it later on. Digital memory thus seems to act like a virtually omnipresent entity, which is just a click away. 'Collective memory' is now not limited only to telling stories and passing them down verbally from one generation to another generation. The community seems to be getting more and more dependent on digital spaces. The advent of digital spaces has changed the ways in which people learn, think, and memorize and thus, in turn, contribute to the 'collective memory' of the community. As discussed earlier digital spaces have also changed the nature of the human communities and thus have changed the nature of 'collective memory' as well.

## GRIOT, Polypoem and Preservation of Past

D. Fox Harrell, who sought to simulate the phantasms of human beings through computational media, adds another layer to the dynamics between digital memory and human memory. Human memory, which according to Merleau-Ponty oscillates between "conservation" and "construction",[37] is a recollection of the past "which acts no longer but which might act, and will act by inserting itself into a present sensation of which it borrows the vitality".[38] In this way, memory becomes an active agent to experience the world, both in an immediate and personal way ("*erlebnis*") or through the accumulation of knowledge deriving from a collective source ("*erfahrung*"). Bergson argues that "memory and perception become states of the same nature".[39] Phantasm, Harrell defines, is a form of phenomenological understanding of the world, as it has

37 David F. Krell, "Phenomenology of Memory from Husserl to Merleau-Ponty," *Philosophy and Phenomenological Research* 42, no. 4 (1982): 503.

38 Henri Bergson, *Matter and Memory* (New York: Zone Books, 1988), 240.

39 Bergson, *Matter and Memory*, 240.

been shaped by sociocultural experiences. At the beginning of his book on Phantasmal Media, he defined phantasm as

> a particular pervasive kind of imagination, one that encompasses cognitive phenomena including sense of self, metaphor, social categorization, narrative, and poetic thinking. This type of imagination influences almost all our everyday experiences, across diverse domains of experience, including art, entertainment, commerce, culture, and power relationships.[40]

Phantasm is the sense of reality informed by the Bergosian idea of "pure memory", which contributes to the epistemological domain of a community or an individual. However, if this subjective understanding of history with its cultural rootedness is produced in algorithms, and is manifested in interconnected semiological phenomena, replicating the oral performances to rejuvenate a community's past and reshape its identity, it transforms the entire epistemic structure of memory and redefine the space it holds to construct and narrativize historical discourses. Harrell blends the computational media with the human perception in such a way that it "result[s] in phantasms".[41]

GRIOT, the computer program Harrell designed, is named thoughtfully to commemorate the West African oral historians who play an instrumental role in preserving history through orature, even after the fact that it could be "grossly simplified",[42] as the program does not substitute a GRIOT, rather it functions on the basis of an orality-informed logic, and may not play the role a griot performs in the society. However, the cultural texture of the name not only suggests its reliance on memory in the preservation of the past, the way it molds the identity of people, and its role in building a social fabric, but also its preoccupation with the intermedial approaches of oral narratorial art. Harrell argues that certain

40 Harrell, *Phantasmal Media*, ix.

41 Harrell, *Phantasmal Media*, 21.

42 Harrell *et al.*, "A Cultural Computing".

cultural forms are "culturally metamedial", which "are not dependent on any particular medium and thus can be expressed and shared via a range of media, including computational media".[43] The integrative cultural system, according to him, often allows a space where culture combines abstract and representational ideas with material media, and thus gives birth to a complex dialogue between conceptual cultural logics and the specific affordances of the medium through which they are expressed. He defines GRIOT as "a computer program developed as a platform for implementing interactive and generative computational narratives"[44] which can 'generate' polymorphic poems with the help of computational algorithms and user inputs. Polymorphic poems, or polypoems, as Harrell has termed it, is a form of AI-generated poetry that "can have fixed narrative structure," but each time the program is run, "the poem will be generated differently with completely new metaphors, tone, and other forms of figurative language."[45] The polypoem, partially created by the user and partially generated by the machine, may address the subjective location of the person and the cultural nuances of the language.

For processing the user input, GRIOT is designed with a set of epistemologies, a set of media assets, and an event structure machine. While event structure helps the system differentiate between different genres, epistemologies will guide the user in generating the output. Thus, the output, which might take the form of a poem, is designed according to the chosen episteme by the user. However, the system does not merely execute what the user wants. The system is not created to produce result-output as it has been designed by the algorithm of the machine, rather the "Subjective AI", as named by Harrell, *responds* to the prompt. The machine's response is trained with the datasets the system has been fed.

The program of GRIOT was used in a project titled *Living Libera Fabric*, a "computer-based memorial and an interactive narrative",[46]

43 Harrell, *Phantasmal Media*, 209.

44 Harrell *et al.*, "A Cultural Computing".

45 D. Fox. Harrell, "Living Liberia Fabric," MIT Docubase, 2010. https://docubase.mit.edu/project/living-liberia-fabric/.

46 Harrell, *Phantasmal Media*, 99.

done in collaboration with the Truth and Reconciliation Commission (TRC) of Liberia after the end of the Liberian Civil Wars from 1979 to 2003. During this 20-year-long Civil War in Liberia, the country has gone through numerous instances of structured and unstructured violence which not only include the killing of 250,000 people and rape and murder of men and women, but also "economic mismanagement, lawlessness, resource extraction without value addition, rampant corruption, crumbling infrastructure, and deteriorating education and health outcomes".[47] Though the TRC, Al-Jazeera reports, is "the most extreme example of Liberia's 'negative peace'",[48] it is the recommendations made by the TRC, that facilitated Harrell, an external non-Liberian member, to come up with the idea of *Living Liberia Fabric*. However, Harrell's location within the diasporic African-American community gave him a cultural ownership,[49] marked by historical affinities and identifications, that helped him understand the nuances of power dynamics embedded in historical narratives. For this project, his team conducted a survey for one or two years to interact with the war victims from "ethnic groups, including the 'Congo' people in Liberia who were repatriated in Liberia from slavers' ships embarking from Central Africa and from the Caribbean islands",[50] and war memorials to gain a perspective on the historiographical values of the war and how the memorial could be created. They tried to address all the nuances of human understanding of history by studying the phantasms of people and looking at the diversified community relations and ethnic bonds in Liberia.

The home page of the project resembles a West African fabric or a piece of cloth having the motif of flowers containing archival pictures or videos of the civil wars. The project, as stated by Harrell, is a "dynamic document that can be explored at multiple levels".[51] The user,

47 Robtel N. Pailey and Aaron Weah, "Liberia Has Suffered 20 Years of 'Negative Peace'. It's Time for Change," *Al Jazeera*, 17-08-2023, https://www.aljazeera.com/opinions/2023/8/17/liberia-has-suffered-20-years-of-negative-peace-its-time-for-change.

48 Pailey and Weah 2023, "Liberia Has Suffered".

49 Harrell, *Phantasmal Media*, 219-220.

50 Harrell, *Phantasmal Media*, 218.

51 Harrell, *Phantasmal Media*, 103.

or the member of the project, who has experienced the wars in various ways, gave different inputs, navigated through different spaces on the page, and participated in the construction of the narratives of the civil wars. The webpage says that the project "uses an artificial intelligence (AI) system to explore how multiple narratives can be integrated into a single storytelling project"[52] and create stories that are customized and different for different users. Since it is a multimedia platform, it uses audio, visuals, and languages to create the narratives. The polymorphic poems were a part of the narratives that were created through the data and keywords received from the user, according to his or her own subjective understanding, or phantasm, as Harrell would like to call it. As a symbolic-AI system, GRIOT operationalizes structured representations of culturally situated identity, following an intentional, inspectable, and theoretically grounded approach different from the deep learning systems, not only in terms of technology, but also, in terms of the transparency of the data which is used. GRIOT does not simulate human comprehensibility and reproduce orality, rather functions on the logic of oral storytelling techniques and with the algorithmic support, it produces the desired result. Harrell modified his system in such a way that it can allow a person to assert his/her subjective restructuring of the world. He writes:

> The expressive function of phantasms, those blends of cultural ideas and sensory imagination that the computer can so effectively conjure, is not restricted to purely aesthetic dimensions. More substantively, phantasmal media can express and construct the types of meaning central to the human condition.[53]

Harrell wanted to construct the system of GRIOT in tandem with Ngugi's reflections on orature. To him, the "elements of performance as described by Ngugi are also central in many forms of subjective

52 Harrell, "Living Liberia Fabric".

53 Harrell, *Phantasmal Media*, xv.

computing with their virtual worlds, procedurality, and user-machine interaction".[54] He enlists five characteristics of the program which may relate this to the collaborative, participatory, performatory, and holistic experience of orature. To him,

> (1) The basis in cognitive semantics allows for a systematic approach to culture that admits concerns such as orature into my computational practice.
>
> (2) The architecture allows computational narrative authors to enable subjective content generation and improvisational, collaborative relationships with the audience/users.
>
> (3) Interaction with polymorphic poetry is structured as call and response interaction as opposed to command execution.
>
> (4) Polymorphic poetry implemented in GRIOT addresses issues related to African diasporic orature and relies upon thematic ontologies in which questions explicitly related to the African diasporic contexts are raised.
>
> (5) Oral performance has been central to polymorphic poetry execution and performative deployment has been theorized as one of four levels of using GRIOT.[55]

Modelling the improvisational dynamics of orature in cyberspace, the ways Harrell enlists them, with its audience-generated participatory narratives, GRIOT alters the historiographical mode in which memory in an oral community function. Instead of replacing a griot, GRIOT declares its own subjective position, while allowing other subjectivities to be incorporated and thereby replicates the collaborative space orature offers. This cyboratory project combining human agency of memory and forgetfulness, with a machine-made framework of people's perception of history, shifts the way memory and identity have

54 Harrell *et al.*, "A Cultural Computing".
55 Harrell *et al.*, "A Cultural Computing".

been forged in historiographical accounts. Orature-informed history, like other semiological systems, is a narrative full of ruptures. It reflects a web of power relations among different socio-cultural positions, where memory functions not only through speeches but also through silences. The history of collective trauma, which is essentially referential and "not fully perceived as it occurs" or "can be grasped only in the very inaccessibility of its occurrence",[56] is marked by its departure. This departure underscores how the inaccessibility of collective trauma complicates its transformation into a historical account. The process becomes even more intricate when it is mediated by the dynamics of human-machine interactions. The traumatic memories of the Civil Wars, which could have produced a historical account of the collective sufferings of the war, are instead contested by the nuanced presence of both human and a non-human entity. This dual agency adds complexity to the process of not only remembering the past but also the associated activities related to the act of remembrance, which include orature and its contribution to the formation of identity.

## Conclusion

In Sembene Ousman's *White Genesis*, the low-born griot, Dethye Law, says,

> I know my place in our community. However, one thing is certain. When it is the question of speaking the truth, or seeking it, there is no *nawle* ['peers' in Wolof]. It is a known fact that many of my caste have been murdered in the cause of truth. ... Nowadays people do not conduct themselves in this way. But truth belongs to all times, and will do so even after we are dead.[57]

His speech elucidates the role of griots in West African communities. In an oral community, where speech is held with utmost importance and

56 Cathy Caruth, "Unclaimed Experience: Trauma and the Possibility of History," *Yale French Studies* 79 (Literature and the Ethical Question) (1991): 187.

57 Ousmane Sembene, *The Money-Order with White Genesis* (London: Heinemann, 1972), 43.

possesses the gravity of unquestionable authority, any attempt to preserve the past, even though recalling it, whenever uttered, is synonymous with the notion of truth. Oral utterances in a community that relied on speech, are for "not to give pleasure, but to impress on their hearers the meaning of duty and dignity".[58] Harrell wants to make his GRIOT perform a similar task in post-war Liberia in forging a community tie among war survivors by building narratives with the agenda of survival and reconciliation.[59] Nevertheless, the Subjective AI's intervention in the memory (or *anamnesis*, which Aristotle talked about to discuss the creative and active nature of memory) to create the narrative of war, with its ideological footing, has the potential to redefine orature's association with truth in narratives. It records a past, which is not only seen and experienced by people but also modified and interjected by the machine, through its complex algorithms designed to comprehend human memory and perception and respond accordingly. Along with the alteration in the archiving of memory, GRIOT may also raise certain questions regarding social function, community values, and the accessibility of the narratives. Although Liberians do participate in digital spaces through various media, in a society, where even in 2023, "75%-80% of Liberians are "offline," and "unable to benefit from the digital economy and with limited access to higher quality education, healthcare, and financial resources",[60] a historiographical account made by a Cyber GRIOT may always represent a lopsided version of the 'collective memory' of the civil war. However, though GRIOT's orature-informed model and its social role in weaving community ties differs greatly in the context of algorithmic reproduction, the language it uses, and the neoliberal economic forces it reflects, it has an immense potential to change the human memory scape in building culturally loaded narratives to document history, through its complex algorithms designed to comprehend human memory and perception and respond accordingly.

58 Sembene, *The Money-Order*, 43.

59 Harrell, *Phantasmal Media*, 103.

60 Light Reading, "Building a Network Bridge Over the Digital Divide in Liberia," 2024, https://www.lightreading.com/digital-transformation/building-a-network-bridge-over-the-digital-divide-in-liberia.

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