
# A Journey through the *Unity Atlantic Rhythm Map*

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## Abstract

The *Unity Atlantic Rhythm Map* is a digital archive prototype that visually unites Afro-diasporic intangible heritage in performances by American, Caribbean and African culture-bearers (mostly emigrés) – and related media from their homelands and the wider diaspora. Watch the 82 second Teaser video (Molloy 2024b).

In the Unity Map, rhythm refers to music and dance interchangeably and as one, as in West African griot cultures (Traore 2020; Comtet 2012; Molloy 2021). As this journal edition considers Africaneity through Caribbean dance, I share my rhythm mapping process. This reveals living African rhythms and historic population flows that make the Caribbean a major hub of Afro-diasporic dance knowledge circulation. Find my browser-based application – the *Unity Atlantic Rhythm Map* – open access online. Or take a 3-minute video tour of the Unity Map in English (Molloy 2025b) or French (Molloy 2025a).

The Unity Map offers an audiovisual journey through circles of past, present, and future social dance – dances we carry in muscle memory, as observed by Katrina Hazzard-Donald in her book *Jookin'* (1990). The Unity Map curates archival, dance community and social media sources as well as official video channels by iconic artists. Any reliable, ethical source that illustrates real-time dance-drum synchrony, rhythm-coded vocabulary, imagery, formation and steps with black representation

https://doi.org/10.3998/conversations.8517 

and expertise, will be considered for the Map. Methodologies include videodance and multimedia ethnography. A unifying theory is rhythm code as ritual of social, collective identity and individual expression.

Map data is organised by recognising rhythm as a unit of embodied collective knowledge, encoded in dance, sound and image. Ancestral rhythm-coded ritual and improvisation emerge as a generative epistemology of Africana memory, identity and belonging. Mapped as a dynamic constellation of knowledge, rhythm iterations illustrate diverse black experiences through local imagery.

**Explore the Unity Atlantic Rhythm Map**: **https://unityatlantic.org/**

Best on tablet or computer with wifi and speakers/headphones. Known bugs: iPhone errors in Map display. URL must be https not http.

A subset of rhythm media is available via Nakala, an open access research repository also cited in the Unity Map modal window text tabs. Making Unity Map data independently citable offers an alternative channel in case the Map interface fails on a given device or on a given day.

The Map is decolonial in that it turns towards indigenous knowledge, prioritizing rhythm-based codes of identity over nation-state identity. Slavery made Black Atlantic identity culturally stateless. Nation states historically and periodically exclude or marginalize Afrodescendant peoples and our cultures. The Map offers a unifying Black Atlantic identity narrative that honours our historic trauma, our globally influential rhythm heritage, and our linguistic diversity. While research and data entry continues, the Map already offers a unique resource for comparing ancestral dances of West Africa with Black dances of the Americas.

The *Unity Atlantic Rhythm Map* is an expression of my Afro-Caribbean American identity, shaped by a social dance practice spanning many codes, countries and collaborations with Afrodescendant culture-bearers. The Map centres real-time drum-dance synchrony, Black representation, virtuoso artists and high production values. The Map's functional longevity depends on software maintenance – so new funding and collaborations need to follow the successful Project

Manifest co-production. This article reaches out to funders, curators and dance scholars interested in a Map collaboration or simply in sharing data sources.

**Keywords:** Africana, social, code, tresillo, trauma

## Introduction

What rhythms survived the Transatlantic slave trade and how did they manifest, syncretize and create the future of music in the Caribbean and worldwide? There are two main threads in this article: my dance practice-as-research; and the rhythm widely known as Tresillo or 3+3+2 – a syncopated rhythm from West Africa diversified in rituals and popular dances throughout the Caribbean and beyond.

The *Unity Atlantic Rhythm Map* is a collection of Black Atlantic dances that honors the cultural diversity of African and Afro-diasporic peoples. The map celebrates the unity of social dance, music and imagery in Black Atlantic cultures as a shared intangible heritage, resilient throughout the shared historic trauma of slavery and colonization. The white points represent the origin place of each rhythm code and symbolize ancestral knowledge, always with us, like the stars, past, present and future. If the origin place of a rhythm is unknown, the origin place of an ethnographic informant may be used.

This article centres Afro-Caribbean dance lineages revealed through rhythm mapping, in response to the theme of this issue. Please peruse the browser-based application – the *Unity Atlantic RhythmMap* – open access online. Or take the 3-minute video tour of the Unity Map in English embedded below (D.C. Molloy 2025b) or French (D.C. Molloy 2025a).

When white dots appear on the continents, the Map is ready to use. Click on a white point to see a rhythm code. Each rhythm code is the parent of rhythms. Rhythm is represented in text, audio, video or all three. Click on a pink arrow to see or hear a rhythm. Unmute (speaker


*Dive into the Unity Atlantic Rhythm Map: https://unityatlantic.org/ Experience optimised for tablet or computer with wifi and speakers/headphones. Known bugs: iPhone errors in Map display. URL must be https not http.*

icon) to hear sound for each video. There are up to six videos with each data point. As you can see in Figure 1, each video window opens with a text tab (at the top). Click on the text tab icon for video credits along with cultural and contextual information for each rhythm, as it becomes available. The Unity Map uses original ethnographic videos, archival and social media videos, but we cannot use video content from Instagram or Facebook. Click on the [**X**] in the modal window corner or anywhere on the map to close the video.

A subset of rhythm media is available via the Nakala open access research repository as permalinks, also cited in the Unity Map modal window text tabs, including a dataset that I manage for Baara Niogonya (Bourget and Sidibé 2025), my field recordings, and videodance ethnography (Molloy 2024b).

Through my audiovisual data curation, the Caribbean emerges as the centre of a circulatory system of popular music and dance. Through dance cartography (Figures 2 and 3) I expand Matt Sakakeeny's (2011) theory of New Orleans music as a circulatory system. Is the resonance of Sakakeeny's theory to my drawings of rhythm code transmission over slave route maps, a reflection of micro-macro dynamics of inter-diasporic knowledge flows?

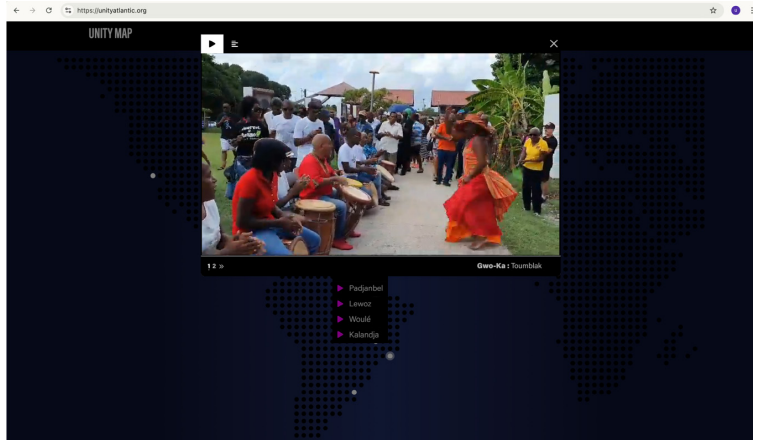


*Figure 1: Unity Atlantic Rhythm Map screenshot, interactive design and data curation by Deirdre Molloy (2024). Full interactive Map Credits are online and at end of this document. Toumblak rhythm video still is from Hommage à Carnot: dancer: Raymonde Pater-Torin (Andre Jean Vidal 2023)*

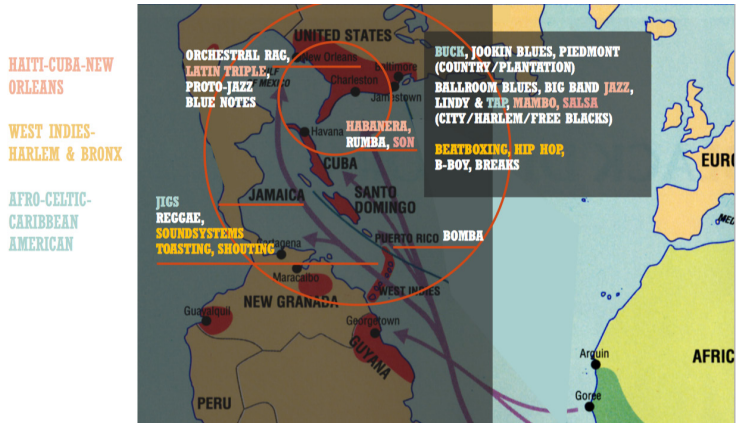


*Figure 2: 'Circulations: telescoping time and space' to show inter-diasporic influences. (D. Molloy 2021) Rhythm diagram by Molloy over a map by Chaliand et al (1995) titled "La traite négrière (XVIIe-XVIIIe siècles") that shows African enslaved populations in red, and slave routes in purple lines/arrows. I added red circles to indicate migrations mainly from the southern Caribbean towards America, linking regions of anglo- celtic- franco- or hispano-creolization and rhythms. Connections of American tap through the Caribbean to Celtic dance informed by Irish dance training in 'The Priest and his Boots', readings of Stearns and Stearns 1994; Gleeson 2001; Hill CV 2009. Caribbean roots of Hip Hop source: Nelson (2012). Base map retouched and reproduced with permission.*

To scale the vast topics of African diaspora culture and colonialism first into a Masters dissertation and now a doctoral thesis, autoethnography is used to frame this research. The *Unity Atlantic Rhythm Map* and its iterations flow from my research question: *How does the research/practice of African diaspora aesthetics across space-time shape and consciously inform (my) dance expression and (micro/macro) identity?*

I define identity as *the stories we tell about ourselves, and the stories others tell about us*. The editors of this issue invite us to consider 'Africaneity' or 'Blackness' through a Caribbean dance lens. Here, instead of those terms, I use the non-essentialising adjective 'Africana', or I use 'Africanist' after Brenda Dixon-Gottschild to refer to cultural production:

> The term "Africanist"… indicates the African influence, past and present, and those forms and forces that arose as products of the African diaspora, including traditions and genres such as blues, jazz, rhythm and blues, and hip hop. (Gottschild 1996: 9)

Mainly though, the adjective-noun 'Black Atlantic' is used, after Robert Farris-Thompson (1983), as it centres African cultural survivals circulated by the Transatlantic slave trade. In their *Atlas of the Transatlantic Slave Trade,* Eltis and Richardson map the transformation of the Caribbean, as Europeans imported Africans to replace the decimated indigenous peoples.

> Brazil and the Caribbean formed the very heart of the Atlantic Slave System, attracting some 90 percent of all the slaves imported from Africa… the production of sugar dominated the economies of both regions… (Eltis et al, 2010: xix)

Work-to-death conditions demanded a continuous flow of Africans into the Caribbean (Tadman 2000, Eltis *et al.* 2010). Here, I follow Eltis et al. in citing Thomas Clarkson's essay on Atlantic slavery that was honoured with a prize at the University of Cambridge in 1785:

> The wretched Africans … are conveyed to the plantations, and are put to their respective work … Calculations are accordingly made upon their lives. It is conjectured, that if three in four survive what is called the seasoning, the bargain is highly favourable. This seasoning is said to expire, when the two first years of their servitude are completed…
> (Clarkson and Lofft 1788, 104)

Describing the Haitian population at the time of their revolution against French slavery, historian Charles Forsdick states that up to 90% were enslaved and that:

> Among the slaves... the majority were born in Africa. The sugar plantation industry in Saint-Domingue was so deadly that mortality rates were extremely high, leading to constant imports. By the end of the 18th century, this amounted to around 40,000 per year. Many of those who arrived died within the first year. The majority of the population are Africans... who bring with them a wealth of culture, but many very diverse cultures, and among them the majority come from Central Africa.
> (Donat et al. 2023, 19:20.)

The fact that 40% of all enslaved Africans landed in the Caribbean (Harris/UNESCO 2006) explains the many African cultural continuities, some preserved in Maroon (escaped) communities. Mapping makes visible also the Afro-Caribbean influence on North America, where only 10% of enslaved Africans disembarked. The Unity Map also includes Euro-colonial dance names such as mazurka and jig, as they are expressed in Africanized forms locally considered black 'folk' traditions. The slave route map in Figure 2 (Chaliand et al. 1995) overlaps with the work of Eltis et al. (2010) in highlighting the importance of the Caribbean.

As the economics of sugar made African lives disposable and Europeans were seriously outnumbered in the Caribbean, the enslavers

exercized their power as a reign of terror (Donat et al. 2023, Fuentes 2016). The Unity Map reveals that amid racist terror, to paraphrase the poet Audrey Lorde, dance is not a luxury, but a necessity of spiritual and social resilience. Is the growing consciousness of shared historic trauma and shared intangible heritage a potential source of a unified Black Atlantic identity? From the unity of music, dance and imagery in Black Atlantic social dance comes a dream of diasporic unity and the artist's name born with this digital map: Unity Atlantic.

In 2021, I began to record Black Atlantic dance culture-bearer interviews, published on my Masters research website: decodenoir.org (Molloy 2021; 2021). While Euro-colonialism has fractured and dispersed West African indigenous peoples across various nation-states, by interviewing *djembefola* Karamoko 'Kako' Kone, I learnt that pre-colonial identity can transcend Euro-colonial borders (Molloy 2024d). Kone advised against labelling rhythms by country, identifying them instead with African indigenous empires and language groups. This insight allows me to visually organise rhythms into meaningful ancestral, indigenous or social regions without getting tangled in the Euro-colonial frontiers that dominate Africa's political landscape since the 1880s. A decolonial vision of rhythm codes as intangible heritage emerges. Practicing dance accompanied by *djembefola*s (literally 'drum speakers') and recording with them, is a journey into oral-kinetic codes. Speech that empowers Western elites by becoming text, is synonymous with rhythm in Malinke. According to my Songhai friend Mansour Maïga from Ivory Coast, currently writing his PhD on Cheikh Anta Diop, '*foli*' translates as rhythm, the beating of drums, speech or communication.

In my 2021 interview series, Guyanese breaker Bibiw distinguished between the 'codes' of Hip Hop and Dancehall. Blues dance culture-bearer Damon Stone mentioned code-switching. Kone also spoke of 'codes' only available to initiates of his ancestral caste of metalsmiths. (Molloy 2021). This data led me to theorize Black Atlantic identity as encoded in rhythm, or 'rhythm codes'. A scientific premise of my *Black Atlantic Space-Time* art series is

that rhythm codes are transmitted through muscle memory – also known also as procedural memory (eg: Knowlton and Schorn 2024). Evidence of the resilience of muscle memory in music comes from the discipline of neurology, most memorably in the case studies of Oliver Sacks (2015; 2007). My rhythm code theory is also informed by 'common knowledge' theory (Chwe 2013), axiology theory (Nichols 1974) and trauma psychology (Fanon 1952; Bradshaw 1988; Leary 2005). 'Rhythm code' is defined here as the embodied knowledge you need to access belonging. 'Rhythm' refers to music and dance interchangeably and as one.

Applying this theory of rhythm codes to ethnographic data allows me to curate four hundred-plus years of rhythm heritage and innovation in a multimedia space-time map. The rhythms are connected by geographic, demographic, musicological, choreographic and ethnographic data into a non-linear digital narrative. The Black Atlantic identity narrative revealed by rhythm mapping is neither monolithic nor essentialist. Rhythms mapped in the Vector Preview (see Figure 3) and online at unityatlantic.org offer a multilingual, inter-arts and Afrofuturist identity, unified by esthetics and historic trauma.

The Unity Map Vector Preview 2025.10 in Figure 3 shows rhythm mapping in progress. Visiting Ivory Coast in 2025, I trained with Geré dancer Léa, and Gurò drummers Mr Bongo and Bernard Dardie. I drafted an ethnic map of Ivory Coast with their help and with Bété dancer Andrienne Broh Zokou. The Jamaica map entry on Figure 3 distills rhythms from a 10-hour BBC radio series by reggae poet Linton Kwesi Johnson. Figure 3 reveals that Geré, a Jamaican funereal rhythm code, shares its name with the Geré people of Ivory Coast/Liberia. In Jamaica may be spelt Gerre, but as this is essentially oral culture, pronounced the same, I use the Afro-French spelling Geré to make the cultural continuum visible. LKJ's interviewee in Episode 2 describes Jamaican Gerre as a lively pair dance with approach and retreat, belly or pelvis bumping, 'a lot of pelvic circling', drums, shakas, a bamboo stamping stick and rhythmic complexity, usually sung by men (Marjorie Wiley interviewed by LK Johnson 1983). I have learnt a Geré dance

called Baï that could be the Jamaican Gerre – it is danced with a wooden staff like the bamboo stamping stick described by Wiley. The staff shapes our dance and we pound the earth with it, joining polyrythms played on djembé and doun by the men. There was a step that could have been or become the belly bump, but we were learning solo, in pedagogical lines.

Not yet mapped are rhythms of the African ethnie, the Mendé of Sierra Leone. *Menndé* is the name of a Gwo-Ka rhythm from Guadeloupe, and another is *Kaladja*. My forthcoming interview with Malinke dancer Fatim Berthé discusses the Manding rhythm *Kamandjan*, that shares its name with a lake and a UNESCO world heritage-listed arch in her village of Siby, storied since the 13th century. At a sacred site built in 1653, a 7-yearly architectural ritual including the *Kamandjan* rhythm is listed as Intangible Cultural Heritage of Humanity (UNESCO World Heritage Centre 2009). Do African heritage and ethnic identities survive only as rhythm names in the Caribbean, or as rhythms with same or different names? Until more rhythms and dances are recorded and mapped, we cannot know – but there is one African rhythm whose Caribbean circulation is well-documented: tresillo, also known as 3+3+2.

My dance practice revealed ancestral connections between dance codes while I was drafting my Bajan family tree, in 2016–20. I found that the journey of Black Atlantic rhythms and innovations is the journey of my ancestors through space-time: pre-colonial Africa to the Caribbean and later to North America – carried by the Transatlantic slave trade and continuous waves of migration and separation until the present. These genealogical clues motivate the Pan African analysis of embodiment of overlapping motifs across codes first drafted in 2021 and refined with ongoing practice-based updates, shown in Figure 4.

Many 'core' Africanist aesthetics summarised in the black center of Figure 4 have already been identified with Afrodiasporic cultures, notably Kurath and Chilkovsky's 'Stylistic Nucleus' of Jazz, Holiness Step and Candomblé, in *Jazz Choreology* (2017 [1960]). These authors follow Zora Neale Hurston ([1934]1969) in identifying angularity and


*Figure 3: Unity Map Vector Preview 2025.10 by Deirdre Molloy. This design began in 2021, developed into interactive Unity Map in 2023–24 with Code Your Future UK, Gerador and Project Manifest EU. Parent > child = code > rhythm. For Jamaica an extra 'category' info layer permits compression of many rhythm codes into only three digital data points. For full source citations and credits see Appendix.*


*Figure 4: Africanist Aesthetics diagram by DC Molloy 2021–2025. The outer circles illustrate 5 rhythm codes' unique expressions of collective aesthetics and local imagery in step names – an example of Chwe's 'common knowledge' ritual transmission (2013). An Africanist aesthetic continuum is revealed in the center, integrating my observations with analysis of Harlem Renaissance orality, dance and African sculpture by Zora Neale Hurston ([1934]1969) and of Candomblé, Holiness step and Jazz by Kurath (1960), followed by Farris-Thompson (1966), and Dixon-Gottschild (1996). From a model unrelated to Black dance called Laban/Bartenieff movement analysis, I have borrowed the terms Homolateral, Contra and Spiral – illustrated here with Black vernacular step examples.*

asymmetry with 'Negro' dance, without crediting Hurston. Brenda Dixon Gottschild (1996) built on writings of Robert Farris-Thomson (1966, 1983) to define an Africanist aesthetic including asymmetry and 'polycentrism', equivalent to 'isolations' below. All these canons of Black Atlantic dance esthetics affirm the importance of rhythm and compliment the analysis below. Africanist social dance is so vast, any canon can only be a simplification.

Vernacular language in the brown circles of Figure 4 reveals Black Atlantic cosmologies, idioms, imagery and lived experience. Similarly, the Unity Map respects black and indigenous local nomenclature of rhythms. I became fascinated with the beauty and dynamism of African dance masks' aesthetic unity, as social belonging is synchronized in ritual, dance, music and song, each rhythm carrying collective memory.

This aesthetic survives, however distorted or fragmented by colonialism and slavery. My research focus therefore remains aesthetic and analytic – attentive to visual and oral imagery of step names and roles. Amid images of everyday life, children's games and humour, I find memories of collective trauma. What does a Jazz step named Hanging Man tell us about the USA in the Jazz age? In the Malinke rhythm *Koreduga*, this step exists, but is not named after a European ritual of torture (Molloy and Capelle-Sigère 2024e). Each of these details illuminates a fraction of the Black Atlantic rhythmic heritage constellation. The antiquity of many African rhythms can be inferred in family lineages and oral histories sung with them, in ritual imagery, process and purpose, and in the social organisation they depict. The Unity Map prototypes a cross-referencing of the intangible with the tangible – the imagery of ritual names, gestures and steps with rhythm ritual objects such as masks, staffs, flyswats, spoons and instruments. For example, the Unity Map > Manding > *Koreduga* text and video entry illustrates dance steps and discusses the symbolic imagery of ancestral rhythm oral, kinetic and visual vocabulary. Similarly recognising the aesthetic unity of Manding ritual orality, dance, rhythm and attire, the black American historian and dancer Ofosuwa Abiola (2019) coined the concept of African 'dance systems' as a primary source of living historical data. Extending this concept, the Unity Map platforms rhythm codes not only as history but as social technologies of cyclic innovation and as living intangible heritage.

Intangible heritage is important because Afro-Caribbean ancestors survived loss of home, kin and country. They survived Euro-colonial slave factories on the African coast, they survived the Middle Passage and the notorious Caribbean 'seasoning' in the cane fields that historian Sir Hilary Beckles calls 'killing fields'. Freedom from slavery left most Bajans landless, disenfranchised and labouring in poverty under white minority rule, as the police and judiciary replaced the overseers (Beckles 2017). As only slave-owners received reparations under English law, generational waves of emigration from the Caribbean followed emancipation. From about 1900 on, many of my grand aunts, uncles and cousins migrated from Barbados to Harlem and the Bronx,

Trinidad, Venezuela and Canada. From such Caribbean immigrant families emerged New York Hip Hop pioneers Afrika Bambaata (my family), Kool Herc and Grandmaster Flash (Nelson 2012), as well as Lindy Hopper, Norma Miller. Meanwhile, Franco-Hispanic-Senegambia – Haiti – Cuba – New Orleans slave routes and revolutions were also circulating rhythms. Demography informs musicology's narrative of African tresillo and cinquillo rhythms in Christopher Washburne's 1997 article *The Clave of Jazz: A Caribbean Contribution to the Rhythmic Foundation of an African-American Music*:

> In the first quarter of the eighteenth century, about half the residents of New Orleans had spent at least a decade in Cuba, having previously lived or been born in Saint-Domingue, now known as Haiti. The French mixed with the people from Saint-Domingue and with African slaves… During the Haitian slave uprisings in the 1790s, many persons of mixed blood (estimates range from 10,000 to 30,000 people) fled to Cuba. They remained there for ten years, until the early 1800s, when war erupted between France and Spain. Because of their French ancestry many were forced once again to seek refuge in a foreign land. New Orleans was an attractive locale because of its proximity, similarity in climate, and Caribbean flavor. (Washburne 1997, 64)

Sakakeeny's circulatory system metaphor embraces complexities to derive a multicultural history from demographic data, eyewitness journals, re-imagined sketches of African rhythms in Congo Square, and Blues biographies.

> People, places, and music are entangled with their representations in media in discourse and together they constitute a circulatory system. This is a loosely structured system of mobility and interaction, where African ring shout dances meet European military marches; liberating processionals in the streets are captured as sounds, images, and texts; and cultural dynamism is constrained by everything from Supreme Court decisions to researchers who have shaped our understandings of black music.

(Sakakeeny 2011, 294–5)

These strands melt into iterations of Black Atlantic music, influenced in turn by mass media and by musicologists attempting to grasp the mercury of oral-kinetic heritage.

In his 1983 book, *Flash of the Spirit*, art historian Robert Farris-Thompson coined the term 'Black Atlantic' to embrace visual, musical and choreographic aesthetics connecting African civilizations of the Yoruba, the Bakongo, the Fon, the Ewe, the Mandé and the Ejagham with Black cultures of the Americas. Mandé and Ewe rhythms are discussed with culture-bearers Kako Kone and Lucky Lartey on the DecodeNoir.org website (Molloy 2021). Continuing my Manding dance training and further interviews, I have learned that Mandé or Manding peoples identify with medieval Mali empire stories, dances, rhythms and architecture connecting a vast West African region of '*ethnies*' (former kingdoms) including Bambara, Malinke, Soninke and Khassonké language speakers. The Manding empire cultivated a caste of oral historians expert in ancestral music and dance, the *djeli*, still called upon to perform popular rituals such as weddings and baptisms. The Unity Map and dataset (Molloy 2024e) features several rhythms that I recorded with Manding *djeli* Karamoko Sanogo.

The Unity Map uses demographic, historic and participatory maps to locate oral-kinetic expressions of identity as rhythm codes in space-time. From audio and video mapped and contextualized with metadata, rhythms emerge as Black Atlantic past, present and future intangible heritage. Turning towards embodied rhythm aesthetics and embodied historic trauma reveals a unifying Black Atlantic identity narrative.

An easy metaphor for inter-diasporic rhythm circulation would be the heart, receiving rhythms from West Africa and pumping them around the Americas. As the blood returns, it mingles musics and steps from Africa, North America and South America. This metaphor gives visceral expression to the Transatlantic trafficking of millions of Africans (UNESCO/Harris 2006), of whom 40% landed in the Caribbean, 40% in Brazil, 10% in Argentina, and 10% in North America. These demographics and the many migrations that followed, tell a

story of African rhythm resilience and creativity, circulating through the Caribbean and northwards to influence blues, jazz and Hip Hop.

Emancipation saw generation after generation bleed from the Caribbean islands and Southern US states towards industrializing cities, wells, mines and infrastructure projects. A 'return of blood', if rhythms were blood, happens through mass media and American imperialism rather than migration, as post-colonial economic factors continue to push and pull Afrodescendant people towards economic centres enriched by slavery, colonization and resource extraction. There is also a story of Caribbean and American aesthetics flowing into 20th Century Africa, blossoming in codes such as Congolese Rumba, Highlife, Afrobeat, Ethiojazz and Kuduro – but that is beyond the current scope of the Unity Map.

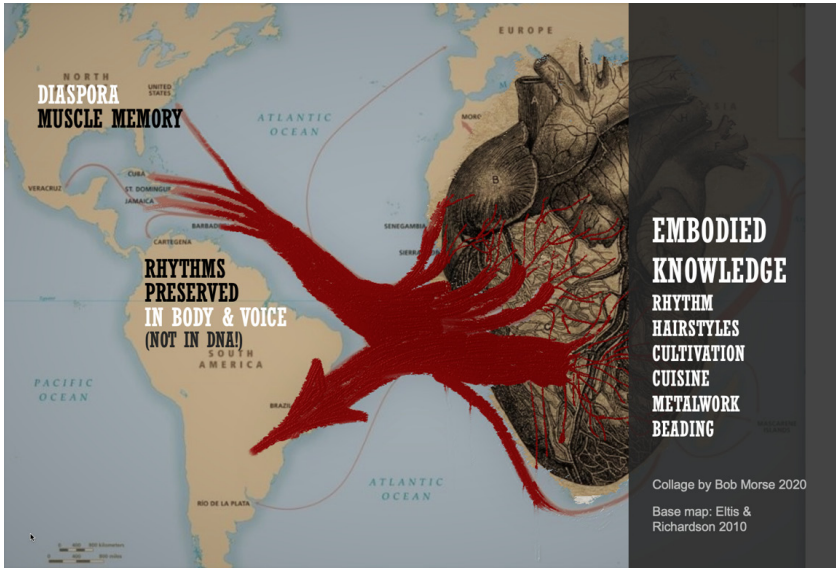


*Figure 5: 'Embodied Knowledge Flows' diagram 2023–24: text added by Molloy in white and black slab serif, over collage by Bob Morse in conversation with Molloy, on a slave route Map by Eltis and Richardson (2010). This 'embodied knowledge' list integrates a range of sources regarding hairstyles (Dabiri 2019), rice cultivation (Ball 1998), metalwork (Bulstrode 2023; Molloy 2021/2024b), cuisine (e.g. use of gombo and rice), and beading (e.g. Black Indians of New Orleans costumes and the Bamoun royal throne, Cameroun, seen by the author at Humboldt Forum 2022, extorted by Germany, 1908).*

Despite much blood spilled by enslavers, the 'blood' metaphor of rhythm circulation is not to be taken literally. A scientific premise of this research is rhythm code transmission through muscle memory – the same memory that you use to drive a car or ride a bike – rather than through DNA or blood (Figure 5). This follows Katrina Hazzard-Gordon's observation that Pan-African dance aesthetics survived the Middle Passage in muscle memory and are visible in Black American vernacular dance.

> Brought to the Americas in the motor muscle memory of the various West African ethnic groups, the dance was characterized by segmentation and delineation of various body parts, including hips, torso, head, arms, hands, and legs; the use of multiple meter as polyrhythmic sensitivity; angularity; multiple centers of movement; asymmetry as balance; percussive performance; mimetic performance; improvisation; and derision.
> (Hazzard-Gordon 1990, 18)

While canons of Africanist aesthetic values (e.g. Figure 4) are broadly supported by Unity Map data, aesthetic transformations are visible in imagery. Images from the Bible, trauma and everyday American life displace some ancestral images from Africa, in dances of the Americas.

## Dance as a technology of memory and innovation

In West Africa, as in much of the Atlantic diaspora, a rhythm is a unit of knowledge that can be recognized by its dance forms (e.g. Charleston or Djondon) and/or by its dominant beat and improvisational aesthetics. Regional Blues dance variations of rhythm and aesthetics are known as idiom dances. Within and across rhythms we find symbolic images that correspond to specific spoken or drummed phrases. The Malinke rhythm, *Nama*, makes visible the collective knowledge of preparing land and planting specific crops with specific tools and techniques. Over the cyclic bass drum-and-bell rhythm of *Nama*, the 'solo' djembefola uses specific phrases to call specific steps or images in a sequence, available to both dancer and spectator as an instruction

manual. The *Nama* video in the Unity Map (Bourget and Sidibé 2025a) shows Fatim Berthé performing many of these rhythm coded images from her homeland of Mali. I joined her embodiment of this ancestral imagery in a workshop in January 2025. My interview with Berthé will soon be available on Decodenoir.org.

Far to the south of Mali, in western Ivory Coast, the agricultural work of the Wé language group that includes Yakuba and Wobé, is ritualised in the rhythm *Tematé*. I have danced this rhythm with culture-bearers in Ivory Coast at Annika dance company and with Gurò percussionists Bongo and Bernard and Geré dancer Léa of Gninka dance company. The *Tematé* rhythm that I filmed in Abidjan with *Tematé Djouhoude* will be added to the Unity Map when I complete the edits. According to the troupe leader, *Tematé* means beauty and rejoicing and that everyone will eat. *Tematé* steps are the same if it is danced for a harvest, a wedding or a funeral, but the style of singing changes according to the event.

## Rhythm code theory – applied to curate Map data

Indigenous cultures reflect regional climate, the biosphere and the cosmos, according to the axiology theory of EJ Nichols (1974, 2013). Nichols' theory does not exoticize. Indeed, he applies his theory to explain Euro-American epistemologies of text, counting and categorising, and values of material accumulation and protectionism or aggression. These values (highest value = object) have proven dangerously unsustainable when imposed on the entire planet through colonialism (Figure 13). By contrast, Nichols considers human relationships to be the highest African value, expressed through symbolic imagery, and it is argued here, through rhythm-coded ritual. I apply this theory to Africanist rhythms in Figures 8, 9 and 10.

Michael Chwe's book *Rational Ritual* (2013) cites European examples of ritual serving to shape a collective perception of reality, that is to create and normalise 'common knowledge' beliefs about space-time and social relationships. Rhythm-coded synchrony between indigenous community, biosphere and cosmos is evident in many African dances and

their masks, such as the Baulé Moon / *Gbagba* Mask (1880), the Soussou monsoon rhythm *Soko* and the Senufo panther mask dance *Boloyé*.

Chwe identifies ritual elements that have the power to create 'common knowledge'. These I have drawn in Figure 6 (black circles), adding the distinctly Africanist circle-solo formation with its invitation to improvise – the iconic formation of the Manding *Baara* or *Kéné*, Caribbean *Gwo-ka*, Puerto Rican *Bomba* or American Breaking cypher (Figures 6 and 7).

I follow Welsh-Asante (1998) in using the term circle-solo to refer the formation where any member conversant in the code of the cypher can enter the circle to 'solo' in dialogue with a lead drummer (or DJ). This value of improvisation extends to Black Atlantic dance formations that we could call 'sparring pair' in a circle (e.g. Roda de Capoeira, Jongo) and to a lesser degree, to black partner and line dances.

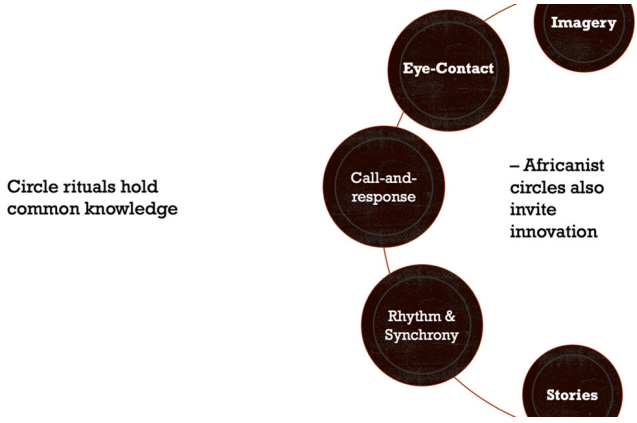


*Figure 6: Africanist circle-solo x Chwe common knowledge theory drawn by Molloy DC 2021.*

'Code' was a recurring word for dance culture in interviews with dancers (Molloy 2021). Code shapes social expectations of dress, speech, dance formation and aesthetic. My integration of this colloquial use of 'code' with Chwe's rational ritual theory and axiology theory (Nichols 1974), produces the theory of rhythm codes.

In the Unity Map, code is the parent of rhythm and drum-dance dialogue is the parent of many codes. In many Africana rhythms, specific

images, phrases or steps reply to a drum beat, call to or sync with drums. Rhythm means repetition; ritual also means repetition. Repetition is how muscle memory is made and how it can create identity and belonging in a group. In 'drum-dance dialogue', drum is a metonym for all instruments that speak rhythm to dancers directly – clapping, gourds, bells, balafon, doun, kora, live scratching on turntables and many more.


*Figure 7: 'Rhythm Codes – past, present, future': by Molloy DC 2023.*

Fragmented in the Americas, rhythm codes overlap, sharing rhythms and esthetics, diversified by generation or region, affiliation or technology (Figure 7, Figure 13). From the Ring Shout to the Electric Slide, from the Roda de Capoeira to the Hip Hop cypher – drum-dance dialogue in rhythm code is a generative Africanist technology, renewing ancestral imagery and creating the future through improvisation.

It is said of Guinean drum master Mamady Idjalit Keïta (d. 2021) known as *Nankama* (born for this) that he knew all the Manding rhythms. The album Balandugu Kan, recorded in Keïta's native village, situates his solos within the collective of a strong female vocal, ensemble drums, hand claps and indubitably, dance. A benefit of studying rhythm as a unit of cultural knowledge is that 'genius' or 'great men' are less important than the collective genius. The Unity Map presents recordings that honor indigenous rhythms recorded by Bourget and Sidibé (2025a), some also described by Malinke dance blogger Hawa Traore (2020). Likewise, ancestral names define

the 12 Malinke rhythms recorded by Julien Comtet (2012), a French ethnomusicologist who began travelling between Mali and France in 1998. The Unity Map is therefore not an etic taxonomy. Rather, it is a data visualisation that honours the idioms of cultural practitioners. In his book (with CD) *Memoires de Djembefola*, Comtet lists over one hundred rhythms from Mali by ethnic group. While there is more complexity than the Unity Map can fully display, the dynamic digital design allows for iteration and improvement.

In West Africa, ancestral rhythm codes depict collective knowledge of ethnic and gendered identity, age, status, skills and relationships to land, biosphere and cosmos. Rhythm-coded rituals can form lines or pairs, but the iconic form is the drum-dance dialogue in circle-solo formation known in Manding regions as *Baara* or *Kéné*, the centre of rituals and festivities.

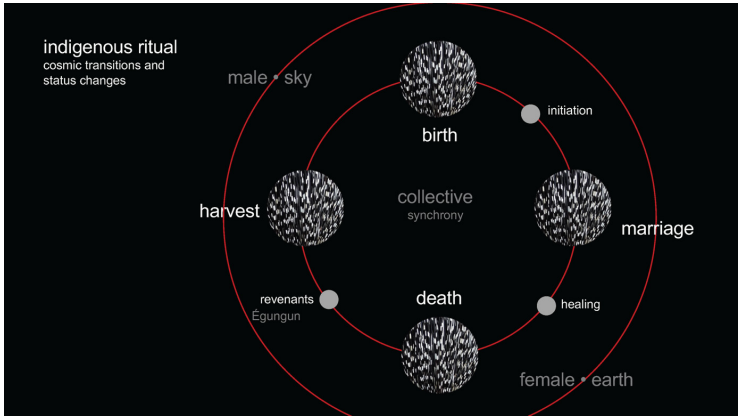


*Figure 8: Indigenous space-time: West African rhythm-coded imagery cosmic transitions/status changes: Molloy DC 2024. In contrast with the Western narrative of lifespan and civilization as a linear progression, indigenous ritual often has a cyclic sense of time. In the Africanist rhythm circle or cypher ancestors may reappear as they do in the Egungun ritual of today's Benin and in parts of Brazil. Ritual synchronizes beliefs about birth, initiation, and other social status changes including in the afterlife. Dance thus synchronizes communal relationships with the cosmos. This diagram synthesizes data from interviews, art research – on the Esu dance mask (Goodbody 2012) and Egungung mask (Benin cultural delegation to Toulouse 2023.09, Farris-Thompson 1974) – and observations of performances: a Malinke Baptism and Congo sanza performance of the Freres Makouaya.*

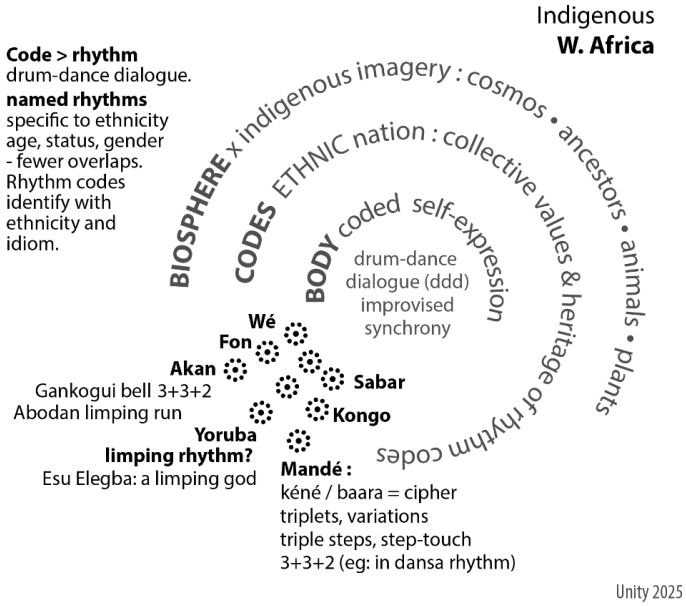


*Figure 9: indigenous axiology – coherent with biosphere – diagram by Molloy, 2022, applying axiology theory by Nichols (1974) to African rhythm codes as a relationship to the environment. This diagram is also informed by personal contact with Aboriginal indigenous cosmology and biosphere and by the anthropologist Wade Davis (Davis 2009). Code > Rhythm refers technically in this diagram to the Parent > Child information hierarchy of the Unity Map interface and data.*

## Manding > *Dansa* > Caribbean Tresillo continuum

Clapping tresillo, I asked Manding *djembefola* Kako Kone if he recognised it. He replied, 'I could put that into in any of the rhythms that I play. So, i asked 'If its not specific, how do we know its African?' He replied 'It's like a smell'.

Kone's reply was evocative of embodiment, of the tug of memory through the senses – but it was vague. Then in fall 2023 at Africlap street festival in Toulouse, I heard tresillo coming from a drum. I hastened to the stall of Issaka Compaore, a Burkinabe instrument-maker who was teaching a private drum lesson. He gave me the name of the rhythm: *Dansa*. This is a popular dance from Bamako, a rhythm of the Khassonké people, according to Comtet (2012). The quote below from the Baara Niogonya website confirms this, placing the *Dansa* rhythm in history,

geography, language and 'ceremonial' culture of the Mali empire that preceded the Transatlantic slave trade and that connects ethnic groups of the region around Bamako and as far south as Guinea. The chant is translated by Manu Sissoko, on the Baara Niogonya Vimeo channel. « *Alou bo Sakhoba ye, na ka dooni don* » means 'Sakhoba goes out from her house to dance for the ceremony'.

> *Dansa* (or *Jansa*) as "one of the emblematic rhythms of the Khasso" (the region between Kayes and Bamako) … is played in different forms and under different names in the whole of Mali. In the Khassonke area, where the djembe is usually not part of the traditional ensembles, the dance steps are marked by the '*djelidunun*' – soloist *dunun* played with a bell by a '*Jeli*' (griot) – and the overall tempo is rather slow. *Dansa* is played in many different circumstances, especially for weddings. The most popular form – in Bamako and elsewhere – which is demonstrated here corresponds to how mandinka people play it in the region of Kita. (Bourget and Sidibé 2017)

*Dansa (slower) video: Dansa sequence 1 – Step 1 (Bourget and Sidibé 2025b). Dancers (L-R): Fatim Berthé, Manu Sissoko, Tiéblé Vieux Diarra.*

Played slowly, at beginner speed here – we can hear a rhythm that survived the slave trade. In *Dansa*'s main rhythm we can hear the 3+3+2 tresillo rhythm, widespread in Afro-Caribbean codes, notably in Jamaican Kumina and Dancehall. Finding tresillo dominant in slow *Dansa* is my own observation, while musicologists (e.g. Floyd 1995) have identified it in Akan *gankogui* bell patterns.

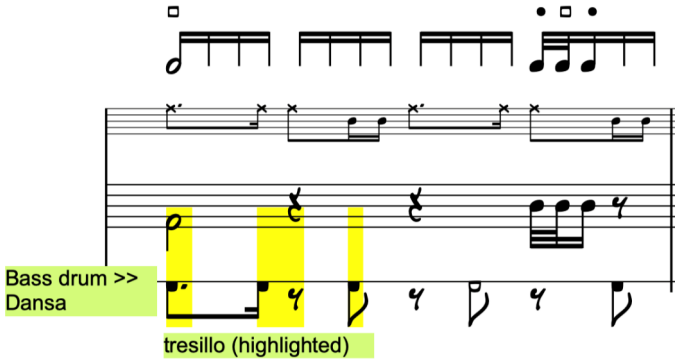


*Figure 10: Excerpt of Dansa ensemble notation by JS Bourget. (2017). Emphasis added by Deirdre Molloy and J. Griffith Rollefson to reveal the tresillo rhythm.*

| 1 | & | 2 | & | 3 | & | 4 | & | 1 | & | 2 | & | 3 | & | 4 | & | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| x | | | x | | | x | | | | x | | | | x | | | DANSA bassline | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | & | 2 | & | 3 | & | 4 | & | 1 | & | 2 | & | 3 | & | 4 | & | | | | | | | | | |
| **x** | | | **x** | | | **x** | | x | | | x | | | x | | | Tresillo loop | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

*Figure 11: Dansa doun drum in TUBS notation: J. Griffith Rollefson and Deirdre Molloy for comparison with Tresillo / 3+3+2 loop. Bold Xs highlight the tresillo. Based on Dansa performance video by the Baara Niogonya ensemble (Bourget and Sidibé 2025b).*

The bassline of the doun drum is consistent at all speeds in *Dansa*. I hear the tresillo rhythm as a composite loop at slow speeds, emphasised by djembe accents. At higher speeds or during dance solos, the tresillo composite loop disappears as the lead drummer plays dance calls and phrases, responding to a solo dancer's coded improvisations or in this case, leading the choreography of the dancers as they demonstrate *Dansa* vocabulary/imagery.

Tresillo is the main Ring Shout rhythm and is also found in Tango and the Habanera. *Dansa* step has a visual echo in Charleston, with travelling weight changes that allow the one leg swing to swing back and forth, marking time, with arms in counter-motion. The Charleston, in turn is a rhythmic variation on Tresillo that drops the third stroke. Not a travelling step, the Charleston 'runs' on the spot, or marks cardinal

points by turning in four directions (Round the World Charleston) like the Senufo dance, *N'goron*.

*Dansa* ensemble formation travels anticlockwise in a circle, marking time with rhythmic steps, while dancers simultaneously rotate in a semi-circle under their own bodies. Variations of this collective turning circle with individual rotating crescent are common across many Mandingue rhythms, such as *Wassouloudon*, *Madan* and *Soko*. The McIntosh Shouters also have turning, travelling rhythm step (Library of Congress 2011) that I've choreographed and danced in the *Unity Ring Shout (Homage)* video, 'Weeping Mary' verse (Molloy 2024c).

## Tresillo: a rhythm of Ring Shout

*Ring Shout (Homage) by Unity: 4 minutes (Molloy 2024c).*

The Ring Shout is a 'moving prayer', in the words of culture-bearer Tamara Williams at her CADD workshop in 2024 at Duke University. Williams writes that 'Shouting' as a black spiritual practice is also found in Jamaica, Barbados and Trinidad (2021). Historically documented in Louisiana, Georgia, Florida and the Carolinas (White and White 2018), the Ring Shout continues as a heritage or spiritual ritual mainly in Baptist and Gullah Geechee communities of the south-eastern US coast (WWNO 2025). The quote below from the *Shout Songs from the South Coast of Georgia* album liner notes shows African cultural resilience and unity in rhythm, unbowed by Christian prohibitions. Shout is effectively a code word for dance.

> Back in the days of my comin' on in the shout, if you cross yo' feet you were dancin', but if you solid, move on the square, you were shoutin'. But if you cross yo' feet you were turned out of the church because you were doin' somethin' for the devil ... So you see those ladies didn't cross they feet, they shouted! And shouting is ... praisin' God with an order of thanksgiving." Deacon James Cook, patriarch of the group, age 98 in 1984, interviewed in 1981(McIntosh County Shouters 1984a)

The *Unity Ring Shout (Homage)* video above by dancers outside the direct lineage of African-American peoples/regions, serves a bigger narrative of Afro-diasporic memory and resilience in my short film *Drum Calls | Body Recalls*. My European co-production had no direct access to Ring Shout culture-bearers, so my choreography is informed by published videos of the McIntosh County Shouters and Georgia Sea Island Singers: *I Want to Die Weepin' Mary*, *Eve and Adam*, and *Watch that Star* (Library of Congress 2011; McIntosh County Shouters 1984b). Artistic influences include Rushida Bumbray's *Run Mary Run* (2011), the Seniorlites *You've got a Right*. Thus, my methodology combines netnography and practice-as-research. Out of respect for Ring Shout history and context, I cast Afrodescendant dancers experienced in Black dance codes for the shoot. Having to record the music and film the dance separately, with mostly non-English speakers, my Unity Ring Shout musical arrangement signals step/verse changes by a break in the lyrical flow.

The *Unity Ring Shout (Homage)* shows how enslaved Africans adapted to Christian imagery to express their experience, as I explained to our guest dancers at the videoshoot. The tresillo rhythm dominates, amid polyrhythms in claps, vocals and footwork. Call-and-response structures Ring Shout lyrics. At the same time, there is total dance-music-image unity through 'dance calling'– for example the ensemble is synchronized in a stylized gesture of picking up leaves by the lyric 'pickin" up leaves'. In stylizing and synchronizing a memory of collective work, the Ring Shout continues the esthetic values of the

Malinke *Nama* or the Wé *Tematé* – but with an image from the Old Testament. Even in the Garden of Eden, black folks must work – the lyric-image of Adam and Eve 'pickin" up leaves' almost humorous in its irony. The twist step used in this second step is based on a Georgia Sea Islanders video (Hawes 1963).

Traumas of slavery resonate with the Biblical image of Mary at the feet of her crucified son in the first verse. The first-person lyric aspires to a death in the company of a loved one – with Jesus or simply one's own child. This recalls the threat of separation, ever-present for enslaved families. Not finding a dance move for the lyric, I added 'Holding the Baby', arms to a turning, travelling pair of triple steps, both seen in a McIntosh Shouters video (Library of Congress 2011). The triple steps embody a polyrhythm (inaudibly) over the tresillo.

The third verse embodies a limping run towards freedom, guided by stars, marking the tresillo rhythm. For this lyric from a Spiritual, I combined a limping run seen in *Run Mary Run* (Bumbray 2012) with raised arms and shaking shoulders of a 'praise' step from a Ring Shout workshop (CADD 2022), a gesture also found in Jamaican dancehall. Also in mind was 'A Limp with Rhythm' (Hutchinson 2012) that links Dominican Republic's merengue and carnival aesthetics to Èṣù Elegba, a limping Yoruba/Fon demi-god – intermediary of humans and deities, with symbolism of the crossroads, phallus and tricksterism. A similar limping run is called forth by one of the Abodan rhythms that I recorded in Ivory Coast in 2025 (video to follow – in the Unity Map). This limping run is distinct from the main root step of Abodan (see Figures 11, 13).

The crescent motion of each Ring Shout travelling step with the image of 'holding the baby' (first verse of Unity Shout) has similar travelling weight changes and crescent motion to *Wassoulou* or *Madan* – but those dances have extra weightless foot touches that mark time. See Unity Map > Manding > Madan by J. S. Bourget and Sidibé (2025b)

I have observed a formation similar to the Ring Shout – a turning circle moving anticlockwise with group synchrony of steps marked by the drum or creating polyrhythms – at a Malinke Baptism ritual

that I filmed (online here: Molloy 2024b). A female griot, or *djeli*, Mariam Coulibaly, led the chants and the flow of this all-female ritual gathering. She led the assembly through one rhythm after another for several hours, through a range of formations – from theatre formation to processions and lines, turning circles and a cypher improvised to live drums. Coulibaly's strong, husky voice was accompanied by djembefola Karamoko Sanogo and synthesizer played by keyboardist Kassim Sanogo. The synthesizer imitated doun (bass drum) and kora (21-string harp). At peak moments of excitement, one or more griots stepped down from the stage to jam with a woman, to dialogue with her or to praise her ancestral lineage in song. I read collectivist values in embodied in the gifting culture towards griots and hosts; in praise songs of ancestral lineage addressed to each individual and in the embodiment of dance synchrony and dress code (eg: many participants wearing tailor-made, matching dresses). Savoury and sweet rice dishes cooked in big pots in the catering kitchen next door were handed through the rows of plastic seating, in tin takeaway tubs to be consumed at will. Rather than synchrony and ceremony of eating, there was synchrony and ceremony of rhythm. In the corners of the room, children played on the floor or slept on the seats amid the din of drums and amplified vocals.

The Ring Shout demonstrates a continuum with West African aesthetics in 'dance calling' – specific phrases (drum or voice) that synchronize or call specific dance moves, in a unifying synchrony of image, lyric and dance. While West African ancestral rhythms often open with a vocal lyric, voice usually gives way to the rising volume and intensity of the drums. The drummer's call pattern or dancer's call step (e.g. *Repriz* in Gwo-Ka or in the Beté rhythm > *Begbé:* a *zagazidada zagazidada* step) shapes collective social synchrony, an extension of the voice, when it would not be loud enough.

My training in Manding rhythms helped me to read the Ring Shout and express it through choreography. Ongoing training in Malinke rhythms reveals many travelling rhythmic steps used in a turning circle, moving anticlockwise. While circle dances are found in many

cultures, a particularly Africanist feature is marking time continually, in place or travelling, not just with the weight-bearing foot but with the free leg, foot, heel and toe (see Fig. 4 Africanist Aesthetics). This can create a 'run on the spot' illusion, or mark syncopations in the air with kicks, as some readers will have experienced in the Charleston. The arms and the head may continue or contrast with the footwork. The lifelong learning curve for rhythmic, whole-body coordination in Malinke rhythms *Djondon*, *Madan* and the Senufo rhythm *N'Goron* – is humbling. Dancers and singers from the USA, Caribbean, Europe and Africa came together in France and Lisbon for the Unity Ring Shout (Homage) and the Limbo. We shared diasporic history, solidarity, creativity and unity through ensemble performances.

## Tresillo and Dembow: rhythms of Dancehall

In the Unity Map, an extra 'category' layer above Code > Rhythm helps collect Jamaica's many rhythm codes into only three Unity Map visual data points. The categories are Plantation, Wake Rdms and Sound System/Band (Fig 3). My love of Dancehall dates from 1996 in Switzerland, dancing at the Zulu Nation club in Geneva with my best friends, women from Kenya and Ghana, during an Erasmus year. Swiss DJs used to fly to Jamaica to buy 7" records hot off the presses. By the 1990s, dancehall was known for its minimalist bass and snare with tresillo cross-rhythms. Musicologist Wayne Marshall writes early dancehall onomatopoeically as 'bomp bomp' and Dembow as 'boom-ch-boom-chick' (2009, 24, 26). Vocals could be silky, rugged or both, as in *Murder She Wrote*, by Chaka Demus and Pliers (1992). Like Hip Hop, Dancehall youth culture is so dynamic that it has produced Old, Middle and New schools of music and steps since the 1970s. As digital media has globalized step transmission, New School steps are being created all over the world. The Unity Map is interested in steps anchored in Afro-Jamaican culture.

The name Dembow comes from Shabba Rank's hit *Dem Bow* (1990). Produced by Bobby Digital, it has 4/4 bassline cut across with

syncopated snare rolls and strokes that echo Lovindeer's *Poco Party* and *Pocomania Day,* released a year earlier (Lovindeer 1989). If the profane Blues lineage includes Ring Shout and spirituals, the profane Dembow has a 200-year lineage in the Poco rhythm code, a ring dance cult.

> Pocomania, sometimes referred to as Revivalism, is more than 200 years old in Jamaica… As an essential part of the Pocomania meeting or worship, 'tramping' is an African inspired dance that is accompanied by the playing of cymbals or tambourines. Tramping occurs after the singing has become intense and the percussive element has reached a peak. The members of the Pocomania group move around in a circle, counterclockwise, each using forward-stepping motions with a forward bend of the body. This is much like the ancient ring-shout form often seen in the Gullah regions of Georgia and South Carolina. (Asante and Mazama 2009, online)

Dancehall's futurization of Afro-spiritual drum-dance dialogue did not escape the notice of Linton Kwesi Johnson at the time, notably in the music of Steelie and Clevie, authors of the *Dem Bow* B-side:

> With the discovery of digital recording, an extreme minimalism has emerged–in the music-of people like Steelie and Clevie, for example. On the one hand, this music is totally technological; on the other the rhythms are far more Jamaican: they're drawn from Etu, Pocomania, Kumina – African-based religious cults who provide the rhythms used by Shabba Ranks or Buju Banton. So despite the extent of the technology being used, the music is becoming even rootsier, with a resonance even for quite old listeners, because it echoes back to what they first heard in rural Jamaica. LKJ in "Introduction," in *Tougher than Tough: The Story of Jamaican Music*, CD liner notes (London: Island Records Ltd., 1993), cited in Marshall, 2009, 24.

This and other writing by LKJ reveals Africanist cultural resilience and unity in a continuum of rhythm codes from plantation and wake to sound

system and studio. Mento, rocksteady and reggae were all dances first, according to LKJ's 10-hour Jamaican music history recorded with the BBC (1983). Distilled into the Unity Map, this data depicts not a history of Great Men but a history of collective rhythm codes often embodied by women, innovating with each generation of outside influences – Bible verse and snare drums of European colonizers, R&B of Afro-American soldiers and Jazz and studio technologies.

The Jamaican code of Dancehall emerged in the 1970s from the same 1960s reggae sound-system lineage that gave the Bronx its Hip Hop pioneers (Nelson 2012). If Hip Hop was born of funk drum breaks selected and looped for breakers by the Jamaican, Kool Herc at his legendary 1970s block parties (Chang 2016), million-selling Dancehall artists demonstrate even closer synchrony of drum-dance dialogue. Dancehall singers call steps and sing the praises of innovative dancers like Bogle – a continuation of West African rhythms that do the same – for example the Soussou rhythm *Yeboulé* in honour of the dancer Fatou. In this article or the Unity Map, you can watch me dance with Aurélie Capelle-Sigère to 'Like Glue' (St. Aubyn Kelly 2003), using 'called steps' as entry and exit cues for ensemble dancers, to highlight the dance calling imagery. Dance calling, where the dance image calls and synchronizes voice, step and image, is common to Jamaican Dancehall, Southern Appalachian Square Dance (Jamison 2016) and the Ring Shout.

In the Beté ancestral dance *Begbé*, the lead drum not only signals step changes, but uses percussion phrases to call specific steps and vice-versa – the dancer can also call specific rhythm phrases. The Sean Paul video 'Like Glue' illustrates the unity of image in lyric, rhythm and step in 'Signal De Plane' or 'Pon de River, Pon de Bank' – only in the official video version of the track – not other releases. Similarly observable in Afro-diasporic codes from the Ring Shout to line dance, to funk – dance calling could be a continuation of West African drum calls and 'solo' phrases that mark or dress dance steps. Collective synchrony continues from West African rhythm codes, renewing and transforming memory through drum-dance dialogue.


*Unity choreography to Like Glue by Sean Paul, official music video soundtrack. For the full video, visit the online journal at https://journals.publishing.umich.edu/conversations/.*

What has changed in this aesthetic, since the Koreduga hip swing and the tresillo of *Dansa* joined the Black Atlantic constellation of culture? The imagery has changed. Dancehall lyrics reflect everyday lived experience in the New World. Sexual exploitation and play, patriarchy and misogyny, gun violence, addiction and rags-to-riches boasts are common to Dancehall to Hip Hop – Afrodescendant ghetto realities in the wake of slavery. However, old school Dancehall retains a stronger Biblical flavour, laced with lethal levels of British homophobia. Multiple challenges have failed to remove this British colonial law from Jamaica's constitution, Article 76 of the Offences Against the Person Act 1864:

> Whosoever shall be convicted of the abominable crime of buggery [anal intercourse] committed either with mankind or with any animal, shall be liable to be imprisoned and kept to hard labour for a term not exceeding ten years.
> – Cited from original law in McDonald (2023)

A notorious instance of homophobia in Dancehall is *Boom-Bye-Bye* (Banton 1992) whose hook 'Boom bye-bye in a batty bwoy head' calls for the execution of gay men. Buju Banton belatedly removed this hit from his catalogue in 2019, across all platforms. Shabba Rank's dancehall hit *Dem Bow* launched a new rhythm code called Reggaeton

when it was covered in Spanish by Nando Boom as *Ellos Benia* and by El General as *Son Bow* in 1991 (Marshall 2009). The patois lyrics of Dem Bow condemn men or women when 'dem bow' (perform oral sex) – an action transformed to a noun in the Spanish translation Son Bow, 'They are Bow'. Furthermore, as Marshall observes *Dem Bow*'s patois lyrics conflate these sexual practices with bowing to oppression. Oh, the irony – a black artist promoting homophobic colonial values as a path to liberation.

## Tresillo's Caribbean circulations – a musicology perspective

On pages 28–29 of *The Power of Black Music* (Floyd 1995), Tresillo is written as notation and as scatting: 'GO-dzi GO-GO-dzi', in a citation from Jones (1959). The rhythm is described as a pulse or timeline played steadily and continuously throughout a dance on a clapperless bell called a *gankogui*. Since the African ethnic group and the name of the rhythm are not clearly indicated (maybe *Adzida*?), I cannot use this source to map rhythm. The Malinke use a clapperless bell known by a different name – not *gankogui* but *kenken*. Washburne describes the Caribbean connection to African rhythms thus:

> The Gankogui's 3+3+2 pattern is identical to the tresillo rhythm; and the son clave, cinquillo, and tresillo rhythms all embody this (African) combination of threes and twos. (Washburne 1997, 68)

On the importance of these African rhythms to Cuban music, Washburne (1997) writes

> … complexity is an out-growth and the elaboration of the primary building block of Cuban music: the unit of the clave. All these rhythms were present in popular Cuban musical styles such as the *rumba, habanera, danzon*, and *son* in the late nineteenth century and are interrelated. The tresillo and the three-stroke measure of clave are identical and are widely believed to be derived from the cinquillo rhythm. By omitting

> the second and fourth stroke of the cinquillo, the tresillo rhythm is apparent. (1997, 66)

And if you drop the third stroke of the tresillo, you get the Charleston rhythm – written by Cecil Mack and James P. Johnson, in the USA in 1923. On the circulation of tresillo throughout the Caribbean, Washburne writes:

> … the prominence of the cinquillo and tresillo rhythms in Haitian music styles-as well as in other Latin-American styles, such as those in Mexico – only served to reinforce their significance and influence on New Orleans music making throughout the formative years of jazz. (1997, 68)

In his memoir, *I Wonder as I Wander*, Langston Hughes wrote his experience of Cuban rumbas: 'no rumbas were danced within the walls of the Athenas, for in Cuba in 1930, the rumba was not a respectable dance… Only the poor and declassé, the sporting elements and gentlemen on a spree danced the rumba. (Hughes, 1956, audio chapter: Havana Nights, 43:57)

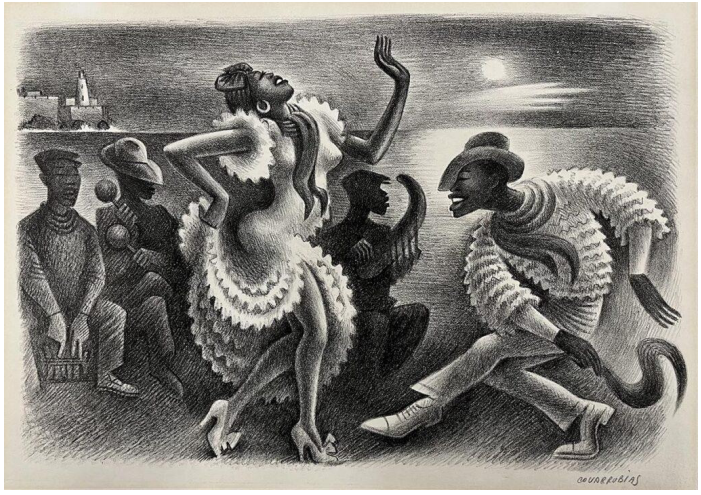

*Figure 12: Rumba by Miguel Covarrubias (1942)*

The Covarrubias drawing (Figure 12) suggests an empowered female dancer leading a dialogue of synchrony with drums and "apart-play" with a partner. However, as a guest of honor at a Rumba party in a large old Spanish colonial house in Havana in the 1930s, Langston Hughes is offered his choice of any woman to sleep with: "our women are your women tonight". No wives or sweethearts are invited. Women and men arrive separately and partner off into private rooms together after dancing. Watched over by a madam, the men dance with "decorative" playgirls or mistresses. The Cubans call the party a cumbacha, which Hughes translates as "spree".

In the Cuban rumba Guaguancó step vacunão – a sudden thrust of the male pelvis towards the woman met with a defensive gesture of closing skirts – what is being stylized? By imagery and repetition, social ritual creates what Michael Chwe (2013) calls "common knowledge", reinforcing social values, be they pro-justice or reproducing relations of domination. At a festival in France in 2023, our Cuban teacher Jose Carlos Leguen demonstrated Guaguanco to live music by Iré Arikù. To demonstrate the female role he dons a skirt over his trousers. Then just as quickly, removes the skirt to demonstrate the male role. Men play and chant polyrhythms with joyous energy: two hand drums, a cajon, the clave bell hit with sticks, a rhythmic vocal, call and response. We women and men dance in lines, with a typical Africanist bent-knee pulse, stepping under the body first. Then a side-step to the right, center, repeat to the left, center, hips always shaking the hypnotic pulse, arms relaxed and bent at the elbows, keeping time, side-to-side with the feet. Movement of hips and arms is exaggerated by the wide flowing skirts for the women, skirts that flow with each step. There is beauty, pleasure, solidarity, all are synchronized in rhythm, relaxed and sharing each step, each beat. We turn in step to face cardinal points. Suddenly, syncopated, the vacunão. The men jerk hips forward, opening their knees to make a diamond shape, then close knees and stand, shaking their shoulders, then continue stepping. Simultaneously the women twist away, wrapping their skirts then

wiping, sinking to the floor then rising, back into the stepping flow, the flow of life.

Hidden in plain sight, we can read the vacunão as a collective trauma memory transformed into social ritual, stylized in rhythm with (safe) space between the male and the female. The gender binary roles of our workshop echoed the macho rumbero culture of New York discussed in Derrick Leon Washington's thesis on Rumba Nueva (2014). Coded in irresistible rhythms, rumba Guaguancó normalises binary gender roles, and arguably even rape culture. I find a parallel of sudden diamond-shape knees in the Sabar rhythm Kaolac, but the story of that dance is different, with many more dramatic, angular gestures.

Jook is an old word attributed to a mainly African (Fulani, Hausa) origin by Allsopp and Allsopp (2003), with a possible Dutch source also. In Caribbean vernacular, "jook" means to poke or stab, gouge or break the skin. Do dance steps and lyrics such as "jook" and "guns" transform collective trauma into pleasure and play? "Jook Gyal (Wine)" by Elephant Man (2003), from his album "Good to Go" calls on women to "wine" the hips. In a humorous tone, the Jook Gyal video places glamorous, gyrating Jamaican women in a barn, wining to a bass-heavy urban rhythm amid innocent, golden hay bales. The Mighty Sparrow's sweet voice sings "Jook for Jook" – a Trini calypso hit whose jolly cadences belie the Biblical violence of "eye for an eye" imagery combined with sexually suggestive lyrics (Mighty Sparrow 1968).

This Caribbean cocktail of Biblical idiom, profanity and irony contrasts with Manding dance imagery that connects cosmic energy, known as *Nama*, with collective cultivation and iron-smithing. West African rhythms synchronise the community in cosmic cycles of birth, age-grade, initiation, healing, marriage, death and revenants. Even as the collective memory marks new steps, Black Atlantic dance has always marked social transformations. Prof. Thomas DeFrantz's evocation of the Ring Shout as a 'technology of the spirit' (2021, 11:30) invites reflection on how social dance transforms emotion or trauma (Fig 13).

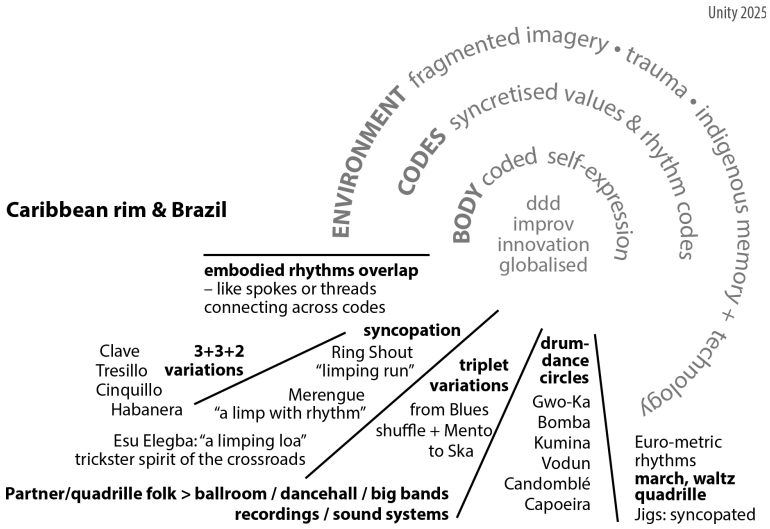


*Figure 13: post-colonial axiology and identity – trauma, technology, racialized body, disrupted relationship with biosphere – diagram by Molloy, 2022–25. Integrates axiology theory by Nichols (1974) with my lived experience, imagery of Caribbean and American dances, and New World transmission of rhythm aesthetics dissociated from ethnicity. An article about the convergence of European codes with West African codes titled 'A Limp with Rhythm' (Hutchinson 2012) also informs this diagram, that integrates my embodied experience of dance, historic trauma, theory and ethnographic data.*

## Formations – the cypher

I use the term drum-dance dialogue to refer to Africanist embodied codes that recall collective knowledge while inviting individual expression:

- call-and-response
- dance calling synchrony and imagery
- circle-solo – coded, improvised synchrony

Call-and-response is widely recognised as an African aesthetic that continues in the Americas (Baraka 1963; Floyd 1995). Robert Farris-Thompson describes it this way:

> South of the Sahara, solo-and-circle, or solo-and-line, or solo-and-solo forms of dancing mirror melodic call-and-response.

> Dance and music are very closely interwoven in Afncan cultures, and persons singing the chorus frequently double as the circling group who surround or are led by the master singer. Unsurprisingly, the leader of the dancers is, often, the leader of the song. Often the overlapping danced responses to the calls are enthusiastic and very strong. (National Gallery of Art 1974, 27)

Circle dances are common to many cultures worldwide. Appalachian Square Dance caller and scholar Phil Jameson affirms that the solo-in-circle formation came to the Americas with African dance, as he cannot find it in European traditions (2016). West African dances illustrated with video in the Unity Map currently all feature drum-dance dialogue in circle-solo formation, even if the cypher is not fully represented in staged video recordings. Cypher formations vary – turning circle or circle-solo surrounded by standing or sitting community at in a function room or village square. The essential feature is that the circle is participatory, porous and invites coded, improvised dialogue with live drums, or a drum 'soloist'. Ofosuwa Abiola describes this cypher dynamic in of her book *History Dances,* an in-depth study of ancestral Manding dances (2019). Rather than describing rhythms as coded, Abiola highlights 'root steps' specific to each ancestral rhythm.

> The dance circle is created by the positions of the spectator-dancers and of the drummers and other musicians. It can be formed from spectators or drummers who are seated or in standing positions. Spectators who desire to dance leave the seating area on the perimeter of the circle and enter the center of the circle to dance. Once he/she has finished dancing, they return to the spectator area. Dancing in the center of the circle is comprised of improvisation with a constant return to the root steps of the particular dance being performed. Sometimes other spectator-dancers will join the soloist in the center of the circle after the soloist has danced in the center alone for a time. (Abiola 2019, 76)

What I'm calling improvised synchrony in drum-dance dialogue, Abiola describes thus, 'the lead drummer, or the drummer performing the accents, must form a dancer-drummer bond with the soloist… anticipate the dancer's moves and provide accents that highlight them'. (Abiola 2019, 76)

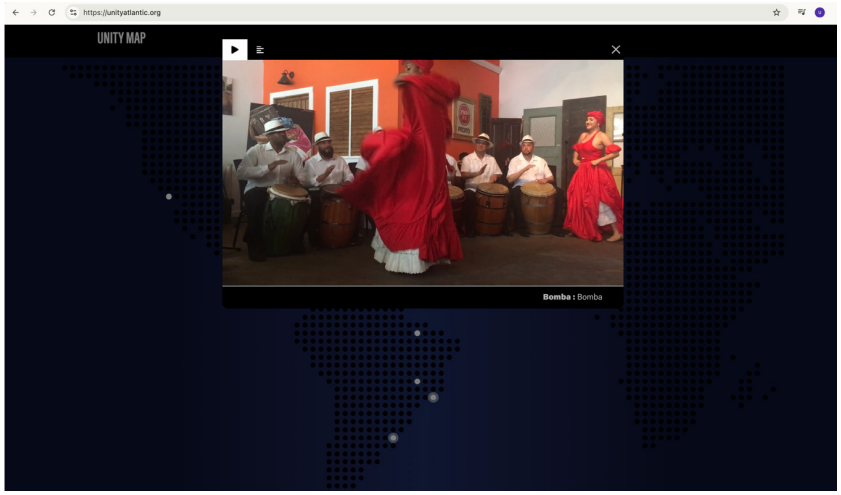


*Figure 14: Drum-dance dialogue, circle-solo: Bomba from Puerto Rico. Video by the author, 2018. Performance by Bombazo company, New York. Screenshot in Unity Atlantic Rhythm Map – interactive cartography by the author.*

This Africanist aesthetic continues in Caribbean codes such as Gwo-Ka (Fig. 1) and Bomba (Figure 14). I see the dramatic, swinging arms of Manding dance transformed to expressive swinging of ample, Euro-colonial legacy skirts, in Caribbean dance. Lena Blou's (2021) doctoral survey of Francophone black dance scholarship and her own dance-practice comparison of Martiniquan, Guadeloupean and Guyanese vernacular, affirms the importance of music, dance and song unity in Caribbean dance:

> … all these works, whether historical, scientific, autobiographical or artistic, trace a salient and transversal line of the Caribbean…: use of the circle, the drum, improvisation, and with the dancer and the singer as actors. From this practice comes a

> particular aesthetic, linking music, song, dance and drum. It is a social aesthetic…
> (Blou 2021, 39)

Transcending centuries and seas of separation is an aesthetic that 'links Caribbean dances together: the homonymy dance/drum, the mobility of the lower part of the body, as well as the song that structures the music-choreographic device' (Blou 2021, 44).

## Digital Heritage Maps – the landscape

In 2023, I trawled the internet for audiovisual dance-mapping examples as context and models for the Unity Map. The only one I found was by French Institut national de l'audiovisuel (INA) with the Association of Choreographic Development Centers, Toulouse branch. With other partners including the University of Toulouse, this response to a 2014 project call from the French Ministry of Culture produced a bilingual French-English audio-visual map. The *Danses Sans Visas* interactive map is archived-based and produced to a high standard, in a journalistic tone. The Centre de Développement Chorégraphique National (Toulouse) present its rationale:

> In the form of an investigation, specialists in dance memory delved into the INA archives to extract sixty videos… they are dancers, choreographers, academics, researchers and writers, recognized for their legitimacy for each of the dances: Eric Falc'her-Poyroux, Stan Lehericy, Florence Boyer, Edmony Krater, Corinne Frayssinet-Savy, Christian Dubar, Simon Valzer, Marie-Christine Vernay, Thomas Jacques Le Seigneur, Fabrice Hatem, Pol Briand, James Carlès. … different entries – cartographic, chronological and thematic – constitute as many ways to appropriate this tool.
>
> Searching for the origin of a dance often turns out to be a delicate mission and this site does not claim to give an exhaustive account of the history of dances but it proposes to lift the veil of their possible origin… Annie Bozzoni (n.d.)

Given its archival source in French colonialism, the map is hardly decolonial and has no Afrocentric focus. I read it as catalogue of collectibles from around the world held together by French academic curiosity. Still, *Danses Sans Visas* challenges Eurocentric views in its Tango reportage, wherein a French journalist expresses doubt about African heritage claimed for Tango by his first informant, Yuri Buenaventura. Further investigation by the journalist yields an excellent demonstration by Juan Carlos Caceres, of Candomblé drum rhythms being transposed to piano, to produce the Tango aesthetic (2003). *Danses Sans Visas* is a valuable example of intangible heritage mapping – one of a series of INA 'interactive frescoes' that promote audiovisual heritage. On topics other than dance, big-budget heritage and memory maps have been produced online in collaborations between tenured academics, city councils and government archives, including the following examples:

- my University College Cork co-supervisor Prof. Griffith Rollefson, supported by data analyst, Shyamasundar L.B. and CIPHER ERC funding, launched the '*3rd AI Engine*' map of Hip Hop artists and lyrics, in 2024 (Rollefson and Shyamasundar 2023).
- *facingthepast.org*: on Atlantic slavery-funded buildings: 'Facing the Past is made possible with The National Lottery Heritage Fund… to bring greater awareness to Lancaster's historic involvement in trans-Atlantic slavery and the legacies of this today. It includes: an interactive digital map… a public performance event; a public memorial consultation with young people and newly commissioned research'. Prof. Alan Rice is a contributor to this map (UCLan 2023).
- *Radiooooo.com*: pop-art style music map *Radiooooo* is an elegant and technically accomplished music-only model, commericalized via 'freemium' subscription. Effectively a digital portfolio by designers and DJs, it has no plausible heritage agenda, rather 'the finest musical collection crafted by humans… explore by country, decades, moods'. Since I copied the above quote in

> 2023, its mission has evolved to creating 'a more open minded and richer world'… as of the 2025 mission statement, that still reads as marketing (*The Musical Time Machine* v 3.1.8 2013).

These examples are relevant to the funding of Black Atlantic heritage projects. Slavery made the Black Atlantic diaspora culturally stateless. This helps explain why Black cultures are continually appropriated and commercialized. While national cultural funds are mostly dedicated to nation-state identity narratives, resources remain concentrated in colonial metropoles. Funding is the number one concern expressed to me by Afrodescendant artists from the Global South engaged for this research. This concerns not only individual survival but our collective, embodied heritage. Apart from the Caribbean Cultural Fund, grants dedicated Afro-diasporic history tend to center the slave trade (e.g. Manifest, FME, Quai de Branly). When Frank Wilderson III (2020) equates blackness to slaveness in his book *Afropessimism*, I am skeptical – but for European funding, apparently it is so.

During the Dance Studies Association Journal peer review process, questions were asked about my use of studio productions more often than fieldwork footage of dance. The Unity Map, within the larger art concept *Black Atlantic Space-Time*, has earned Unity our largest ever co-production and group exhibition, Project Manifest 2024. Manifest funding required Unity to film in Lisbon with a local production company (funded) or to film in France out of our direct budget to a tight production and exhibition schedule. From a Manifest budget of almost €1M, Unity's direct production budget was €1000. The online Unity Map is dynamic and will be updated with original field recordings as funding and resources allow.

The unit of knowledge analysis in this map is rhythm as drum-dance dialogue – a portable technology recognizable across many different settings, even on improvised instruments, when performed by respected culture-bearers.

I can compare my lived experience of the *Abodan* funeral ritual with an *Abodan* rhythm video performed for camera by Clément Assémian

and three musicians, filmed in the theatre where Clément teaches daily in France. In the Ivorian village of Mouyassué, Clément joined about 20 men to collectively create a rhythm with voices, drums and sticks striking benches. This is a spiritual experience. The sound has a fullness, volume and timbre that can only be experienced live – but the rhythm itself is portable. The *Abodan* ritual can last for hours, but a recording can only hold a viewer's interest for minutes. Staged *Abodan* is a pale imitation of the rhythm-coded social circle that summons people from miles around to honour ancestral memory, bring gifts, and musically uplift the family who has lost a loved one. Community gender dynamics are obscured in the all-male staged performance and the ensemble turning circle formation is not represented by a solo staging. Otherwise, Clément's solo accurately represents *Abodan* rhythm and step aesthetics of his community. One economic and social fact that I have minimised in the Unity Map is the majority white participation in African dance classes to live drum rhythms – my typical learning environment in France. As I prioritize black representation and indigenous African knowledge in the Unity Map, questions of whiteness and appropriation are ever-present but are beyond the scope of this article.

If we cannot learn everything about African ancestral aesthetics by inviting culture-bearers to represent their culture in a videoshoot, the Unity Map / *Black Atlantic Space-Time* dataset (Molloy 2024e) tests what we can learn by this process. Inviting culture-bearers to perform ancestral dances in a controlled environment permits high quality sound capture, creative camera movement, lighting and editing. Choreography for camera opens storytelling possibilities that are otherwise beyond the reach of a low-budget shoot.

In 2025, I received a small grant from the University of Toulouse, for fieldwork in West Africa. As I edit the media and fieldnotes from that February trip to Ivory Coast, I update the Unity Vector Preview. The gap between the Unity Map's potential and its resources can be gauged by the many data points in the Vector Preview (Figure 3) not yet collated with text, references, audio and video in the online

version. This doctoral arts research has not benefited from Caribbean fieldwork– so there is much work still to do! The Unity Map exists because I gave myself permission to create something imperfect and to make mistakes. Benefactors, dancers and scholars supportive or critical of this Black Atlantic rhythm collection and Map are invited to get in touch, to help me build it better.

## Conclusion

Early articulations of Black identity and Pan-African solidarity such as the New Negro movement (The Met 2024; Gates 2024) and Négritude, centred visual art, prose and poetry (Césaire and Pinkham 1955; *Senghor* 2015) rather than music or dance, with a few exceptions. Credit is due to Zora Neale Hurston as arguably the first scholar to identify aesthetic qualities uniting African and Afrodiasporic dance, orality, rhythm and visual design. Hurston celebrates Negro 'angularity' and 'asymmetry' by reference to African visual art, a poem by Langston Hughes, the St. Louis Blues, and the dancing of Bojangles and Snake Hips Tucker. (Hurston 2000a [1934], 35)

My embodied dance-design research is inspired by Hurston's oeuvre. This article has used the Unity Map (Molloy 2024) online and Vector Preview (Figure 3) to illustrate:

- An Africanist continuum of aesthetic and collectivist values**:** drum-dance dialogue in circle-solo or turning circle formation, call-and-response and dance-calling (synchrony). Collective support, identity and social synchrony through rhythm.
- Afro-Caribbean rhythm continuities: Dansa / Tresillo / Dem Bow rhythms
- Black Atlantic innovations and transformations in the Americas: indigenous ritual imagery reflecting relationship with the biosphere, replaced in the Americas with images of collective trauma, popular culture and technology in old or new steps, dress and instruments.

Researching my Afro-Caribbean-American identity through dance, song, video, audio and map design is transformative even as dance continues to shape my life as it always has. The artistic identity that emerged in creating the Map is UnityAtlantic, a container brand for creative collaboration, begins to reply to my research question about identity.

I can see the usefulness of the term 'Blackness' for discussions of black representation, critical mass, solidarity or influence, especially in situations in which white privilege or white majority is associated with cultural appropriation. However, the essentializing term 'Blackness' may obscure aspects of history or living heritage such as African and Afro-diasporic linguistic, ethnic and creole diversity. Essentializing Blackness as if dance were transmitted through our blood or DNA may obscure strategies for cultural sustainability and viability, including the resourcing of cultural archives, conservatories, or community practice spaces. Perhaps the key is critical mass, whether by demographic happenstance or through the intentional creation of 'Black spaces'.

Similarly, I hear scholars and dancers referring to an essentialized body – the 'Black body' or 'Creole body' – as an archive (e.g. Riot 2022). This metaphor obscures the fact that any individual body lacks desirable archival attributes, such as intergenerational longevity and predictable, reliable, equitable accessibility. With the Unity Map, I attempt to create a cultural archive with these properties by combining dynamic digital media with theory that supports collaboration. As yet, the Unity Map lacks sufficient institutional backing to ensure longevity. Unreliable and fractured archives are part of the Black Atlantic experience of a culturally stateless identity, giving rise to narrative innovations, pioneered by Saidiya Hartman (2007), Marisa J. Fuentes (2016) and Melissa Blanco Borelli (2016).

Visually, the Unity Map recalls stars reflected in the sea, to visually symbolize African ancestors and rhythm knowledge past, present and future. 'Rhythm code' provides a unifying theory, of drum-dance dialogue as ritual of social identity and individual expression. The

work to date reveals a tiny sample of a vast rhythm heritage, devalued and obscured by colonial-legacy erasures, thefts and inequalities. Nation states, city governments and monotheistic cults historically and periodically suppress Afrodescendant peoples and our cultures. I prioritize black representation in the curation of the map as a space for Black Atlantic histories and Black Atlantic futures.

The Map is uniquely decolonial in prioritizing rhythm-based codes of identity over nation-state identity. Mapping rhythm codes telescopes four hundred-plus years of rhythm heritage to offer a unifying, resilient Black identity that embraces diversity in language and literacy. While research and data entry continues, the Map already offers a unique resource for comparing ancestral dances of West Africa with Black dances of the Americas.

This research artwork emerges from a social dance practice spanning many codes, countries and collaborations with Afrodescendant culture-bearers. The Map centres real-time drum-dance synchrony, Black representation, virtuoso artists and high production values. The Map's functional longevity depends on software maintenance – so new funding and collaborations need to follow the successful Project Manifest co-production. This article reaches out to funders, curators and artists interested in a Map collaboration or simply in sharing data sources via the Share a Rhythm form in the Unity Map menu. Pending institutional, archival backing, the *Unity Atlantic Rhythm Map* is both a personal research tool and a public, Black dance heritage map.

Drum-dance dialogue generates a continuum of Africanist rhythm codes, circulated through the Caribbean, diversified through migrations and more recently, mass media. The 3+3+2 pulse of West Africa finds expression in the Malinke *Dansa*, the Cuban *Habanera* and Dembow, in the 'Spanish Tinge' of Jazz. Dance accents and images transform through cyclic, generative Black space-time. As the constellation of collective memory begins to shine, the *Unity Atlantic Rhythm Map* invites new inter-diasporic dialogues and circulations.

## Author Biography

**Deirdre C. Molloy** uses social dance ethnography and digital design to research Black Atlantic identity. Her doctoral research follows Masters degrees in Multimedia (1.0) and Ethnochoreology (1.0) and a BA (Hons) in Psychology. Molloy is a PhD candidate at University College Cork and Université Toulouse Jean Jaurès, affiliated with CIPHER ERC, ERRAPHIS, and SLIPPAGE. In 2022, Molloy won the Danijela Kulezic-Wilson Memorial Award for interdisciplinary innovation in Film, Music and Theatre. Under the artist name UnityAtlantic, Molloy creates film, music and performance collaborations. Her video dance narrative *Drum Calls* has been screened at film and dance festivals in the USA, Canada, Scotland, France and Italy. The poetic narrative of the movie is complimented by a more analytical approach to rhythm in the *Unity Atlantic Rhythm Map.* Follow the research or get in touch at: *https://linktr.ee/molloydc*

## Appendix 1

### *UNITY ATLANTIC RHYTHM MAP: CREDITS*

**Design, concept, research curation:** © 2023–25: Deirdre Molloy | Unity

**Map Prototype 1**: By Code Your Future UK: 2023.10
Team Rhythm Code: 2023 Unity Map Full-stack HTML
Christina Mifsud | Delnia Alipour | Irianni Munoz | Man Sang Sin
Mentor: Dr Gregory Dyke: https://codeyourfuture.io

**Map Prototype 2**: Interactive Map 2024
Code producers: George Kalyvianakis and Carolina Costa/Gerador

**Base maps / research maps**: Base Dot Map: Original typographic composition by Deirdre Molloy in a modified stock vector dot map by Evcimen. Peters Projection, cross-referenced with a Google Map screenshot and pre-colonial data.

**Dance / Music / Audio-visual**: movie credits vary so they are listed with each map data point.

**Unity thanks CIPHER ERC** colleague Prof. Gustavo Souza Marques for Capoeira and Candomblé audio recordings from Brazil. **Unity thanks Baara Niogonya** for permission to reproduce and manage data from the private archive by JS Bourget, featuring percussion by Sega Sidibé, JS Bourget, Jean-Christophe Bénic

**Dancers**: Fatim Berthé, Tiéblé Vieux Diarra, Manu Sissoko http://www.baaraniogonya.com/

Tango video: Institut national de l'audiovisuel: https://fresques.ina.fr/danses-sans-visa/

**Curated social media**: Youtube, Vimeo

The Unity Map website and Prototype 2 was co-funded by the European Commission under the Creative Europe Programme.

## Appendix 2

Caption detail for *Unity Map Vector Preview 2025.10* (Fig 3 ) Content curation by D.C. Molloy. Data Sources: for Blues and Manding rhythms, dance community mentors and ethnographic interviewees from my Masters dissertation dataset (Molloy 2021); Capoeira and Candomblé rhythms identified by Mestre Boca and Mestre Daniel, recorded in Belo Horizonte (Molloy and Marques 2024); Vodun: Katherine Dunham et al (Hegedus and Pennebaker 1983); Tango (Danses-sans-Visa – Origines Africaines Du Tango 2003) ; Manding rhythms (Molloy 2021; Bourget and Sidibé 2025). The Jamaican rhythm list summarizes a 10-hour BBC radio series by reggae poet Linton Kwesi Johnson (1983). Swing and Hand Dance: dance community and forthcoming field recordings. Gwo-Ka cultural consultants included Guadeloupean DJ, Gwada Mike, and dancers Lena Blou and Raymonde Pater-Torin. Vogueing and Ballroom data source: Lasseindra Ninja radio interview (Baquet, n.d.), Rumba: personal communication with Cuban flautist, Bethy Ramirez. Ring

Shout: Library of Congress 2011; McIntosh County Shouters 1984a. West Africa – as cited and forthcoming fieldwork and interviews in the DecodeNoir website /dataset and participatory geography. Sabar: Wolof culture-bearer teachers Aziz Mbengue and Abib Sow, private communication 2023–25. Kongo source: rhythm workshop with Les Freres Makouaya seen at Africlap festival, 2023. San rhythm/video source: Myburgh 1985; Zylstra 2018.

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