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African
Ancestral
AI

Aishatu Gwadabe

This morning Halima decided not to enter the *Loop Vine*.

She took a deep breath and observed the pulsating atmosphere outside her window. An IoT-connected smart street light system illuminated her neighbourhood in the heart of Munich city. Autonomous cars moved like a swarm of bees.

Halima took her eyes off the road to glance at her phone. She sighed. Twenty-three minutes to go.

Halima longed for a tribe to attribute her blackness to. Her father's heritage was a mystery to her. Her whole life, she only knew that he was Nigerian. Not to which tribe he belonged. The multi-tribal nature of Nigeria had always put her at a loss.

Her German identity was easier. All she had to do was step foot outside. Her fondest hiking memories always took her to Blautopf, a small myth-enshrouded river that changed from dark blue to a light turquoise depending on the light.

The *Loop Vine* had distracted her from the void that often overwhelmed her for not knowing. In the metaverse, Halima could dissociate from the world of her father's absence and shed her corporeal form to step into a pixel-created life of her choosing. But it was a temporary fix—only a flash of serotonin. She found herself needing more to feel okay.

Halima stopped her train of thought to look at her phone. The delivery drone was still en route. Twenty minutes to go. She picked up a handwritten letter and read:

*My darling daughter Halima,
If you're reading this, I'm no longer of this world. Sorry,
the clinical trial has failed. I've tried my best to beat this disease.
I hope you can forgive me for what I'm about to tell you.
One year after we got married, you were born.
It was the happiest day of our lives.
One evening, I returned from a stroll late at night.
The scents of roasted almonds, cinnamon, and hot chestnuts
wafted through the winding alleyways of the old town.
I took you to see the festivities of the Christmas market.
Once I reached our neighbourhood, I saw dark clouds of smoke
and flames. There was a terrible fire in our apartment.
It was the most heartbreaking moment in my life.
Your father was trapped inside the towering inferno.
I was too late.*

*We had planned to visit his family in Nigeria.
I'd never met them before. The fire had destroyed
every trace of his existence. When he died,
I realised I had no way of contacting his family.
I decided to spare you the pain and never talk about it.
He belonged to the Hausa tribe located in Kano State,
in the northern part of Nigeria.*

Halima pressed the letter to her chest in an embrace. It was the one-year anniversary of her mother's passing.

Reading about her father's death and learning that he was Hausa had not brought her the peace of mind she so dearly needed. There was no closure, just more questions.

Her life had come to a screeching halt ever since. She stopped eating and sleeping properly and spent most of her time in the *Loop Vine* or watching Nollywood movies.



Halima muttered to herself. *Today will be different.*

She closed the window and moved across her living room to let herself fall on a soft armchair. It was her favourite colour. A deep and vivid shade of blue with shimmering golden flecks reminiscent of a starry night sky.

The fabric felt warm, soft, and fluffy. Halima loved to snuggle into the velvety chair with a freshly brewed cup of golden milk. She wrapped her hands around the warm mug and took a deep smell of the comforting spice mix. She admired the murky swirl of gold and white before she savoured the nutritional elixir.

Church bells chimed from across the street. It was 10 a.m.

Halima rubbed her hands on her thighs. She looked at the smart logistics app of her neighbourhood's municipal IoT network. The electronic tag attached to her parcel, stored in the RFID system, enabled her to track and monitor the delivery drone in real-time.

Halima's phone vibrated. She jumped out of the chair to run toward her door.

Finally.

The RFID reader informed the parcel ID system in her app of the arrival of her package through the 7G. The delivery drone dropped the parcel in the receiving box at her apartment building for her to pick up with her digital ID. It was stored in her phone's blockchain wallet.

The parcel was from an organisation called *The African Collective*. The tiny package contained a sound shirt and an AR code to a unique access token for KOWA. The token's 7G-enabled holographic disclaimer message had one passage that caught Halima's attention:

KOWA AI is a voice-activated African Ancestral AI technology that exists with bias mitigation protocols. As you have indicated kinship with the Hausa community, your KOWA AI app has been personalised. The data set, which was curated for you, encapsulates the worldview of the Hausa people. We are committed to carbon neutrality. Our language model has been developed with Green AI technology, using distributed clean energy sources.



Halima opened the KOWA AI mobile app interface to enter her unique access code and select her personalised settings. She carefully put on a translucent sound shirt. It had a programmable display fabric that allowed users to change the design of the shirt to their choosing.

The garment had no wires, instead, all conductive pathways were seamlessly integrated into the fabric, so that data networks were stretchable along with microelectronic circuitry. Halima chose the default design that transformed the sound shirt into a dark blue hue embellished with a decorative grey Hausa ornamental design that looked hand-stitched. She touched the shirt that felt like smooth cashmere on her skin.

Halima synced her ear-free headphone unit with the KOWA AI app. It was around her neck like a u-shaped golden necklace. The unit had two small holes that

directed sound waves toward her ears to create a voice-controlled personal sound bubble with noise-cancelling technology.

She activated KOWA AI with a greeting in Hausa.

“Baka da Wahaka KOWA. Greetings!”

No answer. There was utter silence.

Halima practised the greeting several times in her head. She raised her voice and repeated,

“KOWA Baka da Wahaka.”

Moments passed. Still no answer. Halima’s skin was flooded with melodious drum beats as the micro-actuators on her sound shirt powered up without warning.

“Halima, ni ba kawa ki bace,” erupted a sudden voice, tinged with a warbling accent she didn’t recognize. *“I am not your friend. Have your parents not taught you proper Hausa etiquette? It’s Barka da Warhaka! That’s how you address the elders. Remember. Now try again!”*

KOWA said, offended.

“Barka da Wa-”

“No, no, no!” KOWA interrupted Halima and let out an exasperated sigh.

“It’s still wrong.”

Halima swallowed hard. Heat rushed to her cheeks. She was utterly embarrassed for not being able to do a basic greeting ritual. The instructions for the KOWA AI app were clear. To activate KOWA one had to use one of the many traditional Hausa greetings.

Why does it matter to me that an AI told me off so harshly? Halima thought while playing with one of her braids that grazed her shoulders. *How come the AI was taking my mispronunciation so personally?*

Her eyes grew squinty while she clenched her fists, but she didn’t respond out of anger.

“Halima, we can sense that we are upsetting you,” KOWA said with a surprised voice.

Halima's eyes widened in embarrassment. Of course, KOWA was monitoring her physiological signals through the pervasive sensor-woven sound shirt, responding to her breathing pattern, her galvanic skin response, body temperature, and heart rate variability.

Heat rushed to her cheeks. The situation reminded her of the archetypical elders in Nollywood movies who claimed to even have eyes behind their backs which allowed them to know what was going on. At all times.

KOWA interrupted Halima's train of thought with the tenderest tingling sensation of the sound shirt. Vibrations trickled down her right arm. The repetitive motions were soothing. Almost as if soft hands were caressing her arm.

These sensations were accompanied by cool-toned pastel colours of baby blue, lilac and mint. The iridescent hues spread all over the garment for a couple of minutes. The colours were comforting. After a while, her shoulders relaxed.

"Is it because we have corrected you?" KOWA continued, "It's our duty to teach you the Hausa way of life. You're part of our community. And we will be direct. If we don't correct you, how else will you learn?"

As Halima sank into her armchair, she sighed.

"Don't worry, we will teach you proper Hausa etiquette. Now let us try together."

"Barka da Warhaka," KOWA and Halima said in unison.

"Great! Well done."

"Barka ka dai." KOWA said, pleased.

"What does that mean?"

KOWA answered with a giggle.

"It's a response to a greeting and means hello."

Bright star-shaped mahogany colours appeared on the sound shirt transitioning into swarm-like movements. A shower of golden sparks spread all over the sound shirt followed by the crowning climax of a firework display that made Halima's jaw drop. It was an unforgettable sight.

The swarming colours looked like tiny explosions on her garment, as if the sky filled it with colours and light. It looked magical.

*“We have saved the progress you made in the communal archive.
Next time you activate us with a greeting, it shall work
without any problems.”*

“Thank you.” Halima said, relieved.

*“We are KOWA - the Knowledge of West Africa AI mobile app.
Our name means everyone in the Hausa language. We are the source
of ancestral memories that have been passed down for generations.”
“Can you teach me Hausa history, traditions, and songs?”*

As KOWA spoke, their voices rose and fell in a melodic pattern:

*“We praise you for seeking knowledge,
This is courage!
To discover your roots,
you shall be encouraged.”*

KOWA continued, *“We can even connect you with relatives
if their information has been collected in the communal archives.”
“Really? That’s incredible!”*

Halima rubbed her hands together in anticipation.

“Let’s start with a simple question. What’s zero divided by zero?”

For several heart-stopping moments, there was no response. Halima picked one of her pencil-sized braids and started to twirl the loose zig-zag patterned curly ends. The braids framed her face like a security blanket. Halima double-checked her ear-free headphone unit.

“Hello? Still there?”

Maybe it’s broken.

She inspected the connection with the KOWA AI app on her phone. There was no technical error.

She raised her voice to repeat her question.

"Hello?"

KOWA snorted and gave an exasperated sigh.

"We might be old, but we're not deaf."

If KOWA were a human standing in front of her, they would have a throbbing vein in their neck.

"There are several videos of people asking this same question to a Siri."

Halima's face brightened. A smile lurked at the corners of her mouth.

"Great! You recognize my question."

"Your request tells us you're ready to treat us like some other AI."

KOWA's androgynous voice shifted, raising a register into the familiar falsetto of Siri, but somehow wrong.

"Imagine that you have zero cookies and you split them evenly among zero friends. How many cookies does each person get?"

Halima stared, startled, at the mockery of the robotic American accent of an AI from another era that filled her living room.

"Right," she said.

"I see."

Halima rubbed her chin and contemplated for a moment.

"Can you recommend any literature on African philosophy?"

"Ban gane ba. We don't understand the question," KOWA said in their own voice.

Despite not having received the answer she was looking for, she liked how KOWA

sometimes answered bilingually, making it easy for her to learn new sentences
Halima rephrased her question.

“Can you tell me where I can read about Hausa traditions?”
“Hausa oral poetry
is no novelty.
It’s a living and dynamic verbal art,
it embodies history.”

Halima leaned into her armchair and took three deep breaths.

“Can. You. Find. Me. A. Website? Anything?”
“Halima, we’re getting a sense that you might mistake us for
an AI recommendation algorithm.”

Halima pressed her lips together into a slight frown.

“We can’t give you a list of books or resources.
Even when our traditions have been recorded, transcribed,
interpreted and printed by Western anthropologists,
they didn’t even have a fraction of our stories.”

Halima bit her lips and shook her head in disbelief.

“You’ve misunderstood! That’s not what I meant!”
“Ancestral oral poetry
must be seen within its context,
and most importantly
this song, this recitation is no contest,
it contains the lives and experiences of our community.”

Halima facepalmed. She took off her headphone unit and tapped the tiny mic to check the sound. When she put her headphone unit back around her neck, she was surrounded by KOWA’s voice.

“...There are no scriptures containing knowledge about Hausa stories that can give a full picture. As you should know: Africa is not a country. It’s a continent.”

Halima exploded out of her armchair.

Kowa continued, “This means, there is no such thing as African philosophy. Also, the Hausa are not a monolithic tribal community. If you repeat asking these kinds of questions you will cause us to malfunction.”

Halima crossed her arms before her chest and shifted her glance across the room. *Maybe if I ask a different question KOWA will be recalibrated?*

“What’s the sound shirt for?”

Halima closely inspected the thin, long-sleeved shirt that fit her like a glove.

“To create a multi-sensory experience.”

KOWA’s voice sounded as if they were excited.

“Our stories must be performed to be effective.”

KOWA made a dramatic pause.

“It involves movement, gestures, dance, and songs.”

“How’s that connected to the sound shirt?”

“We don’t have a physical shape. The sound shirt allows us to perform and to dance between different devices.”

Halima tapped a fist against her lips. *Dancing?*

KOWA continued, “You can feel the music on your skin through thousands of tiny haptic sensors built into the material.”

“KOWA, it’s not just for my benefit. It connects you with me by recreating human touch.”

KOWA concurred, *“Our knowledge, this experience, this moment is a multi-sensory communal experience. Fluid and dynamic.”*



Several hours went by while KOWA continued to tell her stories about various royals of the Hausa people who reigned for centuries in the northern part of Nigeria.

Church bells rang seven times and interrupted her conversation with KOWA. *Seven p.m.? How many stories have I listened to?*

Halima rolled her shoulders backwards in a slow movement and focused on tightening her shoulder blades by drawing them toward each other.

“Can you tell me about the Maguzawa?”

“The Maguzawa?” KOWA’s voice held a note of disdain.

“We got more stories about our leaders,” KOWA said.

“I heard enough about royals and politicians.”

Halima’s voice sounded steady. *“At least for today.”*

“But, we have not finished telling you about—”

“The Kano chronicles.” Halima’s and KOWA’s voices came together.

KOWA went on to say,

“Life, like ebb and flow, is a circular story,

The Kano chronicles recount our tales in all their glory.”

Halima stood up and pressed her back against the wall, fighting off a wave of disappointment that threatened to wash over her.

“Maybe you don’t know all the stories.”

“We are the communal archive.”

“Then tell me about the Maguzawa.”

KOWA raised their voice. *“What about them?”*

*“They’re the indigenous Hausa people. Right?
I want to understand why the Maguzawa were forced to flee the—”
“They weren’t forced to flee the cities.
It was their own choice to move to the rural areas.”
Halima tilted her head. “B-But... the Maguzawa are being
treated as second-class citizens.”
“We are the communal archive. We can’t verify your claims in the data.
Your assumptions are wrong.”*

Halima crossed her arms and a pout crossed her lips.

*“There must be some record of their plight.
Are the Maguzawa marginalised?”
“Ban gane ba. We don’t understand the question.”
Halima rephrased, “Are they structurally marginalised?
Discriminated against?”
“Ban gane ba. We don’t understand the question.”
Halima rolled her eyes. “Can you tell me anything about them?”
“Ban gane ba.”
“Ban gane ba.”
“Ban gane-”*

Halima turned around and punched the wall with her right fist.

*“I don’t believe you.”
“Ban—”
“Stop!”*

Halima yelled at the top of her lungs to an empty room. The sound shirt changed colour and blinked in different shades of red. The haptic actuators vibrated rapidly. Expanded and contracted. It sounded like a tubular drum head on Halima’s back. It produced the sound of a tremendous crack.

As the vibrations gradually died out, the sound echoed and reverberated, generating the rumbling call of thunder.

Time seemed to slow down. KOWA shut down completely.

Halima crouched down with her head in her hands. Her heart continued to race. Every part of her went on pause while her thoughts caught up.

Halima breathed out.

She did not even realise that she had been holding her breath.
How long? Seconds? Minutes? Hours?



“Barka da warhaka,” Halima remained composed in her tone.

KOWA came back online. *“Barka ka dai.”*

“What happened?”

“We warned you not to ask questions that are filled with prejudice.”

“Prejudice? Me?” Halima shook her head in disbelief.

“This is a teaching moment.” **KOWA** said with a firm voice.

“A teaching moment?” Halima bolted upward.

“I’ve read that the Maguzawa have experienced marginalisation in cities.”

“We don’t agree.” **KOWA** said in an unwavering voice.

“Citing sources unknown to us is uncanny

Knowledge is transmitted orally

like a musical-dramatic opera, by word of mouth

and learnt by imitation or example in a crowd.”

Halima turned her head and asked her remote IoT stove to heat up coconut milk. Robotic hands placed a teaspoon of turmeric paste into a mug and poured the hot milk over it.

Halima picked up the warm mug. A sip of the golden milk felt as if a warming ray of sunshine embraced her ochre skin on the last sunny day of the year. A mottled brown tan clung to her skin like burrs as the autumnal equinox ushered in the arrival of a darker and colder season.

“You are the archive so you must know the answer to this.

Do the Maguzawa hold positions of power in government?”

“Well, they decided to—”

“Please. Only give me yes or no answers... So? What’s the answer?”

"No."

"Do they have economic power?"

"No."

"Are they being treated with contempt by their neighbours?"

"Well... Maybe?"

"Are you sure? Aren't they seen as pagans? Which has a negative connotation in the Hausa community."

"Yes, but they're pagans because they have no religion.

Some even follow the Bori cult and believe in spirit possession."

KOWA said with a trembling voice.

Comprehension ironed out the wrinkles in Halima's forehead. *You're not bias-free after all. How to counter your programming?*

"What kind of names do they have?"

"..."

"You can answer normally again."

KOWA let out a relieved sigh.

"They name their children according to events."

"Events?"

"Exactly, a girl born during the rainy season is called Damina."

"Not just Maguzawa name their children according to events, right?"

"You're right."

"Just because they have different beliefs doesn't make them less human.

Can you agree with that?"

"Makes sense."

Halima touched the Northern knot symbol on her sound shirt.

"KOWA what does this symbol mean?"

"Unity in diversity."

Halima nodded. Relief brought a smile to her lips.

*“These data points have never been connected before.
Updating the entire communal archive.”*

Halima thought, *Knowledge is relational. We are teaching our technology about ourselves as we inter–*

“Update complete.”



“Halima, in your personalised app settings you had asked us to share a pearl of Hausa wisdom with you daily. Please allow us to share a Hausa proverb with you.”

Halima nodded, then realised that KOWA could not see her.

*“Yes, please!
We can sense that you’re not at peace with yourself.
That’s why we’ve chosen the following proverb of the day.*

Mai hakuri yankan dafa dutse.

It’s the patient that boils bits of rocks. By this, we want to highlight the importance of perseverance in dealing with any kind of issue.”

Halima looked confused. *“Can you explain what you mean?”*

“If you are patient, you will ultimately succeed, just like water eventually boils. Just remember that. You can do the impossible, the seemingly unachievable, with perseverance and patience.”

Halima beamed. *“Thank you!”*

“We know your deepest wish. And as we have mentioned before, we will help you to learn and to reconnect with the Hausa community, your family.”

A smile spread across her face.

*“Halima, born in Munich, Germany,
You’re tied to your ancestral family.
May you find what you seek and desire.
We will illuminate the path you inquire.”*

KOWA went offline as Halima walked across her living room to look outside her window. Munich was silent and dark except for the bright moon in the night sky.

Aishatu Gwadabe (www.aishatuado.com) is a creative of African descent, who is a peace technologist, artist, author and AI ethicist. She can be found on the Lighthouse3 “Top 100 Brilliant and Inspiring Women in AI Ethics” 2022 list. Aishatu weaves real-world issues into technological promises of a better future and worked in conflict-affected communities in Yemen, Benin, Niger and Burkina. She explores Sub-Saharan African and Indigenous epistemologies and ontologies found in folklore, and oral literature to design innovative, restorative and equitable future(s).

Aishatu is a visual and literary NFT artist who pushes the boundary between the real and the artificial. She cultivates imaginaries that reframe, transform and orient toward enabling peaceful futures. Aishatu explores narratives from the past, present, and future that empower, uplift, represent and honour Black experiences.

Her multidisciplinary practice spans digital illustration, painting, and new media such as AI, VR and AR. Aishatu’s work is framed by legacies of Africanfuturism—like her predecessors, she uses science fiction to reconfigure the present into an exhilarating vision of the future.

Acknowledgments

We thank Lynn Kirabo, Minne Atairu, Christine Mungai, Shepherd Mpofo, and Reginald Royston for listening to this story and providing their thoughtful feedback and expertise.