For her extraordinarily detailed costumes, Ruth E. Carter studied the garments of the Maasai and other African tribes. A 3-D printer was also important.

How do you outfit an African queen? For Ruth E. Carter, the costume designer for “Black Panther,” it involved a Zulu hat and a 3-D printer.

In her 30 years in film, Ms. Carter has made her career putting images of African-American history and contemporary culture onscreen, from Spike Lee’s canon to “Selma” and the recent remake of “Roots.” For the Marvel blockbuster “Black Panther,” she got to envision a futuristic African alternate reality — made up of diverse tribes and untouched by colonizers.
“I really wanted this movie,” Ms. Carter, 57, said. She didn’t know much about the Marvel universe when she met with the director and co-writer, Ryan Coogler, but she liked the comic books’ portrayal. “You saw people with little kufis,” she said. “You saw a tribal council happening and someone was sitting there in a suit, and then they’d have a big Maasai headdress.”

To imagine the fictional African nation of Wakanda, without the influence of the Dutch, the British and other colonizers, Ms. Carter borrowed from indigenous people across the continent. During six months of preproduction, she had shoppers scouring the globe for authentic African designs, like the traditional stacked neck rings worn by the Ndebele women of South Africa. Textiles were sourced to Ghana, but many African fabrics are now printed in Holland; Ms. Carter rejected those. “I wanted to create the fabrics, and I wanted them to feel very superhero-like,” she said.

There was a strict color palette, drafted by Mr. Coogler: Chadwick Boseman, who plays T’Challa, the Wakanda royal who is also the Black Panther, wears black; Danai Gurira, as the warrior Okoye, and her band of female fighters, the Dora Milaje, are in vibrant red; and Lupita Nyong’o, as the spy Nakia, part of the river tribe, is in shades of green. (Black, red and green are also the colors of the Pan-African flag.) For Mr. Coogler, blue “represented the police and authority.” She dressed Michael B. Jordan, as Black Panther’s rival, Erik Killmonger, in it.

She also leaned on a visual bible created by Hannah Beachler, the production designer, which laid out the districts and culture of Wakanda. The merchant tribe is inspired by the Tuareg, ethnic Berbers of the Sahara, Ms. Carter said. The mining tribe resembles the Himba of Namibia, known for their red ocher body paint and leather headpieces. And for the artsy Step Town district, she scoured looks from an Afropunk festival in Atlanta, where “Black Panther” was shot.

“She has everything you want in a collaborator,” Mr. Coogler said. “She’s experienced but still youthful and energetic, still curious and open to trying new things.”
Ms. Carter said this was not the most complex production she’d ever done; “Malcolm X,” set across several eras, was even more involved. But the chance to explore Afrofuturism with “Black Panther” was meaningful to her. “It is the reason why we have a sense of pride as African-Americans,” she said.

The movie “connects everything that I’ve done about slavery and about how Africans came to this country, and what happened to their culture,” she said.

Here, she discusses the inspiration and design of several looks from the film.

The Black Panther Suit

The suit Chadwick Boseman wears onscreen features a raised motif.
Credit: Matt Kennedy/Marvel and Disney; Justin T. Gellerson for The New York Times

Ryan Meinerding at Marvel designs all of its superhero suits, but Ms. Carter put her stamp on the three versions made for this movie, adding a raised-triangle motif. “It has a little bit of a sheen to it,” she said. She calls the triangle “the sacred geometry of Africa, and it makes him not only a superhero, but a king, an African king.”
The Black Panther first appeared onscreen in “Captain America: Civil War” in 2016, and when Mr. Bose-man donned that suit and helmet for her, “we were, like, wow.”

“It was majestic. The superhero thing really is something mystical,” Ms. Carter said. “And then he was doing moves and he was telling us, you know, ‘I can’t raise my arm, and I can’t breathe out of my nose.’ And we’re like, oh, O.K., that’s bad, Mr. Black Panther. We’ll change that.”

**Queen Ramonda’s Crown**

Left, a Zulu woman in the traditional headdress of a married woman; center, a conceptual costume sketch by Ms. Carter (design) and Ryan Meinerding and his team (concept artists); and right, the head-dress as worn by Angela Bassett in the movie. *Credit: Getty Images; Marvel; Marvel/Disney*

For the headgear worn by T’Challa’s mother, Queen Ramonda (played by Angela Bassett), “we found a traditional Zulu married woman’s hat, complete with the ocher that makes it red, and like a hairy, furry, texture on it. It was giant, and I really wanted to see that beautiful cylindrical shape, because I’ve always seen the ones that you get in the tourist trade,” which don’t always resemble archival images. “I didn’t believe that the origins of its shape were real until I saw a real one.”

The hat was the model for Ms. Bassett’s crown, which was 3-D-printed, with help from the designer Julia Körner, who specializes in wearable plastics. A rounded shoulder mantle, with a bit of African lace, was also 3-D printed. It took six months, Ms. Carter said, to get the design right.
W’Kabi’s Cloak

As a leader of a border tribe, W’Kabi, played by Daniel Kaluuya, is wrapped in the Wakandan version of a Lesotho blanket. “The Lesotho do these wonderful blankets with these amazing prints on them that represent their king, they represent harvest,” Ms. Carter said. “And we screen-printed on the other side with vibranium” — the fictional metal on which Wakanda runs — “silver Adinkra symbols, so that their blankets could be used as shields during fighting. We worked on those blankets from start to finish.”

It was Mr. Coogler’s idea to make the blanket a shield. “What I found with African art and clothing and structures — things tend to have multiple uses,” he said. “If you see somebody wearing a beautiful cloth, not only does that cloth protect their body, but it also tells the story of their culture and their history, written on the fabric.”
Nakia’s Striking Looks

Left, a conceptual character and costume design sketch for Nakia (the design is by Ms. Carter and Keith Christensen is the concept artist). Right, the dress as worn by Lupita Nyong’o, with Chadwick Boseman, in the casino scene. Credit: Marvel; Matt Kennedy/Marvel and Disney

The costuming for Nakia, played by Ms. Nyong’o, made the broadest leaps, Ms. Carter said. The spy’s river tribe was based partly on the Suri of Ethiopia, so her traditional look was made of shells, beads and leaves.

“That cultural specificity was very, very helpful,” Ms. Nyong’o said. “I looked at images of those people and their particular way of life. It’s another layer of character development.”

But she also has a high-wattage fight scene in a casino in South Korea, for which she wears a striking green, high-neck, open-shoulder dress. Ms. Carter and her team designed the fabric and had it 3-D-printed. They started with a kente cloth, “extracted the line work and created a pattern, hand-painted it,” she said. It’s covered with Wakandan text — boxes with slashes inside — and it’s sexy
but not revealing. “It was her Bond Girl moment,” Ms. Carter said, “but also, she could fight and move in it, and it wasn’t constricting.”

Nakia’s civilian clothes were the real challenge. “It’s hard to figure out what a person’s casual looks are when they’re a war dog, a C.I.A. operative, a casino girl,” she said. “We were trying things on all the time in the fitting room.”

Ms. Nyong’o said, “There were days when, like, last minute, we still didn’t know what I was going to wear.” But Ms. Carter never panicked, she said admiringly. “She’s so relaxed, in a way that is just spell-binding.”

Dora Milaje Warriors

Danai Gurira, right, as the general Okoye, wears a gold neckpiece, not silver like the ones worn by lower-ranked members of her elite unit. Credit: Marvel/Disney

Maasai women in Kenya. The beading on their garments was one of the inspirations for the Dora Milaje look. Credit: Getty Images
In their red and gold outfits, these spear-fighting women are the elite warriors of Wakanda. The front of the costume is beaded “in the same tradition that you see throughout Africa — the Turkana, the Maasai,” Ms. Carter said. “The overall garment has a texture as well, the same kind of striations and sacred geometry” as the Black Panther suit. The leather harnesses that cross the bodice were made by craftsmen in South Africa so that they appear to be hand-stitched, and the imposing color was chosen to make eight actresses look as bold as 80, she said.

As their general, Ms. Gurira’s necklace is gold, not silver like her battalion’s. Ms. Carter thought through every detail of their armor for battle. “I had back story for the Dora Milaje costumes,” she said. “I had back story for Lupita. I have to have that back story, or I just can’t move a muscle.”