

Black History

The Hidden Superpower of 'Black Panther': Scientist Role Models

King of a technologically advanced country, Black Panther is a scientific genius.

Clifford Johnson
The Conversation

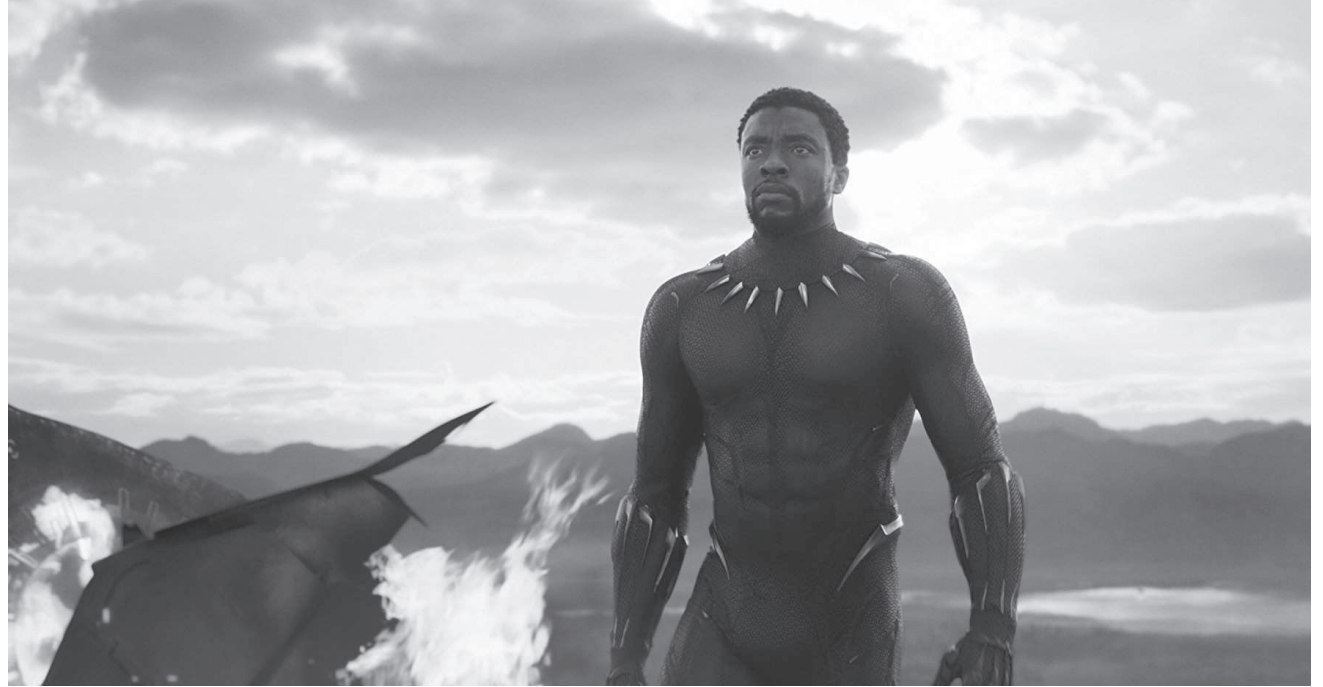
I'm not the first to say that the upcoming Marvel movie "Black Panther" will be an important landmark. Finally a feature film starring a black superhero character will be part of the Marvel Cinematic Universe – a successful run of intertwined movies that began with "Iron Man" in 2008. While there have been other superhero movies with a Black lead character – "Hancock" (2008), "Blade" (1998), "Spawn" (1997) or even "The Meteor Man" (1993) – this film is significant because of the recent remarkable rise of the superhero film from the nerdish fringe to part of mainstream culture.

Huge audiences will see a Black lead character – not a sidekick or part of a team – in a superhero movie by a major studio, with a Black director (Ryan Coogler), Black writers and a majority Black cast. This is

a significant step toward diversifying our culture by improving the lackluster representation of minorities in our major media. It's also a filmmaking landmark because Black creators have been given access to the resources and platforms needed to bring different storytelling perspectives into our mainstream culture.

Last year's "Wonder Woman" forged a similar path. In that case, a major studio finally decided to commit resources to a superhero film headlined by a female character and directed by a woman, Patty Jenkins. Female directors are a minority in the movie industry. Jenkins brought a new perspective to this kind of action movie, and there was a huge positive response from audiences in theaters worldwide.

Above and beyond all this, "Black Panther" also has the potential to break additional ground in a way most people may not realize: In the comics, the character is actually a scientist. Moreover, in



'Black Panther'

the inevitable (and somewhat ridiculous) ranking of scientific prowess that happens in the comic book world, he's been portrayed as at least the equal of the two most famous "top scientists" in the Marvel universe: Tony Stark (Iron Man) and Reed Richards (Mr. Fantastic). A Black headlining superhero character written and directed

by Black artists is rare enough from a major studio, but having him be a successful scientist as well is another level of rarity.

Scientists on screen

I'm a scientist who cares about increased engagement with science

“The history and evolution of the Black Panther character and his scientific back story is a fascinating example of turning a problematic past into a positive opportunity

ther character and his scientific back story is a fascinating example of turning a problematic past into a positive opportunity.

Created in 1966 by Stan Lee and Jack Kirby, he's the first Black superhero character in mainstream

to a fault. Of course, he grows to become a powerful ally of the Fantastic Four and other Marvel superheroes over many adventures.

While likening Black Panther to a 'refugee from a Tarzan movie,' the Fantastic Four marveled at his technological innovations in 'Introducing the Sensational Black Panther.' *Fantastic Four #52* (July 1966). [Marvel Comics]

The key point here is that the superlative scientific ability of our hero, and that of his country, has its origins in the well-meaning, but problematic, practice of inventing near- or beyond-perfect Black characters to support stories starring primarily White protagonists. But this is a lemons-to-lemonade story.

Black Panther (T'Challa) eventually gets to star in his own series of comics. He is turned into a nuanced and complex character, moving well away from the tropes of his beginnings. Writer Don McGregor's work started this development as early as 1973, but Black Panther's journey to the multilayered character we'll see on screen was greatly advanced by the efforts of several writers with diverse perspectives. Perhaps most notably, in the context of the film, these include Christopher Priest (late 1990s) and Ta-Nehisi Coates (starting in 2016), along with Roxane Gay and Yona Harvey, writing in "World of Wakanda" (2016). Coates and Gay, already best-selling literary writers before coming to the character, helped bring him to wider attention beyond normal comic book fandom, partly paving the way for

Minimize your risk to lead in water from home plumbing

Elevated levels of lead in drinking water were found in 18 out of 134 recently tested high-risk homes. These homes are at highest-risk for lead in water since they have copper pipes with lead solder.



Exposure to lead through drinking water is possible if materials in a home's plumbing contain lead. Common materials are copper plumbing with lead solder and brass parts.

Lead can cause health problems, especially for pregnant people and young children.

Follow these tips to reduce your exposure to lead:

1. Test your water for lead. Free kits at www.leadline.org.
2. Run cold water for 30 seconds to 2 minutes to flush out lead.
3. Do not cook, drink, or make infant formula with hot water from the tap.
4. Do not boil water to reduce lead. Boiling water does not remove lead.
5. Clean faucet screens to remove trapped pieces of lead.
6. Install low-lead fixtures or a lead-reducing filter.

**Find out how to protect your family.
Contact the LeadLine at www.leadline.org
or 503-988-4000.**

by the general public. I've worked as a science adviser on many film and TV projects (though not "Black Panther"). When the opportunity arises, I've helped broaden the diversity of scientist characters portrayed on-screen.

Jason Wilkes is a Black scientist on 'Agent Carter,' whose character emerged from the author's talks with the show's writers. ABC Television, CC BY-ND

Panels from 'The Dialogues,' including a Black female scientist. "The Dialogues," by Clifford V. Johnson (MIT Press 2017), CC BY-ND

I've also recently published a nonfiction graphic book for general audiences called "The Dialogues: Conversations about the Nature of the Universe." Its characters include male and female Black scientists, discussing aspects of my own field of theoretical physics – where black scientists are unfortunately very rare. So the opportunity that the "Black Panther" movie presents to inform and inspire vast audiences is of great interest to me.

The history and evolution of the Black Pan-

comics, originally appearing as a guest in a "Fantastic Four" Marvel comic. As a Black character created and initially written by non-Black authors, guest-starring in the pages of a book headlined by White characters, he had many of the classic attributes of what is now sometimes controversially known as the "magical negro" in American cultural criticism: He ranked extremely highly in every sphere that mattered, to the point of being almost too unreal even for the comics of the time.

Black Panther is T'Challa, king of the fictional African country Wakanda, which is fathomlessly wealthy and remarkably advanced, scientifically and technologically. Even Marvel's legendary master scientist - Reed Richards of the superhero team Fantastic Four - is befuddled by and full of admiration for Wakanda's scientific capabilities. T'Challa himself is portrayed as an extraordinary "genius" in physics and other scientific fields, a peerless tactician, a remarkable athlete and a master of numerous forms of martial arts. And he is noble