It could turn out to be mankind`s biggest technological leap forward Artificial Intelligence, AI for short.

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Highlight: For decades, Hollywood movies have taught us two things about robots. First, they`ll someday walk on two feet like people; and second, most of them will eventually turn on us. But in real life, humanoid robots like we see in the movies have always seemed to be twenty years away. Well, don`t look now. Last weekend, these robots competed in a competition run by DARPA.

Body

CHARLES OSGOOD: Good morning. I`m Charles Osgood. And this is SUNDAY MORNING.

Today is Flag Day, marking the adoption of the very first American flag on this date back in 1777 during the heat of the American Revolution. These days, a different kind of revolution is underway, a scientific revolution, centering on Artificial Intelligence, AI for short. Though its proponents claim AI will change all of our lives for the better, there are skeptics who are skeptical, as David Pogue will be reporting in our Cover Story.

DAVID POGUE: For a hundred years, the only place you could see walking, thinking robots has been in the movies. But now, advances in robotics and artificial intelligence are progressing so fast, the experts worry that these machines will become too smart.

MAX TEGMARK: There is almost no limits to be-- to how badly it can go for us humans.

DAVID POGUE: Coming up on SUNDAY MORNING, the thrilling presence and worrisome future of intelligent machines.

CHARLES OSGOOD: Helen Mirren won an Oscar for her 2006 film portrayal of Queen Elizabeth. And a week ago tonight, she won a Tony Award for a (INDISTINCT) portrayal of the queen on Broadway. Along the way, she granted an audience to our Lee Cowan.

LEE COWAN: It`s fitting perhaps that Oscar winner Helen Mirren lives just down the road from Tower Bridge. After all, she`s made a career playing towering British figures.

(Excerpt from The Audience; Broadway video)

DAME HELEN MIRREN: It`s a portrait. It`s not her. It`s our understanding of her.

LEE COWAN: Helen Mirren, expanding her realm to Broadway, ahead on SUNDAY MORNING.

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CHARLES OSGOOD: We take note this morning of the record producer behind a number of pop music greatest hits. His name is Mark Ronson and he talks with our Anthony Mason.

(Adele singing)

ANTHONY MASON: He`s produced for Adele, Paul McCartney and Amy Winehouse.

(Bruno Mars and Mark Ronson singing)

ANTHONY MASON: But now, Mark Ronson has his own monster hit.

(Bruno Mars and Mark Ronson singing)

ANTHONY MASON: How does it feel to have a number one song?

MARK RONSON: You know, it`s something that I never, ever thought was even remotely attainable.

LEE COWAN: Ahead on SUNDAY MORNING, Mark Ronson and the year`s biggest smash.

CHARLES OSGOOD: Time travel by vintage automobile is altogether possible and it`s happening in what might appear to be a very unlikely place, just ask Elizabeth Palmer.

ELIZABETH PALMER: Out for a nostalgic spin in the Islamic Republic. Iran`s American classic car lovers give us a glimpse of their treasures.

I think I see a Model T.

RAMIN SALEHKHOU: Yeah, you`re right.

ELIZABETH PALMER: Is it possible?

RAMIN SALEHKHOU: It is. And this is another car that`s awaiting restoration.

ELIZABETH PALMER: Oh, look, someone`s left the key on the seat. Should we go for a spin?

RAMIN SALEHKHOU: Why not?

ELIZABETH PALMER: Later on SUNDAY MORNING.

CHARLES OSGOOD: Mo Rocca talks with short story author George Saunders. Steve Hartman introduces us to a man who is truly driven. We remember actor Christopher Lee, talk about Napoleon and Waterloo, and more.

But first, here are the headlines for this SUNDAY MORNING, the 14th of June, 2015. The search for two convicted killers who escaped from a prison in upstate New York is now in its ninth day. Police are still focusing on woods and fields near the prison but there have been no new leads.

Hillary Rodham Clinton formally kicked off her campaign for president yesterday at an outdoor rally on Roosevelt Island in New York City. Today, she`s in Iowa.

Queen Elizabeth formally marked her birthday with festivities in London yesterday. But the real guest of honor was twenty-three-month old Prince George in the arms of his father, Prince William, on the balcony at Buckingham Palace.

But Her Majesty`s celebration may have an upstaged by last night`s party in Eastbourne, England, with the marriage of George Kirby, age one hundred and three, and his ninety-one-year-old bride, Doreen Luckie. After living together the past twenty-eight years, George popped the question on Valentine`s Day. The newlyweds` combined age is one hundred and ninety- four.

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Tigers, lions, hippopotamus and other animals escaped from a zoo in former Soviet Georgia after heavy flooding. The hippo was tranquilized and recaptured.

Now the weather, rain continues across parts of the upper Ohio River Valley and sections of the Northeast and usually warm in the Pacific Northwest. The week ahead, occasional showers in the Northeast, sunny in the Northwest, and hot and summery in the Southwest.

Next, robots: friend or foe?

And later--

ELIZABETH PALMER: Wow, time travel.

CHARLES OSGOOD: --on the fast track.

(ANNOUNCEMENTS)

CHARLES OSGOOD: It could turn out to be mankind`s biggest technological leap forward--Artificial Intelligence, AI for short. Unless all the AI in doubt robots decide to take over for us some day. Our Cover Story is reported by David Pogue of Yahoo! Tech.

(Begin VT)

DAVID POGUE: For decades, Hollywood movies have taught us two things about robots. First, they`ll someday walk on two feet like people; and second, most of them will eventually turn on us. But in real life, humanoid robots like we see in the movies have always seemed to be twenty years away. Well, don`t look now. Last weekend, these robots competed in a competition run by DARPA. DARPA is the military`s advanced technology division. You may have heard of some of its previous projects--***self-driving cars***, GPS, and a little thing called the internet.

(Crowd cheering)

DAVID POGUE: DARPA offered three and a half million dollars in prizes for robots that can navigate a disaster-rescue scenario. With only intermittent remote control by a human operator, the robots have to perform tasks like driving, turning off a valve, drilling out a wall, crossing a pile of rubble and climbing stairs.

(Crowd cheering)

DAVID POGUE: The crowd went wild.

GILL PRATT: It is an extraordinary thing, isn`t it? When the robot does well and it scores a point, everyone cheers as if they`re the ones that are getting the point. And then, of course, when the robot teeters and then suddenly falls, everybody goes, ah and they sympathize with it.

DAVID POGUE: Gill Pratt is the head of the DARPA Robotics Challenge.

GILL PRATT: These are still the Model Ts. And in think that in coming years, first of all, the most important thing is reliability will go up, prices will go down, and we`ll find more and more uses for them.

DAVID POGUE: It just walks?

GILL PRATT: I think that it just walked.

DAVID POGUE: Yes, just walking is a major accomplishment.

RUSS TEDRAKE: We`re still a long way from science fiction.

DAVID POGUE: Just ask Russ Tedrake, the MIT professor who led MIT`s robot in the DARPA competition.

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RUSS TEDRAKE: Our robot has to actually sit in the passenger seat because he`s too big to fit behind the driver`s seat.

DAVID POGUE: That would be this one.

RUSS TEDRAKE: Basically, it tried to drive while it was getting out of the car. It broke its wrist. It had to go through the rest of the competition with its right arm just dangling limp.

DAVID POGUE: Even with a broken right arm, the robot finished the course one-handed, earning respectable seven out of eight points.

RUSS TEDRAKE: This competition, a few similar competitions have convinced the world that robots are capable of doing real things in the real world. That has led to massive new investments from Google, Apple, Uber, Qualcomm, you name it. And that`s going to mean an acceleration of technology. Things are going to go really fast from here on out.

(Expert from Ex Machina)

DAVID POGUE: Alex Garland would agree. He`s the writer-director of Ex Machina, a movie that considers what technology might be like just a little bit in the future.

So it seems like, thinking robots are all of a sudden a thing again this year in--

RUSS TEDRAKE: Yeah.

DAVID POGUE: --in popular culture. Why do you suppose that`s a resurgence all of a sudden?

RUSS TEDRAKE: Why has that happened? I don`t know. I`ve thought about it quite a lot. And I think it may not actually be to do with AI. In some respect, I think it`s more to do with technology and a fear of technology.

(Expert from Ex Machina)

RUSS TEDRAKE: And we all have cell phones and we all have tablets and laptops and computers, and we don`t really understand how these things work. But they seem to understand how we work. And that makes us feel uneasy.

(Expert from Ex Machina)

DAVID POGUE: Most movies where there is a very smart robot, like yours, turn out to be menacing or threatening in some way if-- if the robot indeed does not turn out to be pure evil.

RUSS TEDRAKE: Actually in this case of this film, Ex Machina, I don`t think the robot is evil. What I think is that the robot is like us. It`s sentient. And that robot has been unreasonably imprisoned and like us wants to get out of that prison.

(Expert from Ex Machina)

RUSS TEDRAKE: We have a bad history, humans, with not respecting sentients. And-- and we-- we don`t want to keep making the same kinds of mistakes.

DAVID POGUE: Whether self-aware machines will ever exist is a question researchers debate endlessly. But getting there will require more than advances in robotics, it will also require breakthroughs in AI, Artificial Intelligence. We`ll have to teach machines how to think.

Let me say something to Siri, which most people think of is a remarkable human-like intelligence. So if I say, when is the next Cleveland-Indians game?

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SIRI (automated voice): The Indians-White Sox game starts at 5:10 PM.

DAVID POGUE: If anyone knows how close we are to being able to talk to our machines, it`s Dag Kittlaus. He and his team created Siri, Apple`s personal assistant. Siri, by the way, also began life as a DARPA project.

DAG KITTLAUS: So the first thing that happens is you need to change and understand the sounds that you`d said and turn them into words. So that`s the first step. And then the words need to be understood. So there`s a Artificial Intelligence inside that understands the context.

DAVID POGUE: Now sometimes I`ve noticed Siri seems to have a sense of humor.

What`s the best smartphone?

SIRI (automated voice): Wait, there are other phones?

DAVID POGUE: Someone was anticipated and wrote that. It`s not really a personality.

DAG KITTLAUS: We anticipated originally that people were going to ask funny questions and we spent quite a bit of time preparing Siri to be funny and have a little bit of a dry wit.

DAVID POGUE: And so as impressive as Siri is, she`s not actually thinking. Everything she says was written in advance by a programmer. But after the Siri team left Apple, they began working on something much, much more ambitious, with much more intelligence. It`s called Viv.

DAG KITTLAUS: You would be able to say something like, find me a great place to go, take my kids, to the Caribbean in the last week of February.

DAVID POGUE: In a split second, Viv will consult several different services on the Web--stores, travel agencies, databases--to execute much more complicated commands.

DAG KITTLAUS: The system would know who your kids are, the last five trips that you took, and approximately how much budget you`d like to spend on those types of vacations. It would begin a dialogue.

DAVID POGUE: It all sounds great, but not to everyone.

MAX TEGMARK: Artificial Intelligence, if we succeed in getting true AI that`s smarter than us, will be the most powerful technology ever. And it`ll either be the best thing ever to happen to humanity, or the worst thing. And it`s up to us, now, to see which way it`s going to go.

DAVID POGUE: MIT professor Max Tegmark is so concerned he started a group called the Future of Life Institute, to consider the dangers of AI.

MAX TEGMARK: And the-- the basic concern is very simple: If you can make a machine which can out-compete us humans on all cognitive tasks, then by definition, it`s better than us also at programming AI. So first thing it can do is improve its own software. Now it`s even smarter. Then it can do it again and again and again.

DAVID POGUE: You`re not saying they`re going to develop emotions and turn on us willingly, right? Are-- are you-- is there a distinction there?

MAX TEGMARK: That`s right. There are a lot of misconceptions. And one of the most common ones is that somehow if you make your robot really, really smart, it`s suddenly going to become sentient, ooh, and it`s going to become evil and it`s going to decide to kill all the people. That`s completely ridiculous. Being intelligent just means that you`re really good at accomplishing your goals, whatever they are: playing chess, getting rich, whatever. You just want to make sure that its goals are aligned with our human goals, and you`ll be fine.

DAVID POGUE: All the experts agree that recent leaps in robotics and AI should make us both excited and cautious.

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DAG KITTLAUS: In the short term, we`re safe, in terms of having to worry about super-intelligences taking over the world. We`re talking fifty or a hundred years from now before we need to really, seriously get too worried about that.

ALEX GARLAND: Artificial Intelligence contains dangers and benefits. And it`s not going to be down to the AIs, which of those we encounter. It`s going to be down to us.

RUSS TEDRAKE: You know, robots, Artificial Intelligence are going to change the way we interact with technology. There`s no question. That`s good. You know, that`s a good thing. And we`re going to have to adapt. But we`re going to-- we`re going to love what happens.

(End VT)

CHARLES OSGOOD: Ahead--

(Excerpt from Duck and Cover, 1952)

(ANNOUNCEMENTS)

CHARLES OSGOOD: And now a page from our SUNDAY MORNING Almanac: June 14, 1954, sixty-one years ago today, the day Americans took time out to hunker down.

MAN (USA Operation Alert): This is Times Square, New York, prior to the start of the civil defense drill highlighting Operation Alert.

CHARLES OSGOOD: The nationwide drill was driven by fears of a Soviet nuclear attack--fears so powerful that even jaded New Yorkers were willing to comply.

MAN (USA Operation Alert): Less than two minutes after the "take cover" signal, the streets were cleared. Times Square is deserted.

CHARLES OSGOOD: Not that New York was the only target of the presumed Soviet attack. Far from it.

MAN (USA Operation Alert): Other theoretical bombs were dropped on cities--

CHARLES OSGOOD: Twenty U.S. cities in all conducted some sort of public exercise, including Washington, where President Eisenhower was seen doing his part.

MAN (USA Operation Alert): A helicopter landed on the White House lawn, here to ferry the President to a secret mountaintop relocation center.

CHARLES OSGOOD: The urgency of that day reflected the overall level of nuclear anxiety of the times--an anxiety that found its way into the nation`s schoolrooms.

(Excerpt from Duck and Cover, 1952)

CHARLES OSGOOD: This civil defense film taught a whole generation of schoolchildren to be prepared for an atomic attack that could come at any time.

(Excerpt from Duck and Cover, 1952)

CHARLES OSGOOD: How effective all that ducking and covering would have been was in doubt even then. And even though the nationwide drill on that long- ago June morning was judged a success, Civil Defense officials calculated that at least two million New Yorkers would have died in a real attack. Nationwide, the toll would have exceeded twelve million. Fortunately, those estimates have never been put to the test.

(Excerpt from Duck and Cover, 1952)

(End VT)

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CHARLES OSGOOD: Coming up, Sunday on the streets of Tehran.

(ANNOUNCEMENTS)

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