

# TIME

A black and white portrait of Robert Mueller, former FBI director and now special counsel. He is shown from the chest up, wearing a dark pinstriped suit jacket, a white shirt, and a patterned tie. He has his arms crossed and is looking directly at the camera with a serious expression. The background is a plain, light color.

## The Lie Detector

Someone's not telling the truth

By David Von Drehle

Former FBI  
director and  
now special  
counsel  
Robert Mueller

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A boom in prescription painkillers created the opioid crisis. Now there are pills to help solve it *By Haley Sweetland Edwards* **32**

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What to watch, read, see and do

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▲ *Guy Mills and his son James examine soil depth while hilling a cornfield with a John Deere tractor outside of Ansley, Neb., on June 19*

*Photograph by Benjamin Rasmussen for TIME*

**ON THE COVER:** *Photograph by Marco Grob for TIME*

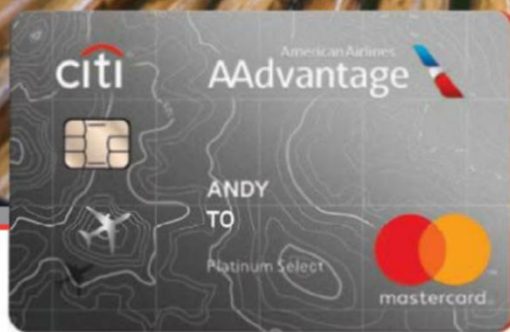
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## What you said about ...

**UBER FAIL** Rita Casey, an HR consultant in Greenbrae, Calif., said she thought Katy Steinmetz and Matt Vella's June 26 cover story on the upheaval at Uber was "well-informed," but that it was naive to say executives could "hold themselves accountable" for doing the right thing. The solution to problems like Uber's, she argues, must be corporate reform "with teeth." Kris Sowolla of Los Gatos, Calif., a self-described "white male who made a nice living in the Silicon Valley," said the reporting on Uber's homogeneous company culture saddened him: "For all the smarts the tech industry has, I can think of nothing dumber than not embracing the intelligent resources offered by women and minorities."

"The pace of tech change has outstripped our ability to observe & ensure the public good."

@NATEMATIAS, on Twitter

**THE GOD SQUAD** Madeleine Boucher, a former professor of biblical studies at Fordham University, a Jesuit institution, wrote that Elizabeth Dias' June 19 feature on millennials joining the Catholic priesthood was

"excellent, but reflects the church's failure to address the real issues," like its treatment of LGBTQ people. If a newly progressive church can be summed up by a priest's feeling comfortable "sporting a goofy mustache," she wrote, "there is not much prospect of truly significant change." Barbara Orze of Chicago wanted to know more about the younger priests' views on the role of women in the

"Time goes on, and the mission of the Roman Catholic Church will stand the test of time!"

MICHAEL J. D'AUGELLI, Antioch, Calif.

church—"one of the big reasons" why she had given up Catholicism, she noted—while Nick Hoesl of Cincinnati wondered the same about birth control, another divisive issue.



**THE WILD SIDE** Wildlife photography is about more than capturing stunning moments—or so says Michael "Nick" Nichols, who snapped the owl above in California. In a new biography, *A Wild Life* (Aperture), the veteran photographer makes the case that such images have a unique power to aid conservation efforts because they "hit you emotionally." See more of his work on [time.com/lightbox](http://time.com/lightbox)

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**INCREDIBLE JOURNEY** A new animated video from TIME traces the true story of a young blind man from Syria as he gets asylum in the U.S. and goes from homelessness in New York City to college in San Francisco, with help from Good Samaritans along the way. See the documentary and read the accompanying story at [time.com/asylum-story](http://time.com/asylum-story)

**SETTING THE RECORD STRAIGHT** ▶ In "The God Squad" (June 19), we mischaracterized the history of married deacons in the Catholic Church. Pope Francis is open to ordaining some married men to priestly roles. "The Burning Sands of Iraq" (June 26) incorrectly recounted a story from the Book of Daniel. Shadrach, Meshach and Abednego were punished because they did not worship a golden idol.

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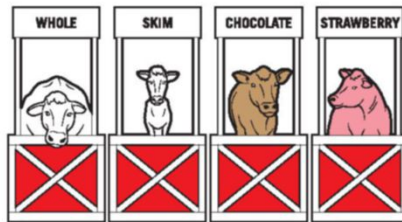
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# 'It is a silent tsunami.'

**SHAISTA HAKIM**, drug-rehabilitation specialist in Kabul, explaining the sharp increase in recent years of opium addiction, now affecting not just Afghan men but also women and children, as poppy production has returned in the war-torn nation; Hakim continued, "In another few years, it will be a disaster"



**7%**

Percentage of Americans who responded that they think brown cows produce chocolate milk, according to a survey from the Innovation Center for U.S. Dairy

# 'ALL LIFE IS SACRED.'

**MOHAMMED MAHMOUD**, imam at the Finsbury Park mosque in northern London, speaking hours after a man drove a van into a group of worshippers in the early morning of June 19, killing one and injuring 10; Mahmoud told those who pinned the suspect not to harm him but instead to let police come and do their job

# 'Perhaps worst-case scenarios should be considered the new normal.'

**GEOLOGICAL SOCIETY OF AMERICA RESEARCHERS**, reporting that because of climate change Louisiana's coastline is shrinking at a higher rate than previously thought; it is now well within what the organization considers to be a "danger zone"

**Old beef**  
Katy Perry said she hoped to resolve disputes with pop-music rival Taylor Swift



**Fresh beef**  
The new McDonald's Quarter Pounder took longer to prepare in test runs, angering customers

# 'We have a lot of work to do, a lot of problems we need to solve.'

**KAREN HANDEL**, U.S. Representative-elect, declaring victory over Democrat Jon Ossoff in a nail-biter special election for Georgia's Sixth Congressional District; seeking to wrest the seat after 38 years of Republican control as a referendum on the Trump Administration, Democrats raised \$25 million, helping make the race the most expensive in U.S. House history

**\$300,000**

Value of avocados stolen by three California produce-company workers, according to the Ventura County sheriff's office, in a case that authorities have nicknamed Grand Theft Avocado



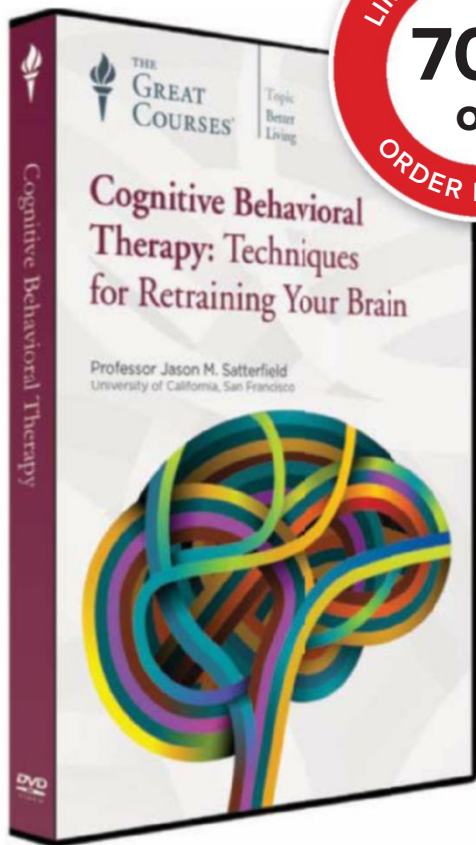
# 'This is not vindication or victory.'

**STEVEN T. O'NEILL**, judge in Montgomery County in Pennsylvania, announcing on June 17 that the jury could not reach a verdict in actor Bill Cosby's sexual-assault trial

**198,000,000**

Number of American voters whose personal information (such as birth dates, home addresses and phone numbers) was exposed when Republican-hired firm Deep Root Analytics stored the data on a cloud server without using password protection for at least two weeks





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# The Brief

'HE WANTED EUROPEANS TO STICK TOGETHER AND HEED THE BLOODY LESSONS OF THEIR HISTORY.' —PAGE 13



An F/A-18 Super Hornet launches from the U.S.S. George H.W. Bush, operating off the coast of Syria on June 6

## WORLD

### Trump's great faith in the military does not a strategy make

By Karl Vick

IT WAS ABOUT 4:30 P.M. ON JUNE 18 when a Syrian warplane first attacked rebels supported by the U.S., pushing them out of a town on the road to Raqqa, the Islamic State capital. Syria is aligned with Russia, and so a U.S. officer picked up a hotline and warned the Russian officer on the other end. When, about two hours later, a Syrian jet returned and bombed the same rebels, it was shot out of the sky by an American F/A-18 Super Hornet.

It was the first air-to-air kill by a U.S. pilot in 18 years, and it happened so quickly that no President could have been brought into the decision-making loop. But the striking thing about Donald Trump's tenure as Commander in Chief is that he wants no part of it anyway. Both in Syria and Afghanistan—where thousands more

U.S. troops are about to be deployed in what is already the longest war in American history—Trump says he's leaving things up to "the generals."

"The lieutenants, the captains, their majors, their colonels—they're professionals," Trump told TIME on May 11. "They love doing it. They know every inch of the territory, right? I say, Why am I telling them? So I authorized the generals to do the fighting."

A great deal is going on in both of America's wars. The Islamic State in June took Afghanistan's Tora Bora from the Taliban, which nonetheless holds more territory than at any other time since the 2001 U.S. invasion.

In Syria the locus of fighting has shifted deep into the desert as Russia and Iran—sponsors of Syrian President Bashar Assad—confront the U.S.-led

coalition in a war zone of extraordinary complexity. In June, U.S. warplanes struck militias and drones operated by Iran, which seeks a land bridge from Tehran to Damascus. Russia says it's hanging up the hotline and will target any coalition aircraft west of the Euphrates.

After five months in office, Trump has still not articulated a strategy for the conflicts. That's a greater cause for concern than how he chooses to delegate to a military for which he remains ultimately responsible, says Peter Feaver, a Duke University political scientist who served on the National Security Council of President George W. Bush. Trump has left it to Defense Secretary James Mattis to decide whether to add up to 5,000 troops to the 8,800 already in Afghanistan. "They haven't figured out what their strategy is going to be, so there's a cart-before-the-horse aspect," says Feaver.

President Obama personally culled the kill list for drone strikes and monitored troop levels down to the single digits. Trump's relative distance could be evidence of executive function, distraction—there's that special counsel investigation—or lack of interest. "Delegation can work when he knows what he's delegating," says former Obama NSC official Loren DeJonge Schulman. "Trump hasn't told us much, except he trusts the military. He hasn't quite finished the sentence: To do what?"

It would help if there were experts in place. For all the attention to White House staffing, strategies actually flow from interagency consultations. But 1,100 senior positions remain vacant across the Executive Branch, and the State Department is operating with a skeleton staff.

Meanwhile, in the absence of declared intent, events open themselves to interpretation. Civilian deaths from U.S. airstrikes have spiked in Syria and Iraq. Does the responsibility rest with Trump, who on the campaign trail vowed to "bomb the sh-t out of ISIS"? Or should critics look to "Mad Dog" Mattis, whose 2004 assault on Fallujah was marred by the civilian death count?

The world is a complex place, not least because of some 800 U.S. bases dotted around it. It's impossible for one person to keep track of it all. (The U.S. Africa Command alone has almost 100 special operations going on on any given day.) But someone does have to make sense of it. In April the Air Force dropped its first-ever MOAB, an 11-ton munition, onto an ISIS tunnel complex. The commanders who ordered it intended it to be a purely tactical strike. Yet it was widely viewed as strategic—a message to North Korea, which Trump had been railing against when he learned the "mother of all bombs" had been dropped.

"I don't know if this sends a message," Trump said afterward. "It doesn't make any difference if it does or not." □



## TICKER

### HIV/AIDS experts resign in protest of President Trump

Six members of the Presidential Advisory Council on HIV/AIDS resigned, claiming they could no longer work with a "President who simply does not care." The members accused the Trump Administration of having "no strategy" to deal with the epidemic.

### Saudi Arabia crowns new prince

Saudi Arabia's King Salman appointed his 31-year-old son Mohammed bin Salman as Crown Prince, transferring power away from his nephew, 57-year-old Mohammed bin Nayef. The move comes amid deeper Saudi involvement in Middle East conflicts.

### Teen killed on way home from mosque

A 17-year-old Muslim girl was assaulted and killed as she made her way home after prayers at a Virginia mosque. Islamic leaders questioned Virginia detectives' insistence that Nabra Hassan's death was a case of road rage, arguing that the attack resembled a hate crime.

### NASA finds new planet candidates

NASA added 219 new potential planets to its catalog, 10 of which orbit in a range called the "habitable zone," meaning there could be liquid water on their surfaces.

## ENVIRONMENT

# How Antarctica is being invaded

Average temperatures in coastal Antarctica have risen over the past three decades. Scientists say those conditions might bring more invasive species to the South Pole.

—Tara John

### DISAPPEARING ICE

Antarctica's ice may be melting faster than initially thought, a study says, due to meltwater flowing into cracks and refreezing. Glacial retreat has alarmed scientists, since it could destabilize the continental ice shelf and lead to a sea-level rise of 3.5 ft. across the globe by 2100.



### GREENER LAND

The retreat of ice has exposed more land in recent years, and higher temperatures have encouraged the growth of indigenous moss across parts of the western Antarctic Peninsula. The rate of growth suggests that the South Pole may be a greener landscape in years to come.



### FOREIGN INVADERS

The mosses have given nonnative insects like the common housefly the ability to survive on the frozen continent, and invasive grasses and flowers have also found a home there. The fear is that these invaders may bring pathogens that could be fatal to Antarctica's native flora and fauna.



## DIGITS

# 65.6 MILLION

Number of displaced people worldwide at the end of 2016, according to the U.N. Refugee Agency; the record figure is higher than the entire population of the U.K. and includes 12 million people from Syria



**RED INFERNO** Firefighters from Portugal's national guard battle a forest fire in Capela Sao Neitel on June 18. Police initially said the blaze, which claimed at least 64 lives, started after a lightning strike, but a top fire official later ordered an investigation into whether arson had played a role. The flames were mostly contained by June 20, after some 1,600 firefighters worked to quell them. *Photograph by Paulo Cunha—EPA*

**BUSINESS**  
**Why Amazon bought Whole Foods**

AMAZON ANNOUNCED ON JUNE 16 THAT IT WILL acquire upscale supermarket chain Whole Foods for \$13.7 billion. Here's why the deal makes sense for the online giant:

**BIGGER RETAIL FOOTPRINT** Last year the Seattle-based retailer—known mostly for online shopping—announced plans to unveil a mobile-checkout-based grocery store in Seattle, and it has opened bookstores in cities such as New York and Chicago. By acquiring Whole Foods, Amazon gains some 465 physical stores to build out its vision for the future of retail.

**FASTER DELIVERY** Amazon's Prime Now service promises to deliver certain products, ranging from paper towels to

electronics, in an hour or less by sourcing them from 70 local fulfillment centers. With its purchase of Whole Foods and the hundreds of grocery stores it operates, Amazon has an opportunity to expand the products it can deliver under Prime Now.

**BETTER GROCERY SELECTION** Adding Whole Foods' selection of items to its AmazonFresh grocery-delivery service could give the company an advantage against Peapod, FreshDirect and Google, whose Express delivery service now reaches almost 90% of the U.S.

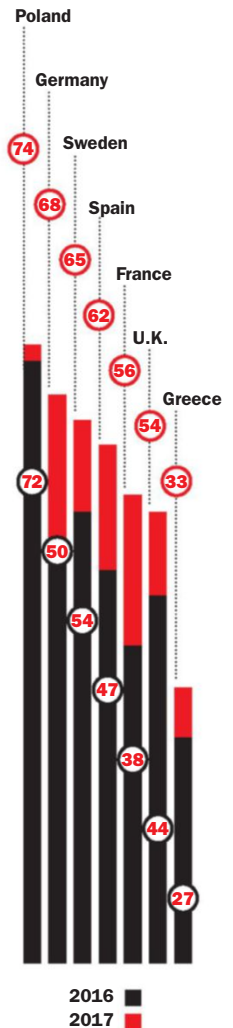
**STRONGER HOME PRESENCE** Amazon already sells buttons you can press to magically reorder household items, wands you can wave over a product's barcode to add it to your shopping list and more. All these gadgets act as clever ways to point consumers to Amazon's online megastore; the addition of Whole Foods groceries only makes it more appealing. —LISA EADICICCO



**DATA**

**EUROPE IS BACK IN FAVOR**

Euroskepticism in Europe is on the wane almost a year after the Brexit vote, according to a survey by Pew Research Center. Here, the percentage of people in each country who viewed Europe favorably in 2017 compared with the year before:





**TICKER**

**Suspected bomber shot in Brussels**

Belgian soldiers fatally shot a suspected would-be suicide bomber at Brussels Central Station after he reportedly set off a small explosion. The country has been on high alert since terrorists killed 32 people in March 2016.

**Woman guilty in text-suicide case**

A Massachusetts woman who sent text messages urging the 2014 suicide of her boyfriend, 18, was convicted of involuntary manslaughter. Michelle Carter, now 20, also urged him on by phone when he hesitated during the act.

**Zika mosquitoes found in California**

Health officials detected *Aedes aegypti*, the type of mosquito with the potential to transmit Zika, for the first time in Long Beach, Calif. Mayor Robert Garcia urged residents and visitors to take "necessary precautions to prevent mosquito bites."

**Nazi artifacts found in Argentina**

A trove of about 75 suspected Nazi artifacts, including a bust of Adolf Hitler, was discovered in a secret room accessed by a hidden passageway in a collector's home in Béccar, Argentina. Authorities believe that the items had belonged to high-ranking Nazis.

THE RISK REPORT

**The real story in U.S.-Russia relations can be seen in the skies above Syria**

By Ian Bremmer

*Dear Pentagon, We're writing to advise you of a change in our military rules of engagement in Syria. Any aircraft belonging to the international coalition operating west of the Euphrates River will be tracked by Russian anti-aircraft forces in the sky and on the ground and treated as targets. Cross the Euphrates and we reserve the right to shoot down your plane. In addition, we are cutting the cord on further communications on military coordination. Have a nice day.*

—Defense Ministry of the Russian Federation

That, essentially, was the stark message from Moscow after the U.S. shot down a Syrian military plane on June 18. The U.S.-led coalition claims that Syrian forces, and Russia's military, were warned in advance that Syrian planes were in the crosshairs and that the downed Syrian jet ignored warnings and dropped bombs. Russia disputes this. This is hardly the new U.S.-Russia relationship that Presidents Donald Trump and Vladimir Putin said they wanted. What's happening here?

In support of President Bashar Assad's government in Syria and with support from Iran, Russia has established military dominance in Syria. Now the question is how much of the country Russia can help Assad reclaim. U.S. officials, particularly in the

Pentagon, want to minimize Assad's gains and political leverage to get an outcome that creates more balance in the country and denies Russia a dominant role in Syria's future.

Syria shows the clearest impact of Trump's decision to leave military decisions to the generals. Defense Secretary James Mattis does not share the President's publicly expressed benign view of Russian actions or his hopes for a new détente. That's why, beyond the latest sensational headline on investigations into the Trump campaign's possible collusion with the Russian government, the real story in U.S.-Russia relations looks a lot more like the hard-line realpolitik we might have expected from a President Hillary Clinton.

**Trump might be one of the last friends that Russia has in Washington**

Add the 97-2 vote in the Senate recently on a plan to tighten sanctions on Russia, and the picture couldn't be clearer: Trump might be one of the last friends that Russia has in Washington, and

though he isn't changing course, he can't prevent others in his Administration or in Congress from changing it for him.

The Russians are very unlikely to shoot down a U.S. plane. Putin is aggressive, not stupid. But he will keep looking for ways to undermine U.S. interests whenever and wherever he can, particularly as he plays up his role as strongman in advance of Russian elections in 2018. There is real danger here for still more confrontation in U.S.-Russia relations. Despite his best efforts, there isn't much that Trump can do about it.

NATURE

**Taking on the animal kingdom**

Olympic superstar Michael Phelps will race against a great white shark in a stunt airing on the Discovery Channel on July 23. It won't be the first time man has competed against beast. —Kate Samuelson

**CHEETAHS**

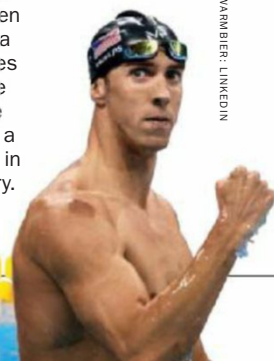
In 2013, two NFL players were pitted against a pair of cheetahs called Jenna and Nave for a Nat Geo Wild documentary. The Chicago Bears' Devin Hester won his race by milliseconds.

**CHIMPS**

U.S. Navy SEAL Scott Helvenston beat a chimpanzee in an obstacle-course race on reality show *Man vs. Beast* in 2003. Another competitor lost a hot-dog-eating contest to a bear.

**HORSES**

A "Man vs. Horse" marathon has been held annually in a rural town in Wales since 1980. The endurance race has been won by a human only twice in its 37-year history.



NATURE: GETTY IMAGES (3); KOHL: THOMAS INO—PHOTOHEX; GETTY IMAGES; WARMBERG: LINKEDIN

## Milestones

### DIED

**John G. Avildsen**, director of Hollywood hits *Rocky* and *The Karate Kid*, at 81. Avildsen won an Oscar for *Rocky*, a project Sylvester Stallone encouraged him to take on.

➤ Style stalwart **Carla Fendi**, at 79; she was the face of the Italian luxury fashion house that she, along with her four sisters, helped transform into a household name.

### AGREED

That the U.S. Supreme Court will consider whether **partisanship in electoral-map drawing** is acceptable under the Constitution.

### ELECTED

A record number of **women to France's Parliament**. Of the 577 new lawmakers, 223 are female.

### CHARGED

**Four former executives at U.K. bank Barclays**, with conspiracy to commit fraud over cash injections from Qatar during the 2008 financial crisis.

### CLAIMED

Pakistan's first ever **International Cricket Council Champions Trophy**, beating defending titlist India.



*Kohl outside the Esztergom Basilica in Hungary, where he attended a Mass in 1989*

### DIED

## Helmut Kohl Reunification architect

HELMUT KOHL, THE FORMER GERMAN CHANCELLOR WHO died on June 16 at the age of 87, was a driving force behind the events that shaped the history of modern Europe. The fall of the Berlin Wall, the end of the Cold War, the reunification of East and West Germany, and the formation of a common European currency, the euro, all took place during his tenure from 1982 to 1998.

But the events that shaped Kohl's vision for Europe took place during World War II. Having experienced the intense Allied bombing of his hometown of Ludwigshafen, he understood that integration was the only way to keep Europe at peace. Despite fierce resistance from many of his peers, Kohl championed the idea of an "ever closer union" of European states—with Germany as its political and economic backbone.

It pained him during the final years of his life to watch that idea pushed aside as the European Union lurched from one crisis to another, starting with the European debt crisis and leading to the British vote last year to leave the E.U. But the message he offered did not change: he wanted Europeans to stick together and heed the bloody lessons of their history. That is the message for which he will be remembered.

—SIMON SHUSTER

### DIED

## Otto Warmbier North Korea prisoner

ON JUNE 13, JUST OVER 17 months after 22-year-old University of Virginia undergraduate Otto Warmbier had been arrested at Pyongyang's international airport, his parents finally got good news: their son had been released from North Korean custody and was en route to his native Ohio.

Six days later, Warmbier died. Upon his landing in the U.S., the grim reality came to light: the student, who was on a tourist trip in North Korea when he was arrested for allegedly stealing a propaganda sign, had fallen into a coma. How or why is unclear. (North Korean authorities blamed botulism and a botched sleeping pill; his U.S. doctors dismissed this.)

His death is a cautionary tale for those Americans who wish to defy the State Department's advice and travel to the authoritarian kingdom. "The awful torturous mistreatment our son received at the hands of the North Koreans ensured that no other outcome was possible beyond the sad one we experienced today," his parents said in a statement.

—NASH JENKINS





**Faces of the fallen**

The seven sailors who died in the collision at sea were later identified by the Navy. From left: Noe Hernandez, 26; Xavier Martin, 24; Shingo Douglass, 25; Carlos Sibayan, 23; Dakota Rigsby, 19; Ngoc Truong Huynh, 25; and Gary Rehm Jr., 37







## MILITARY

# A portrait of American service in the death of seven sailors

MOST OF THE 300 SAILORS ABOARD the U.S.S. *Fitzgerald* were asleep in the early hours of June 17 when the destroyer collided with a commercial container ship four times its size. The *Fitzgerald* had been traveling off the coast of Japan under clear conditions in an area known for significant sea traffic. Jolted awake as water poured into their ship, some on board assumed they were under attack.

Seven U.S. Navy sailors—ranging in age from 19 to 37, hailing from Connecticut to California—were killed. The collision severely damaged the ship's starboard side and tore a deep gash in the hull. As icy ocean water flooded a machinery room and two berthing areas belowdecks, sailors scrambled to save both the vessel and their shipmates, diving into the flooded compartments. “They had to fight the ship to keep it above the surface,” Vice Admiral Joseph Aucoin, the commander of the 7th Fleet, said at the U.S. naval base in Yokosuka, Japan. “It was traumatic.”

The U.S. Navy and Coast Guard were still investigating the cause of the fatal collision with the Philippine-flagged container ship when the bodies of the seven sailors were flown back to the U.S.

Family members spoke of men who had felt fulfilled by their service; some enlisted because their fathers and grandfathers had. Ngoc Truong Huynh, who turned 25 the day before the collision, was among those killed. His sister, Lan Huynh, told the *New York Times* that she knew her brother had been happy on the *Fitzgerald*: “He found his purpose and he loved every minute of it.” —KATIE REILLY

The damaged U.S.S. *Fitzgerald* off Yokosuka, near Tokyo, after the June 17 collision with a merchant ship  
Photograph by Hitoshi Takano—Kyodo News/AP





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# The View

'THE BATTLE OVER RIGHT TO REPAIR IS ABOUT A SPIRIT OF SELF-SUFFICIENCY' — PAGE 20

NATION

## A Confederate monument solution, with context

By Josh Sanburn

IF YOU DRIVE FAR ENOUGH down Monument Avenue in Richmond, Va., past the statues of Confederate leaders General Robert E. Lee and President Jefferson Davis, you'll find a bronze likeness of native son Arthur Ashe, the tennis legend and activist, holding books and a racket. A few miles to the east is the Virginia Civil Rights Memorial, not far from a statue of Abraham Lincoln.

This is how the former Confederate capital has dealt with the weight of history: not by removing troubling monuments, but by adding to them. It's a different approach than the one taken by many Southern cities and towns, which have been roiled by the push to remove monuments to Confederate leaders and prominent slaveholders. From St. Louis to Orlando, from New Orleans to Charlottesville, Va., the prospect of the statues' coming down has led to angry, sometimes violent protests among those who see them as vital to their heritage and others who see them as emblems of hate.

Yet in Richmond, which has no shortage of public memorials to defenders of white supremacy, there has been comparatively little outcry. The reason, say many residents and historians, is that the city has been working for decades to reinterpret its past, updating older tributes with much-needed context while adding new ones to the canon.



▲  
A statue of Arthur Ashe, unveiled in 1996, is one of several erected around Richmond that work to balance the city's Confederate memorials

AP

PHOTOGRAPH BY STEVE HELBER

17

“Richmond has a pretty long history in dealing with these things,” says David Goldfield, a professor of history at the University of North Carolina at Charlotte and an expert on Civil War symbolism. The city has “had the time to reach a consensus.”

Part of it is representation. Unlike many other Southern cities, Richmond elected its first black city-council member in the 1940s and had a black mayor and a majority-black city council by the 1970s. “Once you have that in place,” says Civil War historian Kevin Levin, “you begin to shift or shape the public discussion about what kind of history you’re going to commemorate.”

Richmond was never going to pave over its Confederate past; Civil War tourism is too valuable to the local economy. But the civic discussion that began decades ago resulted in addition rather than subtraction. In 2003, seven years after the city erected the monument to Ashe, officials installed the memorial to Lincoln. Later, the Richmond Slavery Reconciliation Statue went up near Shockoe Bottom, a former slave market. On July 15 the city will unveil a statue of Maggie Walker, the first black woman to charter a bank, and the National Park Service will conduct walking tours about her life.

As important are the symbols Richmond chose not to pursue. In 2008 the Sons of Confederate Veterans offered to finance a statue for the American Civil War Museum of Jefferson Davis holding hands with a mixed-race child who was cared for by the Davis family. The plan collapsed after museum officials didn’t commit to presenting it in a way favored by the Confederate group.

There are residents who don’t think Richmond’s hybrid approach goes far enough. Ana Edwards, chair of the Sacred Ground Historical Reclamation Project, is pushing for the city to place its Confederate memorials in a museum or at Hollywood Cemetery, where thousands of Confederate soldiers are buried. “We think they will come down,” Edwards says. “But no politician is willing to take it on.”

For now, she’ll find few allies in city hall. Instead, Mayor Levar Stoney is creating a commission to further contextualize the city’s Confederate memorials, which could mean adding explanatory plaques to existing statues or building additional monuments. The commission, he says, will invite public input and “take a deliberative, reasoned approach” to reinterpreting the city’s history.

“I want Richmond to tell the whole story of its people,” Stoney tells TIME. “Not just a one-sided story of the Lost Cause and the Confederacy. Right now we have an opportunity in our history to redefine who these people were.”

That will mean more changes along Monument Avenue. But in a living museum, there’s always room to add to the collection. □

**VERBATIM**  
**‘I think the probability of establishing a self-sustaining civilization is very high.’**

**ELON MUSK**, founder and CEO of SpaceX, suggesting that humans may well colonize Mars—so long as the cost of moving there drops to roughly the median price of a U.S. home (about \$200,000)



**BOOK IN BRIEF**

**Advertising is dead; long live advertising**

IN THE FUTURE ADVERTISERS WILL ask not what their customers can do for them, but what they can do for their customers. Or so argues Andrew Essex, the former CEO of advertising agency Droga5, in *The End of Advertising*, which highlights how brands must do more to break through in the age of ad blockers and commercial-free streaming. Consider Lego and American Girl, which sell toys through movies designed to entertain their target audience, or Citibank, whose sponsorship of New York City’s bike-sharing program did wonders for its brand. (During the two years following Citi Bike’s launch in 2013, the number of people who said they would consider giving their business to Citibank rose by 43 percentage points, according to company data.) Eventually, Essex writes, it may even become commonplace for corporations to sponsor infrastructure projects, like highways and bridges, as consumers continue to applaud brands that are “looking to add value to people’s lives rather than annoy them.” —SARAH BEGLEY



**CHARTOON**

**Large coffee**



JOHN ATKINSON, WRONG HANDS

**BIG IDEA**

## A razor built for assisted shaving

Most American men shave their face a few times per week. But as more of them get older—the U.S. population over the age of 65 will nearly double by 2050, per the Census Bureau—they may need help from caregivers. That makes shaving especially tricky, since standard blades are meant for personal use. Not so with the Gillette TREO, a new razor designed to help caregivers provide “a high level of safety and comfort” when shaving others, says Matt Hodgson, the project’s lead engineer. The TREO, which is not commercially available yet, will soon enter its first testing phase. Here’s how it works. —Alex Fitzpatrick



**HISTORY**

## The birth of the bachelorette party

THIS WEDDING SEASON, AS IN DECADES OF summers before, many of those who tie the knot will do so after celebrating a weekend of freedom among friends. But while bachelor parties have roots in traditions from ancient Sparta, bachelorette parties only somewhat recently became an American wedding ritual.

It all began in the 1960s, when women—who had long been accustomed to bridal showers, where friends and family would gather to help a bride acquire gear for keeping house—started adding a more secretive event to the preparatory calendar. There, they could open gifts like lingerie that they wouldn’t want their mothers to see.

These parties got wilder over the next decade. When the first mention of a bachelorette party appeared in *TIME*, in 1979, the brides-to-be in question were

checking out male strippers at Midwestern nightclubs with names like the Sugar Shack. Bachelorette parties became another way women of that era showed the world that they could do whatever men could, says Beth Montemurro, author of *Something Old, Something Bold: Bridal Showers and Bachelorette Parties*.

As for today’s weekend-long blowouts, Montemurro says that trend can be traced to someone surprising: Princess Diana. Her 1981 wedding to Prince Charles, watched by some 750 million people, helped popularize the idea of lavish nuptials. “As weddings become more extravagant,” Montemurro says, “so do the rituals surrounding them, like bachelorette parties.” —OLIVIA B. WAXMAN

► For more on these stories, visit [time.com/history](http://time.com/history)



**DATA THIS JUST IN**

A roundup of new and noteworthy insights from the week’s most talked-about studies:

**1**

**DOG OWNERS WALK MORE**

A study of adults over age 65 in *BMC Public Health* found that those who owned a dog took an average of 2,760 more steps than those who didn’t, which amounted to 22 more minutes of moderate exercise per day.

**2**

**THERE MAY BE A WAY TO TAN WITHOUT SUN**

Researchers wrote in *Cell Reports* about discovering that they could activate a gene linked to tanning using an agent that darkened skin cells just like the sun—but without any negative UV exposure.

**3**

**RED ONIONS MAY BE BETTER CANCER FIGHTERS THAN WHITE ONIONS**

A study in *Food Research International* found that the amount of cancer cells that died after exposure to Ontario grown red-onion extract was three to four times as great as the amount of cancer cells that died after exposure to extracts of lighter-colored onions.

—Julia Zorthian

# Hand me that wrench: farmers and Apple fight over the toolbox

By Alex Fitzpatrick

LIKE ANY FARMER, GUY MILLS JR. HAS HAD HIS SHARE OF equipment trouble. In the past, Mills, who grows corn, soybean and alfalfa on his 3,810-acre farm in Ansley, Neb., would have fixed his machinery himself. But like so many essential tools, Mills' equipment has become so technologically complex that he needs outside help when it breaks down. Unfortunately for him, that help can eat up time and money, both of which have been in short supply.

"If you have a bad alternator, they connect a computer to your tractor and it tells them the alternator is bad," says Mills, 57. "Before, there were other signs. Is the battery dead? Do you have lights? Just by looking at it and using deductive reasoning, you figured things out."

Mills and his fellow farmers say that part of the problem is that equipment manufacturers like Deere & Co., maker of John Deere tractors, make it difficult for consumers and independent repair shops to get the tools needed to fix today's high-tech tractors and other heavy machinery, which run on copyright-

protected software. Instead, customers must often work with company-approved technicians, who can be far-flung and charge expensive rates. So Mills and other farmers nationwide have banded together in support of the so-called Right to Repair legislation. These bills, which have been proposed in at least 12 states, would require equipment manufacturers to offer the diagnostic tools,

**'Being able to be the master of your own stuff, to open it up and take a look and take care of it, answers to a very basic human need.'**

MATTHEW CRAWFORD, author of *Shop Class as Soulcraft: An Inquiry Into the Value of Work*

manuals and other supplies that farmers need to fix their own machines. "Customers, dealers and manufacturers should work together on the issue rather than invite government regulation that could add costs with no associated value," said Ken Golden, a spokesperson for Deere & Co.

The Right to Repair movement has come up against an unexpected opponent: Apple. The iPhone maker and world's largest public corporation by market capitalization has been lobbying state lawmakers in opposition to the bills. The argument being made against the proposals is that they could result in subpar repair work or—even worse—make consumers vulnerable to hackers. Right to Repair advocates say that Apple, which offers iPhone repair services at every Apple Store, wants to maintain control of its share of the approximately \$4 billion smartphone-fixing business. "The more that they can completely own the repair experience, the more of a profit opportunity there is," says Kyle Wiens, CEO of iFixit, an online repair-manual repository. Apple makes



↑  
*Farmers who want to repair their own tractors are getting pushback from Apple*

an estimated \$1 billion to \$2 billion a year fixing iPhones compared to approximately \$120 billion to \$200 billion selling them.

**THE BATTLE HAS PRODUCED** some unlikely bedfellows. Farmers like Mills who want to repair their own heavy equipment are banding together with techies like Wiens, who believes consumers should be able to fix their own phones and computers. "There's



a cultural perception that you can't fix things anymore, but I'm not sure that's true," says Wiens, whose website offers nearly 28,000 free manuals and had 94 million visitors last year searching for DIY repair guides on everything from PlayStations to lawn mowers to dishwashers. The issue is cutting across party lines, with support from Republicans in agriculture-heavy states like Nebraska and pro-consumer Democrats in states like New Jersey.

The battle over Right to Repair is about more than malfunctioning tractors or cracked iPhone screens. It's about a spirit of self-sufficiency that's baked into the DNA of blue collar America. Mills says he takes pride in farmers' image as can-do fixers who can keep their own machinery humming, so it's frustrating when that isn't possible. "[We] should be able to obtain the necessary tools and access to information necessary to repair our

equipment," he says. Mills stresses that modern farmers are increasingly familiar with high-tech innovations, including everything from GPS to self-driving tractors, and that with the right tools, they would be able to fix even the most complicated machinery.

Some Right to Repair opponents have argued that consumers cannot be trusted to fix or modify their equipment because they might further damage it or hurt themselves in the process. But others say there's a psychologically important benefit to mucking about with the things we buy. "There's this pervasive sense that we're ruled by these inscrutable forces that are hard to bring within view," says Matthew Crawford, author of *Shop Class as Soulcraft: An Inquiry Into the Value of Work*. "Being able to be the master of your own stuff, to open it up and take a look and take care of it, answers to a very basic human need."

Given the high-power opposition from the likes of Apple, Deere & Co. and AT&T, it's unlikely that any state will pass a full Right to Repair bill anytime soon. Nebraska's effort has stalled, and a measure in New York may not advance before June 21, the end of the current session, leaving Massachusetts as the next battleground. Supporters optimistically point out that Massachusetts voters approved a similar measure involving car repairs in 2012, leading some automakers to address their concerns rather than navigate a complex patchwork of laws.

There are signs the pressure is also moving other companies to open up at least a little bit. In early June, Apple announced that it would send 400 high-tech iPhone screen-fixing machines to third-party repair shops, an unprecedented move for a company that has until now closely guarded such technology. In an interview with Reuters, Apple brass framed the move as an effort to improve repair service and cut down on wait times. Still, some advocates say it's not enough. "If Apple seriously wanted smaller lines in their stores, they could simply allow a lot more people to replace the glass," says Gay Gordon-Byrne, executive director of the Repair Association. "This is so simple, and they have made it so complicated." □

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## What Silicon Valley can learn from Travis Kalanick's Uber fail

By Matt Vella

TRAVIS KALANICK, UBER'S BRASH AND EMBATTLED CEO, is out. After months of pummelingly bad news for Kalanick and his eight-year-old ride-hailing startup, pressure from investors in the near \$70 billion company forced Kalanick to relinquish his role. In the wake of a major investigation into systemic discrimination at Uber and a related series of public relations disasters, on June 13, Kalanick announced that he would take a leave of absence. That wasn't enough for the investors who worried about how quickly the company could pick itself back up and find new leadership with its founder lurking in the background. Now Uber will be able to offer candidates for top executive positions full control of the company, which has a presence in 76 countries and counting. Kalanick will retain his seat on the board along with his voting shares of the company's stock.

**WHAT HAPPENED, AND** what happens next, will be the stuff of business-school case studies for years to come. Uber faces difficulties that include everything from its profitability to peacekeeping, with its force of drivers providing millions of rides, to protracted legal battles with government regulators and competitors. And it must reboot its culture, something that will take some time if the recommendations of an exhaustive investigation by former U.S. Attorney General Eric Holder's law firm are any indication.

In a recent *TIME* story, my colleague Katy Steinmetz and I framed the troubles at Uber as a test of some of Silicon Valley's long-held values. Technology is advancing so rapidly that, at this point, it is always going to outpace the law as well as the public's capacity to fully understand its ramifications. If Uber's stunning fumbles prove anything, it's that in the absence of rulemakers who can keep up, the architects of the new economy—which is just another way of saying the new world—must hold themselves accountable.

There is another, more personal lesson in the story of Kalanick, compared with the examples of icons like Steve Jobs or Bill Gates. Kalanick had a reputation for being argumentative. A recent *Fortune* cover story used another *A* word commonly attached to Kalanick in the Valley. His brawler persona was useful for Uber, which, unlike other giant tech firms, was born into conflict: opposition to lawmakers, competitors and the media is in the company's DNA. But it also frequently went too far and reportedly engendered an aggressive, misogynistic culture that, according to Holder's findings, provided cover for misbehavior and transgressions of the worst sort.

### UBER ALLES

In eight years, Kalanick drove Uber to become the world's most valuable startup and expand worldwide. The combative gene that helped him succeed was also his undoing after a series of scandals.



Jobs and Gates were also famously difficult. Former *TIME* editor Walter Isaacson's biography of Jobs is replete with examples of "Bad Steve," from baroque insults (Google "Steve Jobs FDA" for one particularly florid example) to impossibly high standards. Gates, too, was hard-charging, building Microsoft into a dominant company through sometimes quasi-monopolistic tactics. As they do, these myths have outgrown reality over time. And because they're salacious, they obscure the truth of both Jobs and Gates as complicated human beings. Using them to justify fundamentally confrontational leadership is a mistake.

**IT IS MORE INSTRUCTIVE** to study their full arcs. In the monomyth, the hero must experience a period of painful exile in order to return to his community with the power to change things. "The descent into Hell is easy," wrote Virgil, "but to retrace your steps and to come out into the upper air, this is the deed, this is the labor." Jobs and Gates could not become world-changing figures without first having descended. For Jobs, it was being fired from Apple and founding NeXT. For Gates, it was the humbling *United States v. Microsoft Corp.* antitrust case that was settled in 2001. What Jobs and Gates did afterward—pulling off the greatest corporate turnaround in the history of capitalism and creating one of the most impactful philanthropies ever, respectively—can be understood and mined for insight only by keeping the full picture in view.

All leaders need a certain amount of guile and toughness. Inventing the future is dangerous business, after all. Kalanick, who at 40 is considerably older than many other Silicon Valley founder types, may or may not come out of this exile a different person. But for founders trying to learn the lessons of the giants who came before, the lows are more instructive than the highs.

Vella is an executive editor at *TIME*



Nation

# Will Bob Mueller separate fact from fiction?

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The formidable special counsel has time, money and an all-star legal team on his side. But he's never taken on an investigation like this before

By David Von Drehle



*As special counsel,  
Mueller has wide  
latitude, and  
a high-stakes  
responsibility, to  
investigate the  
White House*

# In Washington, the ‘first law of holes’ is one of those shopworn maxims that are so familiar, they need not be spoken. It’s like what you should do if you want a friend in the capital: ‘Get a dog’ goes without saying.

But maybe things are different where Donald Trump came from. And maybe that’s why he didn’t know what to do when he found his young presidency in a small hole involving contacts between a few of his underlings and Russian officials.

Now he’s learning the local folklore the hard way. The first law of holes is, if you’re in one, stop digging. Three times, Trump heard assurances from former FBI director James Comey that the Russia investigation wasn’t aimed at him. Instead of putting his shovel down, though, Trump worked it furiously. According to Comey’s sworn testimony, Trump pushed the G-man for a public exoneration, and when Comey demurred, he

may have pressed his case with Director of National Intelligence Dan Coats and National Security Agency Director Mike Rogers. Unsatisfied, he fired Comey in ham-fisted fashion, then reportedly boasted to Russian visitors that he did it to take pressure off the investigation. Now he’s in the hounded condition of various predecessors: struggling to regain control of the agenda, lashing out at aides, shouting at television sets and peppering his dig-the-hole-deeper tweets with all-caps exasperation.

He blames his enemies, but guess what? All Presidents have enemies. Successful ones try to outsmart them. Trump’s own actions have turned a

small hole into a yawning abyss: a special counsel’s investigation that could run from the Oval Office to Trump Tower and command headlines for the next year or more. Trump has traded the anguished Hamlet Comey for the adamantine Marine Robert Mueller, the Justice Department ramrod who remade the FBI after 9/11. As special counsel appointed in the wake of the Comey firing, Mueller has one job, no deadline and bottomless resources, and he is assembling an all-star team of veteran prosecutors whose expert backgrounds go beyond counterintelligence to include money laundering, corporate fraud and the limits of Executive Branch power.

Sensing the trouble he had dug himself into, Trump tweeted, “You are witnessing the single greatest WITCH HUNT in American political history.” Perhaps all Presidents feel the same way if they find themselves under the withering gaze of a high-profile investigator. Whether called a “special prosecutor” in the Richard Nixon era or “independent counsel” in the Bill Clinton years or “special counsel” today, the specific powers change, but the overall effect is quite the same. Trump’s predecessors could tell him that such investigations are sometimes survivable, but they are not controllable. Trump is at the front end of political cancer treatment: live or die, it will be a draining, miserable experience.

But the President won’t go through it alone. The whole country will be dragged along. From congressional hideaways to country-club fairways, from newsrooms

## Digging deeper

For months, President Trump has criticized the investigation into Russian meddling in the 2016 election, at times inexplicably inserting himself into the proceedings. This has resulted in a broader, more aggressive criminal inquiry.

### Dec. 9

The Trump team attacks the credibility of the CIA after it finds Russian involvement in the election: “These are the same people that said Saddam Hussein had weapons of mass destruction.”

### Dec. 29

Incoming National Security Adviser Michael Flynn speaks with the Russian ambassador by phone. He later tells the Vice President that Russian sanctions were not discussed. This was incorrect; sanctions were discussed.

### Jan. 27

Donald Trump and FBI Director James Comey have dinner alone at the White House. Comey makes notes afterward, quoting Trump as saying, “I need loyalty, I expect loyalty.” Trump later denies that he said this.

### Feb. 11

Flynn files a financial-disclosure statement that underreports more than \$150,000 in 2016 income, including a financial relationship with Russian state-backed news network RT.

### Feb. 13

Confronted with intercepts of his conversations, Flynn admits that he misled others about his phone conversation with the Russian ambassador. Flynn resigns from the White House at the President’s request.

to lunchrooms, from skyscraper to silo, the realization is sinking in: this is going to be with us for quite a while.

So, like hurricane watchers dashing to the grocery store, Washington's ruling Republicans are trying to jam through a health-care bill before the investigation inundates the capital. Decimated Democrats are squabbling over a party identity to give shape to their rising hopes. Interest groups, having geared up for fights over taxes and regulations, are pivoting to wage war on this new battleground. Out in America, meanwhile, many battered and anxious voters find themselves back at seemingly unmovable square one: Who, or what, can lead the country out of this sour patch of history?

It's safe to say the investigation won't be a source of national unity. With Internet speed, pro- and anti-Trump factions have created rational and plausible—yet utterly irreconcilable—histories of an investigation that has barely even begun. To Trump supporters, this is the story of an unconventional agent of change elected to break up a failed status quo. In their view, the elites, with help from their leaky minions embedded throughout the government, have turned on the new President to protect their own power.



^  
*Former FBI boss Comey testifies before a Senate committee on June 8 about his dealings with Trump*

When Trump fired Comey in hopes of piercing the empty Russia balloon, Comey took his revenge in classic insider style: he arranged to have a friend leak memos that would prompt the appointment of a special counsel. And that turned out to be

Mueller, a longtime Comey associate who, despite his straight-arrow reputation, has installed Democratic donors on his prosecutorial dream team.

The veteran Washington knife fighter Newt Gingrich, after initially praising the Mueller appointment, has swung to this version of the story with gusto. He sicced a team of researchers on the question of political activity at the Department of Justice and at law firm WilmerHale,

PREVIOUS PAGES: AFP/GETTY IMAGES; COMEY: CHRISTOPHER MORRIS—VII FOR TIME

**Feb. 14**

Comey documents another private conversation with Trump, writing that the President asked him to go easy on Flynn: "I hope you can let this go." Trump later denies saying this.

**March 2**

Attorney General Jeff Sessions recuses himself from the Russia investigation after it is revealed that he failed to disclose a meeting with the Russian ambassador. Deputy Rod Rosenstein soon takes over.

**March 30**

Flynn's lawyer asks Congress to grant him immunity from prosecution. "Flynn certainly has a story to tell," the lawyer says. On the same day, Comey says, Trump asked him to announce that Trump is not under investigation.

**April 11**

Trump calls Comey to repeat the request. According to Comey, Trump says, "Because I have been very loyal to you, very loyal." Comey says he told Trump to contact the Justice Department.

**May 9**

Trump fires Comey. White House aides say the reason is Comey's handling of the Clinton investigation in 2016. Trump soon contradicts this, saying he was thinking of the Russia investigation.

**May 17**

Rosenstein, who had criticized Comey's handling of Clinton to Trump, appoints former FBI director Robert Mueller as special counsel to lead the federal investigation in Russian meddling in the 2016 election.

**June 16**

After reports surface that Mueller will investigate Trump for possible obstruction of justice, Trump tweets, "I am being investigated for firing the FBI Director by the man who told me to fire the FBI Director!"

where Mueller had been working. The researchers found this: of more than \$600,000 in campaign donations from employees at the two institutions to major presidential nominees in the 2016 election, less than \$10,000 went to Trump; the rest went to Hillary Clinton. Gingrich sent the numbers to the White House. “It’s just one more realization of the desperation of the deep state to do everything it can to prevent change,” Gingrich told TIME.

Trump’s foes tell a very different story. Theirs involves a billionaire whose undisclosed business interests may involve rich Russians as financiers and customers. After winning a narrow victory in an election plagued by Russian hacking, the new President surrounded himself with aides and advisers who had undisclosed Russian contacts. And when the FBI opened an investigation, the President abruptly fired the bureau’s director. Comey’s subsequent testimony about his awkward interactions with Trump raised the specter of obstruction of justice—made meatier by the President’s admission that he was trying to make the Russia issue go away. With Attorney General Jeff Sessions recused from the matter because of his role with the Trump campaign, Deputy Attorney General Rod Rosenstein had no choice but to name a special counsel, and the veteran Mueller was an obvious choice.

Is there enough common ground between those two realities to give hope of a clear resolution? The answer hinges on the behavior of the two men now lashed together in a grimly familiar Washington drama. Mueller must be careful and measured and honest and open. If he finds offenses, he must lay them out clearly, with every *t* crossed. If he finds none, he must issue equally clear and compelling exonerations. America is hungry for fair dealers: Mueller can do his part by proving himself to be one.

Trump’s task is more difficult. To lead



▲  
*Trump at the White House on June 12*

the country out of the deep hole he has excavated, he must be patient and disciplined, two qualities so far missing in the unpredictable and instinctive disrupter. Indeed, his White House advisers and GOP leaders in Congress are bracing themselves for a worst-case scenario in which the President trades his shovel for a backhoe by firing Mueller. Two years after his late-in-life entry into politics, Trump has yet to play the role of a healer. His gift

**Trump’s gift for locating sore spots and poking at them is undeniable, but part of his job is to bring people together**

for locating sore spots and poking at them is undeniable, but part of a President’s job is to bring people together.

Trump might start by thickening his own skin. The criticism he is taking now is part of the job—and not so different from the attacks he dished out gleefully when he was a private gadfly demanding to see Barack Obama’s birth certificate. Another of those tried but true Washington maxims should govern Trump’s future tweets: he’s in the kitchen now, and he has to learn to take the heat.

**THE SPECIAL COUNSEL IS**, like Trump, the scion of a wealthy family, raised at a boarding school and educated in the Ivy League. But the life choices of Robert Swan Mueller III, 72, suggest a decidedly different temperament from the one that occupies the Oval Office. Unlike Trump, who says he has few if any personal heroes, Mueller’s path was marked by a profound admiration for a role model he met at Princeton, a student a year ahead of him named David Spencer Hackett.

“I played lacrosse with David,” Mueller explained last year in a speech at West Point. “He was not necessarily the best

on the team, but he was a determined and a natural leader.” Hackett’s decision to join the Marine Corps, and his death in 1967 while rallying his platoon during an ambush in Vietnam, moved Mueller to follow in Hackett’s footsteps. “Many of us saw in him the person we wanted to be,” Mueller said.

Trump once joked with radio shock jock Howard Stern that chasing women while risking STDs was his version of Vietnam, adding, “It is very dangerous.” He might have chosen a different analogy if he had served as Mueller did. Commissioned in the Marine Corps and trained at Army Ranger School, Lieut. Mueller led a rifle platoon in Vietnam from 1968 to 1969. Wounded in combat, he received a Bronze Star with a V for valor as well as a Purple Heart and two Navy Commendation Medals.

Mueller told his West Point audience that his military experience instilled in him a desire to continue to serve his country. After earning a law degree from the University of Virginia and learning the ropes as an associate at a large law firm, he joined the U.S. Attorney’s office in San Francisco, where he rose to chief of the criminal division.

In 1989, Mueller moved to Washington, where he soon took charge of the entire Justice Department’s criminal division. Under his watch, department lawyers prosecuted major cases involving terrorism, organized crime, drugs and money laundering. Although his voter registration said Republican, Mueller earned the confidence of leaders in both parties. In 1998, Democrat Bill Clinton appointed him U.S. Attorney for Northern California. Republican George W. Bush called him back to Washington as Deputy Attorney General, then picked him to lead the FBI in 2001.

Mueller’s first official day at the Hoover Building was Sept. 4. A week later, terrorist attacks on New York City and Washington plunged the bureau into one of the most tumultuous periods in its history. Mueller’s challenge was to transform a primarily domestic law-enforcement agency into a global counterterrorism force—while breaking down cultural barriers to information sharing and pulling the paper-pushing bureau into the digital age. Many agents found Mueller to be bullheaded as he

## A tough legal team

Special counsel Robert Mueller has assembled an aggressive team of lawyers to work on his investigation. They bring expertise ranging from criminal law to corporate fraud and executive privilege, which suggests that Mueller expects his probe to range wide and far. Here are some of the top players:



### Andrew Weissmann

Weissmann served as the FBI’s top lawyer. Before that, he was the director of the Enron task force, overseeing prosecutions during the energy company’s collapse. A former New York federal prosecutor who fought organized crime, he is an expert in turning witnesses.



### Michael Dreeben

The Deputy Solicitor General is a renowned expert in criminal law and oversees the DOJ’s criminal docket. He has argued more than 100 cases before the Supreme Court, a milestone achieved by very few. He is an expert on the constitutional questions of criminal law.

### Aaron Zebley

Zebley was Mueller’s chief of staff when he ran the FBI. Before that, he was an FBI special agent in the counterterrorism division, and he also served as an assistant U.S. attorney in Virginia. His specialty is prosecuting cases in national security, terrorism and violent crime. In private practice, he was a partner at WilmerHale with Mueller.

### James Quarles III

Quarles was an assistant special prosecutor on the Watergate investigation, in which he specialized in campaign-finance research. He was a longtime partner at WilmerHale and rose through the ranks to run the firm’s D.C. office.

### Jeannie Rhee

Rhee was the Deputy Assistant Attorney General under former Attorney General Eric Holder. She advised him on issues of criminal law, executive privilege and national security. She was a partner at WilmerHale, where she worked with clients who were the subjects of government investigations.

### Lisa Page

Page worked in the FBI’s Office of the General Counsel and is a former trial attorney in the criminal division’s Organized Crime and Gang Section. She has extensive experience in money-laundering and organized-crime cases, including ones specifically focused on Eastern Europe.

shook up personnel rules and rammed through technology updates. And he made mistakes, including a botched investigation of the 2001 anthrax attacks in D.C., Florida, New York and New Jersey, in which an innocent man was hounded in the press while Mueller and his agents ignored the real killer. But overall, in the judgment of FBI historian Ronald Kessler, no director in the modern era “has had a greater positive impact on the bureau than Mueller.”

As director, Mueller worked closely with Comey, who was appointed Deputy Attorney General in 2003. Together, they threatened to resign in 2004 over a White House plan to preserve a program of warrantless wiretaps. Their frantic dash to the bedside of ailing Attorney General John Ashcroft to ward off a delegation of White House arm twisters on a mission to save the program was a heroic high point for friends of Mueller and Comey—and an example of their sanctimony to their detractors. Either way, they won: Bush agreed to make changes to the program. When Mueller’s extended term at the FBI ended in 2013, few were surprised that Obama installed Comey in his place.

Praise was widespread and bipartisan for Mueller’s appointment on May 17 as special counsel. But that enthusiasm was not shared at the White House. As the gravity of his miscalculation sets in, Trump has been lashing about for someone to blame. Attorney General Sessions, one of his earliest supporters, offered to resign after a bawling out from Trump, who feels that he would not be in this pickle if Sessions had not recused himself from the Russia investigation.

Trump is also furious with the flip-flopping Democrats who went from hating Comey (they blamed his public hand-wringing over her emails for Hillary Clinton’s loss in November) to hailing him as a martyr. “The Democrats should be ashamed,” Trump tweeted. “This is a disgrace!”

And then there’s Deputy Attorney General Rosenstein, who wrote a memo at Trump’s request that the White House briefly used to justify the Comey firing, then appointed the special counsel. “I am being investigated for firing the FBI Director by the man who told me to fire the FBI Director!” the President tweeted. “Witch hunt!” That June 16 outburst



▲  
*Voters cast their ballots in  
Chesterfield, Va., on Nov. 8, 2016*

caught Capitol Hill Republicans flat-footed. “Is this part of a new plan?” an adviser to House Speaker Paul Ryan asked a White House aide. Of course not, the aide answered. “Do you think we would plan to have the President of the United States implicate himself?”

Friends report that the wrathful President discussed the possibility of firing Mueller, an idea that horrifies White House advisers and terrifies veteran congressional Republicans. The last President to try such a thing was Nixon, who sparked the so-called Saturday Night Massacre in 1973 by ordering the ouster of Watergate special prosecutor Archibald Cox.

Beyond the disastrous politics of such a move, it’s unclear how Trump could execute this step. Justice Department regulations tightly govern the removal of a special counsel, which can be done “only by the personal action of the Attorney General” and only for “misconduct, dereliction of duty, incapacity, conflict of interest or for other good cause.” With Sessions recused, the power of removal passed to Rosenstein—but his involvement in the Comey firing could force his recusal as well. Rosenstein has assured a Senate committee that he would not carry out an unjustified firing. “If there were not good cause, it wouldn’t matter to me what anybody says,” he averred. If Rosenstein refused to fire the special counsel, the order would go next to another Senate-confirmed Justice official.





With the Solicitor General's office still unfilled, that leaves Associate Attorney General Rachel Brand, who hasn't said publicly how she would respond.

Trump's alternative to this uncertainty might be to exercise his constitutional authority to rewrite the Justice Department regulations, giving himself the firing authority. Such a step would smack of despotism in a capital that cherishes checks on power.

For now, the White House is trying to compartmentalize the investigation, while such allies as Gingrich launch counterattacks. Rather than fire Mueller—and risk sparking a backlash—the plan seems to be to discredit the investigation with voters. The Republican National Committee is cranking out messages designed to make Mueller and Comey the new Hillary

and Bill. Their friendship snarls Mueller in a flagrant conflict of interest, the attack goes, and Mueller's team is rife with partisans. At least three of his recruits have written checks in partisan campaigns, including two—James Quarles and Jeanie Rhee—who gave the maximum allowable amount to Hillary Clinton for her race against Trump last year.

**A FACT OF** Washington life that ought to be a maxim, but isn't: not every important moment gets a headline. One such moment was a largely overlooked exchange in May between Senator Sheldon Whitehouse, a Rhode Island Democrat, and Comey, who still held his job at the FBI.

"It's not uncommon to seek and use tax returns in a criminal investigation?" asked the Senator, himself a former prosecutor, who was well aware of the answer.

"Not uncommon," Comey replied on cue. "Especially in complex financial cases, it's a relatively common tool."

Whitehouse went on to ask about Russian strategies for compromising U.S. business partners by giving them highly favorable deals and to explore the use of shell corporations in laundering dirty money through untraceable transactions with American companies. "And that's not a good thing?" Whitehouse asked in conclusion.

Comey: "I don't think it is."

Investigations like Mueller's have a way of moving from Topic A to Topic Z, from Ozarks real estate to an intern's blue dress as one question begets another and clue leads to clue. The Senator's questions and Comey's answers mapped several paths by which an investigation of Trump's actions as President—Was he trying to obstruct

**Investigations like Mueller's have a way of moving from Topic A to Topic Z as one question begets another and clue leads to clue**

justice?—could become a dissection of the inner workings of his private business. The tax returns he has steadfastly refused to publish. The conflicting accounts he and his sons have given about Russian investments in Trump projects. The sharp rise in the number of Trump-branded luxury condos bought by shell corporations since his nomination, as first reported by *USA Today*. And so on.

For now, the leak-prone Administration has mostly gone quiet, the better to showcase displays of presidential normalcy. An infrastructure week. A summit with tech CEOs. "The media and the Democrats talk about Russia," says Trump adviser Kellyanne Conway. "The President talks about America." Mueller-related questions are steered to outside counsel, part of a Sisyphean effort to professionalize the chaotic White House. Still, aides live in the shadow of the boss's shifting moods.

On Capitol Hill, Vice President Mike Pence is driving Republican leaders hard to change the subject by passing legislation. Even as he hired attorney Richard Cullen—another Comey friend—to guard his own flank in the investigation, Pence shuttled between the White House and Congress, pleading for a win on health care to cheer the embattled President. But the Fourth of July recess loomed with Senate majority leader Mitch McConnell still short of a majority for any Trump-blessed reform, leaving lawmakers to face the prospect of going home empty-handed while the President sulks with his Twitter.

It was tempting, as the wheels of another Washington investigation accelerated away from the station, to say that we've seen this all before, though never with a protagonist quite like President Trump. In his outside personality and unmasked audacity, he's making it clear that this all-too-familiar story has roots much deeper than even the most shopworn Washington lore. It goes back to the Greeks, who understood that the peril of kings was hubris, and that hubris was an invitation to the avenging goddess called Nemesis. In Robert Mueller, Trump may have found his. —*With reporting by* TESSA BERENSON, MASSIMO CALABRESI, MICHAEL DUFFY, PHILIP ELLIOTT, ZEKE J. MILLER *and* MICHAEL SCHERER/WASHINGTON

BUSINESS

# THE

OPIOID-INDUCED CONSTIPATION

## AMITIZA

MEDICATION\_ *Lubiprostone*

COMPANY\_  
*Sucampo Pharmaceuticals and  
Takeda Pharmaceuticals U.S.A.*



OVERDOSE TREATMENT

## NARCAN

MEDICATION\_ *Naloxone hydrochloride*

COMPANY\_  
*Opiant Pharmaceuticals and Adapt Pharma*

OPIOID ADDICTION TREATMENT

## REVIA

MEDICATION\_ *Naltrexone*

COMPANY\_ *Duramed Pharmaceuticals*



# DRUG

OPIOID-INDUCED CONSTIPATION

## RELISTOR

MEDICATION\_ *Methylnaltrexone bromide*

COMPANY\_  
*Progenics Pharmaceuticals and  
Salix Pharmaceuticals*



OVERDOSE TREATMENT

## EVZIO

MEDICATION\_ *Naloxone hydrochloride*

COMPANY\_ *Kaléo*



OPIOID ADDICTION TREATMENT

## VIVITROL

MEDICATION\_ *Naltrexone*

COMPANY\_ *Alkermes*



# CASCADE

OPIOID ADDICTION TREATMENT

## SUBOXONE

MEDICATION\_ *Buprenorphine/Naloxone*

COMPANY\_ *Indivior*

OPIOID-INDUCED CONSTIPATION

## MOVANTIK

MEDICATION\_ *Naloxegol*

COMPANY\_ *AstraZeneca and Daiichi Sankyo*

### *A boom in prescription painkillers drove the opioid crisis. Now there are pills to solve it*

WHEN IT COMES TO KILLING PAIN THESE DAYS, A PRESCRIPTION FOR A HIGH-powered opioid is no longer enough. Once you're taking, say, OxyContin or hydrocodone on a regular basis, you'll probably get pills for the side effects: pills to control the nausea, pills to regulate your testosterone production, and pills to help you use the bathroom when the drugs numb the receptors in your intestines that are supposed to help move things along.

If you become addicted to painkillers, there are pills to help you stop taking the pills, by reducing the symptoms of withdrawal. And if you take too many pills, there's a pill for that too. Or, rather, there's a nasal spray, or an injection, or a nifty \$4,100 auto-injector that announces, through a tiny speaker, how to use it to reverse the effects of an overdose.

In the medical world, this phenomenon is known as a drug cascade, and with hundreds of millions of opioid prescriptions flooding American homes, the opioid cascade has become, over the past five years, a multibillion-dollar business. "All of these different medicines just start to pile on," says Dr. Andrew Kolodny, a senior scientist at Brandeis University and an expert on opioid policy.

In some cases, government initiatives have been the force behind more demand for drugs that treat addiction and overdose. With 33,000 Americans dying of opioid overdoses in 2015 alone, state and federal guidelines have encouraged doctors to co-prescribe opioids with a drug that reverses an overdose—just in case. Police and first responders have stocked up on the overdose-reversal drug too.

In other cases, drugmakers and their investors have marketed a whole new class of follow-on pills, because they know a growth industry when they see one. In 2016, the pharmaceutical companies that make opioid painkillers raked in \$8.6 billion in sales for 336 million opioid prescriptions, according to the data firm QuintilesIMS. That's enough to give pain pills to 9 out of every 10 American adults. It's also enough to constitute an impressive new customer base for drugs that, for instance, ameliorate the constipation associated with chronic opioid use.

Analysts estimate that the follow-on opioid market is worth at least \$3 billion a year. Given current trends, some project that it will top \$6 billion by 2022. In most instances, the companies that sell opioids are different from those that profit from the follow-on market, but the economics are inescapably linked: the more people there are on opioids, the more pills that are needed to treat the side effects and complications of their use. "Pharmaceutical companies made billions promoting the aggressive prescribing of opioids," says Kolodny. "Now they'll make billions from treating the consequences

WRITTEN BY

**Haley Sweetland  
Edwards**

ILLUSTRATIONS BY

**James Kim**



of overprescription.”

Putting an end to that cycle is complicated by the fact that many of the pills that have been developed to address the explosion in opioid use and abuse are beneficial and much needed. Many save lives. A 2016 study showed that long-term opioid patients who received a prescription for the drug that reverses an overdose had 63% fewer trips to an emergency room after a year. A 2011 Harvard study found that administering a drug known as Suboxone is one of the most effective ways to reduce substance abuse.

“It’s really important for people to understand that some of these treatments are the best for them,” says Dr. Joshua Sharfstein, a dean at the Johns Hopkins Bloomberg School of Public Health. “A lot these companies have taken every possible advantage in the market,” he continues—but that doesn’t mean we shouldn’t use their products.

Finding a way to walk that tightrope—to ensure access to vital medications at reasonable prices, while reining in the profiteers—may well become one of the biggest public-health conundrums of our time. “If there’s a medicine available that saves lives, we need to make sure people can get to it without spending thousands of dollars or raising taxes to pay for it,” says Dr. Barbara Herbert, the former president of the Massachusetts chapter of the American Society of Addiction Medicine. “We need to make the conversation about benefiting the public good.”

**WHEN ROUGHLY 91 AMERICANS** are dropping dead every day of opioid overdoses—in their homes, in their cars—it has a way of grabbing officials’ attention. State and federal lawmakers have responded by promoting access to two medications: naloxone, which can reverse an opioid overdose, and buprenorphine, which helps people control and treat an opioid addiction. Neither drug is under patent. Naloxone has been available for pocket change since 1985. Buprenorphine has been on the market since the 1970s.

But over the past few years, the companies that sell these medications—or have patented and branded innovative ways to administer them—have found themselves at the center of a lucrative new market. Demand has been driven largely by public-health efforts. From 2013 to

**\$4.4**

**BILLION**

*Annual market for  
substance-abuse treatment  
in the U.S. in 2015*



**\$12.4**

**BILLION**

*Projected annual  
market for substance-  
abuse treatment  
in the U.S. by 2024*

2016, three federal agencies, including the Centers for Disease Control and Prevention, issued guidelines urging doctors to co-prescribe naloxone alongside high-risk opioid prescriptions. The 2016 Comprehensive Addiction and Recovery Act doubled down, calling for funds to purchase naloxone and expand access to treatment programs. The same year the Department of Health and Human Services also pushed states to reduce barriers for doctors prescribing buprenorphine.

All 50 states responded in kind, passing laws that make it easier for friends and families of opioid users to access naloxone. Cities, emergency responders and hospitals bought large quantities of the drug, and nonprofits dumped money into promoting its use. Billboards advertising

naloxone decorate sidewalks from Knoxville, Tenn., to the Bronx. CVS and Walgreens have made naloxone available over the counter in more than 40 states.

Naloxone is a good drug. People should have access to it. But the companies that make it have also made huge profits off increased demand resulting from the opioid crisis. A March 2016 financial report, paid for by Opiant Pharmaceuticals, which makes Narcan, a type of naloxone, acknowledged that public initiatives and infusions of taxpayer cash had created a market for naloxone 21 times as large as expected. “Estimates suggest naloxone market size is actually \$1.3 billion, versus the misconception that it is only \$60 million,” the report said. Opiant’s partner, Adapt Pharma, which has licensed the right to sell Narcan, says the report overstates the potential market.

Three of the main companies that make naloxone products raised the prices on their drugs as demand increased. From 2005 to 2014, Hospira, which was purchased by Pfizer in 2015, increased the list price of its 10-milliliter injectable naloxone pack by 2,300%, from \$9 to \$220, according to data from Truven Health Analytics. (By the end of 2014, the price came down to \$158.) From 2001 to 2014, the list price for Amphastar’s 20-milliliter naloxone pack jumped 175%, from \$120 to \$330. Kaléo raised the price of Evzio, its naloxone auto-injector, by 550%. When it was first introduced in 2014, it cost \$575. In 2016, it was \$3,750. Kaléo provides its Evzio free of charge to any patient with private insurance and a prescription, and Pfizer donates injections to nonprofits and public-health centers. In all three cases, insurers and hospitals end up paying a lower, negotiated price for all medications. But the fact remains: higher list prices mean everyone buying naloxone—from prisons to police departments—ends up paying more.

Public-health initiatives promoting what’s known as “medication-assisted



***If you become addicted to painkillers, there are pills to help you stop taking the pills. If you take too many pills, there’s a pill for that too***

treatment” for opioid addiction follow a similar narrative. Suboxone, for example, is a combination of buprenorphine and naloxone. Multiple studies indicate that it’s one of the most promising new treatments for opioid addiction. It was developed through a partnership between the U.S. government and the U.K.-based company Reckitt Benckiser. Like naloxone, Suboxone is a good drug, and people should have access to it. But Indivior, the company that now owns the drug, has made huge profits off increased demand.

Last September, 35 states and Washington, D.C., filed a lawsuit against Indivior alleging that it took “deceptive and unconscionable” actions to deliberately subvert competition for Suboxone. The lawsuit points to the fact that, in 2002, the company received a license from the FDA to sell the drug without competition for seven years. But as the license was set to expire, the company launched a film version of Suboxone, which dissolves under the tongue—for which it received new patents ensuring competition-free sales until 2023. Indivior then took the tablet version off the market, which allowed the company to charge more for the licensed film version.

Indivior now enjoys 61% of the U.S. market for opioid addiction treatment and is testing a new way to administer the active ingredients in Suboxone. If approved, it is expected to bring in peak annual net revenues of “at least” \$1 billion, according to the company’s financial results. In a statement to TIME, Indivior said it was proud of its work providing options for medication-assisted treatment and will consider itself “most successful when patients no longer need to be treated with our medicines.”

Other addiction-treatment drugs, like Vivitrol and Revia, have also benefited from a flood of federal, state and local funds, doled out through Medicaid, prisons and public health departments. Ohio’s substance-abuse-treatment market, for example, is “worth well over \$100 million a year in public money alone,” according to Cleveland’s *Plain Dealer*. That dynamic is fertile ground for drugmakers’ lobbyists. According to the Center for Responsive Politics, Alkermes, which makes Vivitrol, has spent at least \$13.5 million in federal lobbying since 2010, when the drug was approved. It has seen its mar-

ket share expand. In 2012, Ohio Medicaid bought 100 doses of Vivitrol; in 2016, it spent more than \$38 million on 30,000 doses, the *Dealer* reported. During that same time, its prices rose: a vial of Vivitrol cost \$800 in 2009; by the end of 2015, it was \$1,309, according to Truven Health Analytics. In a statement to TIME, Alkermes stood by its pricing and marketing. “It is surprising to see coverage attacking the integrity of both Vivitrol and Alkermes at a time when the nation’s focus should be on developing and implementing a comprehensive plan to address the opioid crisis,” a spokesperson wrote.

A different class of drugs—those that treat opioid-induced constipation (OIC)—has seen its profits soar as a direct result of more opioid prescriptions. OIC occurs when opioid painkillers act on receptors in the bowels, slowing and blocking normal function. Historically, the OIC market has been small, limited mostly to people in palliative care. But in recent years, as the customer base has ballooned, so has the price of these medications. From 2007 to 2017, Sucampo Pharmaceuticals

and Takeda Pharmaceuticals doubled the price of their OIC drug, Amitiza, from \$173 to \$350, according to Truven Health. Salix Pharmaceuticals’s OIC drug Relistor costs \$1,500.

In 2014, the market for OIC drugs was worth \$1.9 billion, according to Credence Research. By 2022, it’s expected to top \$2.8 billion. Three years ago, there was only one drug that treated OIC; by 2019, there will likely be eight. “It’s a case of the pharmaceutical industry creating a disease,” says Dr. Mark Publicker, a longtime addiction specialist in Portland, Maine, “and then selling a drug to treat it.” In a statement to TIME, AstraZeneca wrote that “OIC is a real condition that is being undertreated in the market.”

**DRUGMAKERS’ PRICE INCREASES** and patent gambits in the opioid follow-on market haven’t escaped congressional attention. In June 2016, members of the Senate’s Special Committee on Aging sent letters demanding that naloxone makers account for their price hikes. Three months later, a House subcommittee cited the rising cost of the drug as an example of the need for better federal regulations. It was the latest in a familiar parade of outrage: first there was Turing Pharmaceuticals’ overnight price hikes in 2015, and then there was Mylan’s 500% increase on EpiPens last year. But how do we fix the problem for good?

A 2016 op-ed in the *New England Journal of Medicine* suggested that the federal government could purchase large quantities of naloxone in the same way it might stockpile a vaccine. Or it could allow cheaper imports, make naloxone available over the counter without a prescription or use provisions within U.S. patent law to compel a drugmaker to produce a less expensive version in exchange for “reasonable royalties.” PhRMA, a trade group that represents drugmakers, cites the National Institute of Health’s goal of encouraging collaboration between government agencies and drug companies. “We all must work together to help craft a multifaceted solution to this multifaceted problem,” said Caitlin Carroll, a PhRMA spokeswoman, in a statement to TIME.

In the meantime, the economic incentives remain perverse. In 2016, the rate of both opioid addiction and overdoses continued to climb. It’s a bull market. □

**\$1.9**

**BILLION**

*Global revenue from  
opioid-induced-  
constipation drugs  
in 2014*



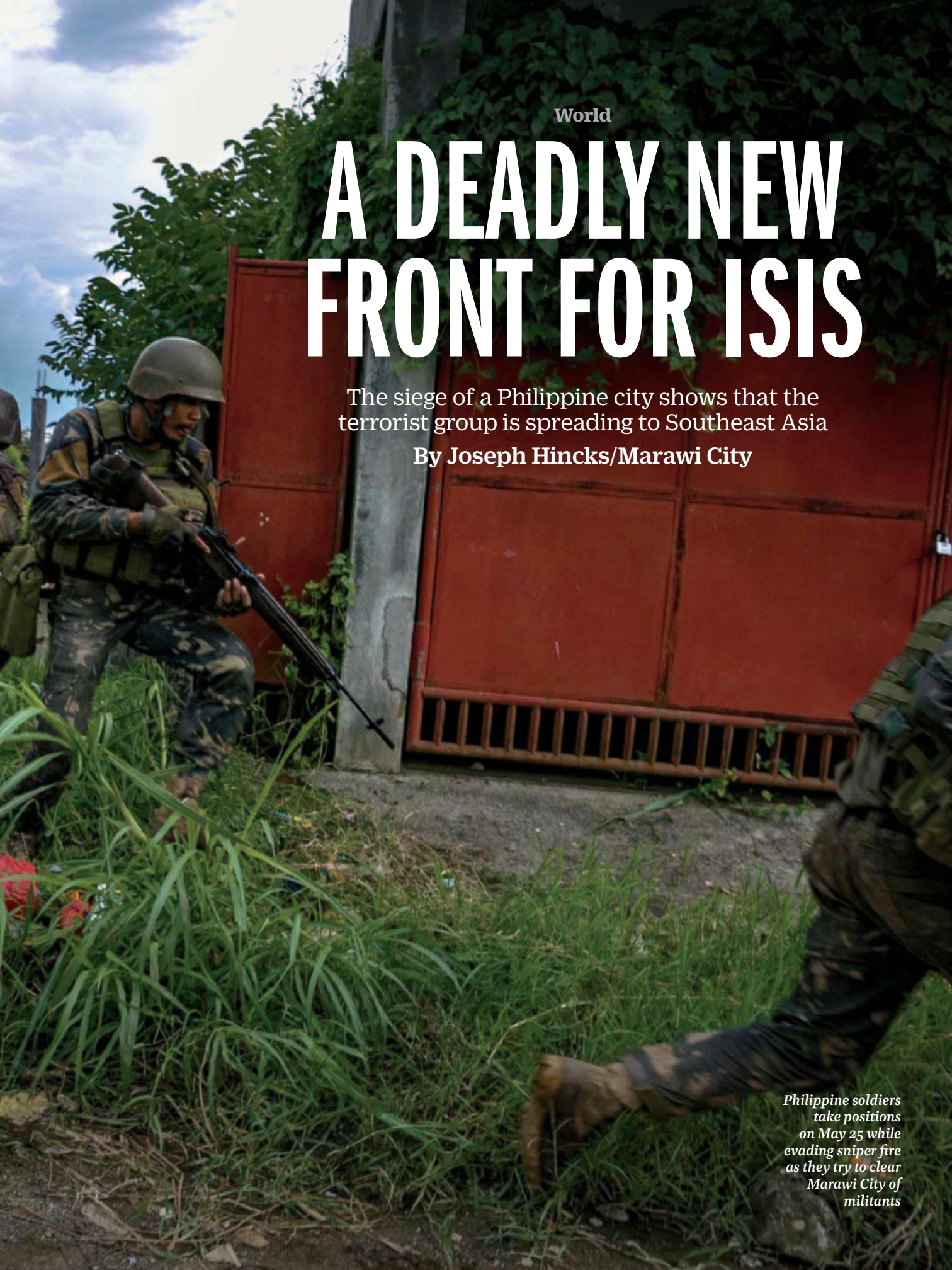
**\$2.8**

**BILLION**

*Projected global revenue  
from opioid-  
induced-constipation  
drugs in 2022*



PHOTOGRAPH BY JES AZNAR



World

# A DEADLY NEW FRONT FOR ISIS

The siege of a Philippine city shows that the terrorist group is spreading to Southeast Asia

By Joseph Hincks/Marawi City

*Philippine soldiers take positions on May 25 while evading sniper fire as they try to clear Marawi City of militants*

On what was to be her wedding day, Stephanie Villarosa ate chocolate-flavored rice porridge out of a Styrofoam cup. Under normal circumstances—rings exchanged, fidelity promised, bride kissed—she and her family would have been feasting on lechón, or roasted suckling pig, a delicacy in her fiancé’s hometown of Iligan City on the island of Mindanao.

Instead, Villarosa was huddled on an institutional plastic chair about 24 miles south of Iligan, inside Marawi City’s provincial government building, where she was finally safe after hiding in a house for 11 days. Outside, sniper fire crackled over the mosque-dotted hills to the east and military FA-50 fighter jets thundered overhead. Wedding or no, the porridge was nourishing and Villarosa was happy: “God is good. Today we survived.”

Survival has become a daily battle in Marawi, the capital of Mindanao’s Lanao del Sur province, whose mostly Muslim population of 202,000 people makes the city the biggest Islamic community in what is otherwise an overwhelmingly Catholic country. Since May 23, Marawi has been under siege by what locals call Grupo ISIS, an ad hoc coalition of insurgent and kidnap-for-ransom militias that have pledged allegiance to ISIS leader Abu Bakr al-Baghdadi. Their swift initial success flew in the face of Philippine President Rodrigo Duterte’s characteristically cocky assurances: “I can be the same. I can dish it more than what you can. Fifty times more than you can,” he said in late April. “Get me a terrorist. Give me salt and vinegar. I will eat his liver.” But a month after the opening salvos in Marawi, the strongman, infamous worldwide for his brutal

crackdown on drug dealers and users, has yet to put down the rebellion.

Marawi is a rare, geographic front for ISIS, which as it loses territory in Iraq and Syria has increasingly relied on terrorist attacks to maintain its public profile: the suicide bomber at the Ariana Grande concert in Manchester, England; the London Bridge assailants less than two weeks later; a bloody late-May assault on Coptic Christian pilgrims in Egypt; twin suicide-bomb attacks that killed three police officers in Jakarta; and twin attacks in Tehran.

Marawi eclipses all those in deaths and duration. But its most critical significance is the potential for ISIS and its affiliates to spread in Southeast Asia—a generally pro-U.S. and increasingly prosperous region—as the extremists come under growing pressure in the Middle East. “The ISIS leadership wants to externalize its model by going to other parts of the world,” says Richard Javad Heydari, an author and political scientist based in Manila. At a recent security conference in Singapore, the city-state’s Defense Minister, Ng Eng Hen, said, “If the situation [in Marawi] is allowed to escalate or entrench ... it can prove a pulling ground for would-be jihadists.” Philippine officials say at least eight foreign fighters—from Indonesia, Malaysia, Yemen, Saudi Arabia and



Chechnya—have been killed in Marawi.

The fighting began when the authorities tried to capture Isnlon Hapilon, head of a southern Philippine militia. The army met fiercer-than-expected resistance. Allied with another pro-ISIS brigade, called the Maute Group, Hapilon’s fighters took a priest and his congregation hostage, freed prisoners from the local jail and overran the city. A month later, the fighting persists, hundreds have died—militants, soldiers, civilians—and hundreds more residents remain trapped in the city. Many have no electricity or running water. Food stocks are diminishing fast: local authorities report that hunger has driven





*Suspected ISIS-linked militants are taken away on June 3 by authorities after they were caught trying to escape by crossing a river*

some to eat cardboard dipped in water.

Iligan's Capin Funeral Homes, one of a scattering of morgues in the area for Marawi's minority Christians, is where some bodies from the conflict have been taken. On a recent Monday, eight arrived, in various stages of decomposition. A Marawi survivor later told local journalist Jeff Canoy that they were his colleagues from a rice mill. About a hundred of them had hunkered down at the mill, the survivor said, and the Muslims taught Islamic prayers to their Christian co-workers to deceive the militants. After four days of hiding, the rice millers made a break for it. Most reached the army checkpoints ringing the city, but a few didn't. Their



bodies were found in a ravine with the word **MUNAFIK**—*traitor* in both Arabic and the local Maranao language—written on placards across their chests. As *TIME* toured the morgue, four men wearing masks hoisted in another cadaver from Marawi. It was missing its head.

The situation has become serious enough that the U.S. military is now involved. In the early 1990s, domestic political pressure in the Philippines, a former U.S. territory, forced Washington to pull out of two big Navy and Air Force bases. But in March this year, Manila agreed to allow the U.S. military access to five Philippine bases. In the meantime, American military personnel act as advisers to

Philippine forces, especially in Mindanao and the adjacent Sulu Archipelago, hotbeds of insurgency. A Philippine military spokesman said the U.S. was giving “noncombat assistance” for Marawi. On at least one occasion, U.S. Navy P-3 Orion planes were spotted hovering above the city, providing surveillance support to Philippine ground troops. Iowa Senator Joni Ernst, who is a member of the Senate Armed Services Committee, recently wrote on Military.com, “Al-Qaida used the Philippines as a safe harbor to plan the horrific attacks on Sept. 11, 2001, and we cannot let ISIS do the same.”

**SOUTHEAST ASIAN LEADERS**

are watching Marawi closely too. ISIS and its affiliates have tagged Singapore as a target in jihadist publications and videos and plotted two attacks on the city-state, according to a June 2017 government threat-assessment report. The second of these—a plan to launch a rocket at the massive Marina Bay Sands waterfront resort—was foiled by authorities in Indonesia, where the would-be attackers were based. Malaysia suffered its first ISIS attack last June—a grenade injured eight people at a nightspot in the capital, Kuala Lumpur—and disrupted an additional seven plots in 2016. On June 16 of this year, Malaysian counterterrorism authorities said they arrested two Indonesians and a Malaysian whom they suspected of trying to join the militants in Marawi.

Indonesia, which has the world’s biggest Muslim population, is particularly concerned about ISIS’s using the southern Philippines as a gateway to establish a foothold in Southeast Asia. The two countries are separated by poorly policed waters through which extremists can flow. “It’s easy to jump from Marawi to Indonesia,” Indonesia’s armed-forces chief, General Gatot Nurmantyo, told reporters in Jakarta on June 13. Six days later, Indonesia, the Philippines and Malaysia announced joint maritime patrols in the area.

To contain the militants, Duterte declared 60 days of martial law on Mindanao, which ends around July 20,

though the President has talked about extending it. The military says its advances are being checked by opposing fighters using human shields and taking sniping positions in mosques. Still, by June 19, officials reported that the battle zone had been reduced to an area of about 3 sq. mi. within four of Marawi’s 96 subdivisions. Beyond that, little is clear. Military spokesman Lieut. Colonel Jo-ar Herrera won’t divulge how many Philippine troops are on the ground, while official estimates of the number of militants range from a few dozen to 1,000.

The death toll is disputed. On June 19, the military put it at 345: 257 extremists, 62 soldiers and 26 civilians. But evacuees and military personnel who declined to be named say they believe that more than 1,000 people have perished so far. “There is going to be an epidemic, because there are so many rotting bodies in the streets,” says Norodin Lucman, a respected Marawi clan chieftain.

The fighting also takes a toll on the living. About 220,000 people in Marawi and the surrounding area have been forced to flee since the fighting broke out. On a recent Saturday, nearly 200 families were squeezed into Iligan’s rapidly repurposed Buru-an evacuation center. Some occupied squares of floor space partitioned by wooden slats and shared with bags, cardboard boxes and Tupperware containers of milk powder. Others spilled onto an adjacent sports field or baked under tents.

While the ISIS-allied forces have targeted Christians, the majority of victims, as elsewhere, are Muslims who reject violence. Among those in limbo is



Hapilon, seen here in undated video footage, at a meeting of militants

**Indonesia is particularly concerned about ISIS’s using the southern Philippines as a gateway to establish a foothold in Southeast Asia**



Naima Abdullah, who says she left the city with her five children, including a 5-month-old baby, her 100-year-old *lola* (grandmother), whom she carried on her back, and a live chicken. “We walked for five hours because there was no transportation available and we had no money,” she says. “The [youngest] ISIS boys were around 12 or 13 years old. They had guns. They were wearing black suits with the flags of ISIS. There were so many armed men. We feared for our lives.”

**THE BATTLE FOR MARAWI** has its roots in the complex and bloody history of Mindanao. Much of the island is Moro, a collective term for various Muslim indigenous groups. Over the decades, the Moros have suffered greatly: American colonizers encouraged Catholic Filipinos to populate land held by dissenting



▲  
*Villagers trapped in the conflict zone are escorted by government troops during a rescue operation on May 31*

Moros; more recently, thousands of Moros were massacred under the late Philippine dictator Ferdinand Marcos. The Moro National Liberation Front (MNLF) and its offshoot, the Moro Islamic Liberation Front, have fought for either greater autonomy or full independence for Mindanao for decades. Both groups have ceased fighting to participate in (stalled) peace talks. But some 150,000 people have died to date. And poverty and deprivation remain rife on the island. That, as much as a zeal for violent jihad, drives the insurgency on Mindanao

Because Duterte is the first Philippine President from Mindanao and claims Moro blood, many hoped he would reignite negotiations. So far, however, this hasn't happened. Counterterrorism experts say that once the fighting is over, a political solution underpinned by social

and economic justice is essential. "Pushing for federalism without the rule of law and responsible local governments is putting the cart before the horse," says Joseph Franco, a research fellow at Singapore's Nanyang Technological University.

The lack of progress has contributed to the rise of more extreme militants, among them Hapilon and his allies, the Maute brothers Omarkhayam and Abdullah, considered the masterminds of the assault on Marawi. As with many homegrown radical Islamists, by associating with ISIS, Hapilon and the Maute brothers can draw on its resources, like money and

manpower. ISIS has named Hapilon an emir, or commander. "A lot of these guys have latched on to the [ISIS] franchise, to the brand," says Franco.

**LAST NOVEMBER**, former Marawi mayor Omar Ali—who popularly goes by the name Solitario—went to the foothills of Lanao del Sur's Butig Mountains for a meeting with the Maute brothers. As a former MNLF commander, Solitario knew the family well: he had gone to school with their father years before, and his brother was married to a relative of their clan. "I proposed to [the Mautes] to temporarily stop fighting the government until the program of the President can be started," says Solitario, referring to Duterte's federalism plan. Should the President not make good on his promise, Solitario told the Maute brothers, they could take up their guns again.

But according to Solitario, the Maute brothers were not interested in compromise or in greater political autonomy for the Maranao indigenous people. "[They told me] we have to do a cleansing process," says Solitario. "We do not want Muslims to be neutral. They either have to join us or be our opponent: You are with us or you are against us." Solitario isn't sure whether the Maute brothers picked up their ideology during their schooling in Jordan and Egypt, but "when they arrived [back from overseas] they brought with them that virus."

Most Marawi citizens, Muslims and Christians alike, want to defeat the virus. Clan chieftain Lucman sheltered 71 people—mostly Christians—in his house in Marawi. Then, drawing on his authority as a pillar of the community, he led them and scores more past the lines to safety. On two occasions, Lucman said, armed men came to his gate demanding to search inside. The first time, he didn't know the ISIS fighters and turned them away. The second time, ISIS sent a Maranao. Lucman recognized the 28-year-old in black ISIS garb as one of his distant relatives. "I said, 'What are you doing with that gun?' He said, 'This is jihad.' I told him, 'There's no way you can win. Take off your clothes. I will hide you. I will talk to the government for you to surrender.' But the militant has his own plan. He said, 'No, I will die.'" — *With reporting by MERLYN MANOS/MARAWI CITY* □

Space

# EYES IN



PHOTOGRAPH BY DESIREE STOVER

**NEW VIEW**

The main mirror of the \$8.7 billion James Webb Space Telescope, here reflecting the NASA logo, hangs in a clean room during its development. The telescope, set to launch next year, is designed to look farther into space—and further back in time—than any telescope before, perhaps witnessing the infancy of the universe

# THE SKY

A NEW AGE OF TELESCOPES DAWNS

BY JEFFREY KLUGER



# O

ONE OF AMERICA'S LEAST KNOWN National Historic Landmarks may also be its ugliest. It's kept hidden inside Building 32 on the grounds of the Johnson Space Center in Houston and is identified simply as Chamber A. The "landmark" resembles nothing so much as a bank vault, albeit one with a 40-ton, 40-ft.-wide door.

When the door is shut, however, and the right machinery is turned on, Chamber A becomes, effectively, a giant pocket of outer space. Pumps create a vacuum, and a liquid helium and nitrogen cooling system drives the temperature down to  $-440^{\circ}\text{F}$ , not far from absolute zero, the thermal floor at which most molecular motion stops.

The chamber was built in 1965 and earned its landmark status both for its innovative design and for its work stress-testing the Apollo lunar spacecraft. Now, it's preparing to inflict its punishment on the next great space machine to come its way: the James Webb Space Telescope.

On a recent afternoon, the main mirror and instrument package of the Webb—named after the NASA administrator who ran the agency in the early part of the Apollo era—sat in the filtered-air clean room outside the chamber, being prepped for a 93-day stay in simulated space. That test, which will begin in July, will be a very high-stakes exercise. The mirror is the heart of the telescope, measuring 21.3 ft. across. It's made of 18 smaller hexagonal mirrors arranged in a honeycomb configuration. Altogether, the assembly has seven times more light-collecting space than the main mirror of the celebrated but aging Hubble Space Telescope. So big an eye will give the Webb the power to look much farther into space—and much fur-

ther back in time—than Hubble can. That might reveal something spectacular—possibly the very moment in cosmic history when the first stars switched on.

"We will be watching the universe light up after the Big Bang," says NASA's Eric Smith, Webb's program director.

The Webb has been in development for more than 20 years at a cost of \$8.7 billion and is at last set to launch in October 2018. In addition to witnessing first light, it may also see the first primal galaxies taking shape, the first planetary systems forming around stars, even signs of early biology—if it exists—emerging on alien worlds. Though Webb is the biggest news in the telescope community, it's not the only news. NASA is betting big on cosmic observatories. Even before Webb flies, the space agency will launch the Transiting Exoplanet Survey Satellite (TESS), which will conduct a study of the entire 360-degree bowl of the sky, looking for planets orbiting the half-million brightest, closest stars in the galaxy.

After that may come the Wide-Field Infrared Survey Telescope (WFIRST), which, among other things, will study dark energy—the still-mysterious force that is forever pulling the universe outward. At least two more spacecraft observatories

**WEBB SEES IN THE INFRARED, WHICH CAN STREAM THROUGH DUST THAT HIDES THE OLDEST GALAXIES**



#### THE GAP

Spaces between the shield's layers work like the vacuum in a thermos bottle, preventing the transfer of heat

are also being developed—to study the universe in the X-ray wavelengths and to look more closely at habitable planets. In all, NASA has earmarked about \$9.2 billion for Webb and TESS alone. The other telescopes, which are still in early development, would cost what a NASA spokesperson estimates simply as "several billion dollars" each. But that may be a price worth paying.

"Humankind has always wondered about the universe, and now our telescope technology has caught up with our questions," says Paul Hertz, NASA's director of astrophysics. "This is a great time to be a scientist."



**LOOK AWAY**

The telescope's main mirror will stand atop the sun shield, facing into space 1 million miles from Earth

**BIG CHILL**

The temperature on the dark side of the sun shield will drop as low as a bitterly cold  $-370^{\circ}\text{F}$

**SIZZLER**

The bottom of the shield will always face the sun; temperatures on that side will average  $185^{\circ}\text{F}$

**FOR THE WEBB TELESCOPE**, surviving in space may be easy compared to the fight it faced to survive here on Earth—a fight it almost lost. The telescope was proposed in the mid-1990s at a cost of \$500 million and was projected to be ready to fly in 2007. But inventing new technology has a way of defying deadlines and confounding cost projections. By 2011, Webb had already burned through \$6.2 billion, with no firm launch date in sight.

Congress responded the way Congress often does in these situations, which was to threaten to cancel the whole project. If throwing away billions in sunk costs seemed hard to justify, there was at least

some precedent. Familiar with the work of the great American particle accelerator in Waxahachie, Texas? No, you're not, because it's nothing but a giant, unused tunnel, one that cost more than \$2 billion before Congress lost patience with the similarly behind-schedule, overbudget project and shut it down in 1993.

For the Webb, however, Washington agreed to hold its fire. When the mirror was finally delivered in 2012, the funding spigot was turned back on. "There was strong support from the science community for the mission," says Smith, "though it was certainly a tense time."

After that near-death experience, the

Webb's next big challenges will be the ones it will face when it at last gets to work. Unlike Hubble, which flies in Earth's orbit at an altitude of just 353 miles, Webb will park itself in space about 1 million miles away. There, it will circle a spot known as L2, one of five so-called Lagrange points, where the gravities of Earth and the sun achieve a balance that can hold objects in more or less the same position. That's a good, safe place for a ship like Webb.

The telescope will do much of its observing not in the optical wavelengths the human eye can see, but in the infrared. The primary source of infrared radiation is heat, and the wavelength can stream

straight through the cosmic dust that prevents Hubble from seeing some of the oldest and most remote provinces of space. The problem is, that makes Webb extremely temperature-sensitive; stray heat on its mirror would be like stray light on Hubble's, washing out images.

Webb will thus turn its back to the sun, Earth and moon, facing out to space with a solar shield protecting it. About the size of a tennis court and roughly diamond-shaped, the shield—which is too large even for Chamber A—is made of five layers of a foil-like material known as kapton. Each layer is as thin as a human hair and is separated from the layers on either side of it by up to 12 in. The temperature on the bottom layer—the most sunward side—will reach about 185°F, not far from the boiling point of water. Each successive layer will get colder and colder—with the vacuum gap between them acting as further insulation—ultimately reaching a low of -370°F on the side of the mirror.

“Five layers gives you enough cooling so that you don’t need an active refrigeration system,” says Smith.

The 18 segments of the mirror are made of beryllium, a metal whose molecular structure can be manipulated into one that functions like glass but that can be polished more predictably and consistently. A thin layer of gold is applied for reflectivity. The gold covers 269 sq. ft. of the mirror, but is so thin that if it were peeled off and tamped down, it would form a mass roughly the size of a golf ball. The beryllium surface, meanwhile, is polished so smoothly that if it were expanded to the size of the U.S., its biggest imperfection would be just 3 in. tall.

The fact that the mirror does not have to be protected from ambient starlight means that it doesn't have to be enclosed in a cylindrical housing like Hubble's. Instead, it sits directly atop the sun screen, completely exposed to space. That saves weight, but also exposes the mirror to intermittent micro-meteoroid bombardment. “Hubble gets beat by stuff all the time,” says Webb's lead systems engineer Doug McGuffey.

What works in Webb's favor is the *micro* part of micrometeoroid: even at high speed, the particles don't have the mass to do catastrophic damage. And if mirror segments do get dinged over time, actuators—or tiny motors—behind them



**THE WEBB**  
2018-?

**21.3**

Diameter, in feet, of Webb's 18-piece main mirror

Length, in feet, of Webb's sun shield; the mirror is exposed to space

**69.5**

**1**

Number of miles from Earth, in millions, Webb will park; it will hover at a gravitationally stable spot called L2

can adjust their position to refocus them. “Damage to one mirror,” says McGuffey, “can be compensated for by the others.”

Such flexibility will help the Webb avoid the kind of problem Hubble faced, when no sooner did it arrive in space in 1990 than NASA discovered that its primary mirror was warped, leaving it nearsighted. It took a servicing mission

by space-shuttle astronauts to fix the problem—something that would not be possible at Webb's million-mile distance.

All of that engineering care will pay off when Webb begins making its observations. An expanding universe like ours presents complexities a static universe wouldn't. The most remote regions of space retreat the fastest, and the light that speeds toward us from those areas thus gets stretched like a Slinky, with its wavelength shifting toward the red end of the spectrum—the very end Webb is built to see.

The farthest infrared signatures are also the oldest in the approximately 13.8 billion-year-old universe. Webb will get very close to seeing back to the very beginning, picking up signals that have been traveling to us since just 200 mil-

**THE TELESCOPE MAY PEER 13.6 BILLION YEARS BACK IN TIME, JUST 200 MILLION YEARS AFTER THE BIG BANG**

WEBB: NORTHROP GRUMMAN; HUBBLE: ESA





**THE HUBBLE**  
1990–present

**7.9**

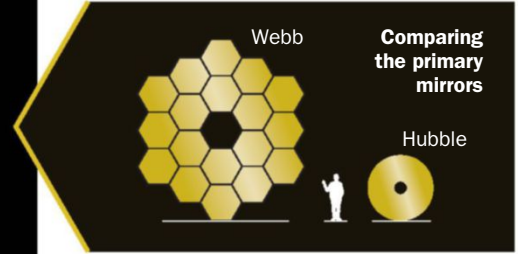
Diameter, in feet, of Hubble's single-piece main mirror

Hubble's length, in feet; its mirror is housed within, to shield it from stray light

**43.5**

**353**

Altitude, in miles, of Hubble's low-Earth orbit; the proximity to home allowed shuttle crews to conduct servicing



Hertz. “But the exoplanets that are the closest are obviously the ones best suited for follow-up studies.”

The WFIRST mission is not as far along as TESS, merely in preliminary development. The telescope will observe the cosmos in more or less the same wavelengths as Hubble does, but it will take in 100 times more sky in a single viewing—the difference between peering through a straw and peering through a window.

**EVEN AFTER ALL** of these observatories take flight, NASA is roughing out plans for still more—pending budgetary buy-in. Particularly promising are LYNX—an X-ray-frequency telescope that would be especially good at studying black holes—and HabEx, which would analyze the atmospheres of exoplanets looking for signs of gases associated with life, such as methane and carbon dioxide.

It says something both odd and exceptional about our species that while we could rightly be preoccupied with the simple business of surviving on the one world we’ve got—keeping the people in our own small tribe fed and healthy and safe from the perceived menace of the tribes across the valley—we always have one eye trained outward. We can’t say exactly what we’re looking for—deliverance, company, answers to eternal questions—but we look out all the same.

Building the instruments that make that wondering gaze possible isn’t easy or cheap, and none of it pays the kinds of earthly dividends that pick-and-shovel programs like fixing roads or building airports do. But there are other kinds of dividends as well, and if uncovering the universe’s most ancient secrets doesn’t qualify, what would? Washington could certainly spend its money more frugally, but it’s hard to see how it could spend it more imaginatively. □

lion years after the Big Bang, and converting that information to pictures. An image it delivers of, say, a brand-new galaxy won’t be the galaxy as it looks today, but as it looked 13.6 billion years ago—the cosmic equivalent of live-streaming videos of your newborn across a network that takes, say, 80 years to complete the transmission. The baby in the video will be an octogenarian by the time your receiver watches the stream. That time-capsule quality will be true of all of the observations Webb makes of stars and nebulae and other structures at the most distant removes of space.

The sheer ambition of the Webb mission has caused a lot of people to overlook what the telescope’s little sister TESS will do. But that less expensive (\$378 million) observatory could make news. TESS will

actually get off the pad first, launching from Cape Canaveral in the early part of 2018, and will go into an ordinary Earth orbit, where it will spend two years conducting its whole-sky survey.

The goal is to study the half-million stars closest to Earth, looking for flickering in their light that suggest they are being orbited by planets. The Kepler Space Telescope, launched in 2009, has already led researchers to conclude that virtually every star in the sky has at least one planet, but Kepler trains its gaze up to 3,000 light-years into space. A planet so far away is hard to study, given that a single light-year is about 5.9 trillion miles. TESS will limit its search to 200 light-years or less.

“Kepler’s great achievement was that it gave us the exoplanet population,” says



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# Time Off

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**The  
romantic  
comedian**

## Kumail Nanjiani's *The Big Sick* reboots the rom-com

By Eliza Berman

KUMAIL NANJIANI IS WORRIED ABOUT Optimus Prime. On the first night of June, in a theater beneath the thrum of Times Square, the 39-year-old comedian is onstage talking about the robotic lead of the *Transformers* franchise. The fifth installment of the explosion-laden series hits theaters June 21, two days before Nanjiani's romantic comedy *The Big Sick* opens. "I thought there couldn't possibly be anything new they could do," he says. He was wrong: "Optimus Prime has a sword. We're so f-cked."

The joke gets big laughs, but the simmering anxiety is genuine. On the phone, when asked how he's feeling since the movie he co-wrote with his wife Emily V. Gordon sold to Amazon for \$12 million at Sundance in January, he explains, "A lot of people have significantly invested money and themselves into this." *Sick* was acquired for more than 2006 indie hit *Little Miss Sunshine*, which went on to gross \$100 million worldwide. "It would be great if that investment paid off," he adds.

Nanjiani—who grew up in an Urdu-speaking Shi'ite Muslim family in Karachi—is stepping into leading-man territory, and his presence is still a novelty for slow-to-change Hollywood. The movie depicts a Muslim family with a rare intimacy, the relevance of which wasn't lost on the Sundance viewers who saw it the day of Donald Trump's Inauguration and a week before the President issued his first travel ban.

*The Big Sick*, directed by Michael Showalter, isn't about any of that. Based on Nanjiani and Gordon's real-life courtship, it stars Nanjiani as himself, Zoe Kazan as a version of Gordon, and Ray Romano and Holly Hunter as her skeptical parents. It's your typical boy-meets-girl romance. Except here, the boy charms the girl by writing her name in Urdu on a cocktail napkin; then he keeps the girl, who is white, a secret from his family; then he signs a release to put her into a medically induced coma when a mysterious illness befalls



her, soon after she discovers he's been begrudgingly meeting prospects for an arranged marriage. *The Big Sick* is not about the happily ever after. It's about the messiness that comes before.

**NANJIANI GREW UP** a minority in Pakistan, where Shi'ites are far outnumbered by Sunnis. His mother instructed him to keep their religion a secret for fear of violence. But it wasn't religion that made him feel like an outsider. "I didn't fit in because I didn't like the same stuff that a lot of people liked," he says. "I was obsessed with movies and video games, and that's all I wanted to do."

He learned English by watching films like *Ghostbusters* and *Gremlins*. When he arrived in the U.S. to attend Grinnell College, in Iowa, he became obsessed with comedy. His friends persuaded him to do an open-mike night. It went well enough that, after graduation, he moved to Chicago—land of Second City and the Belushis—and worked in tech support while moonlighting as a comic.

Nanjiani first resisted relying on his experience as an immigrant, but he later relented, building a show around it in 2007. He returns to the topic frequently.

**'Some of my people are upset, like, "We want representation, but why this guy?" ... And I agree! It shouldn't be me!'**

KUMAIL NANJIANI,  
star of *The Big Sick*

In his 2013 Comedy Central special *Beta Male*, he agonizes over the conflict between his love for *Call of Duty* and his frustration with the Karachi-set game's street signs, which are inaccurately scrawled in Arabic instead of Urdu. At his New York City show in June, he mocked Twitter users telling him to "go back to India": "Do they hope I have an awesome vacation?"

By the time his stand-up career had taken off, Nanjiani had also broken out on shows like *Portlandia*, *Inside Amy Schumer* and, most of all, HBO's *Silicon Valley*, on which he plays the unlucky-in-love software engineer Dinesh Chughai. He'd also fallen in love with Gordon, who worked as a family therapist. When producer Judd Apatow heard about their story—the cross-cultural family, the dramatic medical episode—in 2012, he agreed that it would make a good movie.

**BECOMING A SUNDANCE** sensation brought Nanjiani new attention. "Some of my people are upset, like, 'We want representation, but why this guy?' He's not funny or good-looking or a good actor or smart," he says. "And I agree! It shouldn't be me!" But right now, along with a handful of other high-profile performers of South Asian descent, like Aziz Ansari, Riz Ahmed and Dev Patel, it is him, and he's adjusting. "I'll do the best I can," he says. "But I don't think anybody should have the pressure of representing a whole group of demonized people."

Nanjiani and Gordon acknowledge the importance of the film's nuanced representation of a Muslim family, but



Nanjiani and Kazan in *The Big Sick*, sharing drinks and flirtation

when writing they treated it mostly as a “happy side effect.” Still, there were a few points they handled with care. Gordon was adamant that Nanjiani’s family speak Urdu onscreen. “My in-laws are always speaking Urdu, and I’ve never seen that in a movie or on a TV show that wasn’t about something nefarious,” she says. Nanjiani adds that it was important for his family to seem fun and loving. But he didn’t draw them that way to make a statement—he did it to raise the stakes. Explains Gordon: “We wanted it to be a big deal if he were to lose them.”

A longtime rom-com aficionado, Nanjiani believes the form can be more exploratory than expected, saying, “The best ones are always about something more than just the couple getting together. *Sleepless in Seattle* is about grieving. *When Harry Met Sally* is about people getting to know each other over decades.” When done well, they can be as provocative as dramas. “People don’t want escapist, mindless entertainment right now,” he says. “People want stuff that really speaks to something.”

Still, Nanjiani doesn’t conceal his love for blockbusters. If he has his way, he’ll be in them, not just competing against them. “I can’t be Captain America,” he says. But he has his eye on a new comic-book series, *Ms. Marvel*, about a Pakistani-American teen growing up in New Jersey. In his estimation, Marvel’s not going to turn around tomorrow and spend \$100 million on a tentpole starring a brown woman. Says Nanjiani: “It’s going to take a lot more smaller movies with brown leads.”

REVIEW

## *The Beguiled* explores the dark side of female desire

THE TRAGEDY OF MEN AND WOMEN IS THAT EACH HAS SOMETHING the other needs, but how to get it? To lie and cheat your way into love is a sure way to ultimately lose it. So what’s left? Sofia Coppola’s gorgeous, simmering thriller *The Beguiled* is based on a 1966 novel by Thomas Cullinan, which was also adapted—by manly-man director Don Siegel—into a 1971 potboiler revenge tale starring Clint Eastwood. But this *Beguiled* is its own species of flora, a daylily crossed with a twisted root vegetable. Its skin is pretty, but its heart is dark.

Colin Farrell, handsome and as wild as a wolf, plays injured Union soldier John McBurney, who’s cautiously rescued by the teachers and students of a nearby boarding school for girls. As he recuperates, he charms and manipulates them, and each woman and girl projects her own fantasies of what a man should be onto him. He rekindles the repressed carnality of starchy, stalwart headmistress Martha Farnsworth (Nicole Kidman, in a performance pitched deftly between ice and fire). Sheltered, frustrated teacher Edwina (Kirsten Dunst, who captures the fragile beauty of a cut flower on its last day) sees him as a tender soul who can sweep her away from a life she secretly hates. And Alicia (Elle Fanning, both sultry and doelike) is quite simply the bad gal. She wants McBurney for 100 different reasons, but mostly—there’s no other way to put it—because he’s hot.

*The Beguiled* borrows some of the gauzy mood of Coppola’s 1999 debut, *The Virgin Suicides*, and like that film, it hits a note or two of sunlit despair. Shot by Philippe Le Sourd, the picture has the look of a misty dream, almost as if you’re watching from behind a wall of sleep. The sounds of the natural world creep through. Birds chatter and trill, and cicadas do their weird whirring thing, possibly their attempt to impart secrets about the dark side of female desire. Yet this sly, elegant picture is sympathetic to both men and women: each side has plenty to lose, and the final shot is a melancholy sonnet. The sensuality of deceit has never looked so enticing—or so mournfully beautiful. —STEPHANIE ZACHAREK



### ELEGANCE ON THE CHEAP

Coppola filmed *The Beguiled* on a budget of about \$10.5 million at a Louisiana plantation. The cast stayed at a nearby Hampton Inn.



Fanning, left, and Kidman: *Sisterhood* is powerful and also sometimes lonely

TELEVISION

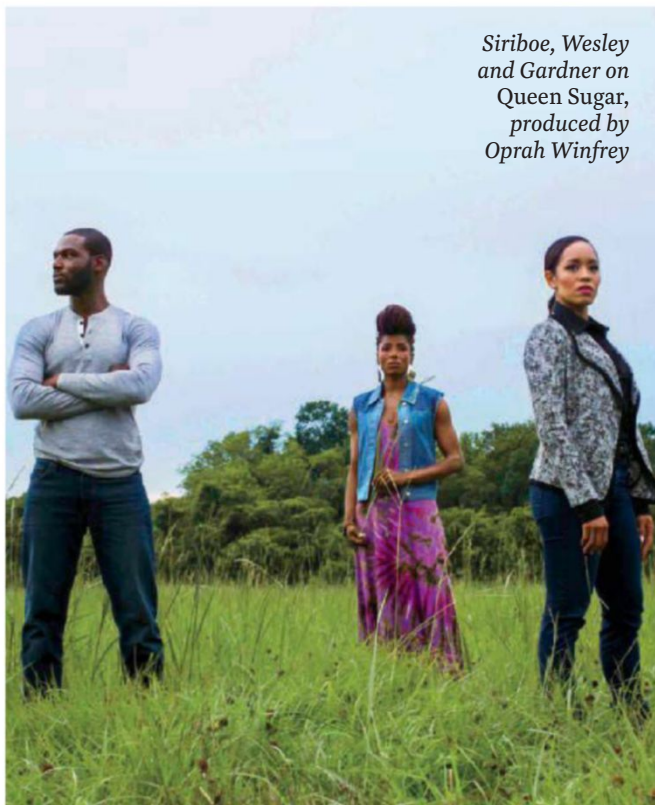
# An onscreen family, raising cane

By Daniel D'Addario

SUMMER IS THE PERFECT time for OWN's drama *Queen Sugar*, now in its second season. Not that the show has the empty-calorie vapidity of a summer movie—far from it. The saga of the three Bordelon siblings reuniting at the family-owned sugarcane farm after their father's death is rich in its examination of how families support one another. The show's Louisiana setting is suffused with such a strong sense of place that you'll feel the heat of the low-hanging bayou sun even while sitting in air-conditioning.

The Bordelons' hometown pride varies by sibling. In the first season, Charley (Dawn-Lyen Gardner) flees back to the South after her pro-athlete husband is caught up in a scandal. Nova (Rutina Wesley) is a journalist and activist trying to improve her community. Their brother Ralph Angel (Kofi Siriboe) does his best to raise a young son with his recovering-addict ex (Bianca Lawson), simply because he has no other options.

Whether they're at the farm by desperation, choice or lack of opportunity, each Bordelon comes into his or her own once they're reunited. Together, they're a unit—and *Queen Sugar* is matter-of-fact about what a necessary thing that is for individuals in the face of systemic inequality. (The white agribusinessmen who oppose the Bordelons are blandly, unimaginatively



Siriboe, Wesley and Gardner on *Queen Sugar*, produced by Oprah Winfrey

evil; they want to dominate because they always have.)

In one particularly powerful sequence in the Season 2 premiere, Charley's son Micah (Nicholas L. Ashe), sheltered for his first 16 years, is arrested at gunpoint for driving without a license. The error, which

could have cost Micah his life, is that of a child, and so too is his reaction. Seeing Micah's soiled trousers, Nova quietly hands him a shawl to tie around his waist.

That moment isn't dwelled on a beat longer than necessary. *Queen Sugar* does not occupy a soap opera's heightened reality, nor does it trade in clichés. Each detail—from Nova's impassioned, elegantly constructed arguments against mass incarceration to Ralph Angel's lack of concern that his son prefers Barbies to Transformers—feels carefully chosen to represent nothing more, or less, than people stumbling toward their best selves. They're already partway there. As this show makes clear, the process begins once one makes one's way home.

**QUEEN SUGAR** airs on OWN on Wednesdays at 10 p.m. E.T.

SCREEN QUEEN

Series creator Ava DuVernay has hired only female directors, to redress the TV industry's inequality. The practice continues in Season 2.



TIME PICKS

MOVIES

**The Little Hours** (June 30), starring Alison Brie and Dave Franco, presents nuns at their wildest in this comedy about medieval schemers who shake up a peaceful Italian monastery.



TELEVISION

Alec Hardy (David Tennant) and Ellie Miller (Olivia Colman) team up once again for a murder case along sunbaked beaches in the final season of **Broadchurch** on BBC America (June 28).

BOOKS

Diksha Basu's novel **The Windfall** (June 27) is about a Delhi family that enters a world full of status-upping skinny ties and shoe-polishing machines after becoming wealthy overnight.

THEATER

**1984** (June 22) transforms the dystopian world of George Orwell's novel into a Broadway adaptation that can still scare viewers at Hudson Theatre in New York City.



TELEVISION

## Naomi Watts' deceptive therapist just can't help herself on *Gypsy*

COGNITIVE BEHAVIORAL THERAPY, the field that Naomi Watts' character Jean Holloway practices on the new Netflix drama *Gypsy*, is meant to put into place new patterns of thought and behavior in order to break old cycles. No surprise she can't heal herself: Jean spends her hours off-duty repetitiously gorging on bourbon, spying on her patients' personal lives and engaging in extramarital liaisons.

To craft a new pattern for her thoughts would be to impose one for the first time—she's all random acts of hedonism.

Watts digs into an outsize role that's the opposite of her current turn on Showtime's *Twin Peaks*. There, she's a devoted 1950s sitcom wife trapped in a collapsing world. Here, she makes the chaos, hiding her impulses from her lawyer husband (Billy Crudup) and sweet kid (Maren Heary). She's stuck in a tidy Connecticut suburb despite the fact that her ideal night out includes heavy drinking and heavier deception.

Jean's mind races during therapy sessions as she decides how she'll mess with her clients once the hour wraps. She's addicted to entering her patients' lives, and Watts, with a weary

gift for fabulism, sells an addict's mentality. Long past finding pleasure in the act, she just performs as she's wired to. It would be more difficult to stop her game-playing—like trying to become best friends with her patient's daughter in order to sabotage the filial relationship—than to keep the game going, no matter how exhausting.

Why is Jean who she is? Maybe it's

### GYPSY'S TWIST

Jean's young daughter Dolly has a fluid gender identity and dresses as a boy—a development that *Gypsy* treats with surprising sensitivity.

marital anxiety and the dullness of suburbia (a plot point, nearly two decades post-*American Beauty*, that's lost its charge). Maybe it's the pressures imposed by her

mother (Blythe Danner). But ultimately it's an uninteresting question posed by a show that yearns to be even pulpier. The psychological inquiry doesn't compel the way Watts' acting does—her Jean is aware that she's erring but is helpless in the face of temptation and resigned to inscrutable urges. If *Gypsy* is to tie up Watts—one of her generation's great actresses—for more seasons, it ought to follow her lead, showing us Jean's journey to the dark without straining to explain why. After all, for Jean's patients, self-examination doesn't seem to do much good. —D.D.

**GYPSY** streams on Netflix beginning June 30



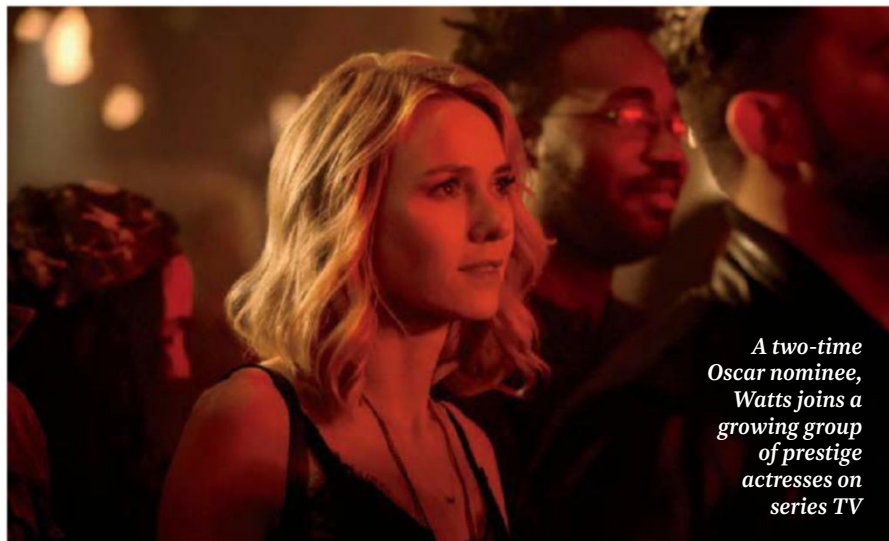
RuPaul won an Emmy for Drag Race in 2016

TELEVISION

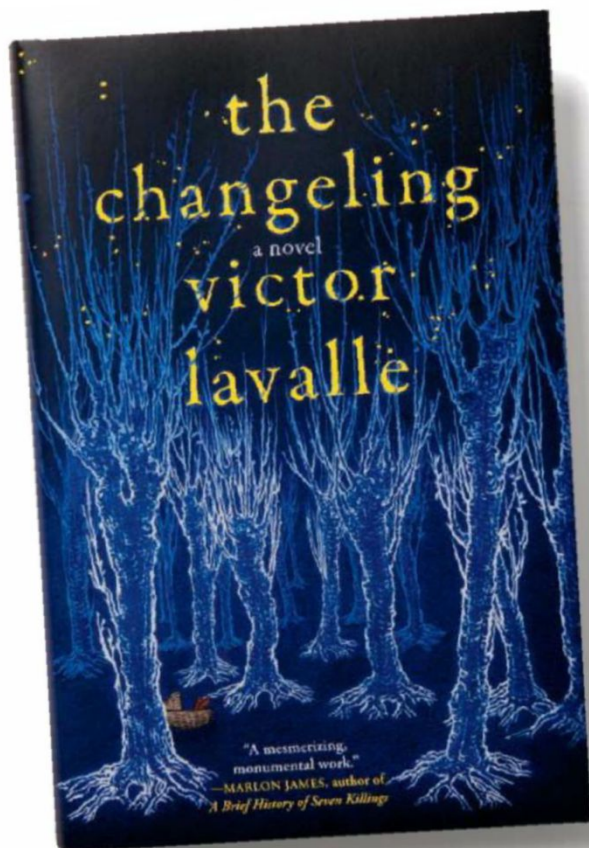
## TV's real mother of draggin'

RUPAUL'S DRAG RACE, the reality show seeking "America's next drag superstar," swirls the clichés of its genre into a giddy extravaganza that still tests real talent. Unlike most of the competitions it winkingly borrows from, the VH1 show defies ratings gravity and has broken through in its ninth season.

*Drag Race*, which wraps up the season on June 23, both makes light of reality TV and takes its craft with deadly seriousness. It's a balance that can be struck only by the most agile of performers—and one that feels refreshing. The show, with its quippy lip-synchers and a host, drag legend RuPaul, with high standards and acid wit, is top-notch escapism. But given that the contestants have gravitated to drag to break free from a world that doesn't understand them, the show also provides solace to viewers who feel lost on their side of the cultural divide. To all, it provides a lesson in keeping your chin held high (and your wig glued on) when choosing your circumstances is impossible, but making the best of them is an art. —D.D.



A two-time Oscar nominee, Watts joins a growing group of prestige actresses on series TV



LaValle's previous books include *Slapboxing With Jesus*, *The Ecstatic* and *Big Machine*, which won an American Book Award and a Shirley Jackson Award

**FICTION**

## Something twisted this way comes

APOLLO KAGWA IS ADJUSTING TO fatherhood while his wife, Emma Valentine, suffers terribly from what seems like postpartum depression. The creature in the crib, she insists, is not her baby. Turns out it's not just in her mind.

Victor LaValle's novel *The Changeling* borrows from the fairy tale and horror genres, turning New York City into a landscape of fanciful and all-too-real dangers: witches, trolls and racist cops suspicious of black men like Apollo. Old-fashioned fables are a handy framing device for this modern tale. Although Apollo and Emma have a charmed love story, their "happily ever after" goes awry when Emma gives birth on a subway car that's stalled between stations. (Their eagerness for the child, followed by later parenting blunders, recalls the couple whose daughter is snatched in *Rapunzel*.) News reports of this unusual delivery, combined with Apollo's overeager social-media posts about his son, lead a predator to their home. (You might think of *Hansel and Gretel* or, as LaValle explains, vampires who enter a home

only by invitation.) "You leave a trail of bread crumbs any wolf could follow," one villain muses, "then act shocked when the wolf is outside your door." After one particularly violent scene, Emma joins a band of women hiding on an island in the East River. "People call us witches," says their leader. "But maybe what they're really saying is that we were women who did things that seemed impossible." Perhaps the most genius literalization of myth is an Internet troll who turns out to have ties to an actual troll.

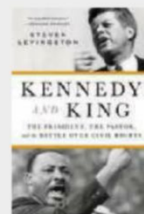
The combination of Grimm-ish allusion and social commentary might seem pat in the hands of less capable authors, but LaValle executes the trick with style. "Fairy tales are not for children," as one character explains. "They didn't used to be anyway. They were stories peasants told each other around the fire after a long day, not to their kids." To that end, LaValle has written a story full of things to terrify not children but the parents who lose sleep worrying about how best to protect them. —SARAH BEGLEY

**EXCERPT**

## Kennedy, King and a call to Coretta

On Wednesday, Oct. 26, 1960, Martin Luther King Jr. was roused from his sleep in a county jail after his arrest at a sit-in and was driven through the pre-dawn darkness to a maximum-security state prison. At home in Atlanta, Coretta Scott King was six months pregnant with their third child and knew nothing of her husband's ominous ride. It was late in the 1960 presidential campaign, and John Kennedy was in Chicago, where two of his aides, Harris Wofford and Sargent Shriver, pressed the Senator to intervene. But Kennedy had not shown himself to be an ardent advocate of social justice; indeed, he had raised suspicions in the black community by his blatant courtship of Southern white support. Shriver, his brother-in-law, was determined to win the candidate over, however, and he chose to appeal to Kennedy's conscience. "If you telephone Mrs. King, they will know you understand and will help. You will reach their hearts and give support to a pregnant woman who is afraid her husband will be killed." All at once, Shriver noticed a change of heart in Kennedy. Jack zipped up his suitcase, then turned to him and said: "That's a pretty good idea. How do I get to her?"

—Steven Levingston



► Read the full excerpt at [time.com/kennedyking](http://time.com/kennedyking)



# TimeOff PopChart



## 'It's me. It's me.'

**LORDE**, revealing that she had been secretly running an Instagram account dedicated to onion rings, during an interview on *The Tonight Show Starring Jimmy Fallon*.



Batman star Adam West, who died on June 9 at 88, was **honored with a ceremonial lighting of a Bat-Signal** from Los Angeles City Hall.



After winning a Tony, **John Legend is just an Emmy away from an EGOT**—the ultimate showbiz prize claimed by winners of at least one competitive Emmy, Grammy, Oscar and Tony.



Blue Ivy became a big sister when parents **Beyoncé and Jay-Z welcomed twins**. The couple did not immediately release their names, but the Internet immediately deemed them **#flawless**.

Sean "Diddy" Combs **topped Forbes' list of the wealthiest celebrities**, vaulting 21 spots to overtake Beyoncé after selling off a majority stake in lifestyle brand Sean John.



### LOVE IT LEAVE IT

TIME'S WEEKLY TAKE ON

WHAT POPPED IN CULTURE

Online retailer Getonfleek is selling an \$80 male romper **featuring a close-up photo of North Korean leader Kim Jong Un's face**.

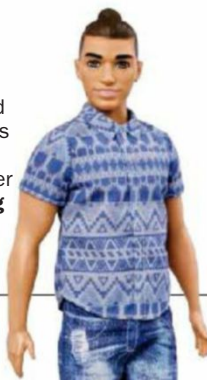


The Wrigley Co. defended its decision to temporarily turn Skittles white, "giving up" the candies' rainbow coatings to show support for LGBT Pride Month. Many called the move **tone-deaf for associating pride with whiteness**.



Rapper Bow Wow denied accusations that he **paid people to follow him down the street during a publicity stunt** to make him appear more popular.

Although Mattel's new line of Ken dolls was applauded for its diversity of body types and skin tones, many on Twitter mocked the makeover for trying too hard, **pointing to the hipster "man bun" one doll sported**.



A **soup company based on Seinfeld's infamous "Soup Nazi" just filed for bankruptcy**. In the words of the memorable character, there will be "no soup for you!"



BATMAN: AP; SKITTLES: TWITTER; KEN: MATTEL; ROMPER: GETONFLEEK; COMBS: EMMY; LEGEND, LORDE, BEYONCE AND JAY-Z, SOUP NAZI, BOW WOW: GETTY IMAGES

**Mark Kurlansky** Twenty years after *Cod*, one year after *Paper* and as he wraps up *Spilt Milk*, the best-selling historian talks about the genre he popularized

**So many authors have imitated the form of *Cod*. Are you flattered or annoyed?** Everyone always gets a little irritated by imitators, but mostly I'm flattered. What if you never did anything anyone wanted to copy?

**Have publishers asked you to endorse your imitators?** Yeah. A few of them I thought were really good, a lot of them I thought were really boring, and if they have a cover letter bragging about how they've copied me, I don't even look at it.

**What have been the good ones?** I blurbed a nice book, not at all like my book *The Big Oyster*, called *The Essential Oyster*. I blurbed a pretty good book about meat called *Meathooked*.

**Have you ever received one that seemed ridiculous?** I don't think I want to just trash these people! But I have, yes. This isn't a real one, but an example is if you did a book on oil and said, "The Fossil Fuel That Changed the World." I mean, no kidding. And then there are the books where they just absurdly overrate the impact. People think that I sit around thinking up commodities to write about, but actually I've had 30 books published, and most of them aren't this kind of book.

**You've done several that have taken that form: *Cod*, *Salt*, *Paper*.** I have one coming out on milk. But these all are for very different reasons. I started writing *Cod* at a time when people were first beginning to take an interest in the problem of fisheries because the Grand Banks had closed. The thing that was fascinating about salt is that it was considered so valuable and people went to such lengths to get it, and then almost overnight everybody said, "Oh, that's no big deal." What is the true value of the things that we're valuing, and will it last? George W. Bush read that book, and I'm told from White House correspondents that he used to talk about it a lot. I wondered if he was picking up on a very intended

message about oil. The oyster book was about the degradation of an urban environment. *Paper* was an opportunity to talk about technology and society.

**Do people propose commodities to you to write about?** Constantly. "Ever think of a book about lettuce?" What I used to get a lot after *Salt* came out was "pepper"—which shows that they're not getting it at all.

**Who is the founder of this genre?** I don't know who the founder is, but I can tell you about a couple of people who did very nice jobs before me. Sidney Mintz wrote a book about sugar called *Sweetness and Power*. Betty Fussell did a wonderful book about corn. The inventors we remember didn't invent anything. They're the people who took somebody else's invention and made it commercially viable. That's sort of who I am.

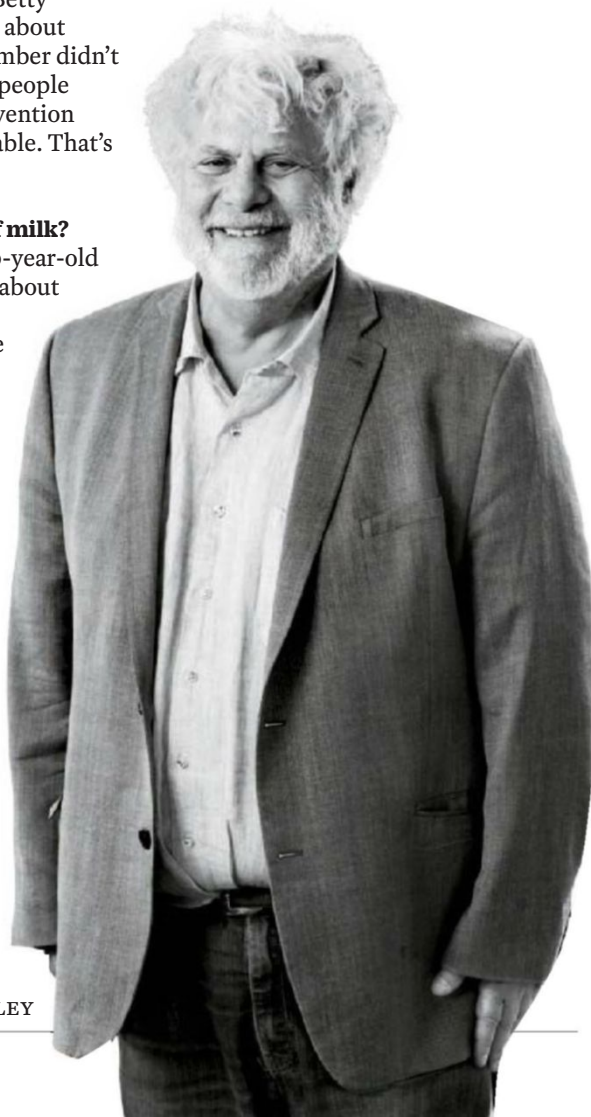
**What's the bigger picture of milk?** Milk is an unresolved, 10,000-year-old controversy. When you think about it, it was a pretty weird thing to begin with, the idea that we could replace mothers with secretions from animals. Whether milk is good for you has been fought over. In recent years they've come up with new things to fight about: GMO and organic and hormones.

**Will we eventually run out of commodities to explain?** Yeah, most commodities aren't very well-suited. I do think there are people just going through commodities, trying to decide on one to write a book on. I have never done that!

**You've just inspired others to do it.** Ha-ha.

—SARAH BEGLEY

'The inventors we remember didn't invent anything. They're the people who took somebody else's invention and made it commercially viable.'



ROBERTO RICCIUTI—GETTY IMAGES



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# "ELEGANT"

- Owen D., Brooklyn, NY

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