







"On some of these holes you can hit a power fade and your ball needs a passport because it goes into Mexico"

"The NFL may not realize they have awakened an animal here. If they want it, they should invest like crazy in it. If they don't really want it, holy moly, what have they created? Because I am not going to go away" "There weren't even fences when we started.
A camel could have walked up to the production facilities and drank the oil"

Bloomberg Businessweek

February 6 - February 12, 2017

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How the cover gets made



"The cover is on Trump."

"I'm shocked. I thought we were going to do a *Fifty Shades Darker*-themed cover, timed to the upcoming release of the next brilliant film adaptation of those beloved, best-selling novels."

"No."

"So, what about Trump possibly deserves a cover?"

"His use of executive orders and the extent to which they may be destabilizing, in addition to being legally dubious."

"You make a strong case."





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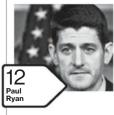
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Opening Remarks

Trump Vs. The Rule Of Law

By Matt Levine

One weekend came close to undoing the firm legal foundation that's let U.S. business thrive

In October 2016, Anthony Scaramucci compared the U.S. Department of Labor's fiduciary rule to *Dred Scott v. Sandford*, the 1857 U.S. Supreme Court decision protecting slavery and ruling that blacks couldn't be citizens. "The left-leaning Department of Labor has made a decision to discriminate against a class of people who they deem to be adding no value," said Scaramucci, a fund-of-funds marketer who was also an adviser and public supporter of Donald Trump's campaign. And he said that, if elected, Trump would repeal the fiduciary rule.

Trump, however, never said that during his campaign. Instead, he promised to ban Muslims from entering the U.S. Scaramucci tried not to think about this: "I'll make a prediction right now that he will not put a ban on Muslims coming into America," he once told Gawker. Did he believe that? Or did he just think that the Department of Labor rule requiring financial advisers to put their customers' interests ahead of their own is the great moral evil of our time, comparable to slavery, and that if Trump could repeal that rule then he was worth supporting, regardless of what he did about immigration?

Now Trump has his Muslim ban, sort of. On Jan. 27—International Holocaust Remembrance Day—he issued an executive order banning people from seven Muslim-majority countries from traveling to the U.S. The ban covered interpreters who heroically helped the U.S. military, children of U.S. citizens, dissidents who stood up to hostile regimes, medical researchers, Syrian Christians, British Olympians, and endangered refugee families who were carefully vetted to be allowed into the U.S.

But you know what Trump hasn't done yet? Repeal the fiduciary rule! Or even talk about it. Its future remains uncertain, and while there's a good chance that it will eventually be repealed, big brokerages are moving to comply with its requirements anyway, ahead of its scheduled implementation in April.

This is a widespread pattern. Many people in the business and financial and technology communities listened to what Trump said and cheerily assumed he'd do something completely different. Sure, he talked about restricting trade and banning Muslim immigrants, but what they heard was that he'd enact "sensible immigration policy" and pro-growth trade agreements, reduce taxes, cut back regulation, and generally improve conditions for business. In



the runup to the presidential election, billionaire Peter Thiel and other Trump supporters said the candidate should be taken "seriously but not literally." As I wrote in my Bloomberg View column, taking Trump literally means believing that he'll do what he says; taking him seriously means believing that he'll do what you want.

What's happened so far? Immigration bans, border walls, abandoned trade agreements, an official reliance on "alternative facts," unprompted promises to bring back torture. And what hasn't happened so far? Tax policy is a complete mystery, with an unclear and walked-back proposal to impose a border tax. Healthcare policy is even more mysterious. Trump has promised to do a "big number on Dodd-Frank" and has issued an executive order requiring agencies to retire two regulations for each new regulation they implement, but that order doesn't seem to apply



to Trump's own remarkable flurry of rules that complicate the regulation of immigration and business relocation.

Everything Trump literally said is coming literally true; everything the serious people heard remains an unserious hope. Businesses may eventually get the tax and regulatory reform they wanted, but it's not a priority. The technology industry, the financial industry, and some others are beginning to figure this out. Richard Fenning, the chief executive officer of consulting firm Control Risks, told Bloomberg TV that the president has "had this extraordinary honeymoon where Wall Street has kind of discounted all the negative aspects." However, as the ramifications of the migrant ban set in, "perhaps that honeymoon is starting to be over."

The problem is bigger than some disagreements over policy priorities. The most troubling aspect of Trump's immigration order may be that it covered

U.S. lawful permanent residents, that is, green card holders who'd spent years building lives in the U.S. While the timeline is a little unclear, it appears that the Department of Homeland Security originally assumed that the order wouldn't apply to green card holders but was overruled by political advisers in the White House. After a weekend of protest, this decision was reversed, and Secretary of Homeland Security John Kelly announced that green card holders would be allowed in—unless he finds a reason to keep them out.

All of this happened through informal channels, avoiding the usual rule-making and oversight procedures that normally constrain our administrative state, and left even those in charge of enforcing the order confused. "A Border Patrol agent, confronted with arriving refugees, referred questions only to the president himself," reported CNN. A visitor from Jordan—a country not on the banned list—was reportedly denied

Many listened to Trump and cheerily assumed he'd do something completely different

entry in Chicago. And after several federal courts issued orders staying enforcement, there were reports that Customs and Border Protection agents were defying those court orders.

The upshot is that U.S. lawful permanent residents, who have spent years jumping through hoops to comply with the intricate immigration rules enshrined in U.S. law, are no longer protected by that law. They can be deported at the whim of the president, or his advisers, or a border agent—or they can be spared by a two-sentence statement from the secretary of Homeland Security. There are no guarantees that the courts or legal procedure can protect them. The nation of laws they immigrated to is gone, replaced by a nation of arbitrary rule.

If the president can, without consulting the courts or Congress, banish U.S. lawful permanent residents, then he can do anything. If there's no rule of law for some people, there's no rule of law for anyone.

Business leaders are waking up to that reality. Many grouse in private about the impact of Trump's actions but are afraid to speak out publicly. "They are scared out of their minds about being attacked," wrote Andrew Ross Sorkin of the *New York Times*, "and what that's going to do for their business."

When the president can damage your business with a tweet-and will, if you disagree with him publiclythen dissent is more difficult. Business decisions, too, are now complicated by the fact that a company that decides to close a factory must now answer personally to the president. As my colleague Peter Coy wrote in these pages in the last issue, businesses spent eight years under President Barack Obama complaining about "uncertainty" in the tax code, in the Affordable Care Act, and in regulation. President Trump's first week, of drastic and inconsistent ad hoc regulation, seems unlikely to inspire any certainty.

The reason the U.S. is a good place to do business is that, for the past two centuries, it's built a firm foundation on the rule of law. President Trump almost undid that in a weekend. That's bad for business. **3**

Bloomberg View

To read Mohamed El-Erian on the next phase of the Trump rally and Noah Smith on what's powering white anger, go to

Bloombergview.com

Donald Trump Heads For the War in Syria

Can his "foolproof" plan end a conflict that's created millions of refugees?



For almost half a decade, the world's only superpower has mostly abdicated its role in helping to resolve the world's most consequential conflict. Now Barack Obama's excessive caution about Syria has given way to Donald Trump's unstrategic uncertainty. Does this qualify as an improvement?

It's certainly good news that Russia has invited the U.S. to participate in Syrian peace talks, along with representatives from Turkey and Iran. But Trump—who claimed during the campaign to have a "foolproof" plan to defeat Islamic State quickly—will soon face some tough choices.

He's apparently open to creating a safe zone in northern Syria to protect Sunni Muslims and Kurds from the Syrian government, which seems likely to remain under President Bashar al-Assad's control indefinitely. Carving out a protected area requires control of the skies above it, however. With both Russian and Syrian planes bombing rebel (and civilian) locations in northern Syria, enforcing a full no-fly zone with U.S. jets and ground-based air defenses would risk turning a sectarian civil war into something vastly larger.

So the Trump administration should use the peace talks to get buy-in on the safe zone from the Russians—who seem anxious to claim victory and go home—and their puppet in Damascus. Iranian negotiators are likely to object, but they have little sway on a safe zone in any deal.

The U.S. will also need a cooperation agreement with the Turks, who have created a small protected area across the Syrian border and have been bombing U.S.-supported Syrian Kurdish forces, which they claim are in cahoots with Kurdish terrorists inside Turkey. But Turkey has much to gain from stabilizing northern Syria and enabling many of the 2.7 million Syrian refugees it houses to return home. Promised support from other members of the U.S.-led coalition, such as Saudi Arabia and Abu Dhabi, is also vital.

Protecting innocents and allies in Syria is important. But

their ultimate safety depends on the defeat of Islamic State. Trump has given Defense Secretary James Mattis 30 days to come up with options for more aggressive action.

Mattis, a general who's seen plenty of combat duty in Afghanistan and Iraq, needs to convince Trump that a comprehensive and deliberate plan, carried out with Russian cooperation if possible, stands the best chance of victory. Any assault on Islamic State in Syria will inevitably spill into Iraq, as the border between the two countries is now fictional.

This would be no small undertaking, to put it mildly, involving great risk to U.S. forces. There will be no quick and total victory over Islamic State. Nevertheless, a change in strategy is overdue, and how Trump proceeds in Syria will be among the first and most difficult tests of his military decision-making.

The Travel Ban: Unwise, Un-American

It won't make the U.S. any safer and will make the global campaign against terrorism tougher

Leave aside the moral, legal, economic, political, and practical objections and instead consider just the security implications of the executive order Donald Trump issued on Jan. 27: Will temporarily banning the entry of all refugees and nationals from seven countries make the U.S. safer?

Regrettably and emphatically, the answer is no. First, if the goal is "Protecting the Nation From Foreign Terrorist Entry Into the United States," as the order is titled, then it would make sense to focus on countries from which terrorist attackers have entered. The main countries that come close to fitting that bill (Egypt, Pakistan, Saudi Arabia) don't make the list.

Nor does the order convey any acknowledgment that refugees are the most vetted group of travelers to the U.S. That's even more true after they apply for their green cards and undergo another round of biometric screening.

Trump's directive will also make it more difficult for any government official—federal or otherwise, at home or abroad—to work closely with those in a position to help stop terrorists. Finally, there's the effect on international cooperation in the fight against terrorism. Allies such as Canada, France, Germany, and the U.K. aren't pleased with this order.

There are more profound reasons to oppose the order. It degrades U.S. moral authority. On a human level, it plays to people's worst instincts while also being unreasonably cruel to tens of thousands of the world's most vulnerable people.

Trump insists this is "not a Muslim ban," even as defenders of the order point out that he campaigned on just such a promise. Regardless, it's now up to the other branches of the U.S. government—and America's civic institutions more broadly—to defend against the White House's reckless incompetence. Trump needs to know that this policy is as unwise as it is un-American.



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Movers

▲ The seventh iteration of the iPhone helped Apple break a threequarter sales slump. A record 78 million handsets were sold in the last quarter of 2016, making up almost 70 percent of

Apple's revenue.

▲ Nintendo said its first mobile game, Super Mario Run, has rounded up

\$50m since going on sale

in December. More than 78 million people have downloaded the game, though only 5 percent opted for the full version, which costs \$10.

Ups

▲ The American Civil Liberties Union received

in donations in two days-

Supporters were cheering

its legal challenge of the

six times its annual average.

Trump administration's travel

ban. The nonprofit will now

ioin Y Combinator's winter

2017 mentorship class.

▲ President Trump picked **Neil Gorsuch** for the Supreme Court.

A Denver-based federal appellate judge, Gorsuch has praised late conservative

Justice Antonin Scalia and criticized the politicization of the court system.

▲ Pork belly prices

surged 20 percent

in January as U.S.

lowest point in

years. Bacon

as a result.

prices will fatten

supplies fell to their

a four-month ban on Bollywood films, which make up about 70 percent of the country's box office. **Distribution of** the Indian movies was blocked after tensions rose over the disputed Kashmir territory.

▲ Pakistan ended

as the largest carmaker in the world. Despite Dieselgate, VW sold

▲ Volkswagen

topped Toyota

10.3 million vehicles in 2016, up 0.2 percent from the year earlier.

▲ India unveiled a budget that would halve tax rates on the 80 percent of filing residents who make less than

a year. The plan also called for a 6 percent duty on cigarettes.

▲ As SoftBank Group deploys a private-equity-style investment fund, it's weighing a

investment in

WeWork, a startup that leases shared office space. Last year, WeWork was

valued at \$17 billion

▲ One of 10 oil fields in the North Sea and Thailand in which Royal Dutch Shell is selling stakes. The company needs to pay down debt it took on when it bought BG Group in February 2016 for \$54 billion.

▲ In the U.K., the House of Commons voted overwhelmingly to allow Prime Minister Theresa May to begin Brexit negotiations with the European Union.

▲ European lawmakers finalized a plan to end mobile roaming fees in June. The deal caps and gradually reduces the wholesale rates telecom companies are allowed to charge each other to extend service beyond their networks.

▼ The trustee

liquidating Bernie

investment empire

won court approval

to sue J. Ezra Merkin

or more. Merkin, who

turned a blind eye to

ran feeder funds

that invested with

Madoff, allegedly

the Ponzi scheme.

Madoff's bogus

to recover

Downs

▼ Walmart scrapped a \$49 subscription service intended to compete with Amazon.com's Prime. Instead, it's offering free two-day shipping on most orders over \$35.

▼ Bedmaker Tempur Sealy and retailer **Mattress Firm** unexpectedly cut

ties over a contract dispute. Recently. 1 in 5 Tempur Sealy mattresses were sold through the Mattress Firm chain. told Facebook to pay \$500 million to ZeniMax Media for allegedly violating a nondisclosure agreement related to Oculus Rift. In testimony, CEO Mark Zuckerberg said the claims were false.

▼ A federal jury in Dallas

▼ Widely missing earnings estimates, **Under Armour lost** about one-quarter of its market-value. Sales increased by 12 percent in the holiday quarter, ending a streak of 26 periods of growth e 20 percer

Sony will write down the value of its movie business by almost \$976 million in the third quarter. The studio blamed weaker film profits.

▼ The Trump administration's controversial executive order on immigration was challenged in court by civil rights groups, Muslim would-be immigrants, and Washington Attorney General Bob Ferguson. Ferguson and

15 other attorneys general called the policy "un-American

and unlawful."

▼ New York Attorney General Eric Schneiderman sued Charter Communications for allegedly promising customers internet speeds that its network could not deliver. Charter said the marketing came from Time Warner Cable before it bought the company.

"We are all sinking, like the orchestra on the Titanic."

▼ Georges Fenech, a

French lawmaker, as a nepotism scandal threatened the presidential campaign of his Les Républicains party member, François Fillo

> ▼ Snoopy is on the block. Licensing company Iconix Brand Group plans to sell the rights to the Peanuts comic strip. Charlie Brown and the gang are responsible for about one-quarter of Iconix revenue.

CLOCKWISE FROM TOP LEFT: ISTOCK/GETTY IMAGES; MICHAEL SAINT MAUR SHEIL/GETTY IMAGES; DAVID PAUL MORRIS/BLOOMBERG; ILLUSTRATIONS; OSCAR BOLTON GREEN

GETTY IMAGES: PICSSTOCK/ALAMY

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Border Economics

February 6 - February 12, 2017

Taxing Mexico. Or Not

▶ The administration is looking for ways to pay for the wall

▶ If "Trump wants to target Mexico... he needs another strategy"

The Trump administration has floated two very different ways to get Mexico to pay for a wall on its northern border. One is called a border tax. The other is also called a border tax. Neither would get Mexico to pay for the wall.

Got that? The clouds of confusion around President Trump's wall-financing plan are thick, but we can at least lay out a few questions and answers about the two main concepts.

What's a border tax?

One of the two "border tax" notions is just Trump's coinage for what the rest of the world calls a tariff. It's a tax on imports imposed at a certain rate on a certain product against a certain country—say, a 4 percent tariff on Belgian chewing gum. Tariffs were the biggest funding source of the federal government from its founding until the advent of the federal income tax in 1913. So the Founding Fathers would

have liked Trump's idea?

That's hard to know. What we can say is that since World War II, tariffs have fallen sharply around the world. That's encouraged more international trade, allowing each country to specialize in what it does best.

Fine, but we want Mexico to pay for the wall.

Understood. If Mexicans absorb the cost of the tariff by cutting their prices to maintain market share, they'll pay

for the wall. If the tariff gets passed along in higher U.S. prices, then Americans will pay for the wall. It'll probably be a little of each.

I thought Trump was threatening to put border taxes on American carmakers.

That's his fresh twist. Usually, tariffs are imposed uniformly on all makers of a certain product. Trump is talking about imposing them selectively on American companies that he says are shipping jobs overseas.

Good idea.

We'll see. The diagram that goes with this story shows that it's impossible to say what's an American-made vs. a Mexican-made product. Parts move back and forth across the border multiple times as pieces get added. Taxing imports from Mexico might cause American and foreign automakers to move production to other countries—whose plants probably would use fewer American parts.

What's the other border tax?

It's Trump's shorthand for a taxation system advocated by House Speaker Paul Ryan and Kevin Brady, chairman of the House Committee on Ways and Means. It's called a destination-based cash-flow tax.

And it's to pay for the wall?

No. It's a whole new system for taxing corporate profits. It has

nothing to do with Mexico.

Why is it called a border tax, then?

It's actually called a border-adjusted tax, or sometimes a border-adjustable tax, but Trump lopped off the part after the hyphen. A senior administration official told Bloomberg News that the president likes the concept but doesn't like the word "adjustable." So that's how we wound up with two different things that are both called border taxes.

Precisely.

Can we stop now?

It's just getting interesting. Some backers of the border-adjusted tax say it would give American producers a leg up and shrink the trade deficit. It taxes imports while sparing American exports from tax. That's why it's called border-adjusted.

That does sound like an edge for Americans.

In theory there should be no advantage to the U.S. It treats foreign and domestic companies the same way: Both pay taxes on sales they make in the U.S. And while it's true that the U.S. doesn't tax exports, the countries that receive the exports do.

Has anyone actually tried this?

Thirty-three of the 34 countries in the Organization for Economic Cooperation and Development use value-added taxes with border adjustment. The U.S. is the one exception. The Ryan-Brady plan is similar to a value-added tax except that wages and salaries are carved out and taxed separately.

So this won't create a fat trade surplus?

Theory says that if the U.S. starts running a big trade surplus, the dollar will automatically rise in value enough to make American exports more expensive, make imports cheaper, and bring trade back into balance.

But that's just theory.

In reality the dollar probably wouldn't rise enough to completely offset the border adjustment. So it really would give an advantage to U.S. exporters while raising costs for American consumers. A border-adjusted tax is "a tariff in

A Supply Chain in the Crosshairs

Here's how manufacturers use the free flow of goods under Nafta. Components assembled into an automatic seat-control unit cross the Mexican border four times before they're installed in cars in the U.S. and Canada. — Thomas Black

Mississauga, Ont.

Canada
U.S.
Centennial, Colo.

Arlington, Texas

El Paso

Ciudad Juárez

Ciudad Juárez

• Firstronic, a company based in Grand Rapids, Mich., buys resistors, capacitors, and microcontrollers from Colorado supplier Arrow Electronics,

which imports them

from Asia.

- The capacitor is incorporated into a circuit board in Ciudad Juárez.
- The circuit board is returned to an El Paso warehouse, allowing Firstronic to avoid paying Mexico's value-added tax.
- The component returns to Mexico, to a factory in Matamoros owned by Kongsberg Automotive, a Norwegian company. Kongsberg assembles the circuit board into a seat actuator—an electrical device that adjusts the seat with the press of a button.
- Once the circuit board has been installed in the actuator, the control unit ships to a Lear plant in Arlington, Texas, a Magna plant in Mississauga, Ont., and other sites. Now inside the finished seat, it's installed in a car at a nearby auto plant.

Matamoros

all but name," Barclays economists Michael Gapen and Rob Martin concluded in a January note to clients. What about getting Mexico to pay for the wall?

Same as with the tariff. If the Ryan-Brady tax plan did raise more money—which it's not intended to do—at least some of it would come from Americans, not Mexicans or other trading partners. On Jan. 31, Urban Institute fellow Donald Marron wrote on the Tax Policy Center website: "If President Trump wants to target Mexico alone, he needs another strategy."

Dang.

—Peter Coy

The bottom line Trump's two ideas to get Mexico to pay for the wall would put at least some of the tax bite on U.S. consumers.

Barriers

The Wall Needs the Consent of Many

- ► Taking the land will be a legal nightmare—ask George W. Bush
- "They're going to have to deal with guys like us"

To build his border wall, President Trump will first have to go through the second hole of the **River Bend Resort & Golf Club** in Brownsville, Texas.

The course, on 135 acres, is so close to the U.S.-Mexico border that the Rio Grande keeps the fairway green, and Border Patrol agents congregate near the clubhouse to nab drug smugglers trying to slip through. "On some of these holes you can hit a power fade and your ball needs a passport because it goes into Mexico," says Jeremy Barnard, general manager of the resort co-owned by his father, Mark.

Along with a potential lack of concrete and documented construction workers, one of the main hurdles Trump will face is the use of eminent domain—taking land from private owners for public use. Federal and tribal lands make up only one-third

Border Economics

■ of the 2,000-mile southern border, according to the U.S. Government Accountability Office. Private and stateowned lands constitute the rest, primarily in Texas. Using eminent domain to build a wall could lead to costly, timeconsuming negotiations, potentially with hundreds of private landowners. "They're going to have to deal with guys like us," says Mark Barnard.

An eminent domain proceeding often begins with a knock on the door or a letter from the government saying the landowner's private property is needed for public use. The parties often reach a settlement, sometimes after the government files a lawsuit.

Under President George W. Bush the government built a fence along part of the border, using eminent domain to acquire the needed land. Denise Gilman, director of the Immigration Clinic at the University of Texas School of Law, says that in many cases the government offered only the value of the small strip of land where the fence would be built, not taking into account that the fence would divide the property. "There was a sense

that it wasn't fair," she says.

During the campaign, Trump spoke of a wall 35 to 50 feet high. That could cost as much as \$25 billion, according to analysts at Sanford C. Bernstein.

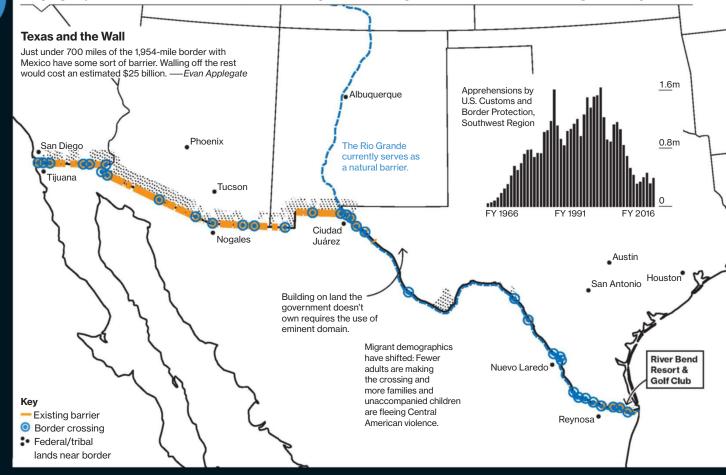
The law authorizing the Bush barrier called for a fence stretching about 700 miles across the southern border. Of the 225 miles to be built in the Rio Grande Valley of Texas, more than half was initially slated to cross land the federal government didn't own. Two years in, the project stalled. "Gaining access rights ... delayed the completion of fence construction and may increase the cost beyond available funding," according to a 2009 report by the Department of Homeland Security Inspector General. At the time, the government still needed to negotiate purchases with more than 480 landowners.

Even before acquiring the land for a wall, officials need to survey sites, negotiate voluntary sales, relocate some owners, and file lawsuits against holdouts. In Texas the most obvious spot to start a wall would be on an existing government-owned flood levee, which snakes through the border region.

"When people talk about Trump's wall, this is where your wall would go," says the younger Barnard, pointing to a levee that cuts through the palm tree-lined property. Fifteen of River Bend's 18 holes sit on the south side of the levee. The resort is also home to more than 200 plots on the south side, where retirees park RVs spruced up with American flags. Their property will be stuck in no man's land if the wall is built.

Othal Brand Jr., who's running for mayor in McAllen, Texas, couldn't wait for Trump to crack down on illegal border crossings. Still, he says, the wall is a fool's errand. He'd rather see more Border Patrol agents along the river, among other actions.

Jeremy Barnard voted for Trump and says a wall makes sense in certain places—just not on his property, where building it would be "complicated." Lost property value could exceed \$1 million, the Barnards say. Mark hopes the president, who owns 17 golf courses, will empathize with him. The elder Barnard says he'd like to invite Trump to come get a



firsthand look at his course and gain a better understanding of the border terrain. And he says he'd ask him a question: "If the wall's gonna totally wipe me out, what would you do? How would you want to be treated?"

The bottom line Before President Trump's wall can be built, the government will have to enforce eminent domain against hundreds of landowners.

—Lauren Etter and Justin Sink

Elections

Let's Make Mexico Great Again

- Trump's win buoys the fortunes of another populist politician
- "We can confront aggression from abroad with strength"

If Donald Trump's border wall is finished on schedule, there's a good chance that another populist will be in power to its south. Andrés Manuel López Obrador, a leftist firebrand who's been part of Mexican politics for the better part of three decades, has surged into an early lead in the race to succeed President Enrique Peña Nieto, whose term ends in November 2018.

Mexican polls are unreliable, and Amlo, as López Obrador is widely known, has twice failed to win the top job. But Trump's demand for a renegotiation of Nafta and his insistence that Mexico pay for the wall have triggered a spasm of outrage in Mexico. It's the perfect climate for a politician who promises to end a relationship of "subordination" to the U.S. and to strengthen the domestic economy.

"Winner of today's U.S. Mexico dustup: Andrés Manuel López Obrador. Hope Trump is looking forward to working with him," tweeted Ian Bremmer, president of the Eurasia Group, after Peña Nieto canceled a planned meeting with Trump over his counterpart's insistence that Mexico pay for the wall. It's not clear yet if the move will shore up the dismal approval ratings of Peña Nieto, who's barred under the constitution from seeking reelection. "The president is a bootlicker," says José Hernández Solís, a street vendor attending a Mexico City **Quoted**



Eduardo Avila, a company driver on break in Mexico City's Zócalo square, where Mexicans have assembled for centuries to vent their anger

rally organized by Amlo's National Regeneration Movement (Morena) on Jan. 30. "López Obrador has the guts to stand up to Trump and tell it like it is."

The white-maned politician, who was mayor of Mexico City from 2000 to 2005, stuck to his script at the event. He blamed "neoliberalism" for rampant inequality and violence and vowed to protect farmers from U.S. competition. "Everything depends on strengthening Mexico," he said, "so we can confront aggression from abroad with strength."

Such rhetoric almost won López Obrador the presidency in 2006. He lost by less than 1 percentage point, and, despite a recount, he and his supporters continue to claim the vote was rigged. They staged protests that shut down central Mexico City for months.

His message resonates with Mexicans, many of whom have taken to festooning their social media pages with the country's flag. Some even advocate a boycott of everything that's from the U.S. "Adios Ford... Bienvenido Toyota" is one internet slogan. It feels like Trump's Make America Great Again—made in Mexico.

An Amlo presidency would be a precedent: Two parties have monopolized the highest office in Mexico for almost a century. An early test of the Morena party's prospects may come in local elections in June. Some see parallels between Amlo and Luiz

Inácio Lula da Silva, who was elected Brazil's president in 2002 after three failed tries. To the relief of investors, Lula moderated his leftist stance in office, though he continued to needle the U.S. José Cárdenas, who held senior positions at the U.S. Department of State under George W. Bush, says López Obrador bears a closer resemblance to another Latin leader. Amlo is a "Hugo Chávez wannabe," Cárdenas wrote in the National Review, warning that his ascension could herald trouble "on everything from border security, counterterrorism, and drug war cooperation to deportations and restricting Central American migration."

His presidency could also bring changes to Nafta, though not the ones Trump has in mind (assuming the pact survives through 2018). Amlo has complained that Nafta has impoverished farmers. He also wants to reverse the recent opening of the energy industry to foreign investment.

Americans will soon get a chance to size up Amlo. He's planning a U.S. speaking tour in February, visiting cities with large immigrant communities.

-Nacha Cattan

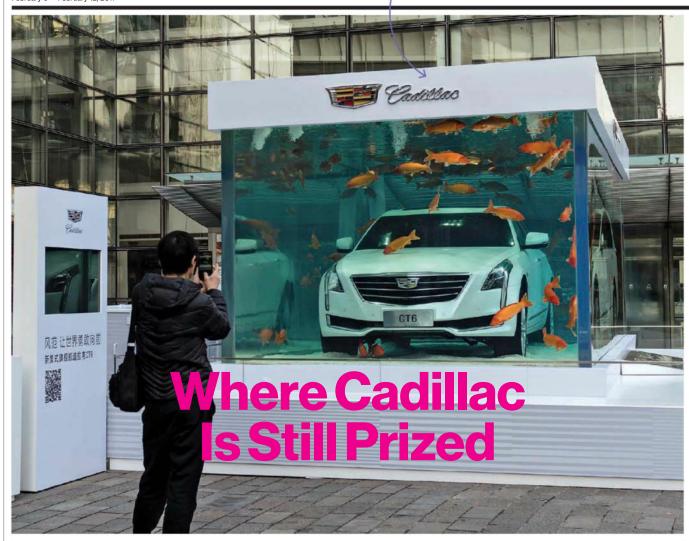
The bottom line Amlo, a Mexican politician with a populist streak and a nationalist message, is gearing up for a third shot at the presidency.



Companies/ Industries

February 6 - February 12, 2017

A Cadillac CT6 inside an aquarium tank grabs the attention of a passerby in a trendy Shanghai shopping district



▶ The once-dominant luxury car, fading at home, finds fans in China

"The brand is recognized in China as having long heritage and pedigree"

General Motors has been spending billions of dollars on Cadillac, trying to recapture the magic that made the name synonymous with luxury in the U.S. for almost 60 years. There are signs the effort is finally paying off—in China.

Aggressive advertising and a hot new entry, the XT5 sport utility vehicle, helped Cadillac push past Lexus to become China's No.4 luxury car brand last year, as annual sales jumped 46 percent, to 116,000. While German luxury brands, led by **Volkswagen**'s Audi, have 75 percent of China's market for upscale vehicles, challengers such as Cadillac, Lexus, and **Jaguar Land**

Rover are making inroads, says Michael Dunne, president of consulting firm Dunne Automotive in Hong Kong. Cadillac enjoys some American swagger on the mainland, thanks to the popularity of GM's Buick brand and the local admiration for U.S. icons such as Starbucks, Apple, and Nike. That's given Cadillac a boost while it struggles to revive its lagging business at home. In America, Caddy sales fell 3 percent last year despite a record auto market, and its "Dare Greatly" ad campaign hasn't done much to counter its second-tier image among affluent baby boomers. "The brand is recognized in China as

having long heritage and pedigree," says Cadillac President Johan de Nysschen. "It is also seen as fresh and new. Its U.S. history has had its ups and downs."

Mostly down. Cadillac's U.S. sales peaked in 1978 at 347,000 vehicles. Quality issues and cars that looked too much like Chevrolets and Buicks eroded the brand's value until it lost its upscale sales crown to **Ford**'s Lincoln in 1998. Boomers then started a love affair with **Toyota**'s Lexus brand and German nameplates including **BMW** and **Daimler**'s Mercedes, which have battled it out ever since. Cadillac sold 170,006 vehicles in the U.S. in 2016, less

than half the 374,000 Mercedes did.

GM is lavishing \$12 billion on new Cadillac models that it will sell globally by 2020. Several are SUVs, favored by American and Chinese luxury buyers. While it offered to buy out more than 40 percent of its 925 U.S. dealers last year, Cadillac plans to almost double its dealership count in China, to 300, in the next few years.

That's why GM was comfortable opening a \$1.2 billion plant in Shanghai in 2016 to build the new CT6 sedan and XT5 SUV. Starting production on the mainland helped to jumpstart growth because the locally built vehicles avoid China's 25 percent import tariff, which, when added to the country's 17.5 percent valueadded tax, made Caddys too pricey for many buyers. Dunne says the construction of the plant also convinced many Chinese buyers that Cadillac is committed to the market and will be there to support its customers and provide service and parts.

Discounting has been a main reason behind the brand's growth. One Cadillac dealer in Beijing, who asked not to be named, says his operation was discounting sedans by 15 percent to 20 percent last year. One of his promotions was called "5+1=6," which offered BMW 5 Series owners a deal to trade in their car for a Cadillac CT6 at a price of 1 yuan (15¢).

Yu Shichao, a 26-year-old founder of a health-care startup in Beijing, says he bought a CT6 in September at a 20 percent discount. While doing research on a BMW 730, he learned that a well-equipped CT6 in the U.S. can cost about the same as a BMW 7 Series. In Beijing he got the CT6 for the price of a cheaper BMW 5 Series. Buying the Caddy made him feel like a smart shopper, he says.

De Nysschen says there's been discounting by all automakers in China, especially as its domestic manufacturers have introduced lower-priced vehicles and global companies have built more factories locally to avoid tariffs and reduce prices.

Cadillac has particularly targeted young buyers on the mainland like Yu. The brand went for a gritty kind

of cool several years ago with television ads that featured actor Brad Pitt with a goatee and his hair pulled back in a bun, driving an XTS sedan through San Francisco. And last year its "Dare Greatly" campaign, which showcases hip New York neighborhoods, ran in heavy rotation on Chinese television and the internet.

The youth approach seems to be working. De Nysschen says the average buyer in China is 33 years old. The average American Cadillac buyer is over 60, according to consultant Strategic Vision. "The German brands are somewhat ubiquitous" on the mainland, Dunne says. "Cadillac works hard to be different. People buying Cadillac can distinguish themselves."

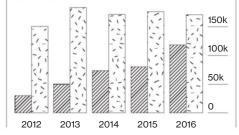
"Dare Greatly" has been far less effective in the U.S., says Alexander Edwards, president of Strategic Vision. One ad runs 94 seconds online and is shot through the windows of a car rolling through a New York neighborhood while a narrator reads Theodore Roosevelt's inspirational screed "The Man in the Arena." The video never showcases a Cadillac and only reveals that it's pitching the brand when the logo appears at the very end.

For American luxury buyers who are happy with their foreign rides, that doesn't get the word out that Cadillac's cars are equal to anyone's, Edwards says. "Cadillac is doing a good job with product," he says. "But the communications are awful. They are not attracting new buyers the way they could."

De Nysschen puts a lot of the blame on a product line that's out of step with the U.S. market. Small and midsize SUVs are the industry's sweet spot, accounting for about 40 percent of

Cadillac sales by country

China U.S.



U.S. vehicle sales today. Lexus and the German brands each sell three or more such SUVs in their showrooms. Cadillac has one.

For now, de Nysschen's emphasis is on selling Cadillacs at higher prices in the U.S., re-establishing the brand's luxury credibility before its upcoming models are released. He says average Cadillac selling prices in the U.S., adjusted for incentives, have risen about 7 percent in each of the last two years and now trail only Mercedes. "Long-term brand development is so important for this company," he says.

Yet, for all its inroads in China, rivals still question Cadillac's luxury cred. "I never underestimate any competitor," says Ian Robertson, head of global sales and marketing for BMW. "There are full-premium brands and near-premium brands. Cadillac is probably near-premium."

—David Welch, with Yan Zhang

The bottom line Cadillac, whose U.S. sales peaked in 1978, could see more of its cars sold in China than in the U.S. within five years.

Footwear

Can Sneaker Makers Come Home Again?

- ► The industry may add robots—but few factory jobs—in America
- Using more U.S. plants "would seem to be politically prudent"

Sneaker makers, led by **Nike**, were among the most vocal supporters of the Trans-Pacific Partnership trade pact. They had good reason to be: Companies including Nike, **Adidas**, and **Under Armour** could have saved \$450 million from tariff reductions in just the first year of the deal, forecast the Footwear Distributors and Retailers of America.

Now with President Trump blowing up trade pacts—he nixed U.S. participation in the TPP during his first week in office—and lambasting companies that import a lot of their products, sneaker makers could find themselves on

Companies/Industries

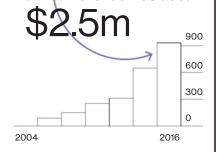
Breakdown

LGBT Suppliers

Over the rainbow As U.S. companies look for gay vendors, more suppliers are seeking LGBT-ownership certification from the National Gay & Lesbian Chamber of Commerce (NGLC).

Certified

- ▶ Program started in 2004.
- ➤ Companies must have 51 percent ownership and control by vendors who are lesbian, gay, bisexual, or transgender to qualify.
- ► The <u>number of certified</u>
 <u>businesses</u> has tripled
 since 2012, topping 900
 last year. Their average
 annual revenue was about



2 Courted

- ➤ The NGLC has more than 100 corporate partners including Apple, Northrop Grumman, and Warner Bros.—that help certified businesses.
- ➤ Starting this year, corporations must begin adding LGBT vendors to their diversity purchasing programs to maintain a perfect score on the Human Rights Campaign Corporate Equality Index.

Changed times Only a decade ago, some LGBT-owned companies avoided being classified as such because of a possible stigma. But now more businesses are willing to get certified as gays become increasingly visible in commerce and society. —Jeff Green

◀ the receiving end of a Trump Twitter tirade.

That has industry players, who import almost all their sneakers from low-cost locales in Asia, talking about their

efforts to switch more production to the U.S. Already, they've been looking in recent years for ways to bring some manufacturing home but for a far different reason than avoiding political heat. Manufacturing closer to big markets such as the U.S. would lower the time it takes to get products to market.

Now, in the Age of Trump, high-profile sneaker makers' efforts to manufacture at home could also help deflect Washington's attention from the fact that they overwhelmingly are in the business of designing and marketing made-in-Asia footwear and apparel for American consumers. According to Nike's website, its products are manufactured by almost 1.1 million workers in 645 factories located across 42 countries. About 400,000 of the workers are in Vietnam, with an additional 202,000 in China. Only 7,000 are in the U.S.

The TPP's tariff reductions would have freed up funds to speed a shift of production to America. Nike, for one, said it would use the money it would have saved if tariffs were eliminated on imports from Vietnam, its largest source of shoes, to accelerate investment in advanced manufacturing technologies. It said that could help shift enough production back home to let it and its manufacturing partners create as many as 50,000 U.S. jobs over a decade. Now footwear companies must hope for Trump and Congress to increase incentives for manufacturing onshore to speed up their made-in-America ambitions. "It's not a fatal blow by any means, but it certainly is a setback for the industry," says Matt Powell, a footwear analyst for consumer-products researcher NPD Group.

As they look to bring production back to the U.S., shoemakers are embracing a new kind of worker: robots. Sneakers, with lots of pieces stitched or glued together, are labor-intensive. That's one reason so many plants are located in low-wage nations. So automating is key for any shift.

Nike has developed a process of painting a shoe's midsole. The old,

slow way requires applying tape to ensure paint goes only where it's wanted-much like painting your living room.

The company devel-

oped a robot that can apply paint without taping and also enables new designs that can't be painted by hand.

Still, getting U.S. production to account for more than a tiny fraction of their global totals will be tough. Nike employs 1,300 at factories in Oregon and Missouri that construct air-filled soles that are shipped overseas to make finished shoes. That's peanuts compared with the factories it contracts within Asia. Nike says that despite the TPP's demise, it still plans to invest in advanced manufacturing to bring production to the U.S. And it welcomes the chance to "engage" the Trump administration on how the "new landscape" across tax and trade can support that, a spokesman says.

Under Armour opened a facility last year in Baltimore with the goal of bringing production to the U.S. Chief Executive Officer Kevin Plank, who's met with Trump, said the initiative will create "tens of thousands of jobs." In late 2016 the company had a limited release of a shoe with a 3D-printed sole that's made in New Hampshire.

Adidas says it will open a facility near Atlanta in 2017 that will use robots to make running shoes. It expects to turn out 50,000 pairs this year and could push that to half a million over time. For perspective, Adidas produces more than 300 million pairs of shoes a year. "It's a drop in the bucket," says Powell, the NPD analyst. "I don't see a day where we'll be making shoes in the U.S. at a commercial scale."

Even if many shoe factories were to get built in the U.S.—a questionable prospect, since sneaker makers depend mostly on contract manufacturers that typically don't operate in the U.S.—the plants would be so automated that most of the jobs they'd bring would likely go to industrial robots or 3D printers, not people. Adidas, for example, says its upcoming "speed factory" in the Atlanta area will initially employ only about 160 people. And Under Armour used just a dozen workers to make its 3D-printed shoes in New Hampshire.

Returning U.S. production "will drive

IRTESY OF PROCTER & GAMBLE (2); ILLUSTRATION BY SAM TAYL

Companies/Industries

jobs in other forms, maybe not factories of hundreds of thousands of people, but you will have hundreds of people running the factory, distribution, sales and marketing, retail, and delivery," says Michael Raphael, founder of Direct Dimensions, a 3D-services company working with Under Armour. "You will also have a whole supply chain that has to feed this."

In the current environment, however, the job numbers may not matter as much as the bigger made-in-America story. Says Caitlin Webber, a trade policy analyst with Bloomberg Intelligence: "To the degree that companies can emphasize their U.S. operations and U.S. manufacturing, that would seem to be politically prudent." — Matt Townsend

The bottom line U.S. shoemakers expected \$450 million in tariff cuts in the first year of the TPP. It's dead, but they still plan to add U.S. jobs.

Marketing

A Skin-Care Ad Tackles Social Taboos in China

- ▶ P&G's facial cream ad targets single women past their mid-20s
- "This campaign has...generated extremely positive sentiment"

In the four-minute advertorial, a young Chinese woman, her long hair pulled into a ponytail, weeps as her parents discuss her single status. "She's just average-looking, not too pretty," her mother says. "That's why she's a leftover." In China the phrase *sheng nu*, or "leftover woman," is a derog-

atory term referring to those in their late 20s who are unmarried.

A Procter & Gamble marketing campaign aims to remove this stigma while promoting products such as its \$179 Facial Treatment Essence and \$225 GenOptics drops for age spots, both included in its pricey SK-II skin-care

line. The campaign fea-

tures women who've

chosen to pursue their dreams instead of being pressured into marrying for the sake of it. It's helped increase sales of SK-II in China more than 50 percent over the past nine months, says Markus Strobel, global president of SK-II. "This

My parents can

understand that

society has changed,

but their values, in

terms of prizing

marriage, won't change. This...

looking down on

single women will

only change when my generation

becomes parents"

campaign has put us on the map in China and generated extremely positive sentiment among consumers and retailers," he says. "It's helping us win with young professional and executive women."

For P&G, which has said it underestimated the Chinese appetite for premium products, expensive ones such as

SK-II goods, teeth-whitening kits, and ProGlide Flexball razors now make up half the company's lineup around the world. The campaign has helped SK-II expand globally, too.

The centerpiece of the campaign is the sheng nu video, which has been watched 46 million times on YouTube and elsewhere. In it, the weepy young daughter and other women talk about the pressures they face to wed. The women and their parents are shown visiting a so-called marriage market in an urban park where parents post ads seeking mates for their children—then the women show their parents their own ads, stating their desire to remain single until they find a spouse they love.

Swedish ad agency **Forsman & Bodenfors** produced the video as part of P&G's "Change Destiny" SK-II campaign, started almost three years ago. It encourages women to overcome barriers and work and live as they want.

There's unease in China around some women's desire to marry later, says Jennifer Gilhool, a former Ford executive there who leads the U.S.based Gender Economics Lab, a

management consulting firm. Those who wait often struggle in a society that still supports traditional roles. Chinese parents, many of whom have only one child, expect daughters (and sons) to marry and provide a grandchild. The

government is also promoting early marriage to deal with the aging population and low birthrate. Young men, who outnumber women, are anxious to find suitable matches as early as possible.

Gilhool is no fan of P&G's campaign,

saying it emphasizes women's appearance and not their accomplishments. "I think the impact of the ad isn't aligned with the intention," she says. P&G spokesman Damon Jones says the campaign "celebrates women who are independent and creating their own definition of happiness, regardless of societal expectations."

Chinese women who want to delay marriage or stay single say it will take more than an ad to alter prejudices. "The commercial just spells out the problems we have. It doesn't really give a solution," says Tong Lei, a 36-yearold executive who works in the tourism industry in Shanghai. She's seen the video but hasn't used SK-II products. "My parents can understand that society has changed," she says, "but their values, in terms of prizing marriage, won't change." She says her relationship with her parents improved only after she moved from their home into her own apartment two years ago, an option not economically possible for many single women. "This mindset of looking down on single women will only change when my generation becomes parents," she says.

Jessica Sui, 29, a native of Shenzhen who works for an airline-services firm in Shanghai, says she didn't realize when she first watched the SK-II video that it was done by the skin-care company-the brand's logo doesn't appear until the end. She wants to show it to her parents. "I hope it will make them feel better," Sui says. "The marriage problem bothers them more than it bothers me." Her brother agreed to an arranged marriage, but she refused. "Parents think marriage is bliss," she says, "but people my age don't think so." —Carol Hymowitz and Lauren Coleman-Lochner, with Rachel Chang

The bottom line A marketing campaign in China for SK-II products has boosted sales growth more than 50 percent over the past nine months.





Politics/ Policy

CHRISTIANS



February 6 - February 12, 2017

Give me your till, your pour to the yearning to the your for 4 M M THE HE TO TO THE HE TO THE HE

Trump's immigration order is being challenged on the grounds of religious discrimination

"This is not about religion. This is about terror and keeping our country safe"

Donald Trump's executive order restricting immigration from certain predominantly Muslim countries set off a political chain reaction that will rumble through Washington for weeks, if not months. Three days after it was signed, the order resulted in the firing of acting U.S. Attorney General Sally Yates, who refused to defend it. This, in turn, prompted Senate Democrats to boycott or delay confirmation hearings scheduled for several of Trump's cabinet nominees, including his pick for attorney general, Senator Jeff Sessions of Alabama. The controversy over the order is also likely to spill into the battle over Trump's Supreme Court nominee, Neil Gorsuch.

The legality of Trump's action will first be tested in U.S. district courts, where challenges are mounting by the day. At issue is whether the order discriminates against Muslims based on their religion, or if it's simply a form of "extreme vetting" of refugees, as Trump claims. The federal court cases raise questions about bedrock constitutional provisions such as "due process" and "equal protection," as well as a part of the First Amendment known as the

establishment clause, which prohibits laws favoring one religion over another.

In a 1982 ruling involving regulation of charitable solicitations by religious groups, the Supreme Court explained that the "clearest command" of the establishment clause "is that one religious denomination cannot be officially preferred over another." Trump's order appears to run afoul of that by establishing preferential treatment for refugees identified with "a minority religion"— Christianity—in their home country.

As protests grew in the wake of his signing the executive order, Trump issued a statement on Jan. 29 saying, "This is not about religion. This is about terror and keeping our country safe." Yet in an interview, Trump said Christian refugees would be given priority to enter the U.S. Specifically, the Jan. 27 order bans entry for 90 days of nationals from seven predominantly Muslim countries: Syria, Iraq, Iran, Sudan, Libya, Somalia, and Yemen. It also bans resettlement of Syrian refugees indefinitely and suspends all other refugee resettlement for 120 days. In the frantic period that followed its signing, as refugees were detained at airports

and immigration lawyers and protesters gathered in baggage-claim areas, four federal judges—in Brooklyn, Boston, Seattle, and Alexandria, Va.—issued rulings blocking aspects of the order.

Those rulings were provisional and didn't delve into constitutional issues. Instead, they sought to prevent deportations or other actions that would harm individuals. Lawyers for those affected will likely return to court in the coming weeks to flesh out their arguments. Additional suits have since been filed that challenge the order's constitutionality, including one on Jan. 30 by the Council on American-Islamic Relations, and another on the same day by the state of Washington. Massachusetts, New York, and Virginia have also joined lawsuits challenging the order.

The Trump administration will send attorneys from the U.S. Department of Justice to defend the order in each of these cases. After firing Yates as acting attorney general, Trump replaced her with Dana Boente, U.S. attorney for the Eastern District of Virginia, who vowed to fall in line behind the White House.

The American Civil Liberties Union, in challenging the order, described it

Trump's aluminum foil could put Beijing in a bind 22

The Keystone XL pipeline gushes back to life. Maybe 23

cor, your **Installed** masses the wretched refuse of see, the **Installed**, tempestceside the golden door!

as a "Muslim ban wrapped in paperthin national security rationale." Dan Siciliano, a law professor at Stanford, says it was "clearly a nationality ban and a de facto religion ban."

Trump's tweets and declarations could become evidence in court of what he intends to accomplish with the order. In December 2015, responding to the San Bernardino shootings that killed 14 people, Trump called for a "total and complete shutdown of Muslims entering the United States," a position he tweaked a few months later by suggesting that immigration be suspended from "any nation that has been compromised by terrorism."

Trump's argument that the order wasn't about religion may have been undermined by former New York Mayor Rudy Giuliani, who told Fox News on Jan. 28 that Trump wanted a "Muslim ban" and asked him to assemble a commission to figure out how to do it legally. Giuliani said the commission recommended the order focus not on religion but on "areas of the world that create danger for us.... Perfectly legal, perfectly sensible."

Theodore Ruger, dean of the University of Pennsylvania Law School, says Trump's comments that the order doesn't target Muslims may be immaterial. "It's possible to challenge government action as discriminatory to a particular religion even if there's no mention of that religion," says Ruger.

Justice Department lawyers defending the executive order can argue that federal law gives the president broad authority to exclude noncitizens "who would be detrimental to the interests of the United States." "No judge can look at the order and analyze it as a Muslim ban because the vast majority of Muslims around the world are not affected," says Jonathan Turley, a law professor at George Washington University. Eugene Volokh, a professor at UCLA School of Law, says that judges could interpret the order as targeting people from countries where "jihadist sentiments" are common, which could give Trump legal cover.

Ironically, Democrats, in fighting the order, may echo concerns voiced repeatedly by Republicans under the Obama administration that the executive branch exerts too much power. Republican-led states frequently sued the federal government over President Obama's executive orders on pollution regulation, overtime pay, and immigration policy. In 2014, Texas led an attack on Obama's immigration reforms, which would have sheltered more than 4 million undocumented immigrants from deportation and

provided them with work permits that could have led to federal benefits such as Medicaid and Social Security.

The federal judge presiding over the case said he doubted Obama had the authority to unilaterally alter immigration policy and blocked the programs until he could decide if they were legal. A deadlocked Supreme Court refused to lift the injunction last summer, effectively ending the case.

Typically Congress sets long-term immigration policy and could reject Trump's immigration ban. That's unlikely with a Republican majority in both houses. Some GOP senators, however, including John McCain of Arizona, Bob Corker of Tennessee, and Lindsey Graham of South Carolina, have criticized the order for being hastily implemented and for sending the wrong message to allied countries.

The Senate's consideration of the Gorsuch nomination will undoubtedly be complicated by the immigration order. Gorsuch, 49, has served on the federal appeals court in Denver since 2006. His best-known cases were religious-rights disputes that ultimately reached the Supreme Court. Gorsuch sided with Hobby Lobby Stores, whose owners objected to providing birthcontrol coverage required under Obamacare. But Gorsuch is a critic

Politics/Policy

◀ of a Reagan-era judicial doctrine that helped bolster the power of the executive branch.

On Jan. 31 the media and the White House were still sparring over how to refer to the order. In a press briefing that afternoon, White House press secretary Sean Spicer insisted that the order isn't a ban, saying "It's not a Muslim ban. It's not a travel ban. It's a vetting system to keep America safe." But just the previous day, a Trump tweet had called it a ban.

—Paul Barrett and David Voreacos

The bottom line Trump's immigration order may wind up in front of the Supreme Court, where his nominee, Neil Gorsuch, could cast a crucial vote.

Trade

Will Trump Crush China Over Aluminum?

- Obama filed a WTO complaint alleging illegal Chinese subsidies
- ► It could let Trump "deliver on his promise to stand up to China"

Donald Trump and China President Xi Jinping haven't had a chance to size each other up in the same room yet, but a chat over aluminum beer cans may offer the first opportunity.

Among the last-minute actions
President Barack Obama took before
leaving was a complaint filed with
the World Trade Organization alleging China's subsidies of its aluminum producers were illegally
suppressing global prices of
metal and putting American

smelters on the verge of bankruptcy. It's a claim that fits perfectly into Trump's tough talk on trade and could provide an early window into how he intends to deal with China.

Although aluminum represents less than 1 percent of total exports from China to the U.S., the stakes are high. If China decides to go through the WTO process, it could end up putting the legitimacy of its entire industrial complex on the line. Aluminum is hardly the only industry it subsidizes, and a loss could set an important precedent. "This is the first time there is a systemic challenge to China's financing and building out of its massive industrial capacity from highly subsidized state-directed financing," says Alan Price, who leads the international trade practice at Wiley Rein law firm in Washington. "They have a lot to lose beyond the aluminum industry."

Rather than going through the formal WTO process, which typically takes two to five years and requires costly amounts of research, translation, and analysis, China may choose instead to negotiate with Trump. That would certainly appeal to his style of doing business. It could also save China from additional scrutiny of its aluminum industry, which relies on dirty coal plants for electricity and has an outsize impact on climate change.

China's aluminum industry has grown tremendously over the past decade. The country is by far the biggest global supplier, producing more than half the world's aluminum last year. A lot of that is consumed inside China, where aluminum

demand has risen 75 percent since 2010. But it's also led to a glut on the global

Gorsuch

market. In 2016, the world produced almost 300,000 metric tons of excess aluminum, according to Morgan Stanley. That's pushed prices down more than 45 percent from an all-time high and threatened the survival of many competitors.

This past summer, Michael Bless, chief executive officer of Chicagobased Century Aluminum, implored the Obama administration to take up a WTO case on subsidies, saying that if nothing was done to cut Chinese capacity, he'd have to close a smelter in Hawesville, Ky., which makes special aluminum used in defense applications. The plant has cut its payroll by more than half in the past two years. "This case specifically is tailor-made for the new president to deliver on his promise to stand up to China and put American workers first," says Jesse Gary, Century's general counsel, who helped spearhead the WTO case brought against China.

The Chinese government plans to shut down about 3.3 million tons of aluminum capacity (about 9.5 percent of its total) during the winter to curtail air pollution, a person with knowledge of the matter said in late January. One way to interpret this is that it's a reaction to the complaint, though it could also end up being a temporary measure if that production comes back on line in the spring.

China could also choose to go through with the WTO process and argue that its aluminum plants are more competitive than those in the rest of the world. Many of its smelters are new and among the most efficient anywhere, unlike their American competitors, which tend to be older and smaller. "China may think: Why should we pay the consequences

Quoted

"This is the entire game. Judge Gorsuch will be able to bring Justice Kennedy over to the conservative side [in] these 5-4 cases."

George Washington University law professor **Jeffrey Rosen** on the friendship between Trump's Supreme Court nominee, Neil Gorsuch, and Justice Anthony Kennedy, considered the swing vote on the bench



of uncompetitive assets when we have competitive assets?" says Jorge Vazquez, managing director of Harbor Intelligence, an aluminum research firm in Texas.

China exports virtually no primary aluminum and only about 500,000 tons of the more expensive flatrolled products to the U.S. Last year it imported more than 1 million tons of aluminum scrap from the U.S. It's the biggest market for many American scrap companies. If Trump gets too aggressive, China could retaliate and stop buying American scrap.

The WTO aluminum case gives the Trump administration its first chance to show off its negotiating strategy with China and reveal whether it intends to make sector-by-sector adjustments. "It's a great test case," says Derek Scissors, an Asia trade analyst at the American Enterprise Institute. "We're up in the air about whether we're going to overhaul how the U.S. trades with China or if we're going to peck at it, and aluminum is a great way to peck at it." —Joe Deaux

The bottom line China faces a WTO complaint about subsidizing its aluminum industry that could threaten the legitimacy of its industrial complex.

Pipelines

Reviving Keystone XL Is No Sure Thing

- Cheap oil and booming U.S. production lower potential profits
- ► If Trump taxes imports, "I don't think it's going to be built"

Donald Trump is convinced the Keystone XL oil pipeline he revived with an executive order on Jan. 24 will gush money. "I want it built, but I want a piece of the profits," he said last year at a campaign stop in North Dakota. "That's how we're going to make our country rich again."

He could be in for an unpleasant surprise. Market changes since the \$8 billion cross-border pipeline was proposed in 2008 have lowered its profit potential. U.S. oil production has jumped by more than 60 percent, to around 9 million barrels a day,

Price Gap

Western Canada Select, per barrel

\$40.33

West Texas Intermediate, per barrel

\$53.88

undercutting the need for the kind of imported crude the Keystone XL would bring from Western Canada. At the same time, oil prices have fallen by about 40 percent, to about \$50 a barrel, raising questions over the viability of Canada's reserves of heavy oil sands, which are among the most expensive types of crude to produce relative to their market value. Traders spend a lot to move Canadian crude down from Alberta; cheaper transportation via Keystone XL would allow producers to charge higher prices at the wellhead.

If Congress passes the kind of border-adjusted tax system the president has occasionally expressed interest in, imported Canadian oil could be taxed and made significantly more expensive for American buyers relative to oil produced in the U.S. That alone could be enough to scuttle the entire project. "If there's a border-adjusted tax, I don't think it's going to be built," says energy economist Philip Verleger of PKVerleger in Carbondale, Colo.

TransCanada proposed Keystone XL as a way to provide its existing Keystone pipeline system with a more direct route from the oil fields of Western Canada to U.S. refineries, including ones on the Gulf Coast. The Gulf extension is complete. After a lengthy review, President Obama rejected the application for the northern section in November 2015, saying that "shipping dirtier crude oil into our country" wouldn't create many long-term jobs, lower gasoline prices, or increase energy security. In 2014 the U.S. Department of State said the pipeline would create just 35 permanent U.S. jobs.

Still, Trump reversed Obama's decision as one of his first acts in office, insisting that the pipeline be built using American-made steel and inviting TransCanada to reapply for a

presidential permit. The company still intends to make a go of Keystone XL. At a conference sponsored by Canadian Imperial Bank of Commerce the day after Trump's announcement, TransCanada Chief Executive Officer Russell Girling said "we're obviously very, very pleased with that announcement." Investors reacted positively as well. TransCanada shares, which rose 3 percent the day after Trump was elected, gained an additional 2.7 percent the day of the announcement.

But even the pipeline's biggest backers aren't taking things for granted. Girling acknowledged at the CIBC conference that the project depends on getting firm commitments from oil shippers to use it, and those conversations have barely begun. "I believe that the economics are still there for these projects, but we'll see," he said.

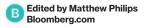
One problem for TransCanada is that the supply of rival pipeline capacity will increase by 2019. The Canadian government has approved the Trans Mountain Expansion Project, which will carry more oil to the West Coast, and the Enbridge Line 3 replacement project, which will carry more oil east to Wisconsin. Cenovus Energy, one of the biggest producers in oil sands, committed to ship 75,000 barrels of oil a day via Keystone XL the first time around, but it hasn't re-upped. "We're still waiting to see what the deals of the reconstituted project look like," spokesman Reg Curren says.

U.S. tax policy is a less-predictable obstacle. A destination-based cashflow tax such as the one being pushed by House Speaker Paul Ryan would give independent U.S. oil producers a big cost advantage against Canadian imports, undermining the pipeline's economics, says Verleger.

The best argument for going ahead with the pipeline is that even if the economics aren't great now, Trump's time in office might be TransCanada's best shot at getting a yes. Says Credit Suisse analyst Andrew Kuske: "This is an era that's favoring pipeline builders. You have a clear window of time."

—Peter Coy, with Robert Tuttle

The bottom line If Trump decides to apply a border tax on imports, he could end up killing the economics of the Keystone XL pipeline.



OGRAPHS BY CARLOS CHAVARRIA FOR BLOOMBERG BUSINESSWE

Technology

February 6 - February 12, 2017

Uber's Campsites

Hard-core drivers are making their beds in their cars

"Some of us have decided to make this a full-time career"

In the 1970s the Safeway grocery store in San Francisco's gleaming Marina neighborhood, known as the Social Safeway, was a cornerstone of the pre-Tinder dating scene. Forty years later, **Uber** driver German Tugas got to know it for another reason: Its parking lot was a safe spot to sleep in his car.

Most weeks, Tugas drives more than 70 hours in San Francisco, where the work is steadier and the fares are higher than in Sacramento, where he lives. So every Monday at 4 a.m., the 42-year-old says goodbye to his wife and four daughters, drives 90 miles south, and ferries passengers until he earns \$300 or gets too tired to continue. On a typical day, he nets \$230 after expenses such as gas. He doesn't return home until Friday, so for much of 2016, he joined at least a half-dozen other Uber drivers using the Social Safeway parking lot to doze before the next long day.

"That's the sacrifice," he said in May, smoking a cigarette beside his Toyota Prius at 1 a.m., the boats in the bay bobbing gently behind him. "My goal is to get a house somewhere closer."

Most of Uber's full-time drivers return home to their beds at the end of a day's work, but many don't. Those drivers live near(ish) expensive cities where fares are higher, though not high enough to avoid the Safeway scenario. To maximize their working hours, drivers are making use of anyplace they can find to nap.

In a sense, this is the logical extreme of what Uber says it does best:

offering its 1.5 million drivers flexibility. "People make their own decisions about when, where, and how long to drive," says spokesman Matt Kallman. "We're focused on making sure that driving with Uber is a rewarding experience, however you choose to work."

Uber is quick to note that 60 percent of its 600,000 U.S. drivers—classified as contractors, without the protections of employees—work less than 10 hours a week. But based on its own research, about half its rides and revenue come from drivers working more than 35 hours a week, the company confirmed after an analysis by Bloomberg. Some go to extremes, like sleeping in parking lots, to make a living.

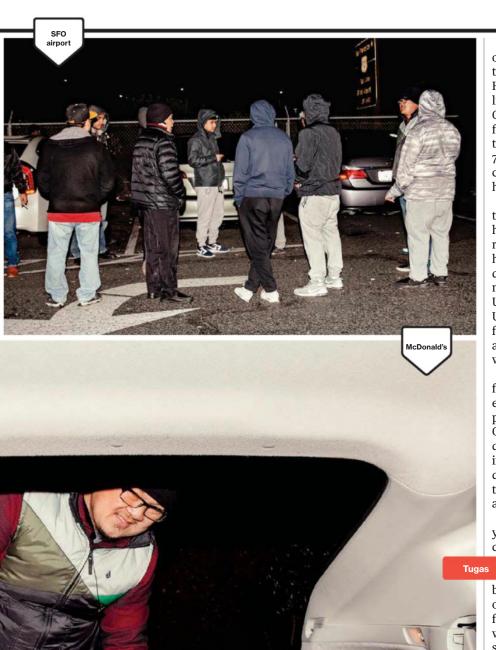
"I take a lot of personal responsibility in making sure our drivers feel heard and recognized and have been given good feedback," says Nundu Janakiram, Uber's head of driver experience, who hasn't fielded complaints from anyone sleeping in his or her car. "I also fully acknowledged and realized that we are many, many steps away."

In Chicago drivers call the 7-Eleven at the intersection of Wrightwood and North Lincoln avenues the Uber Terminal. In Columbus, Ohio, it's the Walmart off the Jack Nicklaus Freeway. In Queens, N.Y., drivers frequent the 7-Eleven off the JFK Expressway. Users of online forum UberPeople.net joke that there's money to be made in a motel chain serving Uber drivers sleeping in their cars in New Jersey.









"They have to understand that some of us have decided to make this a full-time career," says Walter Laquian Howard, 53. "It's getting harder." He lives alone in a basement apartment in Griffith, Ind., but has spent most nights for the past two years parked beside two or three other drivers at that 7-Eleven in Chicago, 40 miles away. On cold nights, he wakes up every three hours to blast the heat.

Howard, previously a nurse's assistant and part-time Uber driver, quit his day job to spend more time on the road. He leased a car from the ridehailing company in March 2015, when driver promotions were helping him make about \$40 an hour. That fall, Uber introduced its group-ride service, UberPool, and cut the drivers' slice of fares. Howard says he's now making about \$12.50 an hour. Uber says it's working to improve Pool for drivers.

In recent years, Uber has dropped fares across the U.S. at the start of each year. On Jan. 19, Uber agreed to pay \$20 million to settle Federal Trade Commission claims that it misled drivers about typical hourly earnings. In Boston, a Craigslist ad said drivers could get \$25 an hour; fewer than 10 percent were paid that much, according to the FTC's investigation.

Uber says it won't decrease fares this year. Many drivers say the company could hardly cut them further. "They

need to stop lowering their rates," says Mark Lewandoske, 51, who's been driving for Uber since July. He owns a home in Sage, Calif., 77 miles from San Diego International Airport, where he gets the best fares and does some of his driving. To supplement his U.S. Navy pension, he tries to earn \$125 a day. Sometimes that means he drives six hours; other days, it's 18.

Lewandoske tries to work five days in a row before heading home to his partner and dogs. He often drives until the bars close before he pulls over to sleep, putting reflective sunshields on his Prius windows to deter cold air and cops. Sometimes he'll park at Camp Pendleton, the naval base, a perk of being a veteran. "They know if you're on base," he says, "you're not going to cause a problem."

Technology

Workers for other gig-economy companies, including Lyft and grocery deliverer **Instacart**, have complained of falling wages and weak labor protections. But Uber is by far the biggest of the bunch. And while some Uber drivers who sleep in their cars also work for Lyft, all of the more than a dozen drivers interviewed for this story say they mostly drive for Uber. Lyft forces drivers to rest for at least six hours after they've worked for 14 straight. Uber doesn't have a rest rule. A day after Uber was criticized for operating during a Jan. 28 taxi strike in New York that protested President Trump's immigration ban, Chief Executive Officer Travis Kalanick said the company would establish a \$3 million legal defense fund for affected drivers. By then, angry users were deleting the app en masse.

In a survey of 1,150 ride-hailing drivers, Harry Campbell, who runs the blog The Rideshare Guy, found that more than half said pay was the most important thing to them, followed by more than a third who picked flexibility. The Uber drivers said their hourly pay averaged \$15.58 before expenses such as gas and maintenance. In a study co-authored by Jonathan Hall, Uber's head of eco-

\$20

Amount Uber agreed to pay on Jan. 19 to settle FTC claims it misled drivers about hourly earnings nomic research, the average hourly pay for a driver in October 2015 was found to be \$19.35.

Among the hardcore drivers, there are still true believers. Tugas, the driver from the Social Safeway parking lot, says

it's his choice to work 14-hour days and he was sleeping in the Safeway lot because he wanted to. He and a fellow driver say they had to relocate last year, after the supermarket hired a security guard to move them along. Safeway declined to comment. Tugas now sleeps in the parking lot at a McDonald's near San Francisco International Airport.

"I signed up for this because I am my boss—I kind of own the business," he says while laying out his sleeping bag in the back seat of his Prius at about 1 a.m. on a night in mid-January. "I have the freedom, and that's a beautiful thing."

Six other drivers were also sleeping in the lot, which goes quiet after the McDonald's takes its last customer at midnight. "This job is not for everyone," Tugas says. "I'm happy. If I didn't like it, I would do something else."

—Olivia Zaleski and Eric Newcomer

The bottom line Uber's most dedicated drivers account for about half the company's revenue. Some sleep in their cars wherever they can.

Hirina

The Trump-Valley Fight Starts to Take Shape

- A draft crackdown on work visas could shift U.S. recruiting
- "The visa challenges are not going to go away easily"

Google, Facebook, Microsoft, and Salesforce.com are among the companies protesting President Donald Trump's ban on refugees and travelers from seven predominantly Muslim countries, saying it violates America's principles and risks hurting innovation. The president's next step could land even closer to home.

Trump's administration has drafted an executive order that would tighten restrictions on the work visa programs tech companies use to hire tens of thousands of employees each year. Businesses would have to try to hire Americans first, according to a copy of the draft reviewed by Bloomberg. Foreign workers offered higher salaries would be likelier to get visas.

"Our country's immigration policies should be designed and implemented to serve, first and foremost, the U.S. national interest," the draft reads. "Visa programs for foreign workers... should be administered in a manner that protects the civil rights of American workers and current lawful residents, and that prioritizes the protection of American workers—our forgotten working people—and the jobs they hold." The Trump administration says it's considering changes to the visa programs but declined to specify.

If put into effect, the order could shift recruiting at U.S. companies such as **Amazon.com**, **Apple**, and Microsoft and force huge changes at information technology outsourcing companies including **Infosys**, **Tata Consultancy Services**, and **Wipro**, among the top recipients of the 85,000 federal H-1B visas granted to foreign workers annually. These IT companies, while based in India, use visas to put their specialists in other companies' offices in the U.S.

H-1Bs are meant to help recruit workers with specialized skills, but advocates for tougher restrictions say Americans can meet those needs. Zoe Lofgren, a Democratic congresswoman from California, introduced a bill to tighten requirements shortly before Trump's refugee ban. "My legislation refocuses the H-1B program to its original intent," Lofgren said in a statement.

The proposed Trump order also calls on the government to publish reports with basic statistics on which companies use visa programs within one month of the end of the federal fiscal year. The Obama administration had scaled back the information made publicly available and required Freedom of Information Act requests for some data.

Ron Hira, a professor at Howard University, says the median annual pay for H-1B workers at top outsourcing firms is less than \$70,000, while Apple, Google, and Microsoft pay H-1B employees more than \$100,000. That suggests the U.S. companies are going after highly skilled employees, while the outsourcers may not be, Hira says.

"Inspections and investigations in the past have shown no cases of wrongdoing by Indian IT services companies," says R Chandrashekhar, president of Nasscom, the trade group for India's IT businesses. "The industry is open to any kind of checks in the system, but they should not cause any hindrance to the smooth operation of companies."

India's technology companies, led by Infosys, TCS, and Wipro, have argued they're helping corporations save money by handling their IT operations with specialized staff in the U.S. If they have to pay more for staff, the argument goes, they may handle more of the work remotely from India or elsewhere.

Wipro and TCS declined to comment. Infosys says it's too early to assess possible effects of the U.S. visa proposals, but it's weighing a range of responses to policy changes. "This includes reducing our visa dependency," the company wrote in an e-mail.

Regardless of its aims, the Trump plan may reduce the likelihood of the next tech giant being founded in the U.S., says Gary Burtless, a senior fellow at the Brookings Institution who researches labor markets. Google cofounder Sergey Brin immigrated from Russia; Microsoft Chief Executive Officer Satya Nadella from India. Steve Jobs's Syrian parents wouldn't have become Americans under Trump's immigration ban.

"Immigrant STEM workers have contributed an outsize share to founding new companies, getting patents, and helping build up American companies, which in turn because of their success have created tens of thousands, hundreds of thousands of jobs," Burtless says. "Discouraging such people to apply for visas to enter the United States to work—I can't imagine how that can be considered to be in the American national interest."

Tighter restrictions on the Indian companies may accelerate their shift to new kinds of services, such as cloud computing and artificial intelligence, says Raja Lahiri, a partner at consulting firm Grant Thornton India. In any case, he says, "the visa challenges are not going to go away easily."

—Peter Elstrom and Saritha Rai

The bottom line The Trump administration has drafted an executive order that would limit tech hiring of foreign workers.

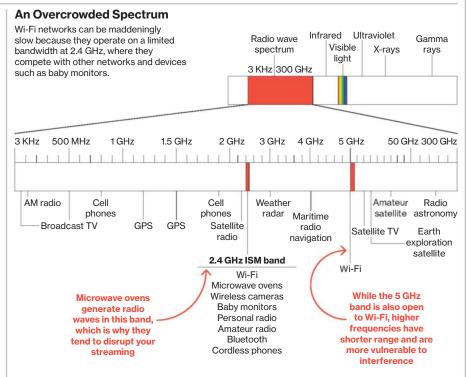
Hardware

The End of Terrible Wi-Fi May Be Near

- New routers prioritize better device management—and looks
- "As an industry, we're sort of failing the customer"

Wi-Fi routers have long suffered from a few big problems. Weak antennas. Radio interference. Their inability to diagnose their own issues. Not least, the boxes tend to be ugly as hell, hideous messes of plastic, blinking lights, and wires jutting off in every direction.

All that may be about to change. Bloomberg tested three new routers that use the latest home wireless



DATA: FCC, REPORTING BY BLOOMBERG VISUAL DATA

technologies—**Plume Design**'s Plume, **Ubiquiti Networks**' AmpliFi, and **Netgear**'s Orbi—and found them far more reliable than their predecessors. They all seem sleek enough to earn a place on the mantle, which will do a lot to help their performance, too.

Fixing Wi-Fi has taken on increased urgency as hardware makers sell consumers on internet-connected fridges, lightbulbs, and lots more. Swedish network-equipment maker **Ericsson** estimates there were about 16 billion smart devices on earth last year and says most future additions (an estimated 29 billion by 2022) will be devices other than phones or computers.

In this hypothetical, hyperconnected future, routers can't keep functioning the way they do now, says Chris Satchell, executive vice president and chief product officer at **Comcast Cable**. "As an industry, we're sort of failing the customer," says Satchell, whose company provides most of the routers its customers use. "The internet doesn't stop at the wall. It stops at your device."

When customers with wireless problems call Comcast or another provider, the first thing they're usually told to do is unplug the router and plug it back in. This is because older devices connecting to a traditional router look for a reasonably uncongested lane of wireless spectrum, then stay in that lane regardless of how backed up traffic gets. Newer phones and tablets are capable of changing lanes when they see roadblocks, and newer routers are better equipped to direct that traffic.

Comcast's latest wireless gateway, due to roll out by the end of March, finetunes the network based on traffic data. The company will charge its usual \$10 a month for the angular cube. It's also planning a software update for older equipment that can do some of the same work, and recommends that customers who have trouble getting online in certain parts of their home ask for supplemental plug-in gizmos called wireless extenders to boost the signal.

Extenders, which have been around in some form for a few years, are becoming a key part of the wireless industry's plan to improve Wi-Fi con-

> nections. San Francisco startup Plume Design takes the concept further. Instead of a central home router, it's selling \$179 sets of three routers the size of makeup compacts. They plug



Innovation

Laundroid

"A ton of team members quit, saying it's impossible or I'm crazy. But the ones who remained came up with some truly brilliant ideas."

Form and function

A fridge-size robot that, given enough time, sorts, folds, and neatly arranges clothes, even storing them while their owners are away or otherwise occupied. Later models, the developers say, will be able to do the washing and drying, too.

Innovator Shin Sakane

Age 45

Title Chief executive officer of Seven Dreamers Laboratories, a six-year-old startup in Tokyo



Scanning Users dump clothes in a lower drawer in the robot. Mechanical arms grab each item while scanners identify them based on distinguishing features such as buttons or collars.

Origin Sakane, a chemistry Ph.D., previously invented high-efficiency surgical tools, an anti-snoring nasal tube, and golf clubs

made from the materials used in orbital satellites.

Funding Seven
Dreamers is valued
at about 20 billion
yen (\$176 million);
in November it
received 6 billion
yen from investors
including Panasonic,
which is slated to
manufacture the
Laundroid.

Cost Sakane says he hopes to get the Laundroid's retail price below 300,000 yen (\$2,700). The pilot model, due out in March, will likely cost much more.

Folding Sliding plates help fold the clothes and stack them on upper shelves. Each item takes a full 10 minutes to fold. Sakane says he's working to cut that down to as little as three minutes.



Rivals U.S. company FoldiMate says its \$700 to \$850 dryer-size machine, coming in 2018, will be able to de-wrinkle and fold garments in about 30 seconds, but users will have to clip clothes onto an attached conveyor belt.

Next Steps

"The biggest challenge has always been the folding," says Jonathan Roberts, a robotics professor at Queensland University of Technology in Brisbane, Australia. "This is the first time I have seen sliding plates used." Roberts says he's skeptical that consumers will pay Seven Dreamers' asking price. Sakane says he's hired Nomura Holdings to explore an initial public offering while he develops a Laundroid that can also wash, dry, and track how often people wear particular items. He's aiming for 2019 for the version that handles all those tasks. — Yuji Nakamura and Hiroyuki Nakagawa

◀ into wall outlets around the house and report device data to computers in the cloud, which make decisions about which connections should get priority. A videoconference will take precedence over another device surfing the web, for example, according to Plume Chief Executive Officer Fahri Diner. Setting up the Plumes was easy, and reliability was excellent.

Many older routers can't send and receive data at the same time. If you're posting photos to Facebook while watching YouTube, the router is alternating every fraction of a second between uploading the images and downloading video. Although imperceptible to the user, those milliseconds can add up. Startup Ubiquiti is selling an antenna that can do both simultaneously. The result is AmpliFi, a \$135 box (\$299 with two extenders, recommended) that provided good coverage across a 2,100-square-foot, single-story home, with the signal moving through several walls. AmpliFi resembles the sort of ultramodern digital clock you'd find in a boutique hotel.

In a way, routers' aesthetic issues have the greatest consequences for internet speeds. Many people hide them under a desk or behind a cabinet, and any wall or other solid object between the router and your gadgets degrades the signal. Putting one in the middle of a room, with no obstructions, is the first thing any troubleshooter should try. Netgear's Orbi looks a bit like an air purifier, was easy to install, and seemed to offer consistently high speeds.

If you want the full coverage these systems are designed for, you can expect to pay \$350 or more, compared with about \$100 for a decent conventional router or about \$10 a month for whatever your internet provider hands you. And in apartment buildings with multiple networks competing for the same airwaves, a peak event like the *Game of Thrones* premiere may still lead to a digital pileup. If all else fails, there's one foolproof piece of networking equipment: a 40-foot Ethernet cable. Of course, it ain't pretty. — *Ian King*

The bottom line New networking systems solve a lot of the problems with conventional routers, but they're pricier, too.

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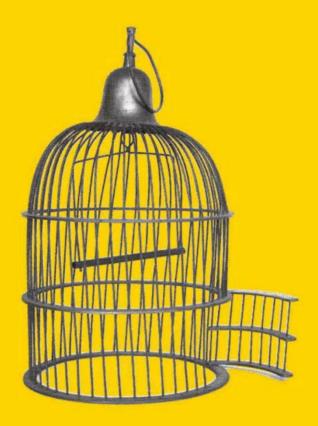
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If college econ majors

ran the Fed... 34

Kevin Turner, Citadel's

Mystery Deal: A Trump

appointee unloads

his business 33

square peg 32

Run! It's 3G Capita

Jorge Paulo Lemann and his partners are due for their next deal—and have the market guessing

"They're loaded up and ready to go"

It's time for Jorge Paulo Lemann to get back in the hunt. That, anyway, is the word inside the food industry, where the Brazilian billionaire has been doing blockbuster deals roughly every two years. In 2013 he persuaded Warren Buffett to team up with him and buy H.J. Heinz. Then, in 2015, the duo orchestrated the \$55 billion merger of Heinz and Kraft Foods. "It's logical that this would be the year," says David Palmer, a food industry analyst at RBC Capital Markets.

The talk has traders-and doubtless

some food companies' managers-on edge. In December a story in a Swiss magazine resurfaced some well-worn talk of Lemann and Buffett planning to buy Mondelez International, the maker of Nabisco cookies and Cadbury candies. That was enough to make the snack giant's shares soar 28 percent in just a few minutes. So far, no such deal has been announced. Regardless, the question of what Lemann might go after in 2017 has just about everyone grasping for leads. Besides Mondelēz, some other names

include General Mills, Kellogg, and Campbell Soup.

There is even talk that Buffett's beloved Coca-Cola could be in play, a prospect that some have dismissed as fantasy. But all the attention goes to show just how much the 77-year-old Lemann has reshaped and influenced the global food and beverage industry. In the past decade, Lemann and his Brazilian partners at **3G Capital** have made their names with a run of splashy deals, including Anheuser-Busch and Burger King, and a

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◀ focus on ruthlessly hacking away costs at every turn.

His team has been so effective at boosting profits that companies have changed how they do business to avoid becoming targets. Some industry insiders have criticized 3G's methods as shortsighted and draconian and suggest the constant need for acquisitions shows cost cuts alone can't boost sales. At Mondelēz, Chief Executive Officer

\$70

Market value of global snacks company Mondelēz, a possible takeover target Irene Rosenfeld says a more balanced approach to improving margins will boost gains in the long run.

Nevertheless, Lemann has made a believer out of Buffett, widely recognized as one of the most successful

investors in the world. 3G declined to comment, and Buffett didn't respond to requests for comment.

With Buffett, who's sitting on an \$85 billion hoard of cash on the books of his holding company **Berkshire Hathaway**, the strategy is simple. He ponies up the cash to help finance the acquisitions, and Lemann's team does the dirty work of cost cutting. When all the savings are wrung out, 3G looks for the next target. And there's no shortage of options in the packaged-food industry, which is struggling as consumers shun traditional grocery staples for healthier options.

At Heinz, the first deal that Buffett did with Lemann, 3G immediately installed its own managers. They shuttered five factories, did away with employee perks—even capping spending on office supplies—and eliminated more than 7,000 jobs. After just 18 months, Heinz's profit margin, based on a measure known as earnings before interest, tax, depreciation, and amortization, rose to an industry-leading 26 percent from 18 percent prior to the takeover.

That paved the way for the Kraft Foods takeover, which was announced in March 2015. At the time, 3G promised to cut \$1.5 billion in annual costs by the end of 2017. So far, it's ahead of schedule. According to research from AllianceBernstein, **Kraft Heinz** is already 88 percent of the way there. Margins are also up. Before the acquisition, Kraft's Ebitda consistently hovered

around 20 percent of revenue. Now the combined company's profit margin is at 30 percent. Kraft Heinz has also announced more than 5,000 job cuts.

Investors have taken notice. Shares of Kraft Heinz have risen 22 percent since the company began trading in July 2015. That's more than double the gain of consumer staples companies in the S&P 500 index. Kraft Heinz's success is fueling speculation 3G will soon need to look for yet another target to keep things going. In November news that the investment firm was raising at least \$5 billion to finance an acquisition pushed shares of General Mills, Kellogg, Campbell, and Mondelēz higher.

"They've pretty much implemented the playbook, so they're loaded up and ready to go," says Asit Sharma, an analyst at the Motley Fool. Many food industry executives are already feeling the heat. Last year, Mondelēz's pursuit of **Hershey** was partly seen as a defensive move to bulk up and stave off a takeover. Hershey resisted, and a deal never happened.

RBC's Palmer says Mondelēz, which generates more than 70 percent of its revenue outside North America, is the most likely target for Kraft Heinz. Kraft and Mondelēz split in 2012, but now Mondelēz, with a market value of almost \$70 billion, would give 3G an international presence and plenty of room to improve margins. The prospect of a takeover at a premium to Mondelēz's current price has even attracted the likes of hedge fund manager Bill Ackman, who took a large stake in the company in 2015.

Other analysts have focused on General Mills, Kellogg, and Campbell, which would give Kraft Heinz a stronger U.S. presence in categories such as snack chips, soup, and cereal, and also have cost-cutting potential for 3G. Alexia Howard, a food industry analyst at AllianceBernstein, predicts Kraft Heinz will buy General Mills this year.

One complicating factor is President Donald Trump. He's vowed to protect American jobs and has aggressively gone after companies that moved them overseas. Big job cuts—a hallmark of every 3G takeover—could draw Trump's ire, says Kenneth Shea, an analyst at Bloomberg Intelligence. "They may have a tougher time politically laying off thousands of people," he says.

That hasn't kept some investors from

talking about what would be the most audacious deal of them all: a Buffett-backed 3G takeover of Coca-Cola. Berkshire Hathaway is Coke's biggest shareholder, with a 9 percent stake, and Lemann once called the company his dream acquisition. An offer would probably need to come from **Anheuser-Busch InBev**, which Lemann controls along with a group of other Brazilian billionaires and wealthy Belgian families, for the \$178 billion soft-drink maker to be swallowed. AB InBev and Coke declined to comment.

As recently as 2015, Buffett called a deal "very unlikely," because Coke wasn't looking for one. But in December, his son Howard said he wouldn't stand for reelection to the company's board. CEO Muhtar Kent also said he'll step down next year and hand the reins to his lieutenant, James Quincey. That's helped fuel speculation: The younger Buffett's departure might make it less awkward for Berkshire to fund a takeover, and new management could be more open to a change. "This seems like a situation tailor-made for a 3G transformation," said Steve Wallman, a fund manager and longtime Berkshire shareholder. —Craig Giammona and Noah Buhayar

The bottom line Lemann has almost hit his goal of cutting \$1.5 billion in annual costs out of Kraft Heinz, and he may be looking for a new target.

Wall Street

Maybe a Good Manager Can't Run Everything

- ► The Walmart and Microsoft star who went to Citadel—briefly
- "One leadership guru doesn't fit everyone"

Ken Griffin isn't a people person. The billionaire founder of hedge fund **Citadel** has proved himself an adept reader of markets and a savvy investor, thriving in areas of finance where an otherworldly mastery of electronic markets takes precedence over personal relationships. Back on earth, Griffin is notoriously hard to work for.

Case in point: Kevin Turner, the former chief operating officer of

Microsoft, who lasted only seven months in the hothouse of Citadel's Chicago headquarters before unexpectedly leaving on Jan. 27. Griffin hired Turner in July as the first chief executive officer of Citadel Securities, a market-making unit of Citadel that acts as a middleman for its customers, trading stocks, options, swaps, and Treasury bonds. Griffin's objective is to transform the little-known operation into a powerhouse that facilitates buying and selling in an array of securities for investors around the world.

"We were struggling with how to manage the complexity that goes with achieving global scale across products and geographies," Griffin said in a November interview for a profile of Turner that fell apart after his surprise departure. "How do you handle the matrix of Europe, Americas, and Asia across rates, FX, commodities, and equities? How do you make that work every minute of every day?"

Apparently not with Turner in charge. That conclusion was reached by "mutual agreement," Citadel says. Turner has an impressive résumé. He ascended from cashier to highlevel executive at **Walmart Stores**. In 2005 he was wooed away to Microsoft, where he spent 11 years as chief operating officer and became its highest-paid executive. "He is a guy who is very results- and accountability-oriented," says former Microsoft CEO Steve Ballmer.

Griffin gambled that Turner's résumé could translate to finance, agreeing to pay him \$25 million a year for two years for his perspective, according to a person familiar with the matter. The challenge Turner faced was parlaying his experience building out Microsoft's cloud computing business and boosting retail sales at Sam's Club into increasing swaps and bond trading.

Turner often speaks of businesses "creating clarity" to "separate the urgent from the important" to "generate energy." A voracious reader of business strategy books, he seeks out the famous authors. At Walmart he brought in Jim Collins to help his executives learn how to go from *Good to Great*. Deepak Chopra got the call to discuss *The Soul of Leadership* with Turner's Microsoft colleagues. Within his first few days at Citadel

Mystery Deal

Investment manager
Anthony Scaramucci, in line
to become an <u>assistant</u>
to Donald Trump, may now get

Scaramucci had filed all ethics disclosures required for the White House role, says his lawyer.

a lesser role, according
to a senior administration
official. The change
may be related to the deal

to sell his firm SkyBridge Capital to a subsidiary of Chinese conglomerate

Scaramucci says he doesn't know the identity of RON's investors and relied, as is customary, on RON's managers to yet them

HNA Group and little-known
RON Transatlantic. RON
declines to disclose who
its investors are. The deal values
SkyBridge at \$180m or
more, say people familiar with

"They bought SkyBridge in spite of, not because of, my affiliation with the administration," says Scaramucci, because the buyers know he'll recuse himself from SkyBridge-related the matter, or 7.2 times earnings before interest, taxes, depreciation, and amortization.

Similar firms often get 3 to 5 times Ebitda, says Karl D'Cunha of CBIZ Valuation Group. Scaramucci says the price was fair and he turned down higher offers.

—Zachary Mider, Katherine Burton, and Simone Foxman

FEDERAL RESERVE BANK, ASSET FIGURES INCLUDE OPEN-ENDED MUTUAL FUNDS, AND XXCLUDE MONEY MARKET FUNDS, FUNDS OF FUNDS AND ETTES, DATA, MORNINIGSTAR

Markets/Finance

Ismail with teammates, their faculty adviser, and Janet Yellen at the College Fed Challenge

■ Securities, he gave Carol Dweck's Mindset: The New Psychology of Success to senior executives. "One leadership guru doesn't fit everyone," he said in November.

Turner's unfamiliarity with the world of finance came out at client meetings, where his repeated use of clichés and catchphrases from the business books he constantly read made for uncomfortable encounters, according to people familiar with the matter. One Citadel Securities executive would warn customers before meeting Turner not to expect any details from him, according to another person. Turner name-dropped his former bosses Bill Gates and Sam Walton. He was unwilling to engage with employees a few levels below him, even when they knew more about the business than he did, according to one of the people who encountered him at Citadel and asked not to be named. Turner declined to comment.

Turner's departure brings Citadel Securities back to Square One. Peng Zhao had left the unit upon Turner's arrival to take on the newly created role of chief scientist. Now that Turner's gone, Zhao, who has been a standout success in his decade at the firm, has been named the new CEO. One of the most senior executives within Citadel Securities, he previously held the title of global head of market making. Profit margin at Citadel Securities "should be north of 30 percent," according to Griffin, who declined to comment beyond a statement the company previously sent after Turner's departure.

Zhao has stayed mainly in the background while earning Griffin's respect for his intelligence, according to a person familiar with the matter. While earning a Ph.D. in statistics from the University of California at Berkeley, he published a paper about an analysis method, "On Model Selection Consistency of Lasso," in the *Journal of Machine Learning Research* in 2006.

A methodical executive, Turner counted the days he'd been on the job. In an interview in November he noted it was his 70th day in charge. A couple of weeks earlier—Day 58—as part of the great fanfare surrounding Turner's hire, Griffin brought him onstage at a client event at the New

York Public Library. Former Federal Reserve Chairman Ben Bernanke, whom Citadel named as an outside senior adviser in 2015, also spoke at the event.

Griffin has seen executives come and go in short order before. In 2008 he hired former Merrill Lynch executive Rohit D'Souza to spearhead his plan to create an investment bank; he quit a year later. His replacement, Patrik Edsparr, was ousted after seven months following disagreements with Griffin over business strategy and management. Griffin disbanded the investment bank in 2011, but its electronic trading systems and infrastructure became part of what's now the marketmaking unit.

"I want tension in my business," Griffin said last year. "Tension creates change. Change is necessary to evolve and prosper. I am never satisfied." No doubt Turner understood this best on Day 125, his last at Citadel Securities.

—Matthew Leising and Annie Massa

The bottom line Ken Griffin hired Microsoft's highest-paid executive, even though he didn't have a finance background. He lasted seven months.

The Fed

Rutgers Over Princeton In Epic Nerd Fight



- A contest where college students are judged on their Fed policies
- "It's intimidating, because these people are economists"

Ali Haider Ismail's hands were shaking. Waiting in a Federal Reserve governor's corner office in Washington, with its fireplace and shelves of books and manuals, he thought about what it would be like to work for the central bank. Then he had to pee again.

It was early December, and Ismail

was preparing to argue that the Fed should raise interest rates three times in the coming year, dissenting from those who supported more gradual increases. He knew he'd be grilled on policy recommendations and economic forecasts, and he knew they'd throw some curveballs.

Ismail isn't a central banker. He's a senior at Rutgers University who, along with four schoolmates, would win the three-day College Fed Challenge, a competition the central bank runs to teach students about monetary policy and to promote economics as a field of study or career.

Under the chandelier of the Fed's boardroom, the Rutgers students sweated their way through a presentation and questioning by the judges—Ellen Meade, a senior adviser at the Fed; William Strauss, senior economist at the Federal Reserve Bank of Chicago; and Argia Sbordone, a vice president at the Federal Reserve Bank of New York.

"I was so nervous," says sophomore Ashton Welles, an economics and computer science major who competes in hackathons in his spare time. "It's intimidating, because these people are economists. This is what they do all day, every day."

The Rutgers students had rehearsed so much, they could almost recite their presentations from memory. In mock deliberations, team members referred to one another as "Governor," to replicate official discussions by the Board of Governors. Professors and alumni in business and government—some of them former competitors—drilled the team about labor market data and other issues.

Before the official start on the last day of competition, Federal Reserve Chair Janet Yellen took photos with the five finalist teams. In early rounds, judges praised Rutgers, calling its economic forecast "insightful and well thought out." Ultimately, the team beat out future economists from Appalachian State, Dartmouth, Princeton, and the University of Chicago.

Two weeks after the event, the Fed increased its benchmark rate by a quarter percentage point, a move widely expected by financial markets. The Rutgers team wasn't surprised either, having spent 15 hours every week since September poring over news reports and academic papers,

even reading the footnotes on former Fed Chairman Ben Bernanke's blog.

"These are the economics that you learn in class, in practice," says Ismail, a four-year veteran of the competition who's double-majoring in economics and mathematics. "After high school you think you're a big hotshot, you've read the macro textbook—and then you walk into the first meeting and you're like, 'Oh, man, I know nothing.'"

Ismail is working on a thesis about the collapse of Bear Stearns. He and teammate Shivram Viswanathan, a junior majoring in economics and mathematics, want to pursue Ph.D.s. But for all the teammates, the real world beckons. In June, junior Karn Dalal and senior Andrew Lee are headed to Citigroup for an internship and a job, respectively. Ismail starts at the Chicago Fed after he graduates in May. —Lananh Nguyen

The bottom line College students competing in the Fed Challenge gain a better understanding of how the U.S. economy works.

Wealth Management

How Fancy Private Bankers Cross-Sell

- ► JPMorgan ex-employees describe the push to sell in-house products
- "Clients expect to hear from us about all of these capabilities"

Salespeople know the drill: Go to the morning pump-up sessions. Hit the revenue targets. Move product or move along. It's the playbook for selling everything from phones to time shares, but it also crops up in more rarefied environments—such as the Manhattan offices of a **JPMorgan Chase** wealth management unit for the banks's richest customers. There, private bankers are encouraged to steer client assets into certain funds and instruments that generate rich fees for the bank, according to several former employees.

How banks cross-sell—essentially, a "would you like fries with that?" approach—has come under regulatory scrutiny after revelations last year that **Wells Fargo** employees opened fake accounts in clients' names to reach sales targets. Wells Fargo admitted to a lapse and changed its incentives.

No one is accusing JPMorgan of faking accounts, and every company wants to sell its own stuff. But the bank stands out because it has so many in-house investments to offer, including the biggest pool of in-house mutual funds in the U.S. banking industry. Several former employees say the pep talks and reward system at the private bank made them uncomfortable: They felt pressured to push certain investments even when they believed others might be better for their clients.

JPMorgan discloses to clients that it favors its own products and says it serves wealthy clients by offering a wide range of investment, banking, and lending options. "Clients expect to hear from us about all of these capabilities," says Darin Oduyoye, a JPMorgan spokesman. The private bankers aren't paid commissions. Oduyoye says the system benefits bank and client alike.

Seven people who worked in various roles across J.P. Morgan Private Bank in the last few years, three of them as recently as mid-2016, say they functioned less as advisers than as salespeople. They describe days that began at 8 a.m. in the "war room" high above Park Avenue. The meeting opened with a market overview that often shifted to a discussion of products. Oduyoye describes the morning meeting as educational rather than sales-driven, with the focus on market events.

The advisers were encouraged to offer "managed solutions" to clients, say several of the former employees. These accounts let clients set their own investment objective, such as growth. Customers pay a management fee, and portfolio managers pick the products and make the trades. The bank prefers in-house products, from which it earns additional fees, as it recently disclosed to clients of its managed products.

The emphasis on selling was reflected in the pay structure, which consisted of a salary and annual bonus. Five of the former bankers describe factors listed in the pay scorecard to determine compensation. They say it measured, among other things, how much revenue they were generating, but didn't address how their clients' investments were performing.

While the bankers weren't explicitly told to push in-house funds, they

Welcome to In-House

Assets under management in mutual fund families of large banks, as of Dec. 31, 2016

JPMorgan
Wells Fargo
Goldman Sachs
Morgan Stanley
\$24b
\$269b

\$77b
The eighth-biggest fund family overall

say, meeting revenue marks was all but impossible without selling products that generated the highest fees for the bank, whether in-house or from partners sharing fees. Putting brokerage clients into other funds wouldn't count toward an adviser's goals, three former employees say.

The bankers agreed to describe the sales culture as long as their names weren't used, because they still work in related businesses. Current employees of the private bank unit declined to discuss it. Oduyoye says performance measures at the private bank "are designed to reflect how well bankers are serving clients as well as risk management priorities of the firm." He declined to say whether that represented a change in practice.

JPMorgan has in the past been open about cross-selling as a business strategy. "Cross-selling is a big deal," Chief Executive Officer Jamie Dimon said at an investor conference in 2012, referring to the bank's retail business. He has also emphasized that the practice must benefit customers.

In October, after the Wells Fargo scandal, three U.S. financial regulators asked banks for information about how their sales practices may disadvantage customers. The Office of the Comptroller of the Currency, one of the watchdogs, says the investigation is still under way. After the request, JPMorgan Chief Financial Officer Marianne Lake said an internal investigation of its sales practices had turned up sporadic problems, which she didn't identify, but no systemic lapses. "Cross-sell is an outcome," she said during an earnings call with investors. "It's not an objective." —Neil Weinberg

The bottom line Even private bankers for the very rich have incentives to act as salespeople for inhouse products.





Across the Middle East, Arab nations—including Saudi Arabia—are doing business with Israeli-owned tech companies. There's a reason only one side is talking about it



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ver the course of 30 years working in Israeli intelligence, Shmuel Bar immersed himself in the hermeneutics of terrorism. Using techniques of literary analysis more familiar to Koranic scholars and Bible critics, he came to recognize the distinctive language and religious phrases that suicide bombers used in their farewell videos. "Victory is with the patient" appeared frequently in the martyrdom declarations of Hamas recruits. Al-Qaeda adherents favored the call "God, count them, kill them, and don't leave any of them."

Bar, a tousle-haired 62-year-old with a wry sensibility, emerged from government service in 2003 amid the proliferation of global terrorism, and in the rising sense of doom he saw a business opportunity. He founded a company called IntuView, a miner of data in the deep, dark web—a sort of Israeli version of Palantir, the Silicon Valley security contractor. Tapping engineering talent in Israel's startup hub of Herzliya, he adapted his analyst's ear for language to custom algorithms capable of sifting through unending streams of social media messages for terrorist threats. He sold his services to police, border, and intelligence agencies across Europe and the U.S.

Then, two years ago, an e-mail arrived out of the blue. Someone from the upper echelons of power in Saudi Arabia, Bar says, invited him to discuss a potential project via Skype. The Saudis had heard about his technology and wanted his help identifying potential terrorists. There was one catch: Bar would have to set up a pass-through company overseas to hide IntuView's Israeli identity. Not a problem, he said, and he went to work ferreting out Saudi jihadis with a software program called IntuScan, which can process 4 million Facebook and Twitter posts a day. Later, the job expanded

to include public-opinion research on the Saudi royal family.

"It's not as if I went looking for this," Bar says, still bemused by the unexpected turn in a life spent confronting Israel's enemies. "They came to me."

Bar says he meets freely these days with Saudis and other Gulf Arabs at overseas conferences and private

events. Trade and collaboration in technology and intelligence are flourishing between Israel and a host of Arab states, even if the people and companies involved rarely talk about it publicly. When a London think tank recently disinvited Bar from speaking on a panel, explaining that a senior Saudi official was also coming and it wasn't possible to have them appear together, Bar told the organizers that he and the Saudi gentleman had in fact been planning to have lunch together at a Moroccan restaurant nearby before walking over to the event together. "They were out-Saudi-ing the Saudis," he says.

Peace hasn't come to the Middle East. This isn't beating swords into plowshares but a logical coalescence of interests based on shared fears: of an Iranian bomb, jihadi terror, popular insurgency, and an American retreat from the region. IntuView has Israeli export licenses and the full support of its government to help any country facing threats from Iran and militant Islamic groups. "If it's a country which is not hostile to Israel that we can help, we'll do it," Bar says. Only Syria, Lebanon, Iran, and Iraq are off-limits.

The Saudis and other oil-rich Arab states are only too happy to pay for the help. "The Arab boycott?" Bar says. "It doesn't exist."

Cybersecurity is particularly ripe for collaboration. In 2012, when hackers breached the computer system of Saudi Aramco,



"If it's a country which is not hostile to Israel that we can help, we'll do it"

the national oil company, Israeli businesses were called to help unlock the jam, and "some are involved in an ongoing basis" through offshore companies, says Erel Margalit, a venture capitalist and member of the Israeli parliament. Expect more of this, said Rudy Giuliani, in a late January interview in Israel, where he met with Prime Minister Benjamin Netanyahu

on behalf of President Donald Trump. "I see it as well beyond [cyber] in terms of areas of cooperation," added the former New York City mayor, who's advising Trump on cyber matters.

Saudi officials declined to speak on the record about possible ties to Israel. Questions e-mailed to the kingdom's interior ministry and its embassy in Washington for this article were unanswered. A source in Riyadh, insisting on anonymity, e-mailed a statement denying any trade links between Israel and Saudi Arabia. "In regard to defense systems technology, Saudi Arabia has never dealt with Israel in this field or any other field," the statement said. "Israel is not among the countries that have commercial relations with the Kingdom."

The Arab embargo of Israel, nominally in force since the Jewish state's founding in 1948, necessitates that all business between Israel and most Arab states remain strictly off the books, cloaked by intermediaries in other countries. But the volume and range of Israeli activity in at least six Gulf countries is getting hard to hide. One Israeli entrepreneur set up companies in Europe and the U.S. that installed more than \$6 billion in security infrastructure for the United Arab Emirates, using Israeli engineers. The same companies then pitched Saudi Arabia to manage overcrowding in Mecca. Other Israeli businesses are working in the Gulf, through front companies, on desalination, infrastructure

protection, cybersecurity, and intelligence gathering.

"All the big ones are active and some of the small ones," says Shabtai Shavit, who ran the Mossad from 1989 to 1996 and is chairman of the Israeli security firm Athena GS3. Shavit won't offer details on who's doing what. "You don't saw off the branch you're sitting on," he says.

Discretion is particularly prized when it comes to weapons sales. At the New Hampshire plant of Elbit Systems of America, a subsidiary of Elbit Systems, Israel's largest private defense contractor, there was a procedure when customers visited from Kuwait, Qatar, or Saudi Arabia, workers say. Managers purged the building of Elbit signs, Israeli maps, and Hebrew writing. Employee nameplates were removed temporarily, "if you had an obvious Jewish name," says Richard Wolfe, who worked at the facility for 15 years, through 2013, designing lenses for the various optical systems the plant produces. Some components were also scrubbed of Israeli markings, another former worker says. Elbit Systems of America said in a statement that it isn't company policy to conceal the Elbit name or other associations with Israel.

Elbit's sales to Saudi Arabia attracted some attention two years ago when one of its New Hampshire technicians, an American named Chris Cramer, mysteriously died while servicing missile systems in the kingdom. According to a travelogue Cramer posted on Facebook, he was sent to help the Saudi army with a series of live-fire demonstrations of Elbit's newly upgraded targeting system for TOW missiles. Cramer had worked for Elbit for 12 years and helped build the system. He was found dead beneath his third-story hotel room in the military city of Tabuk one day before he was due to come home. Saudi police called the death a suicide, which Cramer's family rejected.

In a statement issued in Israel, Elbit did not specify what Cramer had been doing in Saudi Arabia. It said only that he was working on an "American product" with no Israeli technology.

n speeches, Netanyahu likes to guip that the three reasons Arabs are interested in Israel these days are "technology, technology, and technology." That interest doesn't translate into open business relationships for one reason above all others: the Israeli-Palestinian problem. Cooperation in the Gulf cannot become truly lucrative until "the lightbulb goes off in Netanyahu's head" and he signs a peace treaty, says Riad al Khouri, a director at political risk adviser GeoEconomica, based in Amman, Jordan. "The Palestinians are still the gatekeepers." And the conflict could quickly get worse. Trump said during his campaign, and reiterated after his inauguration, that he intends to move the U.S. Embassy from Tel Aviv to Jerusalem. His nominee for ambassador to Israel, his bankruptcy lawyer, David Friedman, has said he intends to work from Jerusalem, calling it "Israel's eternal capital." The Palestinian Fatah party has stated such a move would "open the gates of hell." Since Trump took office, Netanyahu's government has also announced it will build an additional 5,500 housing units in settlements in the occupied West Bank.

The Saudis say they'll make peace with Israel after Israel makes peace with the Palestinians. The offer was reiterated in 2016 by two retired senior Saudi officials in rare public appearances alongside Israeli counterparts in Washington and Jerusalem. Salman al-Ansari, a former banker and media executive who runs a new Saudi advocacy group in Washington, sent an even stronger signal in October. In an article for the *Hill*, he wrote that Saudi Arabia and Israel should form a "collaborative alliance," rooted in open business ties, to assert their rightful

place as the "twin pillars of regional stability." Arab critics skewered al-Ansari for not mentioning the Palestinians in the article. He says the omission was intentional, reflecting his wish to change the old narrative of conditioning everything on Palestinian statehood. Even without formal diplomatic ties, he says, the Saudi-Israeli relationship can blossom under the "pragmatic and forward-thinking" Deputy Crown Prince Mohammed bin Salman.

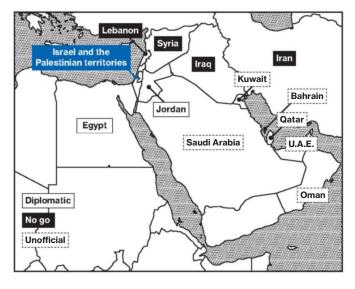
That openness could change quickly if Trump and Netanyahu provoke another Palestinian intifada. Still, these feelers "show how Saudi Arabia is changing," says Dennis Ross, who conducted Arab-Israeli diplomacy for three U.S. presidents. "You'd never have seen something like that before. These are clearly straws in the wind."

On the ground, Netanyahu's frontman for regional cooperation is Ayoob Kara, a 61-year-old Arab-Israeli parliamentarian who recently became a full cabinet minister. A member of the Druze sect and a hard-liner on Palestinian peacemaking, Kara shares the Likud Party dream—or some might say fantasy—of normalizing relations with Arab states while retaining large swaths of the West Bank.

On a day last November, Kara stood on the veranda of a Jordanian mineral spa overlooking the Dead Sea and swept his left arm southward toward the Gulf of Aqaba, where Israel, Jordan, and Saudi Arabia converge. Israel and Jordan are developing plans for the desolate area where Moses led the Israelites while wandering the desert for 40 years, and Kara insists Saudi Arabia will eventually be involved. "They want our technology, they want our expertise, and they really want to get the Palestinian headache out of the way," he says.

Plans start with the biggest public works collaboration ever proposed among Israel, Jordan, and the Palestinians. Dubbed the Red Sea-Dead Sea Conveyance Project, it's a \$10 billion pipeline and desalination venture, backed in part by the World Bank, that will siphon water from the Red Sea to the Dead Sea, 1,400 feet below sea level. The project, whose construction is scheduled to start in 2018, will produce drinking water and electricity for Jordan, Israel, and the Palestinians. Waste brine will then flow into the Dead Sea, a vast mineral sink that's been shrinking for years. The project could ease water conflicts in the hydrological crossroads where Israel, Jordan, the West Bank, and parts of Saudi Arabia, Lebanon, and Syria

Israel's Regional Ties



all rely on the same handful of rivers and aquifers.

Kara has more immediate concerns, too, as he gazes across the water at the West Bank and Israel. Invited here to address the Swedish-funded EcoPeace Middle East conference on regional water sharing, Kara also arranged to meet a Jordanian counterpart to discuss a possible trade route from Europe and Turkey through the Israeli port city of Haifa, to Jordan, Saudi Arabia, and the Gulf. Since the outbreak of the Syrian civil war, Haifa has become a transshipment hub for Turkish goods that used to travel by road to the Gulf through eastern Turkey and Syria. Today about 20 Turkish trucks a week arrive by rusty freighter on the Haifa docks, where Israeli officials X-ray and process them in a drive-through warehouse and send them on their way across the Galilee to Jordan. For a time, customs agents at the Jordanian-Saudi border waved them through. But passage to Saudi Arabia ended abruptly two years ago, when a competitor in Riyadh ratted out several truckloads of Turkish tomatoes that had arrived, via Haifa, in Saudi markets, according to a Haifa freight broker.

Kara is working with Gulf diplomats, through partners high up in Jordan's government, to attempt to reopen the Israeli-

Saudi route to the wider Arabian Peninsula, a move that would quintuple Turkish truck traffic overnight, the freight broker says. "Very soon things will be out in the open, and you'll see Netanyahu landing in one of these countries," Kara says. His Jordanian go-between agrees: "Times have changed," he says. "They're all

Netanyahu also uses other aides for high-level Arab contacts, including his personal attorney, Yitzhak Molcho, and former Ambassador to the United Nations Dore Gold. Off and on since the Oslo Accords in the early 1990s, Israel has operated trade offices in Oatar and Oman, and about a year ago it received approval to station a diplomat in the U.A.E.'s capital emirate, Abu Dhabi, as its representative to the International Renewable Energy Agency. The office has the capacity to function as an embassy for Israel's expanding ties in the Gulf.

Kara's role is unique. The only Arab in Netanyahu's cabinet, he meets regularly with Arab diplomats and businessmen in Cairo, Casablanca, Geneva, and New York. The Druze sect, which numbers about 140,000 in Israel and an additional 850,000 in Lebanon, Syria, and Jordan, formed a millennium ago. Druze have survived in tightknit farming clans in mountain villages by paying allegiance to whatever political authority is in control.

Two of Kara's uncles were killed by Arabs for cooperating with Jews before Israeli statehood. He was injured in an Israeli army tank while fighting in the 1982 Lebanon War and discharged as an officer after two of his brothers were killed. He practiced law in northern Israel for 15 years, won a Knesset

> seat in 1999, and broke into the Likud Party leadership in 2006. To celebrate Israel's 58th Independence Day that year, he threw a party for Netanyahu and hired kosher butchers to slaughter 58 sheep for the occasion. Netanyahu feasted with 7,000 Druze townspeople in front of the Kara home, in Dalivat al-Karmel.

"I feel like a Jew, but I'm not a Jew,"

"I connect with people in Arabic, but I don't give up on Israel's needs"



Kara says, sitting with his college-age daughter, Ameera, on the stone portico by his front door. "I connect with people in Arabic, but I don't give up on Israel's needs." He whips out a cell phone to show a photo of a guy lighting a fat Cuban cigar for him in a New York hotel suite. The older bald man, who's wearing suspenders and holding the lighter, is a member of the royal family of Qatar, Kara says, and one of his go-to go-betweens.

He also says there's Gulf interest in a second Red Sea pipeline, an existing one built 50 years ago in partnership with the shah of Iran when the two countries maintained secret alliances. The state-owned Eilat-Ashkelon Pipeline Co. operates the 160-mile conduit to pump oil from tankers in the Red Sea port of Eilat to the Mediterranean city of Ashkelon. It bypasses the Suez Canal and can cut shipping costs to Europe and North America. When the shah was overthrown in 1979, Israel took sole ownership of the project. A Swiss appeals court last year awarded Iran \$1.1 billion in lost revenue, a sum Israel refuses to pay its sworn enemy. Kara says the prospect of using the pipeline keeps coming up in his discussions with Saudis.

or now, "everything has to be under the radar," says Shavit, the former Mossad chief. That's how Mati Kochavi blazed Israel's trail into the Gulf with a \$6 billion security business in the United Arab Emirates. An Israeli serial entrepreneur who lives part time in the U.S., Kochavi, 54, founded several high-tech security companies after the Sept. 11 terrorist attacks. One, called 4D Security Solutions of South Plainfield, N.J., built the perimeter monitoring systems at New York's airports.

Kochavi shopped his companies' services to the leaders of the U.A.E. and Abu Dhabi. He didn't hide that he and most of his companies' technology and many of their employees came from Israel. Not a concern, he was assured, as long as the contractors weren't domiciled in Israel. In fact, Israel's security prowess was seen as an advantage in a country facing similar threats but lacking sophisticated defenses, former Kochavi employees say. "There weren't even fences when we started," says one former Israeli intelligence officer, describing the emirate's 3 million-barrel-a-day oil infrastructure. "A camel could have walked up to the production facilities and drank the oil." Kochavi, through his spokesman, Moshe Debby, declined to comment.

Kochavi sold the U.A.E. on what became the most comprehensive integrated security system in the world at the time. From 2007 through 2015, a Kochavi company called AGT International, based in Zurich, installed thousands of cameras, sensors, and license-plate readers along the U.A.E.'s 620-mile international border and throughout Abu Dhabi. AGT's artificial intelligence platform, code-named Wisdom, analyzed images and data from the devices. Nominally, Kochavi managed the operation out of the U.S. and Switzerland. The real brainpower, however, resided in Israel, at a separate Kochavi company called Logic Industries.

Twice a week at the height of the project, a chartered Boeing 737, painted all white, took off from Tel Aviv's Ben Gurion International Airport, touched down briefly in Cyprus or Jordan for political cover, and landed about three hours later in Abu Dhabi with dozens of Israeli engineers onboard, many of them out of the intelligence services. They lived and ate togethernever in restaurants—carried location transmitters and panic buttons at all times, and disguised their nationality and Hebrew names as best they could. They called Israel "C country"; Kochavi was known as "MK."

Most Arabs who worked with AGT saw through the Swiss veneer, which caused occasional tension but didn't stop the formation of some close friendships. The charade got a bit absurd at times, such as when U.A.E. intelligence officials would wryly address the Israelis by pseudonyms from the TV series *Lost*, such as "Boone" and "Sawyer."

The Israeli technology demonstrated its value in December 2014, when a woman stabbed an American schoolteacher to death in the restroom of an Abu Dhabi mall. She then drove to the home of an Egyptian-American doctor and planted a bomb, which was later defused. AGT's network, processing video and still images captured at the scenes, identified the suspect within a day. She was convicted and executed seven months later. Government spokesmen in Abu Dhabi didn't respond to e-mailed questions about AGT's work in the U.A.E. An embassy spokesman in Washington declined to comment.

In 2014, as the U.A.E. project was winding down, AGT and 4D teamed up on a crowd-management system with Mobily, a Saudi-based cellular provider, for a place so sacred that non-Muslims can't even set foot there: Mecca. With more than 3 million people flooding the city for the annual five-day hajj pilgrimage, Saudi Arabia's Ministry of Hajj solicited bids for controlling access to the area. Although the Saudis ration hajj permits, they don't turn away pilgrims who make it into the holy city. So the flow of pilgrims has to be controlled long before their buses reach Western Saudi Arabia from throughout the Middle East and North Africa. But how?

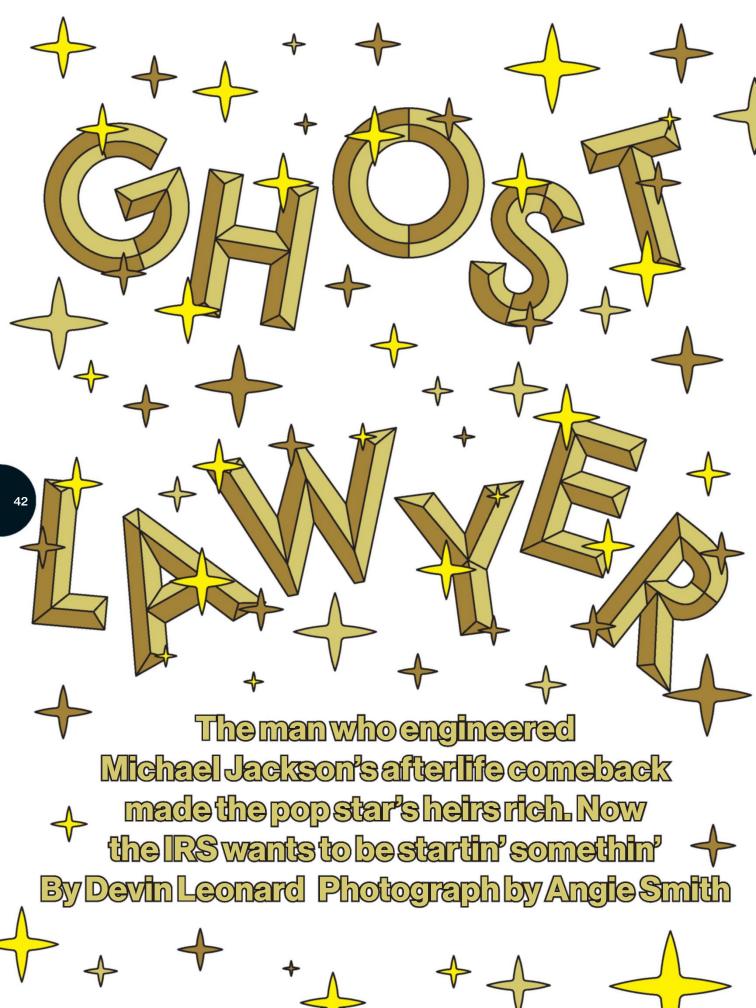
4D engineers in New Jersey designed a system requiring every credentialed pilgrim to wear an electronic bracelet that would register his or her presence on hajj buses. The buses would use Mobily's cellular system to notify a central computer how many travelers were on each bus—both with bracelets and without. A red light could flash on the outside of buses carrying unpermitted passengers, alerting police to pull them over long before they reached Mecca. Or automated gates might turn them back at electronic checkpoints. Saudi officials could also deploy 4D's design like an air traffic control system, sequencing bus arrivals to minimize congestion.

The Kochavi companies and Mobily demonstrated a prototype of their system at the Hajj Ministry in Jeddah. The minister at the time, Bandar al-Hajjar, participated in the test with several aides, each donning 4D bracelets on a bus in the parking lot. At one point a computer screen showed there were more bracelets than passengers on the bus, a potentially embarrassing error. But al-Hajjar smiled and pulled a second wristband out of his pocket. "He was testing us," says a former Kochavi employee.

The AGT-4D system earned the ministry's top score of three prototypes presented. Yet they didn't get the job. Several months later, some engineers at Saudi Arabia's King Fahd University of Petroleum and Minerals published an almost identical idea in an academic journal. At last year's hajj, the Saudis required pilgrims to wear bracelets for the first time. The police announced they turned back almost 200,000 people without permits. A Hajj Ministry spokesman didn't respond to e-mailed questions.

"Mobily has submitted a bid for the mentioned contract with an American company, but we did not win," wrote Mobily spokesman Mohammed Al Belwe, in response to e-mailed questions. "Claiming that this is a cooperation between Mobily and an Israeli company is totally misleading and incorrect.... Our policy will not allow such teaming-up."

A former senior engineer in Kochavi's operation says he and his team believed their idea was stolen. Still, he marvels that the test happened at all. "What always surprises me is how much money and technology and equipment flows between mortal enemies on the political stage," he says. But Islam's holiest site appears to be, at least for now, a leap too far. \blacksquare





even years after Michael Jackson's fatal overdose of propofol and lorazepam in 2009, the statute of limitations on gossiping about the deceased is, apparently, over. In one of her rare interviews in the midst of the presidential campaign, future First Lady Melania Trump told the luxury magazine *DuJour* how Jackson, a friend of Donald's and onetime Trump Tower resident, mischievously suggested they kiss to make

her husband jealous. Then Madonna, on CBS's *Late Late Show*, revealed that she'd smooched amorously with him long ago. And the *New York Post*'s Page Six dropped a chunk from Tommy Hilfiger's memoir, *American Dreamer: My Life in Fashion and Business*, about the designer's visit in the 1990s at Neverland Ranch, the singer's compound in Santa Barbara County, Calif. After encountering a giraffe and a string of baby elephants outside, Hilfiger found Jackson in his office, with a bandage on his nose, wearing sunglasses and sitting on "an enormous gold-and-burgundy throne." His two oldest children, Prince and Paris, were there, dressed "like characters from a Broadway show or *The Sound of Music*—velveteen knickers, dirndl jumper, ruffled blouses, patent leather shoes, each in full makeup."

Paris, in response to such banter and because she's now 18, just gave her first full-length interview in a *Rolling Stone* cover story, setting the record straight: She'd had a wonderful child-hood until her father's death at age 50. After, she struggled with drugs and attempted suicide several times, but she's now happy, clean, and, the magazine reports, "heir to a mammoth fortune—the Michael Jackson Trust is likely worth more than \$1 billion, with disbursements to the kids in stages."

That number could change if the IRS has anything to do with it. The agency's lawyers are taking the executors to trial, set to begin sometime this month in U.S. Tax Court in Los Angeles. The IRS intends to prove that \$702 million of that inheritance is owed in penalties and back taxes. The crux of the case is the disputed value of Jackson's name and likeness, which is to say the right to use his visage on everything from coffee cups to baseball caps. An estate tax filing is supposed to be a snapshot of the person's assets on the day of his expiration, and under California law that includes the value of a star's name and likeness. The IRS claims Jackson's should have been valued at \$434 million. The estate claims that it was worth a mere \$2,105, implying that his image had been rendered all but worthless by stories about skin bleaching, his obsession with plastic surgery, prescription drug abuse, odd parenting choices-such as covering his children's faces in black veils or Spider-Man masks in public-and allegations that he molested young boys who visited Neverland.

Celebrity estate lawyers are watching closely. It felt like a record year for the deaths of icons in 2016, with the passing of Prince, David Bowie, Leonard Cohen, Merle Haggard, Muhammad Ali, and Debbie Reynolds and her daughter Carrie Fisher. Fisher's December departure prompted reports that Walt Disney was rushing to make a deal to use her digital likeness in future *Star Wars* movies. (Disney denied this.) The Jackson case signals that tax examiners see enhanced value in a deceased star's face and name as technology and social media open up novel paths to profit, such as the ability to conjure up appearances using computer-generated imagery and voice software.

The man largely responsible for the estate's current fiscal health is not Michael Jackson, or not exactly. For the balance of the past 37 years, a 66-year-old Los Angeles entertainment attorney named John Branca, a partner at the firm Ziffren Brittenham,

has handled the singer's record deals and tried to shield him from his own worst impulses. After Jackson's death, Branca and John McClain, a veteran music industry executive and former Jackson confidant who keeps a lower profile (and declined to be interviewed for this story), were appointed executors of the singer's estate, which gave them responsibility for generating income for the beneficiaries named in his will—his children Prince, Paris, and Blanket, and his mother, Katherine Jackson, whom he designated as their guardian.

"Michael used to say to me, 'You and I, Branca, we're going to be examples for the business, we're going to be the kings,'" Branca says. It's early July, and he's reclining in the opulently furnished living room of his home in a gated community high in Beverly Hills. He looks like an aging rock star himself, intent on defying the calendar. He's slim, brown-haired, and dressed fashionably in a black polo shirt, black pants, and expensive-looking black leather sneakers. The twice-divorced Branca is engaged to Jenna Hurt, a 32-year-old model who makes a brief appearance and then withdraws to

let her fiancé hold court. The walls are covered with signed portraits of clients extolling his expertise, including Berry Gordy, the former head of Motown Records, the Eagles' Don Henley, Brian Wilson of the Beach Boys, and, of course, Jackson, who can be seen posing happily with Lisa Marie Presley, his first wife. Branca casually notes that he introduced them.

It all might be too self-congratulatory if Branca himself weren't so convivial. He grew up in Mount Vernon, N.Y., the nephew of the late Ralph Branca, a three-time All-Star pitcher for the Brooklyn Dodgers. Branca liked sports—he became an avid baseball card collector—but he was more interested in music. His parents divorced, and he eventually moved to Los Angeles to live with his mother, a dancer. As a teenager, Branca was kicked out of the Chadwick School in Palos Verdes Peninsula, Calif., and played keyboards in a band that opened for the Doors on the Sunset Strip in the '60s.

Branca enrolled in Los Angeles City College to study music, where he got A's on his harmony papers but felt out of his league when it came to playing with some of his fellow students, among them pianist Les McCann, a future soul-jazz great. "I just looked around and said, 'This is ridiculous. I don't belong here,' Branca recalls. So he got a law degree at UCLA in 1975 and found a job working for the late entertainment lawyer David Braun. Braun, whose clients included Bob Dylan, Neil Diamond, and former Beatle George Harrison, was established enough not to bother keeping up. One day the Beach Boys came into the office. "David didn't even know who they were and didn't care," Branca says. "So he sent me to the meeting. I was 27 years old at the time, and all of a sudden, I became the Beach Boys' lawyer."

Fortuitously, the Beach Boys' accountant also did Jackson's taxes. In 1980 he introduced Braun and Branca to the ascendant pop star, who'd recently turned 21 and was in the process of distancing himself from his domineering father and primary manager, Joseph Jackson. Branca found Jackson pleasantly eccentric. "He had sunglasses on, and he pulled them down and he goes, 'Do I know you?' Branca recalls. "I go, 'I don't think we've met, but I look forward to getting to know you.' And he goes, 'Are you sure we don't know each other?' I said, 'Michael, I would remember if we had met.' "The next day, Branca got a call from the accountant. Jackson was hiring him to be his attorney.

One of the first things Branca did was renegotiate what he describes as Jackson's "absurd" contract with his label, Epic

URTESY JOHN BRAN

Records, winning him a royalty rate that only a few artists such as Dylan enjoyed at the time. When Jackson was ready to unveil Thriller, he wanted to spend \$1.2 million on the video for the title track. Branca protested—this was a time when music videos typically cost \$50,000-but Jackson curtly told him, "I don't care. Just figure it out." Branca persuaded Showtime and MTV to pay a total of \$600,000 for a movie about the making of the Thriller video and got another company to spend \$400,000 on the home video rights. The finished 13-minute film featured a troupe of corpses rising from a conveniently located graveyard to dance with a zombielike Jackson, their knees high and claws up. Jackson, then a Jehovah's Witness, decided it was blasphemous and should be destroyed. Branca came up with another crafty fix. He told his client that Bela Lugosi, the star of the classic 1931 Dracula, was also religious and had had the movie's producers include a disclaimer to the theatrical release saying it didn't represent his personal views. "It was a complete fabrication," Branca says, laughing. Jackson added the disclaimer, and the hugely company in exchange for \$115 million and a yearly stipend that started at \$10 million.

That year, Jackson prepared the first of his wills, naming Branca and McClain as his executors. It was updated twice, as he had children, but the document essentially stayed the same.

It was getting harder for Branca to protect Jackson, though. He was abusing prescription drugs and acting strangely. He spent \$30 million, a record sum, to record *Invincible*, his splendid final studio album, released in 2001. Jackson blamed Sony when it sold a mere 8 million copies, a hit for any other artist. In July 2002, Jackson, looking pale and Kabuki-like, held a series of press conferences in New York in which he described himself as a victim of a racist music industry with a history of ripping off black artists like himself. He made headlines that year when he dangled infant Blanket over the railing of a hotel room in Germany so his fans could get a look.

Jackson overrode Branca's attempts to control how British television producer Martin Bashir used interviews in the show

popular video helped propel the album's sales to 100 million copies worldwide. It's still the best-selling record ever.

In 1984, Branca learned that the Australian corporate raider Robert Holmes à Court was shopping a company called ATV Music, which held the rights to more than 200 Beatles songs, including *Yesterday, Revolution, The Long and Winding Road*, and *Hey Jude*. An excited Jackson told Branca to spend whatever it took to acquire ATV. "It's my catalogue!" he wrote in a note. But Jackson and Branca's \$47.5 million offer was beaten by Marty Bandier and Charles Koppelman, two New Yorkers who promised \$50 million.

Bandier remembers flying to London on the Concorde with Koppelman to meet with Holmes à Court. "We thought it was a closing," he says. He noticed Branca on the same plane but didn't think anything of it. When they arrived, Holmes à Court said he'd accepted Jackson's lower bid. Branca had offered to let the seller's daughter, named Penny, keep the rights to the Beatles classic *Penny Lane*. He'd also agreed to have Jackson appear for an hour at an event in Perth put on by Holmes à Court's favorite charity. "It was depressing," Bandier recalls. Branca sold off the rights to the catalog's cinematic background music for \$6 million, which brought the effective price down to \$41.5 million. In the end, Jackson, who borrowed \$30 million to cover his costs, put only \$11.5 million in cash on what would become his life raft when he was drowning. Jackson gave Branca a Rolls-Royce for his efforts.

Three years later, Branca helped Jackson buy Neverland, listed at \$60 million, for \$17.5 million. Jackson was so pleased that he rewarded his attorney with another Rolls-Royce. Around the same time, Jackson was best man at Branca's wedding to his first wife. He brought along his beloved chimp, Bubbles, in a matching tuxedo. "I've got fun pictures of Bubbles with my ex-wife and people at the wedding," Branca says nostalgically. Little Richard, it should be noted, performed the service.

As things got rocky for Jackson, so did his relationship with Branca. Various people competed for the performer's ear, and Branca was fired, then rehired in 1993 when the star was in the throes of the first molestation accusations, which were settled in a civil suit for what was widely reported to have been \$20 million. Branca, now back in charge, thwarted other advisers who were pushing for Jackson to sell half of ATV to Sony for \$75 million to cover his costs. By 1995 he'd negotiated a deal for Jackson to merge ATV with Sony's music publishing

Living With Michael Jackson, which aired in 2003. In it, Jackson admitted he sometimes shared his bedroom with the youngsters who visited Neverland, including a young cancer survivor who sat beside him on camera, and blithely insisted that it was nothing unusual. Soon after, the boy's family accused Jackson of molesting him, which led to a criminal trial. In 2005 he was acquitted by a jury in Santa Maria, Calif. By then, Branca had been fired again, though he continued to get calls for help from Jackson's advisers. Finally, the Jackson maelstrom became too much, and Branca walked away from his

Without Branca, Jackson floundered. He was no longer releasing records or touring, so the only way he could afford his lifestyle was by basically borrowing against his half of Sony/ATV. By 2008 his debt secured by the publishing company had swelled to \$300 million. Fortress Investment, a New York hedge fund, purchased his mortgage on Neverland and threatened to foreclose if Jackson didn't pay up.

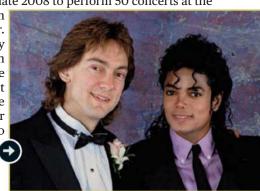
Then Dr. Tohme R. Tohme appeared, a person often described as a mystery man because he declines to provide details about his history or the provenance of his degree. "I'm a self-employed guy," Tohme says. "I advise many people, many top people in the world, about investments."

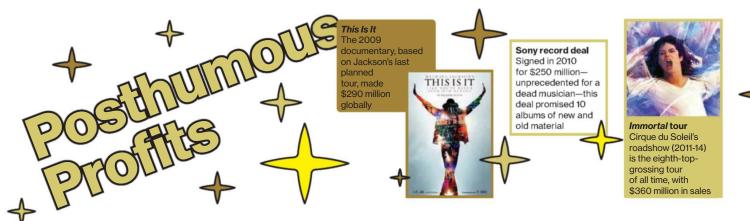
Tohme first met Jackson, who was in a wheelchair wearing mismatched socks, in Las Vegas, through his brother Jermaine. Tohme connected Jackson with Colony Capital, a real estate buyout company founded by Jackson admirer (and now Trump confidant) Tom Barrack. Colony purchased the debt on Neverland to keep the property out of foreclosure. "It was 10 days from being sold in court," Tohme says. After that, he became Jackson's manager, persuading him to return to the stage so he could raise money to pay off his debts.

Jackson agreed in late 2008 to perform 50 concerts at the

O2 arena in London the following summer. The concerts quickly sold out; Jackson expected to make \$50 million on ticket sales alone. Tohme insists the pop star wanted nothing to do with Branca and spoke ill of him in his

former best man.





final months. Eight days before his death, however, Jackson summoned Branca to a meeting at the Forum in Inglewood, Calif., where he was rehearsing. They embraced, and the attorney says Jackson told him, "Branca, you're back."

At this point in the interview, Branca disappears into a closet and returns with a framed letter bearing Jackson's signature. "Here's the letter he signed at that meeting confirming I was his lawyer again for all the family members that doubt it," Branca says.

Jackson looked sleepy at their meeting, Branca says, but he assumed his client was trying to conserve energy for his rehearsal. Eight days later, Jackson overdosed from the mix of sedatives administered by his personal doctor, Conrad Murray, who was later convicted of involuntary manslaughter. The outpouring of sympathy for Jackson was overwhelming. "His extraordinary talent and his music was matched with a big dose of tragedy and difficulty in his private life," then-President Barack Obama told CNN. "I don't think we can ignore that, but I think it's important to affirm what was best about him." Obama's eventual successor provided a more selfreferential tribute. "I knew Michael Jackson very well. He was a special guy. He was with me many times at Mar-a-Lago and Palm Beach." (On the campaign trail last year, Trump offered some unexpected analysis about the nature of this tragedy at a GOP town hall: "He lost tremendous confidence because of, honestly, bad, bad, bad plastic surgery." Jermaine Jackson, claiming it was external stress that broke his brother, tweeted back: "This fool Trump needs to sit down.")

Shortly after Jackson's death, Branca says, he read the singer's final will, dated July 7, 2002, and signed in Los Angeles, to the family at Jermaine's home. As he recalls, they applauded. But Joseph Jackson, the family patriarch, accused Branca and McClain of forging the document, insisting that Jackson had been in New York that day lambasting Sony. According to court documents, Joseph also revealed that his son had been paying him a monthly allowance of almost \$60,000. He wasn't likely to keep getting it if Los Angeles Superior Court Judge Mitchell Beckloff accepted the will, which he did. He also gave Branca and McClain the power to manage the estate.

Now that Branca was in charge, he discovered that concert promoter AEG had footage of rehearsals for the O2 shows that had been filmed at Jackson's request. Several movie studios were eager to distribute a documentary stitched together from this material. Branca orchestrated a bidding war. Sony, the winner, agreed to pay the estate a \$60 million guarantee and almost 90 percent of the profits. When it released *This Is It* in November 2009, the movie grossed \$290 million globally, making it one of the most successful documentaries ever. With cash flowing in from the movie, the estate was able to refinance its debt. It pushed the rate on a \$75 million loan

secured by Jackson's compositions from an onerous 17 percent to 6 percent and lowered the rate on the \$300 million loan backed by Jackson's share of Sony/ATV, from 5.8 percent to 2.9 percent, saving millions of dollars a month in payments.

This Is It addressed another one of Branca's chief concerns: He wanted to restore Jackson's tainted legacy. Jackson looks spectral in the film, but he banters about music with his band members and footwork with his choreographers. "I went to see it 11 or 12 times," says Susan Fast, a professor of cultural studies at McMaster University in Hamilton, Ont., who wrote a well-regarded book examining Dangerous, Jackson's eighth studio album. "They did an amazing job of humanizing him, showing him as being kind of vulnerable, and giving us a glimpse into his artistic process." She did also think it was "exploitative" to have released the imagery of Jackson when he looked like he already had one foot in the grave.

The estate's income grew further in 2010 when Branca negotiated a \$250 million deal with Sony to release 10 albums featuring old and new Jackson material. He also enlisted Spike Lee to direct documentaries to accompany rereleases of favorites like *Off the Wall* and *Bad*. Lee and Branca were in agreement on the direction: "I just wanted to focus on the music, his musicianship, the great artist that he was," Lee says. "All the other stuff? I wasn't down with it."

In the midst of this productive whirl, Branca got a call from Celine Dion's manager asking him if he was interested in meeting with the top executives of Cirque du Soleil, the Canadian theatrical company that had produced the successful Las Vegas show called *The Beatles LOVE*, featuring the band's music. He flew to Montreal to see Guy Laliberté, the company's founder, who'd just returned from a voyage in a space capsule during which he hadn't been allowed to enjoy a single cigarette. He was now chain-smoking to make up for it. "I said to Guy, 'We want a show in Vegas that's like *The Beatles LOVE* only better,' "Branca recalls. "He said, 'I want a show that's going to tour around the world.' So we said, 'OK. Why don't we do both?' "

The Cirque traveling show, called *Michael Jackson: The Immortal World Tour*, featured many of Jackson's band members, ran for three years, and, according to *Billboard*, became the eighth-top-grossing tour of all time, with \$360 million in box-office revenue. Two years later, *Michael Jackson: One*, the company's Las Vegas show, complete with a hologram of its star, premiered at the Mandalay Bay Resort and Casino. "I think it will run forever, because Michael's music will be popular forever," says Daniel Lamarre, Cirque's chief executive officer. Branca also negotiated a video game deal; the rerelease of *Moonwalk*, Jackson's 1988 memoir edited by the late Jacqueline Kennedy Onassis; and an agreement with Pepsi to put Jackson's face on a billion soda cans. By 2012 the estate had paid off Jackson's debt except for the Sony/ATV



hunk. Jackson was proving to be more popular in death than he'd been when he had a pulse.

The following year, 60 Minutes, in a highly flattering segment, called Branca and McClain's management of their ghostly client "the most remarkable financial and image resurrection in pop music." Correspondent Lara Logan asked Branca, "His image was so battered and tarnished by the time of his death. Have his fans just forgotten about all that?"

"We don't really pay attention to the tabloids," Branca replied. "We look at the Michael that we knew, the real Michael, the artistic genius, the visionary."

"The real Michael Jackson also told Ed Bradley on 60 Minutes that he let young boys sleep in his bed," Logan persisted. "You can't run away from that, right?"

"Well, I don't recall that interview," Branca replied. "The Michael Jackson that I knew was somebody I considered a very honorable person."

The IRS took notice of the estate's prosperity, too. In 2013 the agency informed Branca and McClain that they'd insufficiently appraised the Jackson estate. The IRS said it was worth \$1.1 billion. The estate, however, claimed he was worth \$7 million at the time of his death. To hear Branca and McClain tell it, Jackson was on the verge of bankruptcy in July 2009. The star owed \$500 million. He hadn't filed personal income taxes in three years. He'd neglected to make the mortgage payments on his mother's home, which he owned, in Encino, Calif. IndyMac, the subprime mortgage lender, was preparing to foreclose. Meanwhile, more than 60 creditors claimed that Jackson owed them money. They included Ola Ray, the actress who played his easily frightened love interest in the *Thriller* video, and a woman who said she was the real Billie Jean.

If it weren't for the executors' smart plays, Branca's position goes, everything might have been sold off in a fire sale and there'd have been little for the beneficiaries. Branca declines to discuss the IRS case, but in a 2015 deposition in a civil suit filed against the estate by another of Jackson's former managers, he said the molestation investigations "would have negatively affected his commercial value" and that Jackson had received "minimal income from pure name and likeness rights." This offers some explanation for why the estate valued his name and likeness at only \$2,105. Still, it seems a puzzlingly low number. "Well, let me put it this way," says Jeffrey Eisen, an estate attorney in Los Angeles. "If somebody had come to you in July of 2009 and said, 'I will sell you all of the rights to Michael Jackson's name and likeness for \$2,106,' one more dollar than the estate tax, would you have bought it? You bet! I would have. So the real number has to be higher."

The IRS is also skeptical. The agency has subpoenaed Tohme, who scoffs at the estate's valuing of Jackson's image. He argues that he resuscitated Jackson, rather than Branca, with the AEG

deal—which, Tohme says, led to a flurry of endorsement offers from Louis Vuitton, Nike, and others. "Most of the money the estate has collected is because of me," Tohme says. "I did all the work." He and the estate are battling in court over his claim that he's owed millions in unpaid fees; the estate argues that Tohme abused his position and sought to enrich himself by persuading Jackson to sign overly generous contracts.

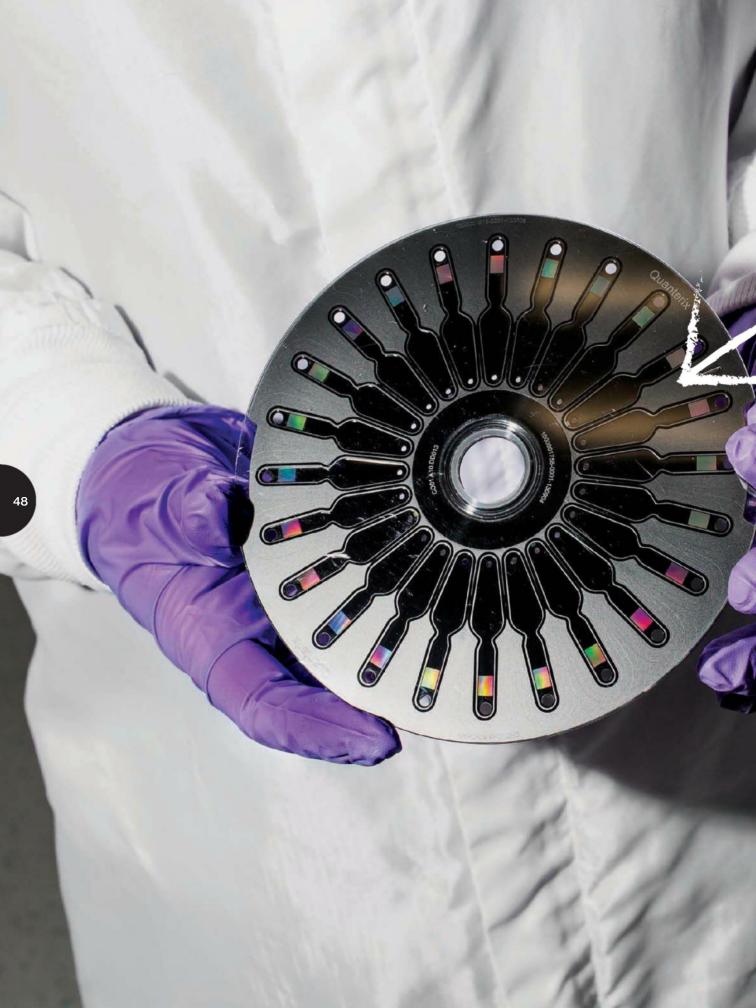
The IRS also disputes the claim that Jackson's interest in Sony/ATV was worth nothing at the time of his death. But documents from the estate value Jackson's piece of the company at \$242 million, less than the \$300 million loan against it at the time. The estate didn't pay all the debt off until last year when Branca, in another negotiating coup, sold the singer's share to Sony for \$750 million. Meanwhile, the dispute puts Jackson's personal effects in limbo, which, according to Paris Jackson's lawyer Craig Peters, is hard on the children. "The kids would like to have some of their dad's stuff that he wanted them to have," he says, describing clothes Jackson wore and pictures that hung around the house. "Mostly because of the IRS, it is still tied up in a warehouse. It's not the shimmering glove. It's personal stuff that means something to them."

The government's attorneys write repeatedly in their court filings that all of the estate's deals were "foreseeable." In other words, all he had to do was stop breathing, and the money would come flowing. "It's like what they said about Elvis Presley when he died," says Michael Morris, a former IRS trial lawyer now in private practice. "Good career move." But this suggests that anybody would have turned Jackson into a thriving multimillion-dollar business.

Brancalytes would disagree. "What John did for Michael while he was living, he did probably 10 times more after he had died. He really protected a man who was no longer here," says Motown's Gordy, who once called Branca the "Smokey Robinson of dealmakers." Bee Gee Barry Gibb, another client, calls his lawyer's insight priceless: "I always listen. He's taught me a lot."

The estate's feud with the IRS isn't likely to tarnish Branca's image. Even if he has to give in, the Jackson estate, which has been paying income taxes all along, will survive and refill the children's coffers. Branca says he's been trying to slow down now that he's reaching retirement age, but his practice continues to grow in one area. Because of his success with the Jackson estate, he's attracted many clients who are no longer with us. He's been hired as a consultant by the estates of Kurt Cobain, Janis Joplin, Otis Redding, and Muddy Waters.

Much as he'd like to take them all, Branca has to set limits. "I got a call from Sammy Davis Jr.'s heirs," Branca says. "I always try to help them, because he and Michael were friends. I said, 'I can't represent you. You guys are all fighting.' The late Rat Packer's heirs worked out their differences and tried once again to hire him. "I told them, 'I can't,' "Branca recalls. "'You guys don't have enough assets."





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n November, Kevin Hrusovsky paid a visit to the NFL's headquarters on Park Avenue in New York. Hrusovsky (pronounced ruh-sov-skee) is chairman and chief executive officer of Quanterix, a life sciences startup that makes machines for measuring proteins and other biomarkers in the blood. He had the NFL's attention because researchers have been using his company's machines to hunt for markers of concussions and neurodegenerative disease. In an open letter NFL Commissioner Roger Goodell published in September about the league's commitment to player safety, he wrote that Quanterix was developing "a blood test to reveal a concussion diagnosis." It would be, Goodell said, "a major breakthrough." The league, through a partnership with General Electric, has awarded Quanterix \$800,000 in grants in the past three years. Hrusovsky was hoping to persuade the NFL to invest directly.

A few minutes after his sitdown with the league, Hrusovsky preaches to me over coffee at a hotel restaurant in Midtown. "My goal is transforming health care," he says. At 55, with a broad mouth, smiling eyes, and graying hair, he resembles first-term George W. Bush. His homespun, slightly jumbled way of talking adds to the impression. Hrusovksy's pitch to me is roughly the same as the one he just gave Jeff Miller, the NFL's senior vice president for health and safety—skittering from drones, to driverless cars, to Tesla, to heart attacks and diabetes. "I'm still addicted to pastries at night," Hrusovsky says before circling back to his thesis: Quanterix's machines are on the brink of delivering a revolution in medicine, as scientists use them to detect diseases earlier, target them more precisely, and create breakthrough treatments for cancer, heart disease, diabetes, and Alzheimer's, to name a few.

Researchers have also begun using Quanterix tests to search for signs of chronic traumatic encephalopathy, or CTE, the neurodegenerative disease that's been found in the brains

of at least 90 dead former NFL players. Among them are Dave Duerson, the former Chicago Bears defensive back who fatally shot himself in the chest (preserving his brain) in 2011, and Junior Seau, who did the same in 2012, three years after finishing a 20-year career as a linebacker.

The disease has changed the conversation about head trauma in football. While concussions are often visible-the hit, the woozy trip off the field, and, usually, the return-CTE is insidious-the slow, inevitable collapse of the brain from within. There's currently no way to test for CTE in the living. By the time there are noticeable symptoms-which

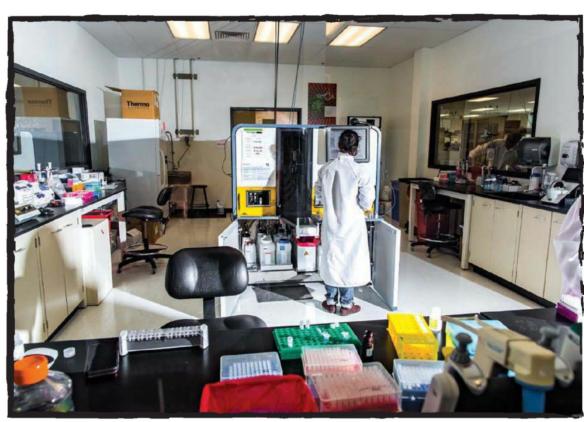
include mood swings, depression, impulsiveness, and memory loss—the disease is far along. As a result, early detection of CTE has become a grail for scientists in the field. A diagnostic test would make it possible to distinguish the disease from Alzheimer's, to know how widespread it is, to begin to figure out why some people get it and others don't, and, potentially, to develop treatments or a cure. Quanterix is one of several life sciences companies in the race. Its approach, a simple blood test, is the most elegant and the most challenging.

While the NFL is backing Quanterix, a test for the living could present an existential crisis for the league. Discovering, for instance, that half its linemen show signs of CTE could starve the league of talent or force changes that make it unrecognizable to fans. And football isn't alone: CTE presents similarly dire questions for hockey, soccer, and ultimate fighting, among other contact sports.

"The NFL may not realize they have awakened an animal here," Hrusovsky says. "If they want it, they should invest like crazy in it. If they don't really want it, holy moly, what have they created? Because I am not going to go away."

A few weeks later, Hrusovsky and I meet again, at Quanterix's offices in Lexington, Mass., a suburb northwest of Boston where college professors live in well-kept colonials next to tech startups in single-story office parks. Hrusovsky keeps a bowl of buckeye nuts in his office to pass out as mementos; the buckeye is the state tree of his native Ohio and the mascot of his alma mater, Ohio State University. "The Indians named it a buckeye because it looks like a deer's eye," he says. "It's great for good luck."

After donning white coats and protective goggles, we enter the lab and watch technicians load a Quanterix Simoa HD-1 Analyzer. The machine, about the size of two refrigerators, is



In a lab at Quanterix's offices in Lexington, Mass.

home to a microscopic technology called single-molecule array. Simoa uses millions of tiny beads, each about one-thirtieth the width of a human hair, trapped inside millions of tiny wells, to detect proteins in the blood.

The beads and wells were conceived in the lab of David Walt, a chemistry professor at Tufts University. Two decades ago, Walt and his team came up with a novel way to map the billions of DNA base pairs that make up a human genome. They took an existing process, which involved setting off chemical reactions that lit the pairs up in coded colors, and ran it on tiny silica beads sitting atop tiny wells, like scoops of ice cream nested on cones. The method dramatically sped up the work of gene researchers. Walt co-founded Illumina in 1998 to bring the technology to market; the company went public two years after. It later won a worldwide race to sequence a human genome for less than \$1,000, and now has annual sales of \$2.4 billion.

In 2005, Walt and his lab began tinkering with another application for the beads and wells. Instead of using them as a kind of Lite-Brite for DNA, they tried putting lids across the wells, trapping tiny amounts of fluid in which they could hunt for molecules. The idea was to build a better test for blood and other bodily fluids.

For decades, the gold standard for blood tests has been the Elisa, or enzyme-linked immunosorbent assay. The process relies on antibodies that attach themselves, like puzzle pieces, to specific molecules. Enzyme reactions then make these matched pairs light up in fluorescent colors. It's an analog system: The final step is reading the intensity of color in a few drops of blood. For the signal to be bright enough to measure, you need at least 30 million target molecules per drop.

Walt's micro-wells made it possible to break the standard Elisa test into hundreds of thousands of mini tests. He cofounded Quanterix with then-CEO Nick Naclerio in 2007 to develop the method, which works like this: Beads are coated in hundreds of thousands of antibodies, like microscopic fur, and submerged in fluid samples, where the antibodies grab hold of any target molecule that comes into contact with them. The captured molecules, now attached to beads, are then tagged with an enzyme, as in a traditional Elisa, and the beads are rolled across a plate of wells, where they drop inside, one per well, and are sealed along with a trigger fluid. If the enzyme is present, the well lights up. If not, it doesn't. "You are basically breaking up the sample into 500,000 little samples," Hrusovsky says as we watch the machine work. "And you're checking each one of them to see if they have got a protein."

Sample vials of blood and other fluids go in a tray on the left, where the machine mixes in the antibody beads and the enzymes. On the right, it traps the beads in micro-wells sandwiched inside a compact disc, the same size as those that play music. The wells are arranged into 24 plots, each about the size of a baby's fingernail, that are arrayed around the perimeter of the disc. Each plot holds 212,000 wells, meaning a single disc can yield more than 5 million results. The machine racks the loaded discs and turns them slowly, like an underpowered jukebox, to photograph the plots.

The method is a thousand times more sensitive than the Elisa, capable of detecting molecules in concentrations as low as 30,000 per drop—the equivalent, Hrusovsky says, of finding a grain of sand in 2,000 swimming pools. Simoa also offers digital results, with each well sending out a "yes" or "no" signal in

microscopic plots of light and dark, which can then be charted to come up with molecule counts.

In 2013, Quanterix began selling its Simoa analyzer to drug companies for about \$165,000 each. It sold some 65 in 2016, to customers including Eli Lilly, Merck,

Novartis, and Pfizer. Quanterix also sells antibody kits, and

it charges smaller researchers to run experiments in its lab-sales were almost \$20 million last year. In March the company raised \$46 million from investors, who pegged its value at about \$150 million.

To assure the crowd he was no Elizabeth Holmes, Hrusovsky pulled on a white lab coat. He seemed not to know that for many photos

Hrusovsky is using the money to expand the menu of antibody kits and build a cheaper, tabletop version of the company's machines. He hopes to begin selling them—and to take the company public—before the end of the year.

For a while now, Hrusovsky has been rhapsodizing about the future of medicine to anyone who will listen. In September he organized a conference called the Powering Precision Health Summit at the Marriott in Cambridge, Mass., drawing a crowd of about 300 cardiologists, neurologists, oncologists, and pharmaceutical executives. He delivered his opening remarks wearing a black turtleneck and blue jeans—a not-so-subtle homage. "It was 19 years ago when Steve Jobs took the stage at Macworld right here in Boston," he told the audience. Jobs, he reminded them, had just come back to Apple from Pixar, and he used the stage that day to prod his company to try new things. Hrusovsky ticked through the list of products that followed in the next 15 years: the iPod, iPhone, iPad, and more. It was, he said, probably "the most unprecedented level of innovation that you can ever imagine."

Quanterix, he suggested, was at the center of something similarly grand: a burgeoning \$30 billion market for blood screens that would upend notions of health and sickness. "It's a huge opportunity to do a big transformation," he said, "almost an Apple level of transformation, right here in health care."

Hrusovsky was aware of what everyone was thinking: He wasn't the first executive to don Jobs's mantle and promise a revolution in health care through high-tech blood tests. On screen, he displayed the cover of a year-old issue of Inc. magazine with Elizabeth Holmes, the CEO of Theranos, in a black turtleneck under the headline "The Next Steve Jobs." Theranos, once valued at \$9 billion, had crashed to earth in the months after the Inc. cover, following a series of articles in the Wall Street Journal showing that its technology didn't work as promised and that it was relying on other companies' machines. In July federal regulators banned Holmes from operating a medical lab for two years (pending an appeal by the company). "You may be wondering why I am wearing black, given what's going on in the industry right now," Hrusovsky said. Then, to assure the crowd that he was no Holmes, he pulled on a white lab coat. He seemed not to know that Holmes had done likewise for many photos-including for *Inc*.

Hrusovsky's backstory contrasts with Holmes's too-perfect tale of dropping out of college and finding a calling to disrupt medicine. He got a degree in mechanical engineering and an MBA, and spent 30 years at a handful of unsexy companies: DuPont, FMC, Zymark, Caliper, PerkinElmer. He worked in plastics, agricultural chemicals, pharmaceuticals, and

lab robotics. He'd planned to spend his late career advising life sciences companies from the boardroom, but in 2014 a few Quanterix investors persuaded him to come aboard. The company had churned through four CEOs since its founding, and its backers were growing impatient. The vision of marketing diagnostic tools for a variety of diseases required not only the creation of "bleed-to-read" tests but also getting them approved by the Food and Drug Administration and persuading health insurers to help pay for the tests. "It was taking a long time and a lot of money, and it was getting frustrating," Hrusovsky says.

As CEO, he shifted the focus to selling analyzers to drug companies, who would use them for research that might one day lead to diagnostic tests. Unlike at Theranos, Quanterix's technology isn't a trade secret: Dozens of scientists have detailed their work using the company's machines in more than 80 peerreviewed papers. They've used it to detect markers of cancer, Parkinson's, Alzheimer's, heart disease—and head trauma.

In 2013, Henrik Zetterberg, a professor at the University of Gothenburg's Institute of Neuroscience and Physiology in Sweden, published a study in the journal Brain Injury, based on Quanterix tests, that showed increased levels of a protein called tau in the plasma of Olympic boxers after their bouts.

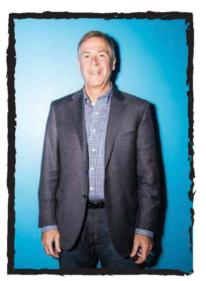
As proteins go, tau is famous. It helps hold together the intricate railway that carries signals between tens of billions of brain cells. When a brain slams against the inside of the skull, some tau dislodges and crosses the blood-brain barrier-the wall that prevents infection but also makes it hard for doctors to know what's happening inside the organ. If a brain is jostled too often, even with subconcussive blows, tau proteins can begin to deteriorate, becoming "misfolded" and falling off the railway. This deformed tau, known as P-Tau, is the primary marker of CTE. In stained slices of autopsied brains, P-Tau shows up as brown splotches.

The first known case of CTE in a former NFL player was found in the brain of Mike Webster, a Hall of Fame center for

the Pittsburgh Steelers who died in 2002 after a long decline into mental illness. Bennet Omalu, the doctor who autopsied Webster, concluded that football had, in essence, caused his brain to collapse from within. (Omalu is the protagonist of the film Concussion, starring Will Smith.) Since then, the brains of 90 deceased former NFL players have been diagnosed with the disease.

The amount of tau that gets into the bloodstream following a concussion is minuscule, not enough to detect with any established test. Doctors and trainers rely instead on checklists of symptoms and patient reports. When a football player gets knocked down and doesn't know what day it is, the diagnosis is clear enough. But not

every blow is spectacular, and players, eager to stay in the game, don't always report symptoms. It's especially hard to know when a player has recovered. "We desperately need a blood test," says Robert Cantu, an investigator at Boston University's CTE Center and a consultant to the NFL's head, neck, and spine committee.



Hrusovsky

A year after Zetterberg's boxing study, he and his team looked at players in the Swedish Hockey League, again using Quanterix tests, and found that tau levels spiked in the first hour after a head injury, then dipped over the next 12 hours before rising again over the following two days. For a study published in January 2017 in Neurology, Jessica Gill, a head trauma researcher at the National Institute of Nursing Research in Bethesda, Md., tested the blood of 46 concussed college athletes from the University of Rochester and found that those with the highest levels of tau six hours after the injury were the least likely to be able to play again within 10 days.

Hrusovsky sees this research as prelude to a concussion blood test. "A finger prick could tell you the answer within 20 minutes," he said in an appearance on Good Morning America in December 2015. At the time, Quanterix said it might have a test ready within a year. By September, at his conference in Boston, Hrusovsky was speaking of the company's "ability to see concussions in blood."

It's a long way, however, from a handful of studies showing correlations to a reliable biomarker test. To get there, Quanterix will need to establish tau baselines across populations and locate thresholds for injury, then test its method against results from clinicians trained to spot concussions. "When he talks in front of audiences, he kind of often comes off like it's done," Cantu says, "but it's not done." During my visit in November, Hrusovsky said a test was four to five years away.

A blood test for CTE is further off. Quanterix hasn't yet identified an antibody that latches on only to the P-Tau proteins that mark the disease. And even if its researchers find one, there might not be much P-Tau to detect. With concussions, the impact sends tau proteins across the blood-brain barrier; with CTE, they may stay contained. "I don't think there is liberation in the bloodstream constantly of any proteins," says Julian Bailes, chairman of the department of neurosurgery at NorthShore Neurological Institute in Illinois. "I think there are damaged areas that are fixed."

> Bailes was one of the first doctors to recognize the significance of Omalu's early findings. He believes positron emission tomography, or PET, scans, which rely on dyes with radioactive tracers, offer a better chance than blood tests of diagnosing CTE in the living. Jorge Barrio and Gary Small, scientists at the UCLA Brain Research Institute, have been scanning retired NFL players in search of the disease. Barrio and Small use a tracer called FDDNP that binds to tau and other proteins associated with neurodegenerative disease. For a study in the journal PNAS in 2015, they injected 14 former players with the experimental drug and found protein deposit patterns consistent with those identified in autopsies of players diagnosed with CTE.

> A company called TauMark holds the license for FDDNP and is working to be able to market brain scans to athletes, military veterans, and others who've suffered head trauma. Small and Barrio own TauMark, along with Omalu, longtime NFL agent James "Bus" Cook, and Bob Fitzsimmons, the West Virginia plaintiffs' attorney who represented Webster in his dis-

ability case against the NFL. Fitzsimmons says the company is looking for funding for a long-term study, which could lead to an FDA-approved test. For the study, TauMark plans to scan dozens of terminally ill patients suspected of suffering from CTE, then compare the results with autopsies after they die. Omalu has done this with former Minnesota Vikings linebacker Fred



A technician loads the Simoa HD-1 Analyzer

McNeill, who died of Lou Gehrig's disease in 2015 after suffering years of dementia; McNeill's family told CNN that the PET scan and autopsy showed matching patterns indicating CTE.

Aethlon Medical, a San Diego immunotherapy company, is coming at CTE from yet another angle, using exosomes, bits of cells that break off and show up in all types of bodily fluids, as biomarkers. Last year researchers found elevated levels of a tau-related exosome in former NFL players, compared with a control group. In January, Aethlon announced that it was looking to begin a study of 200 former NFL players.

Robert Stern, director of clinical research at BU's CTE Center, oversees the university's seven-year, \$16 million effort to find a diagnosis for living patients. Over the years, he's used blood tests, PET scans, exosomes, and more to test former NFL players. Speaking at the Boston conference about his results with Quanterix, he said, "We found a pretty robust relationship between the cumulative head impact exposure and total tau through this simple blood test." Still, he doesn't believe a standalone blood test for CTE is coming. Instead, he says, blood work will likely serve as a screen to find patients who need PET scans and other tests. "It will always require these extra steps. It won't be the kind of thing that will be immediately able to be done in, let's say, a Simoa." (Stern declined to comment for this story.)

"I would say that the jury is still out on how far we're going to be able to get," Hrusovsky says of a standalone blood test.

During this year's playoffs, the NFL has been airing TV commercials with the tag line "The Future of Football." One of them shows a white-coated technician loading blood samples into a Quanterix machine. "We're trying to develop the best tools, ones that will allow us to diagnose concussions in real time," says the narrator, Teena Shetty, a neurologist who consults with the New York Giants. Quanterix's concussion research fits into the NFL's vision of a future in which head trauma is neatly contained. A pinprick sideline test would make everyone rest easy when a player who just took a head shot returns to the field.

The CTE research is less comfortable for the league. For

several years after Webster died, the NFL downplayed the problem of head trauma. In 2009, after being called to testify before Congress, Goodell ducked questions about the link between football and neurological disease. "Medical experts would know better than I do," he said.

Nobody knows how common CTE is among current and former NFL players. "Some people have said up to 90 percent," Bailes says. "I think it's much less than that." Not everybody who suffers repetitive head trauma winds up with the disease. And nobody knows why some get it and others don't. It could have to do with the intervals between hits, with genetics, with nutrition. A test for the living would make it possible to begin sorting this out, to devise prevention programs, and maybe even find drugs that can reverse the damage. This is the hope, both for CTE sufferers and for the NFL.

For now, the league has the problem contained, at least from a legal standpoint. In 2013 it settled a lawsuit brought

by more than 5,000 retired players who claimed the league had failed to share what it knew about the long-term effects of head trauma. The NFL promised to pay at least \$675 million to former players whose symptoms make them eligible and to set aside \$90 million for medical monitoring and research. In March of last year, Miller, the NFL health and safety executive, openly acknowledged the link between football and CTE. And in September, in his open letter, Goodell committed an additional \$100 million to fund further research in helmet engineering and neuroscience. All of this was on top of a 2012 grant of \$30 million to the National Institutes of Health for research on brain injuries.

With CTE on many fans' minds, the NFL has little choice but to present itself as eager to learn more about it, though not everyone is convinced the league is prepared to acknowledge the full scope of the problem. "The NFL, in my opinion, still has weasel words," says Fitzsimmons, the West Virginia attorney who represented Webster. The league, he says, has yet to "fully embrace the notion that hitting the head against another head is not good for people and that the brain is not designed to take those forces without damaging it."

"We understand that there are many, many unanswered questions," says Joe Lockhart, a spokesman for the NFL. "Our ultimate goal is to do our part to contribute to finding the answers. We are prepared to follow the science to wherever it leads." That didn't include buying a stake in Quanterix. The league sticks to grants, Lockhart says, so that there's no question its goal is to advance the science rather than to direct it or profit from it.

Hrusovsky left the November meeting feeling less than loved—a league representative, he says, chided him for failing to mention its funding during his appearance on *Good Morning America*—but the NFL has gone out of its way since then to show its support. The commercial featuring the Quanterix machine was one example. "I think they're just trying to get their hands around what all this can mean," he says.

His message to the NFL was not to fear what's coming. "The objective test might wind up being your best friend," he says. "Maybe it's a big risk, or maybe it's salvation."











but the more people came to visit, the more it was clear that other wealthy thrill-seekers

were looking for this kind of oasis, too. Even if the idea wasn't to start a business, Spring Mountain is one now, with 126 employees and \$30 million in annual revenue from race-instruction schools, the membership fees of aspiring Lewis Hamiltons, and track rentals by manufacturers for testing. Which is why Morris is now in the middle of a transformation that will turn Spring Mountain into a destination resort with a community of luxury homes on 200 trackside lots, a hotel, restaurants, theaters, a car wash, a coffee shop, a water treatment plant, and probably many other things he hasn't thought of yet. "It was also an investment," Morris explains. By the end of 2017 or early 2018, he says, he'll also have a 6-mile, off-road desert course for trucks and ATVs, a track for high-performance go-karts, and a zip line to the resort's main clubhouse with a 160-foot drop.

For visitors who don't want to race or zip, there's standup paddleboarding on the 18 million-gallon lake Morris built in 2014, as well as an indoor shooting range. "The idea was to have a complete destination," he says, so members won't have to leave for anything. Two of his wealthiest members even talked Morris into building a 6,000-foot straight on the new track to accommodate their jets. "It can double as a drag strip," he says, one he and members may use to attempt land-speed records.

lmost everything outside the window of John Morris's helicopter is his or will be his soon. When the semiretired internet entrepreneur bought the original Spring Mountain Motorsports Ranch in 2004, here in the desert town of Pahrump. Nev., it was a 2.2-mile racetrack with a couple of spectator tents and portapotties. The gate to the place wasn't much more than a swiveling lead pipe.

"I thought it'd be fun to own a racetrack," says Morris, 69, angling his red, black, and white Robinson R44 helicopter toward a large parcel of desert scrub that he says he'll soon lease from the U.S. Bureau of Land Management. Last year, Morris paid an undisclosed sum for a 150-acre chunk on the track's west side; once he has the bureau's piece, the Spring Mountain Motor Resort & Country Club-his ever-growing automobile playland-will total 900 acres, with the world's longest track as its centerpiece.

Currently, the longest track is Germany's Nürburgring, the

legendary 13.1-mile circuit in Nürburg, near the Belgian border, which includes sections of public road and isn't open for racing most of the year. When he's finished, Morris will have at least 15 miles of private track just 45 minutes from the Las Vegas Strip. He claims that Pahrump, population 36,441, is the "fastest-growing town in the U.S. for its size" (a January tourism office press release only commits to Pahrump being "a sleepy desert town on the rise") and that the property was a great deal. He paid \$5 million for it, including 3 acres that front Route 160, the main road from Las Vegas to Death Valley, which annually handles an average of 1.7 million tourists.

Morris says he initially wanted to buy a place where his friends and family could drive fast-in everything from street cars to Porsches and Ferraris to exotic Radicals-and have fun,

"We'll end up with our own city, and we can do whatever the

hell we want." He pulls the helicopter up and over power lines and guides it toward a small U.S. Forest Service ranger station on the current Bureau of Land Management parcel.

Morris has the dyed-brown hair and *joie de vivre* of a man sitting atop a fortune. A serial investor, he sold his last and most successful business, Advanced Access, then the country's largest provider of web services to the real estate industry, for \$30 million in 2006. He was ready to have some fun and made the deal with Dominion Enterprises on two conditions: He wanted all cash and the assurance "that I will never hear from you again," he says. He got his wishes.



Semiretirement suits him. Morris has a thirtysomething girlfriend he met at a yoga class in Las Vegas. In addition to his home at the track, he spends time in Hawaii and Newport Beach, Calif., and flies to Honduras for stem cell treatments that are controversial and unproven, but which he proselytizes about nonetheless to anyone with an ailment. Meanwhile, his hobbies have escalated. Once an excellent golfer, he says, he quit playing after he fell in love with racing his modified Dodge Viper. Later he blew up his old golf trophies with Tannerite, a material used to make exploding targets for shooting ranges. Golf seemed "too slow," he says.

These days, Morris would rather floor his Italian-made Wolf race car 180 miles per hour or fly one of his water-powered jet packs around the lake. The body of water is visible in its entirety from the helicopter, as is the palm-tree-shaded island in the middle that breaks up the wake from the jet packs, which he rents to members and visitors. Morris briefly owned a jet pack manufacturer, too. "Have you seen the video of me from the news?" he asks. Morris is referring to a 2011 segment in which he takes off from a dock, accidentally hits the pack's kill switch, and immediately face-plants into the harbor live on San Diego morning TV. The clip, "Fox 5 News Jetpack EPIC FAIL!," has more than 3 million views on YouTube.

The changes to Spring Mountain started small. In 2007,

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Morris added the clubhouse, a pool, and 140 member garages. After he tired of staying in a run-down local motel, he built a small apartment, racquetball court, and helicopter hangar. Once members saw his apartment, they clamored for a place to sleep, so Morris built 42 condos, including one for himself. He wound up spending so much time at Spring Mountain that, two years ago, he built himself a 5,000-square-foot house. It has a basement garage for his race cars, a pool, a second hangar, a wine cellar, and a rooftop helipad with a fireman's pole. "I climb up more than I slide down," he says.

The helipad, where the helicopter ride ends, offers an excellent view of all 6.1 miles of existing track as well as the two new parcels of land. Morris points out where 3 miles' worth of track will soon be under construction, possibly starting this month.



Most days, that portion will serve as its own distinct track, just as the existing 6.1 miles is typically divided up into three or four that can be run independently, allowing the facility to host multiple driving schools and still keep a section or two open for the 300 club members. (In total, there are 53 track configurations.) On rare days when Morris or his track manager decides to run all segments concurrently, Spring Mountain is already the longest track in the Americas and the third-longest in the world. The club is home to Corvette's driving school, and last fall, General Motors opened a Cadillac performance academy on the grounds.

Members pay \$45,000 to join and \$5,000 a year in dues, but they rarely stop there. From Morris's on-site showroom, "they buy a \$250,000 Wolf, then a \$500,000 lot" for a private home, he says, adding that one member bought eight cars and a lot on his first day of membership. Most enthusiasts, 33 percent, are from California; 20 percent live in Nevada; 10 percent are Canadians. One guy flies in from Australia for all of the track's race weekends. There will be 10 this year.

Spring Mountain's most famous member (that we know of—there are celebrities who've succeeded in remaining anonymous) was Oliver Prinz von Anholt, a son of Zsa Zsa Gabor's who died in a motorcycle accident in Los Angeles in December. Jeffrey Cheng, 53, a private equity investor from Newport Beach, Calif., who races a Wolf, says: "Spring Mountain is an adult Disneyland. We race cars, we go offroading, we shoot big guns, we jet pack, we play with remotecontrol boats and cars, we fly drones, we fly planes, we fly helicopters. When you want a great dinner and some nightlife, you're only a 40-minute drive from Las Vegas. Who can beat that?" Alain Derzie, a laparoscopic and general surgeon who lives in Manhattan and drives a Radical, made his first pilgrimage to Spring Mountain in 2004 to attend Corvette's driving school. He became a member in 2012. "When John

THEHELL WE WANT

says he's going to do something, he does it," says Derzie, 48. "He said, 'I'm gonna build a lake.' I said, 'What?' He built a lake. Every year there's something new."

At this point, the only thing holding up the latest expansion is a mandatory waiting period for public comments, which Morris expects to wrap up soon. Local officials declined to comment on the plans, though Arlette Ledbetter, the town's tourism director, says, "This project is extremely important to the Pahrump economy, and we look forward to working with John Morris and his team." Morris gazes out on the sprawling scrub. "I want to incorporate our own city two years from now," he says. People keep suggesting Morrisville, in jest, but he has a better idea. "We're looking at Race Town, Nevada." •

It's the End of the Wop

Do you feel fine? Good! But that's probably pondered the possibility of a nuclear

ince 1947, the *Bulletin of the Atomic Scientists* has kept the Doomsday Clock to track how close mankind is to destroying itself. Assessing nuclear arsenals and other risks, it calculates the number of "minutes to midnight," with midnight being End Times. On Jan. 26 the *Bulletin* moved the clock 30 seconds forward, to two and a half minutes from the apocalypse—the closest we've been since 1953, shortly after the U.S. tested its first hydrogen bomb. (Yes, President Trump's "intemperate statements" factored into the thinking.)

Nobody likes to contemplate catastrophes, nuclear or not, which is why we're woefully unready for them. A 2016 survey by the National Center for Disaster **We Know It**

because you haven't w_inter. By Ira Boudway

Preparedness at Columbia University found that only one-third of American households have an adequate plan for an emergency. What does being ready mean? First, talk with your family about who will meet the kids at school and who'll go to the nursing home to get Grandma. Another key step is to pack what experts call a "bug-out bag" with emergency essentials; you can even throw a bug-out-bag party to get ideas—(cough) *condoms* (cough)—from friends and neighbors, says Cham Dallas, director of the Institute for Disaster Management at the University of Georgia's College of Public Health. The relief alone is worth the hassle, says Michael Coston, a former EMT who blogs about outbreaks and readiness. "You don't lie awake worrying about it anymore," he says.

Home Away From Home Away From Home

Big cities are big targets. The best place to be if society goes south is a couple of steps removed—in a town on the edge of a small city. "My camo buddies, they think they're going to do something by simply gearing up," Dallas says.

"Unless you connect with a group, you're not going to protect yourself, and you won't help anybody else either." Here are some spots where you might want to look for, uh,





You Can Take It With You-Well, Some of It

house is on fire, if the creek is rising, if the neighborhood has devolved into leave," Coston says. Pack enough to get by for 72 hours but not so much that your bag is impossible to carry. Items our experts say are worth considering:

1 Patagonia Black Hole 32-liter backpack

\$149; patagonia.com
This will hold everything on these pages, and it's water-resistant.

2 LifeStraw Go with

Water is heavy. A portable filter isn't. In a pinch, "if the water is a little questionable," Dallas says, "you drop drops of bleach in there. It doesn't taste good, but it doesn't hurt you." He keeps a few ounces in a travel shampoo bottle.

LED FLASHLIGHTS

3 Fenix E12 LED flashlight

\$26.95; fenix-store.com Stanley HL2PKS 5-LED alkaline

headramp \$16; amazon.com LED bulbs have a longer battery life than traditional ones. Pack a couple of flashlights, plus extra batteries. Or try a headlamp to keep your hands free.

BILTONG

5 UST emergency food ration bars \$7.99 for four; ustbrands.com

6 Brooklyn biltong \$34.99 for 16 oz.; brooklynbiltong.com

7 Guayaki yerba mate

\$6.95 for 25 bags; guayaki.com Each UST block breaks into six 400-calorie bars and has a fiveyear shelf life. They taste like a dry apple cinnamon scone-but it's \$8 for something you don't have to think about again until 2022. Nonperishable and nourishing are the main requirements, but it shouldn't be all hardtack. Pack some things you'll want to eat, such as fancy beef jerky or tea.

HAND-CRANK RADIO

8 Midland ER210 emergency

compact crank radio

\$49.99; midlandusa.com Important if landline phones, cell networks, and TV are inaccessible. This one has a flashlight and a port for charging mobile phones-hey, we can hope.

WHISTLE

9 UST JetScream floating whistle \$6.99; ustbrands.com

You'll need this to signal for help if you're trapped or threatened. Get one without a "pea" (that floating ball), so the whistle doesn't jam.

MAP AND COMPASS

10 Trails illustrated map

11 CountyComm compass

\$12.50; countycomm.com Keep a laminated map of the region and a compass—you may not be able to rely on GPS to get around.

MULTITOOL

12 Leatherman Wave

\$90.85; leatherman.com Make sure it has a can opener. This one does, along with 16 other tools, including two knives and a saw.

DISTRACTIONS

Uno

\$5.99; target.com If your kids are big enough to walk, get them their own bags. "It makes them feel like they're part of the plan," Coston says. "You can put in games or books and a little flashlight

for each of them." Fact: Uno is the

undisputed king of card games.

CLOTHES AND SHOES

14 Wave men's water shoes

From \$15; amazon.com Keep a weather-appropriate outfit stashed and change it seasonally. Don't forget a spare pair of lightweight sneakers-or, in warmer weather, quick-drying aqua shoes.

BLANKET

Grabber space all-weather blanket

\$14.99; amazon.com Cheap, compact Mylar blankets do a good job of holding in heat. This one has a second fiber layer to help it keep its shape.

FIRST-AID KIT

16 CountyComm Grab & Go first-aid kit

\$9.50; countycomm.com

17 Ever Ready Israeli compression bandage

\$8.54; amazon.com CountyComm's kit covers the basics. Dallas likes the bandages because they stop bleeding effectively and "squeeze down real easy." Bring extras: "Nobody around you is going to be prepared," he says. "You need to be the hero of your block."

MEDICATION

Keep at least a seven-day supply and up-to-date copies of prescriptions. If you wear glasses, pack an extra pair.

Up to \$1,000 (in small bills) is good if you can spare it, but more isn't necessarily better. "All you're going to be is a resource for somebody to take it away from you," Dallas says.

PHOTOCOPIES

Include contact information for doctors, insurers, and close friends and family—as well as IDs, credit cards, bank account information, and other hardto-replace documents. Paper is good; so is putting this information on a flash drive.



FASHION FORWARD

Menswear nerds are flocking to an EBay alternative By Max Berlinger

unny Lam was on the hunt. The thirtysomething clothing designer and consultant in New York wanted-*needed*-rare pieces from the early 2000s by his cult favorites, Raf Simons and Helmut Lang. "I used to go on EBay, but it's a bit of a migraine," Lam says, explaining that the selection is disorganized, the photo quality stinks, and the best pieces sell almost instantly. Then Lam found Grailed, an online menswear resale shop that is to EBay what Saint Laurent Chelsea boots are to Crocs; a "grail" in internet menswear parlance is an article of clothing you've been searching for forever. Not long ago on the site, Lam scored a T-shirt from Simons's summer 1998 Black Palm collection, a seminal look in Lam's circles.

"Our motto is 'Fire for All,' " says the company's 28-year-old founder and chief executive officer, Arun Gupta, "fire" being street slang for, among other things, "really cool clothes." He started

Grailed in January 2014. At the time, Gupta was an active member of menswear message boards such as Styleforum and Superfuture, which were great for community building but not for buyers and sellers, who had to use third-party services to share images, negotiate prices, and process payments. There were resale sites for women's wear-Tradesy and Poshmarkbut nothing for the increasingly voracious men's audience. "I was, like, 'Hey, I could build a website and consolidate," Gupta says. Thrive Capital, which has put money into e-commerce successes such as eyewear company Warby Parker, was a seed investor.

was a seed investor.

Today, Grailed occupies a spacious top-floor loft in Manhattan's SoHo neigh-

borhood. On a recent afternoon, Gupta was sitting Supreme on a large leather couch in front of a wall of mounted skateboard **ECURITE** decks. With him were the company's director of marketing, Jake Metzger, 30, and brand director, Lawrence Schlossman, 29, who give the site its clean graphic look and frat-light tone; Grailed is as much a fashion

BEFORE YOU SHOP

Grailed's got its own lingo

jawn (noun; plural, jawnz): a cool, trendy clothing item

magazine

as it is a

cop (verb): to purchase
(e.g., Bro, you cop those
jawnz?)

archive (adjective): rare article of clothing no longer in production, typically of high value (e.g., Bro, you cop those archive jawnz?)

collabo: short for "collaboration"; generally used to discuss two brands that join forces on a limitedrelease item

NWT: acronym for "new with tags"

NWOT: acronym for "new without tags"

consignment shop. "The site couldn't look bad if you expect someone to spend \$4,000 on a jacket," says Schlossman, who formerly ran the influential menswear blog Four Pins and is now in charge of Grailed's social media and its blog, Dry Clean Only. (They each interpreted "fire" in their own way: Gupta had on a red buffalo plaid jacket; Metzger, jeans, a button-up shirt, and a blazer; and Schlossman, all black, including his slide sandals.)

The challenge now is a familiar one for startups: how to grow without alienating the core audience. Gupta and his team aren't traditional retailers—they charge a 6 percent commission but have no control over supply or demand. To get some, Schlossman introduced the Grailed 100, a sale of hard-

to-find archival pieces and trendy items curated and sold by Grailed, not users. Most of the pieces in the inaugural 100 sold within 24 hours of its February 2016 debut. A second sale took place in November, and the site plans to keep doing them. In-store events at fashion-forward boutiques such as FourTwoFour on Fairfax in Los

Angeles helped listings per month more than triple in 2016 to about 95,000, boosting traffic 130 percent in the past six months, according to ComScore. To reach even more eyeballs, Dry Clean Only runs stories like "The Women's Guide to Grailed."

Not that the three principals would admit to caring about traffic numbers; for them, it's bros before breakeven. "When we say that the site is for enthusiasts, by enthusiasts, we try to make sure that it grows from that group," Metzger says. That

energy isn't lost on the Grailed faithful. "It's become a community," says Lam, the designer. "Some of us, we've become friends." Friends, of course, until someone grabs that Raf Simons T-shirt you wanted. **5**





house-made baguette.

Alaskan king crab leg.

fries with roasted

peppers, provolone, and curry gravy?

roasted prime rib.

flavor-then seared.

French roll.



THE ROOTS OF OUR RAGE

In Age of Anger, Pankaj Mishra taps into a centuries-long vein of resentment. By Peter Coy

REJECTING THE

WHY DO THEY

HATE US?"

FRAMEWORK

klahoma City bomber Timothy McVeigh and World Trade Center bomber Ramzi Yousef became friends in the late 1990s, when the men were held in nearby cells at the federal supermax prison, outside Florence, Colo. After McVeigh was executed in 2001, Yousef said he'd never known "anyone in my life who has so similar a personality to my own as his."

The kinship of two terrorists, born into seemingly opposed worlds but drawn toward the same ends, illustrates the theme of Pankaj Mishra's *Age of Anger: A History of the Present* (\$27, Farrar Straus Giroux). Mishra, an Indian-born cultural critic, rejects the "Why do they hate us?" framework that divides the world between a retrograde Islam and a progressive West. The real divide, he argues, is between an

isolated global elite of all races and faiths and the billions of people who resent it. Globalization imposed from above has failed, Mishra says; the supermax fraternity of McVeigh and Yousef "constituted a kind of globalism from below."

Mishra overstates and overgeneralizes at times, but in probing for the wellspring of today's anger he hits on something real. He traces our current mood back to the French Enlightenment

mood back to the French Enlightenment of the 18th century. We revere its thinkers today for their devotion to reason, science, and the rights of man, but they were disdainful of their fellow *citoyens*,

who clung to their muskets and their religion. Voltaire was a friend of monarchs, including the despotic Catherine of Russia. Denis Diderot, editor of the Encyclopédie, which he intended to spread glorious reason around the world, once wrote that "we must ride roughshod over all these ancient puerilities." These attitudes echo across the centuries. According to a 1951 document the United Nations commissioned to give advice to underdeveloped economies: "Ancient philosophies have to be scrapped; old social institutions have to disintegrate; bonds of caste, creed, and race have to burst; and large numbers of persons who cannot keep up with progress have to have their expectations of a comfortable life frustrated."

Age of Anger focuses on the reaction, sometimes extreme, to elites who ignored

or misunderstood the plight of ordinary people. Jean-Jacques Rousseau, an outsider described as a "militant lowbrow" by 20th century philosopher Isaiah Berlin, was one of the first to take offense, writing that the arts and sciences Voltaire championed

were merely "garlands of flowers over the chains which weigh us down." Rousseau had strange ideas about restoring what he saw as a more wholesome past, including that "[woman] must make herself agreeable to man rather than provoke him." Later reactions against Enlightenment thinking were even more extreme, on

up to the German Volk movement that inspired Nazism.

For those who are angry, there's no going back to the world before Voltaire, Mishra says. Latter-day groups such as Islamic State claim to detest Enlightenment values but nonetheless crave its sense of autonomy. The byproduct of this dissonance is violent anarchy, "a form of strenuous selfassertion that acknowledges no limits and requires descent into a moral abyss." Donald Trump, who was gaining support as a presidential candidate at the time of Mishra's writing, appears in the book as a "demagogue," just one among many who have "tapped into the simmering reservoirs of cynicism, boredom, and discontent."

Along with quotations from Voltaire, Rousseau, and other familiar figures of Western Civ, Age of Anger includes observations from Iranian, Chinese, Indian, Japanese, and other nations' scholars; their perspectives complement Mishra's deep understanding of global tensions. (He writes for a wide range of outlets, including Bloomberg View.) But the book can be hard to read at times, because it's so ... angry. "The history of modernization," Mishra says, "is largely one of carnage and bedlam." He has something nice to say about just one modern figure, Pope Francis, whom he likes because he's "not an agent of reason and progress" but rather "the moral voice of the Church that was the main adversary of Enlightenment intellectuals."

Mishra deplores the excesses of reactionaries, but he's clearly no fan of the Davos set. In one of his only personal asides, he writes, "As a stepchild of the West, I feel sympathetic to both sides of the debate." If only those sympathies could extend beyond the pages of



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