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REVIEW

THE WALL STREET JOURNAL.

WSJ

101
Things
To Do
Before
You Die

VOL. CCLXX NO. 101

DOW JONES | News Corp

WEEKEND

SATURDAY/SUNDAY, OCTOBER 28 - 29, 2017

★★★★ \$5.00

WSJ.com

What's News

World-Wide

A military request to send an armed drone near a Green Beret patrol in Niger before a deadly Oct. 4 ambush was denied, raising question about whether the troops had adequate protection. A1

◆ At least one person has been charged in the Mueller probe of alleged Russian meddling in the 2016 election. A1

◆ Spain ousted Catalonia's leaders, hours after separatist lawmakers declared the region an independent republic. A6

◆ Trump said he would announce his choice for Fed chief next week and that he has "somebody very specific in mind." A3

◆ More Americans will be able to get no-premium ACA health plans when enrollment starts Nov. 1. A3

◆ Hamas's security chief in the Gaza Strip was injured by a car bomb. A8

◆ Iraq's premier ordered a halt in military operations against Kurdish fighters. A8

◆ The FBI warned police of a threat to Oswald's life, documents about President Kennedy's killing show. A4

Business & Finance

◆ The U.S. economy grew at a 3% annual rate last quarter despite two hurricanes, helped by rising stocks and consumer and business confidence. A1

◆ The S&P 500 and Nasdaq set records on strong corporate results. The Dow edged up 33.33 to 23434.19. B12

◆ Amazon, Alphabet, Microsoft and Intel posted the biggest gains, as enthusiasm for tech shares swelled. B1

◆ CVS's bid for Aetna followed a six-month-long hunt, during which the drugstore firm also approached Anthem and UnitedHealth. A1

◆ Alibaba's co-founder will buy a 49% stake in the Brooklyn Nets for \$2.3 billion. B1

◆ Exxon and Chevron said profits jumped 50% and Total gained 40% but investors remain wary of oil shares. B1

◆ Brent crude prices topped \$60 a barrel for the first time in more than two years. B11

◆ Wells Fargo's foreign-exchange trading is being probed by prosecutors. B10

◆ Clariant and Huntsman ended their planned deal amid investor pressure. B2

◆ Penney slashed profit goals and warned of softer sales. Shares slid 14.8%. B3

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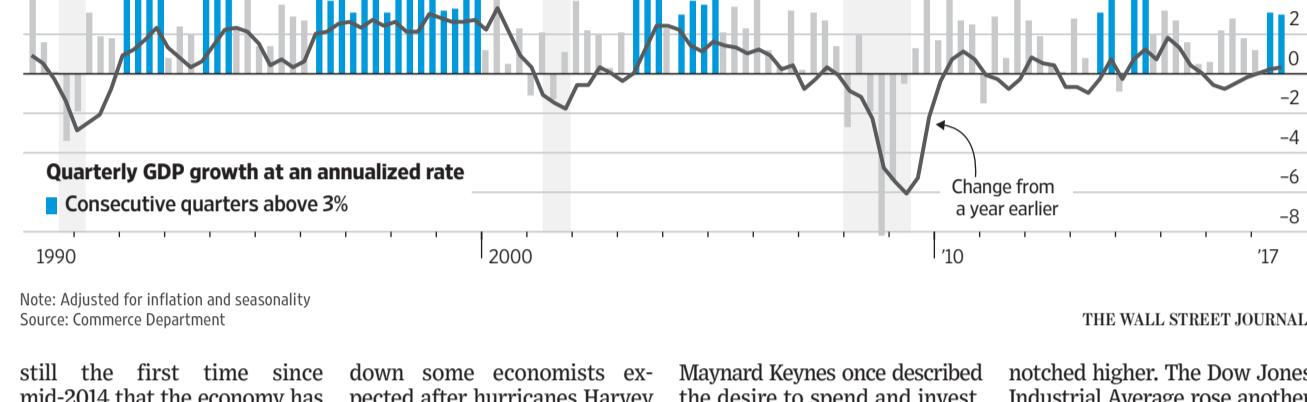
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Source: WSJ Market Data Group

The U.S. economy has posted two consecutive quarters of growth above 3%



Note: Adjusted for inflation and seasonality
Source: Commerce Department

Despite hurricanes, U.S. consumers and businesses drove a six-month expansion

By JOSH MITCHELL

WASHINGTON—The U.S. economy posted its best six-month stretch of growth in three years despite two hurricanes, a sign that it might be breaking out of its long-running slow-growth trend, with the help of soaring stock prices and rising business and consumer confidence.

Gross domestic product, the broadest measure of goods and services produced in the U.S., expanded at a 3% annual rate in the third quarter, the Commerce Department said Friday. That followed 3.1% annual growth in the spring.

Though not a boom, that's

still the first time since mid-2014 that the economy has strung together two quarters of at least 3% growth. Solid spending by consumers and businesses—along with higher sales of American goods overseas—helped prevent a slow-

down some economists expected after hurricanes Harvey and Irma shut down parts of Texas and Florida in August and September.

The third-quarter gain came alongside signals that "animal spirits," as the economist John

Maynard Keynes once described the desire to spend and invest, were helping to boost economic activity. Stock-market gains have accelerated since Donald Trump was elected president last year, and consumer and small-business confidence have

notched higher. The Dow Jones Industrial Average rose another 33 points Friday, putting it up 18.4% so far this year.

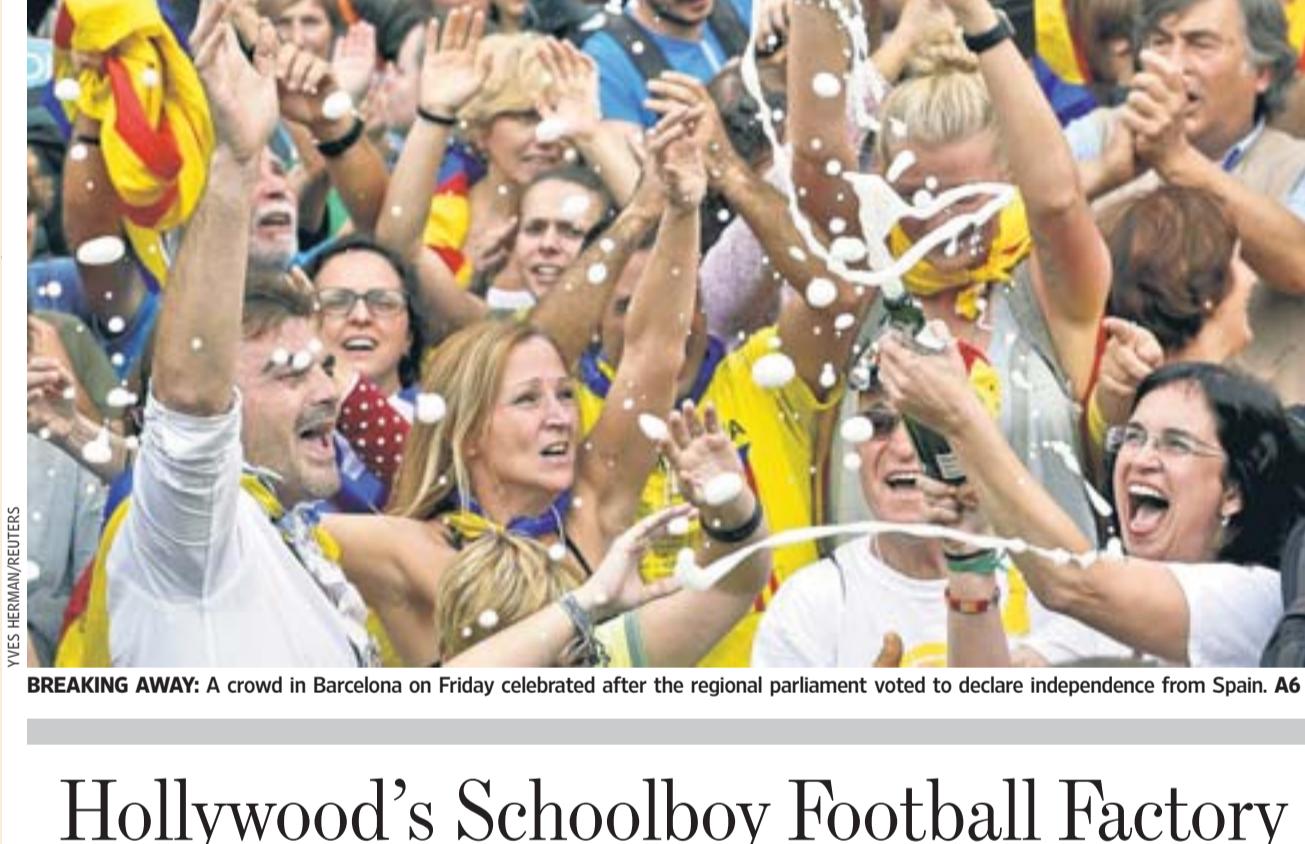
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◆ Trump to name Fed choice next week..... A3

◆ Catalonia Independence Move Spurs Emergency for Spain's Leaders

YVES HERMAN/REUTERS

BREAKING AWAY: A crowd in Barcelona on Friday celebrated after the regional parliament voted to declare independence from Spain. A6



Catalonia Independence Move Spurs Emergency for Spain's Leaders

Charge Is Filed In Mueller Probe

BY ARUNA VISWANATHA AND DEL QUENTIN WILBER

At least one person was charged Friday in connection with Special Counsel Robert Mueller's criminal investigation into alleged Russian meddling in the 2016 presidential election, according to people familiar with the matter.

That person could be taken into custody as soon as Monday, these people said. The number and identity of the defendants, and the charges, couldn't be determined.

A spokesman for Mr. Mueller, Peter Carr, declined to comment Friday. The news of the charges, marking the first in Mr. Mueller's investigation, was reported by CNN Friday.

Appointed in May, Mr. Mueller and his team of prosecutors and Federal Bureau of Investigation agents have been

Please see PROBE page A5

◆ GOP tax strategy echoes health-care approach..... A4

◆ Trump donor sought Clinton email data..... A4

◆ Website first funded research for dossier A4

◆ Hollywood's Schoolboy Football Factory

IMG Academy churns out major college prospects, who pay \$75,200 a year in tuition

By BRAD REAGAN AND ERICH SCHWARTZEL

BRADENTON, Fla.—The best moments of high school for 18-year-old senior Will Huggins haven't been typical rites of passage like the prom or getting a driver's license. Instead, he recites his time in the 40-yard dash, down four-tenths of a second in two years, and the 40 pounds he gained. "Thirty-seven of that is muscle mass," he says.

Mr. Huggins is a wide receiver for IMG Academy, a high-school football program that is just four years old but has already become a fearsome, controversial powerhouse. Owned and operated by Holly-

wood entertainment conglomerate Endeavor, IMG Academy is an elite, for-profit boarding school—and the leading producer of top college and National Football League prospects.

Families pay \$75,200 in annual tuition, more than the most famous prep schools and Harvard University, to improve their teenager's chances of making it.

Players work out at an \$11 million training complex with a high-tech weight room where each repetition is filmed and evaluated by coaches and trainers. Scientists from the Gatorade Sports Science Institute monitor hydration, body composition and other aspects of players' phys-

ical development. IMG Academy regularly flies to other states to square off against top teams in a game schedule considered the country's most difficult.

The formula works. The Ascenders haven't lost since 2014 and are ranked No. 2 in the U.S., behind Mater Dei High School in Santa Ana, Calif., according to MaxPreps, a high-school sports website.

As many as 30 members of the current team are expected to get Division I scholarships, including from top programs Alabama, Ohio State and Florida State. Mr. Huggins, who convinced his mother two years ago to let him move

Please see IMG page A10

It's an Instagram Emergency!

This Fall's Foliage Isn't Fit to Post

* * *

Dull colors sow chaos on social media; a

line forms at a red tree in Central Park

By KATHERINE BINDLEY

NEW YORK—During a run in Central Park around lunchtime on Monday, Anne Speyer noticed a gaggle of people with their phones out. They were posing for pictures in front of a sugar maple, the only tree nearby with brilliant red leaves.

She doubled back to investigate. "People were taking turns

in front of the tree," said Ms. Speyer, a 28-year-old Brooklyn book editor. "Clearly, they were determined to get their fall shot."

She took her own photos and posted them on Instagram: one of the celebrity maple, another of people taking pictures of the tree. "I feel that the people deserved to see the tree that everyone was

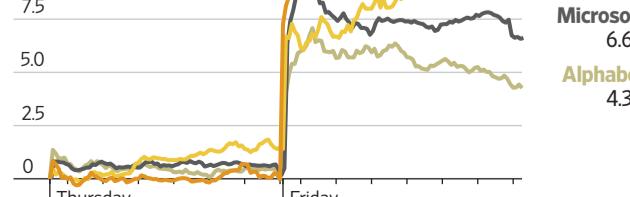
Please see FALL page A10

Source: WSJ Market Data Group

Tech Giants Soar to New Heights

Soaring stock gains for a quartet of internet and technology titans added \$146 billion to the stock market Friday as blow-out earnings renewed enthusiasm for some of 2017's high flyers. B1

Share-price performance since Wednesday



Source: WSJ Market Data Group

CVS Bid For Aetna Followed Long Hunt

BY ANNA WILDE MATHEWS AND DANA MATTIOLI

CVS Health Corp.'s bid for Aetna Inc. is the culmination of a wide-ranging hunt by the drugstore giant for a deal partner, highlighting a broader effort among health-care companies to find new avenues of growth by combining diverse businesses under one roof.

The Woonsocket, R.I., company has been examining different deal possibilities for about six months, according to people familiar with the matter. CVS approached Anthem Inc. about potentially buying the health insurer, and also discussed a combination with UnitedHealth Group Inc., the people said. CVS is now focused on sealing a deal with Aetna, though the hurdles to an agreement are formidable.

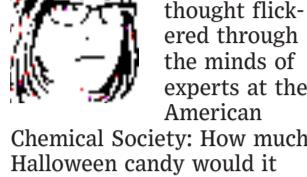
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◆ More people to get free ACA insurance plans..... A3

U.S. NEWS

THE NUMBERS | By Jo Craven McGinty

Trick or Treat? Halloween Candy, in Perspective



A dark thought flickered through the minds of experts at the American Chemical Society: How much Halloween candy would it take to kill someone?

Realistically, it's unlikely that pint-size ghouls would consume a lethal dose of candy, because they would have to gobble up a gluttonous amount in one sitting to put their lives at risk.

Nonetheless, here's what it would take:

At a high enough dose, sugar, like most substances, can be toxic. Even water and—horrors—caffeine can kill if consumed in extreme quantities.

One way to determine how much is too much is LD50, a test created in 1927 to measure the relative potency of drugs.

"It stands for lethal dose 50%," said Hans Plugge, a toxicologist in Bethesda, Md., with Verisk 3E, a company that provides environmental-health and safety-compliance services. "You take 10 rats, feed them a dose, and if five of them die,

you've determined the LD50. It's pretty straightforward."

The measurement is expressed in milligrams or grams of the potentially toxic substance per kilogram of body weight.

From the scientific literature, Mr. Plugge, who helped the ACS come up with its estimates for Halloween candy, knew that the LD50 of sucrose, the kind of sugar found in candy, is 29.7 grams per kilogram of weight, or about 13.5 grams per pound.

"Thirty grams per kilogram is a very, very high end for LD50," Mr. Plugge said. "Most things would have lesser LD50. In other words, sucrose isn't very toxic."

In comparison, the artificial sweetener aspartame has an LD50 of 10 grams per kilogram, grain alcohol has an LD50 of 7 grams per kilogram and caffeine has an LD50 of 0.2 gram per kilogram.

To examine the potential deadliness of Halloween candies, Mr. Plugge and the ACS looked at the amount of sucrose in fun-size treats, which are smaller than regular-size candies and weigh less than an ounce.

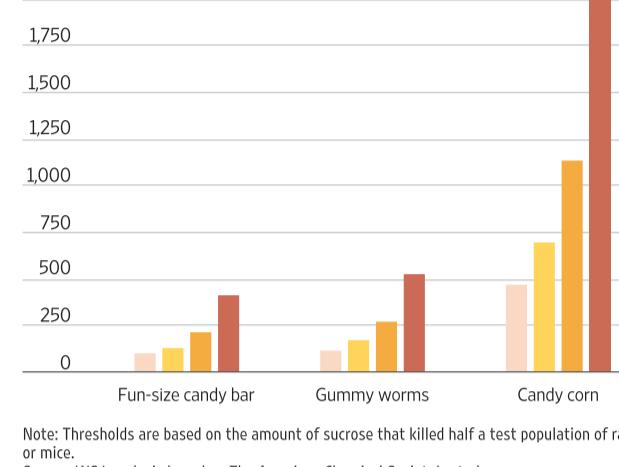
The average fun-size

The Sweet Hereafter

The amount of candy that, if consumed in one sitting, might be lethal.

■ 50 lbs person ■ 75 lbs ■ 125 lbs ■ 250 lbs

2,250 candies



Note: Thresholds are based on the amount of sucrose that killed half a test population of rats or mice.

Source: WSJ analysis based on The American Chemical Society's study

THE WALL STREET JOURNAL

candy, the ACS estimated, has 9.3 grams of sugar.

An American adult who weighs 180 pounds—about average, according to the Centers for Disease Control and Prevention—would have to consume 5.4 pounds of sugar all at once

to reach the sucrose LD50, according to the ACS.

That's essentially an entire bowl of Halloween candy or, by the ACS's count, about 262 fun-size pieces.

A child who weighs 70 pounds, which the CDC says is about average for a 10-year-old, would have to eat

about 100 fun-size candies to hit the threshold.

"More than likely, they'd throw up before reaching the lethal dose," Mr. Plugge said.

To apply the ACS calculation to people of different sizes, enter a person's weight into this equation: $(\text{weight} \times 13.5) / 9.3$. The result is the approximate number of fun-size pieces of candy an individual would have to eat to reach the 50% lethal dose of sucrose.

LD50 is sometimes called the median lethal dose. Some test subjects would be killed by a lower dose, but to kill the entire test population would require a larger dose—the LD100.

The ACS also notes that the lethal dose for humans could differ from the dose that affects a test population of rodents.

But scientists can't allow trick-or-treaters (or parents who dip into their kids' Halloween haul after bedtime) to eat candy until half of them cash in, so in this case, it's the best estimate available.

Sugar can occur in food naturally or can be added during food preparation or

processing. The American Heart Association recommends that adult women consume no more than six teaspoons, or 25 grams, of added sugar daily, and adult men no more than nine teaspoons, or 36 grams, a day.

The heart association recommends that children ages 2 to 18 consume less than six teaspoons of added sugar each day. Kids often consume three times that much.

In addition to candy, major sources of added sugars are cookies, ice cream and soft drinks. A regular 12-ounce soda contains eight teaspoons, or about 32 grams, of sugar.

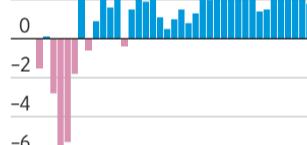
According to the National Retail Federation, consumers plan to spend \$2.7 billion on Halloween candy this year. To stay within the heart association's recommended range, kids would have to limit themselves to about two fun-size treats a day.

The sucrose might not get 'em, but limiting their Halloween candy? That could be a fate worse than death.

Signs of Spirits

Third-quarter GDP growth of 3% looks weaker without volatile trade and inventory figures...

Final sales to domestic purchasers, quarterly change at annual rate



Note: Inventory and investment figures are adjusted for inflation and seasonality; optimism is adjusted for seasonality.

Sources: Commerce Department (Real final sales, business investment); National Federation of Independent Business (optimism); University of Michigan (sentiment)

...But inventory-based growth coupled with growing investment in equipment...

Change from a year earlier



...Could continue to fuel high levels of small-business optimism...

Small-business optimism index



...Which is being echoed in measures of consumer sentiment.

University of Michigan consumer sentiment index



PUERTO RICO

FEMA Has Concern Over Energy Pact

The Federal Emergency Management Agency said it had "significant concerns" with a decision by Puerto Rico's power authority to award a \$300 million contract to a little-known Montana company, **Whitefish Energy Holdings LLC**.

FEMA on Friday said it had questions about how prices were negotiated and was talking with the public-electricity monopoly known as Prepa and its legal advisers about how the contract was procured and how the utility determined prices were reasonable.

Questions surrounding the deal reverberated as federal officials began investigating the U.S. territory's disaster-recovery spending. More than a month after Hurricane Maria left Puerto Rico largely powerless and destroyed much of its electrical grid, service has been restored to less than a third of power customers.

FEMA's statement was at odds with the Whitefish contract itself, in which Prepa represented that FEMA had already approved the terms of the deal.

Ricardo Ramos, the executive director of Prepa, told The Wall Street Journal in an interview Friday that this language should have been removed from the contract.

FEMA said it hadn't provided any reimbursement for the Whitefish contract specifically. A Whitefish spokesman didn't respond to a request for comment.

—Andrew Scurria

March 2016. The 28-year old, carrying his Virginia driver's license, said he defected from Islamic State and wanted to escape to Turkey, local officials said at the time.

Evidence presented at Mr. Khweis's federal trial showed that he left the U.S. in December 2015 to travel to Syria. After crossing the Turkish border, he completed Islamic State intake documents and agreed to become a suicide bomber.

The American then spent weeks training at an Islamic State safe house, prosecutors said. At some point, Mr. Khweis evidently lost the desire to be a suicide bomber and fled soon after deploying to Tal Afar in northern Iraq.

—Jessica Donati

UTAH

Trump Said to Back Monument Cutbacks

President Donald Trump will approve a recommended downsizing of Utah's Bears Ears and Grand Staircase-Escalante national monuments—two of the country's biggest and most contentious, a senator from that state said he was told Friday.

Sen. Orrin Hatch said the president called him to say he had decided to follow recommendations by his Interior secretary, Ryan Zinke, to reduce the size of the monuments that were created by past Democratic administrations. "I'm approving the Bears Ears and Grand Staircase recommendation for you, Orrin," the president told the Republican senator, according to a statement by Mr. Hatch's press office.

The downsizings are likely to be substantial because both monuments are large. Grand Staircase-Escalante, created by President Bill Clinton in 1996, encompasses nearly two million acres of canyonlands in south-central Utah, while Bears Ears, created by former President Barack Obama last year, covers another 1.35 million acres.

White House officials wouldn't comment on the decision.

—Jim Carlton

GDP

Continued from Page One

In the wake of those sentiment advances, household purchases of durable goods, such as cars and refrigerators, have picked up, as have gains in business investment in equipment. Consumer spending on durable goods rose at an 8.3% annual rate in the third quarter after 7.6% annual growth in the previous quarter. Equipment spending by business rose at an annual 8.6%, following 8.8% in the previous quarter.

Kevin Wilson, chief executive and president of Buzz Franchise Brands, a pest-control and home-cleaning company, said higher stocks have led several people to open franchises under his brands this year.

"Good times are here," he said. "Their stocks have gone up and they're taking some of that money and saying: 'Now's the opportunity to start our own business.'"

Still, there is ample reason for caution before concluding the gains will be sustained. The economy has produced six-month growth bursts several times during this eight-year expansion, including a period of near-5% growth in mid-2014. But it hasn't been able to keep up that pace. The growth rate as a whole for the expansion has averaged 2.2%.

A chunk of the third quarter's growth reflected businesses' replenishing of stockpiles, which had fallen earlier this year, rather than higher sales. Stripping out inventory changes, which can be volatile, output grew at a 2.3% rate, closer to the longer-running average. Compared with a year earlier, overall output including inventory changes was just 2.3% higher.

While economists are expecting growth in the current quarter to clock near 3% again, nagging trends, including an aging population and weak worker productivity gains, still might stand in the way of sustained robust growth.

"We have to be a little bit careful," said Gregory Daco,

economist at Oxford Economics. "The underlying pace still remains in that 2% growth environment."

The Trump administration has promised sustained 3% growth by reducing regulations, revamping trade agreements and passing a broad tax-cut package currently being negotiated in Congress.

Administration officials celebrated the latest numbers. "As the President's tax-cut plan is implemented, our entire economy will continue to come roaring back," Commerce Secretary Wilbur Ross said in a statement Friday.

Democrats weren't prepared to yield any credit to the new administration. "Today's GDP numbers show the resiliency of the economy this administration inherited," Sen. Martin Heinrich (D., N.M.) said in a statement. "Instead of building on this foundation, President Trump has created a climate of uncertainty."

Hurricanes made it challenging to discern the underlying trend in the third quarter. Damage to property led to a spurt of spending on cars in hurricane-damaged areas, but the storms also appear to have depressed spending on services like restaurants, where payrolls sank

for the month.

The Commerce Department said hurricanes likely suppressed business activity such as oil-and-gas extraction in Texas and agricultural production in Florida. But the storms likely boosted other types of activity, such as emergency services and repair efforts.

"It is not possible to estimate the overall impact of Hurricane Harvey and Irma on 2017 third-quarter GDP," the agency said.

Repair efforts could boost economic growth in coming quarters, particularly in building sectors. The Commerce Department estimated that government and private insurance companies' payouts resulting from the storms could total \$102 billion. That's money that could be plowed back into the economy.

The report is likely to nudge the Federal Reserve closer to

raising its benchmark short-term interest rate—the federal funds rate—at its policy meeting in December. Inflation picked up this summer, though it is still below the Fed's 2% target.

For the economy to sustain faster growth, much depends on the outlook for business investment, which is central to boosting worker productivity and sustaining robust corporate profit gains.

MBAF, a 600-employee Miami-based accounting and consulting firm, offered a sign of a sustainable pickup. It has budgeted about \$1 million in capital spending in its current fiscal year—three times what it spent last year. Tony Argiz, chief executive and chairman, said the spending increase reflects two developments: New technology enabling his company to perform audits much more efficiently, and data breaches at firms like Equifax pushing firms like his to invest in new security software.

He said the company feels the urge to become more efficient to compete with other firms. "We need to keep up with the times, and artificial intelligence is going to be critical in my profession in the next four or five years," Mr. Argiz said.

CORRECTIONS & AMPLIFICATIONS

Xi Jinping became China's Communist Party chief in 2012 and president in 2013. A Page One article in some editions on Wednesday about Mr. Xi's leadership incorrectly said he first assumed the presidency five years ago.

Recent Communist Party meetings in China gave Xi Jinping a second five-year term as party general secretary. In some editions Oct. 16, a World News article about U.S.-South Korean military drills incorrectly said China's Communist Party Congress was set to extend Mr. Xi's presidency.

Mattel Inc.'s third-quarter revenue was \$1.56 billion. In some editions Friday, an Earnings Watch article incorrectly said Mattel's third-quarter revenue was \$1.56 million.

In some editions Friday, the name of the St. Louis Post-Dispatch was incorrectly given as the St. Louis Dispatch in a Page One article about tech companies' quarterly results and in a U.S. News article about deal talks between CVS Health Corp. and Aetna Inc.

Ken Himmel is the presi-

dent and chief executive of Related Urban, a unit of Related Cos. An article in the November/December issue of The Future of Everything magazine about new uses for vacant malls incorrectly called Mr. Himmel president and CEO of the parent company.

Cambridge Analytica CEO Alexander Nix in August 2016 sent an email to employees and Republican donor Rebekah Mercer in which he said he had reached out to WikiLeaks' Julian Assange. A U.S. News article Thursday incorrectly said the email was sent in late July 2016.

Readers can alert The Wall Street Journal to any errors in news articles by emailing wsjcontact@wsj.com or by calling 888-410-2667.

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U.S. NEWS

President To Name Fed Choice Next Week

BY KATE DAVIDSON AND DAVID HARRISON

President Donald Trump said Friday he would make public his choice for the next leader of the Federal Reserve "sometime next week," declaring he has "somebody very specific in mind."

"It will be a person who hopefully will do a fantastic job," Mr. Trump said in a video posted to Instagram on Friday. He added: "I think everybody will be very impressed."

Mr. Trump was leaning toward tapping Fed governor Jerome Powell, who was going through the final stages of the White House vetting process, according to a person familiar with the matter.

Stanford University economics professor John Taylor was also under serious consideration, and Mr. Trump said in an interview Wednesday he was thinking of offering another term to Fed Chairwoman Janet Yellen.

White House officials caution that nothing is final until the president makes public his choice. He is known for making spur-of-the-moment personnel decisions and for changing his mind.

The GOP president has upended the usually staid selection process by openly weighing the pros and cons of various candidates and asking lawmakers, businesspeople and media personalities for their input. As the process drags on, contenders for the job have faced heightened scrutiny from detractors hoping to sway Mr. Trump's choice.

Conservatives who support Mr. Taylor's nomination have mobilized against Mr. Powell, a Republican who served in the administration of former GOP President George H.W. Bush, assailing him for supporting the Fed's easy-money policies during his five years at the Fed.

They also say Mr. Powell didn't do enough to oppose what they see as overly stringent financial rules the Fed imposed after the crisis, despite his recent public remarks that the Fed should rethink some postcrisis regulation. And they point to Mr. Powell's previous confirmation votes, when a significant number of Republicans opposed him, as a reason for the White House to think twice about putting his name forward.

A Fed spokeswoman said Mr. Powell declined to comment.

Mr. Taylor, meanwhile, is facing questions about whether he would follow his own mathematical formula for setting interest rates—dubbed the Taylor Rule—if he becomes chairman. Under the rule, short-term interest rates would be around 3.5% now, compared with the Fed benchmark federal funds rate's current range between 1% and 1.25%, according to Michael Feroli, chief U.S. economist at J.P. Morgan.

Mr. Taylor's supporters have said he wouldn't be so rigid as his arguments might suggest, with some saying he would be less likely than Mr. Powell to raise interest rates to curb inflation that could stem from GOP tax cuts.

More People to Get Free ACA Plans

Trump indirectly bolstered subsidies that help consumers with insurance premiums

BY ANNA WILDE MATHEWS AND CHRISTOPHER WEAVER

Insurers selling Affordable Care Act plans have a compelling new pitch: free health insurance.

When sales of plans on the law's exchanges begin Nov. 1, a growing number of consumers around the country will be able to get coverage for 2018 without paying any monthly premium, according to health insurers and an analysis of newly available federal data.

In nearly all of the 2,722 counties included in the data, some consumers will be able to obtain free health insurance because they qualify for larger federal premium subsidies that cover the full cost of a plan, according to the new analysis.

The growing availability of no-premium plans is a side effect of a decision by President Donald Trump's administration to end federal payments that help consumers with their insurance premiums.

The new analysis doesn't project exactly how many consumers could be eligible for the no-premium plans, a figure that depends on variables including people's income, household size, age, location and access to other types of health coverage.

In the coming weeks, insurers are gearing up to promote the no-premium option. Amid uncertainty about the future of the 2010 health law, also known as Obamacare, many insurers have pulled back from the law's marketplaces. Many of the remaining ones are worried about losing enrollment next year—



More consumers will be able to get coverage without premiums. Above, a clinic provided free dental and medical care in Olean, N.Y., in June. SPENCER PLATT/GETTY IMAGES

largely among consumers who aren't eligible for subsidies and won't be able to get premium-free plans.

Insurers hope the no-premium insurance draws in more enrollees, particularly those they need most: people with few health needs. Healthy consumers help bolster the stability of the market by balancing out the health costs of sicker enrollees.

"We absolutely will be promoting this opportunity to get coverage at a zero price," said Wendy Curran, a spokeswoman for Blue Cross Blue Shield of Wyoming, which is mentioning the no-premium plans in print, radio and social-media advertising. "We hope those younger people will say, 'Well yeah, if it's not going to cost me anything, sure.'"

Ms. Curran said it was "astounding even to us" how many

people will be able to get no-premium insurance in Wyoming.

The no-premium plans will also receive a hefty promotional push from insurance agents. EHealth Inc. and HealthMarkets Inc., both big national

'We absolutely will be promoting this opportunity to get coverage' at no charge.

agencies, said they're preparing to highlight the option in advertising and other outreach.

"It's just the idea of something free being really appealing," said Nate Purpura, a vice president at eHealth.

Availability will vary by age

and income, but some enrollees who don't have a very low income may be able to land zero-premium coverage, according to the analysis of federal data conducted by consulting firm Oliver Wyman, a unit of Marsh & McLennan.

The firm found that zero-premium ACA exchange plans would be available next year to at least some consumers in a total of 2,692 counties, out of 2,722 in the study.

A 60-year-old making about \$36,000 a year could find free 2018 plans in 1,590 counties, while one with income of about \$48,000 could do so in 654 counties, according to the analysis, which used data released Wednesday for plans available on HealthCare.gov, the federal marketplace used by 39 states.

For 2017, no-premium plans were available in many places for the lowest-income enrollees,

but for those at slightly higher levels, they were much more scarce. For instance, in 2017, a 60-year-old making about \$36,000 could find free plans in about 300 of the counties.

That is what is different in 2018, said Kurt Giese, a partner at Oliver Wyman. The zero-premium plans are "much more prevalent now than they were," he said.

In California, which isn't included in the federal data, there is a "huge increase from last year" in the number of people who are eligible for zero-premium plans, said Peter V. Lee, executive director of Covered California, the state's ACA exchange. Covered California currently has about 1.1 million enrollees who receive federal premium subsidies, and more than half of them will be able to buy a no-premium plan for 2018, he said.

Trump Move Leads To Higher Subsidies

The growing availability of no-premium plans is tied to the complicated dynamics of the Affordable Care Act, as well as a recent move by President Donald Trump.

Under the law's rules, subsidies that help pay for premiums are available to people making up to about \$48,000 a year. Those subsidy amounts are linked to the cost of the second-cheapest silver plan in an enrollee's location. So, when silver premiums go up, subsidies go up.

Earlier this month, Mr. Trump's administration cut off federal payments to insurers for

covering certain out-of-pocket costs for low-income enrollees in silver plans. In response, insurers raised premiums on their 2018 policies sharply to cover the extra expense, now coming out of their pockets—and in many cases, they loaded the extra cost onto the silver plans.

Because the separate premium subsidies, which Mr. Trump didn't cut, are linked to silver-plan prices, those subsidies are rising, too. In many states, the costs for cheaper bronze plans are going up much less rapidly than silver plans, so many more people will wind up being eligible for no-premium plans.

For some, the zero-premium plans won't actually be the best deal, insurers and insurance agents say. The silver plans could

be cheaper overall for people who use much health care, despite their higher premium costs, if these people are eligible for the law's cost-sharing help.

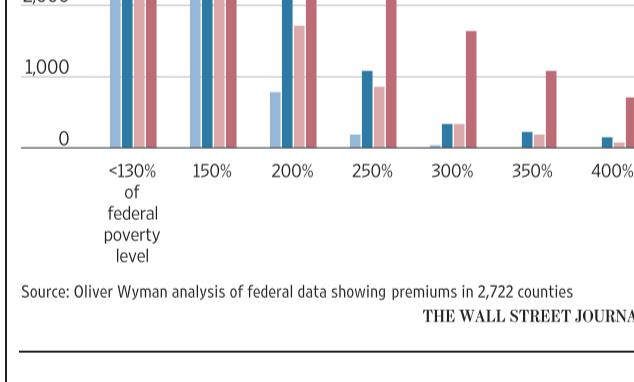
And those who don't get premium subsidies under the law won't have the option of zero-premium plans, and may be responsible for the full brunt of steep rate increases. They may be able to mitigate the impact by staying away from silver plans.

Jerry Dworak, chief executive of Montana Health Co-op, said, "Of course we're hoping that" young and healthy enrollees flock to the no-premium plans. "If they see that it's free, why not take it?" he said.

—Anna Wilde Mathews and Christopher Weaver

Zero-Premium Plans

Number of counties where people will be able to get no-premium insurance on the Affordable Care Act exchanges, depending on their income level and age



Source: Oliver Wyman analysis of federal data showing premiums in 2,722 counties
THE WALL STREET JOURNAL.

Tennessee Police Brace for White Nationalists

By CAMERON MCWHIRTER

Law-enforcement officials in Tennessee are gearing up for two white nationalist rallies this Saturday, preparing expansive security measures and calling for community members to avoid the events by groups that marched in Charlottesville, Va., this summer.

"White Lives Matter" events will be held in Shelbyville, a city of 21,000, and Murfreesboro, a city of 132,000, both south of Nashville.

Groups sponsoring the marches include the League of the South, which calls for the South's secession from the U.S., and the National Socialist Movement, a neo-Nazi Party. Both participated in the August demonstration in Charlottesville, where a woman was killed when a Nazi sympathizer drove a car into a crowd of protesters.

After other violent clashes at several events involving white nationalists around the country, state and local officials have been putting in place strict

rules and heavy security. To reduce the possibility of violence, local law-enforcement officials are stressing the importance of keeping participants and counter demonstrators apart.

Last week, Republican Florida Gov. Rick Scott declared a state of emergency ahead of a white nationalist speech at the University of Florida, allowing local officials to draw from a bigger pool of resources.

Tennessee Gov. Bill Haslam, a Republican, won't deploy the National Guard for the rallies,

but state law enforcement will be in close contact with local police, according to his spokeswoman Jennifer Donnals.

In Shelbyville, police announced they will close streets and set up barriers between rally supporters and those opposing them. The police have forbidden all weapons, backpacks, containers, liquids, torches and other items. Any person entering the area will be subject to search, police said.

Michael Hill, the League of the South's president, issued a

statement Wednesday urging members attending the rally to "obey all authorities."

"Stand your ground, speak your mind, and proclaim your message, but do not initiate physical contact with anyone who opposes you," he said.

A League statement said the purpose of the rallies was in part "to call attention to the continuing influx of African immigrants/refugees into middle Tennessee, and to protest the recent black-on-white church shooting" in Antioch, Tenn.

Hurricane Proved Puerto Rican Team's Fiercest Opponent

By ARIAN CAMPO-FLORES

cure.

Lost ticket revenue and increased costs from moving and housing players have dealt the young team a financial blow.

"We basically blew through our team budget," said Tom Payne, the team's president, who estimates the financial hit so far has reached \$200,000 to \$300,000. "I'm not sure about the situation with that heading into next year."

Maria's damage to the island has been extensive. Only 28% of customers have power, cell service remains difficult, and basic supplies like water, medicine and fresh food are still needed in isolated towns. To get the economy back to normal remains a distant prospect.

For the football team, which is the island's only professional squad that competes in a U.S. league, the Category 4 storm came midseason when the team still had eight games to play. Most players stayed on the island for the storm. "It was an incredible thing to see how Maria razed the country," said midfielder Jorge Rivera, whose uncle lost his home to the storm.

After the storm, Mr. Payne, who had evacuated to Orlando, Fla., worked the phones incessantly, trying to reach his players and find them flights off the island. Once the San Juan airport resumed operations, players managed to trickle out in small groups.

Mr. Payne worked with the league to redo the match schedule and find alternative training and playing fields. The other teams in the league have stepped up, he said, devoting 50% of a match's ticket sales to Puerto Rico relief efforts.

He eventually found temporary housing for the players in Orlando, home to a large Puerto Rican population. As the team has settled into regular training, it is performing better.

After the season-closing match Saturday, the team plans to return to the island to perform community work—and begin to make plans for next season in the face of so much uncertainty.



Puerto Rico FC's Héctor Ramos scoring during a match last year in Puerto Rico. Hurricane Maria left the team's stadium in tatters.

U.S. NEWS

HHS Aide Presses Migrants Not to Abort

BY LAURA MECKLER
AND BRENT KENDALL

WASHINGTON—After a visit to a federal detention center in Texas earlier this year, Scott Lloyd focused on the details of one pregnant girl. He wanted to ensure she had food she liked and was comfortable, and he wanted to counsel her against having an abortion.

"Often these girls start to regret abortion," he wrote in March in a follow-up email to a subordinate.

The shelter, for children who cross the U.S. border illegally on their own, is overseen by the Department of Health and Human Services, and Mr. Lloyd runs the HHS office charged with their care.

Under his leadership, the agency has made it a policy to block abortions for teens in its custody. Mr. Lloyd, a 38-year-old lawyer and longtime anti-abortion activist, has repeatedly phoned or met with pregnant girls to discourage abortion since he began his post in March, according to court filings and administration officials.

His efforts thrust the Trump administration into a whirlwind legal battle after another girl, known in legal papers as Jane Doe, insisted on having an abortion. The administration argued it shouldn't be forced to facili-



HHS's Scott Lloyd was questioned about the constitutionality of his efforts by House Democrats at a hearing on Thursday.

tate an abortion for the 17-year-old Central American girl, but an appellate court disagreed, and the abortion was performed Wednesday.

Mr. Lloyd declined to comment for this article.

Supporters of Mr. Lloyd say he is doing what he should to care for vulnerable expectant mothers. Critics say the department's policy of discouraging and even blocking abortions is inappropriate and unconstitutional.

"It is extremely troubling to me, Mr. Lloyd, what is happening, and I think you are far overreaching over your exper-

tise," Rep. Pramila Jayapal (D., Wash.) told Mr. Lloyd at a congressional hearing Thursday, where he was pressed by Democrats on these practices.

Mr. Lloyd didn't respond to the criticism nor answer many questions about what kind of contact he had with pregnant girls at the shelters.

"I'm out in the field in many of our locations, and we, I meet with, you know, dozens and perhaps hundreds of the people who we serve," he said. "I'm certain that some of them, some of them were pregnant at the time."

Internal HHS emails pro-

Social Conservatives Expand Their Power

Scott Lloyd's work is an example of a broader push by the Trump administration to deliver socially conservative policies.

Republican President Donald Trump has signed legislation that allows funding cuts to Planned Parenthood and rescinded a mandate by President Barack Obama that all employers offer contraceptive coverage under the Affordable Care Act.

Mr. Trump undid protections for transgender students in schools and in the military, and appointed a conservative, Neil

Gorsuch, to the Supreme Court. The administration itself is populated by many social conservatives, including Mr. Lloyd, to the delight of activists.

"Personnel is policy," said Billy Valentine, vice president of public policy at the anti-abortion group Susan B. Anthony List. "I'm very glad Scott is in the position he was to make clear the government was going to provide excellent health care to the mother and the unborn child."

Mr. Lloyd had an early brush with contentious national debates while he was in law school at Catholic University: He assisted the parents of Terri Schiavo, who fought a

high-profile court battle to keep their daughter alive against her husband's wishes when she was in a persistent vegetative state.

After graduation, he joined President George W. Bush's administration and helped develop a "conscience" regulation to protect workers who didn't want to participate in certain medical services.

He later co-founded Legal-Works, a "pro-life apostolate" law firm embracing what it calls "the belief that the practice of law should be guided by the principles of our faith in every respect."

—Laura Meckler
and Brent Kendall

WASHINGTON WIRE

POLITICS

Trump Donor Sought Clinton Email Data

Trump donor Rebekah Mercer in August 2016 asked the chief executive of a data-analytics firm working for Donald Trump's presidential campaign whether the company could better organize the Hillary Clinton-related emails being released by WikiLeaks, according to a person familiar with their email exchange.

The previously undisclosed details from the exchange between Ms. Mercer and Cambridge Analytica CEO Alexander Nix show how an influential supporter of Mr. Trump was looking to leverage the hacked Clinton-related messages to boost Mr. Trump's campaign.

Earlier this week, The Wall Street Journal reported that Mr. Nix emailed Ms. Mercer and some company employees that he had reached out to WikiLeaks founder Julian Assange to offer help organizing the Clinton-related emails the website was releasing. The new details shed light on the timing of Mr. Nix's outreach to Mr. Assange, which came before his company began working for Mr. Trump's campaign.

Representatives for Ms. Mercer and Cambridge Analytica didn't return a request for comment. Earlier this week, Mr. Trump's campaign issued a statement playing down its work with Cambridge Analytica but not addressing the offer to help Mr. Assange index the Clinton-related emails.

—Rebecca Ballhaus

ELECTION

Website First Funded Anti-Trump Research

A research firm whose work ultimately culminated in a dossier of unverified and salacious information about President Donald Trump's ties to Russia was first hired by a conservative publication to conduct research on a number of presidential candidates.

In a joint statement released Friday, the Washington Free Beacon's chairman and editor in chief said the Washington, D.C.-based web publication had hired the firm Fusion GPS to conduct opposition research during last year's presidential campaign. But the publication denied any involvement in anti-Trump research that culminated in a 35-page dossier compiled by ex-British spy Christopher Steele that has become of significant interest to investigators probing alleged Russian meddling in the 2016 election.

The Free Beacon's involvement in the initial research effort ends a long-running mystery concerning the murky origin of the dossier, which circulated widely in intelligence and media circles late in the 2016 election.

Mr. Trump has called the dossier "fake" and "discredited" and has denied any collusion with Russia during the election.

—Byron Tau

FBI Warned of Threat to Oswald, Memo Shows

BY ELI STOKOLS

A newly released memo from longtime FBI Director J. Edgar Hoover reveals his frustration over law enforcement's failure to keep Lee Harvey Oswald alive long enough to extract his confession to the murder of President John F. Kennedy.

The Federal Bureau of Investigation had even warned the Dallas Police Department about a threat on Oswald's life the agency had received the night before Dallas nightclub owner Jack Ruby shot and killed Mr. Oswald, according to the document, one of some 2,890 previously classified documents surrounding the Kennedy assassination released to the public Thursday.

Mr. Hoover dictated the memo Nov. 24, 1963, two days after Kennedy was shot and just hours after Oswald had been killed while he was in police custody.

"There is nothing further on the Oswald case except that he is dead," the memo began.

The FBI had received a phone call the night before Oswald was killed warning them a plot was in the works. "Last night, we received a call in our Dallas office from a man talking in a calm voice and saying he was a member of a committee organized to kill Oswald," Mr. Hoover said.

That information was twice communicated to the Dallas police chief, first on the evening the threat came in and again the following morning in a phone call, according to the memo. Dallas police "assured us adequate protection would be given," Mr. Hoover states. "However, this was not done."



Evidence related to the assassination of President John F. Kennedy, including Lee Harvey Oswald's rifle and his identity papers.

On the morning of Nov. 24, 1963, a crowd of police and press with live television cameras rolling were assembled in the basement of the police department's headquarters to witness Oswald's transfer to a more secure county jail. As officers walked Oswald out, Mr. Ruby stepped forward and shot him once with a concealed .38-caliber revolver.

The single gunshot wound proved to be fatal—ending Oswald's life but also Mr. Hoover's hopes of extracting a

confession from him to the Kennedy murder.

A confession was of the essence, Mr. Hoover wrote in the same memo, because of the need for "something issued so that we can convince the public that Oswald is the real assassin."

The comment was remarkable for its foresight. More than 50 years after the assassination, more than half of the country still questions the Warren Commission's conclusion Oswald acted alone.

Historians don't anticipate any revelations from the newly released documents that will offer convincing validation of

The National Archives released the trove of new documents related to the JFK assassination Thursday evening at the behest of President Donald Trump, who held back a number of documents the FBI and the Central Intelligence Agency requested remain classified. Those additional documents could be released after additional review.

Historians don't anticipate any revelations from the newly released documents that will offer convincing validation of

any conspiracy theories that have long swirled around the Kennedy assassination.

But they could add to the public's understanding of the government's failed pursuit of Oswald in the months leading up to the killing and the process of its long investigation into the matter.

Mr. Hoover wrote hours after Oswald's murder that his "having been killed today after our warnings to the Dallas Police Department was inexcusable."

BY NATALIE ANDREWS

As Republicans push forward to rewrite the tax code, some stakeholders are warning that Senate Majority Leader Mitch McConnell is adopting the same legislative strategy that proved unsuccessful with health care.

The effort to overturn the 2010 Affordable Care Act collapsed after GOP lawmakers wrote the legislation behind closed doors and depended solely on votes from their own party to pass the bill. When three of them balked, the measure failed since no Democrat supported it.

Republicans are taking that same approach on the tax package—despite efforts by some Democrats to engage in the process, according to interviews with lawmakers.

"One of the things that typically you do in governing is you reach consensus, but you use both sides of the aisle to do so," Sen. Bob Corker (R., Tenn.) said.

President Donald Trump has courted Democratic lawmakers on the House and Senate tax-writing committees, meeting with them at the White House. "I think we're going to get some Democratic votes," the GOP president said Wednesday when asked about the tax measure.

But his outreach hasn't been matched with similar efforts by Senate Republican leaders. Democrats said they have not seen the tax legislation and don't expect to see it before it is released next week.

"There is a lack of trust at this point because so much of this has been done behind closed doors with just Republicans," said Sen. Claire McCaskill of Missouri, a Democrat whom the White House is attempting to win over.

Aides to Mr. McConnell, a Kentucky Republican, point out that Democrats will be able to offer amendments in the Finance Committee and later on the Senate floor, should the bill come to the floor for a vote.

"Many Democrats called for action to get tax reform done," Mr. McConnell said in a floor speech this week. "I hope our Democratic friends will work with us now in a serious way to actually do so. After all, it's not as if the need for tax reform has changed since our friends made statements like these. The only

thing that's changed is the occupant of the White House."

The pressure for Republicans to pass a tax bill is growing. With the GOP holding 52 seats in the Senate and at least two Republicans retiring, the party's majority in the chamber could be on the line if the effort to reform the tax code is unsuccessful.

Former Senate Majority Leader Trent Lott, a Mississippi Republican.

"If they go this whole year not having achieved anything major, other than one Supreme Court justice, that horse is going to be out of the barn," Mr. Lott said.

Mr. Trump's attempts to build a bipartisan coalition have struck some Democrats as more pressure than persuasion—a tactic similar to one used by congressional Republicans. At an October meeting at the White House with mostly Democrats up for re-election in 2018 in states Mr. Trump won, a Democratic senator said the meeting began friendly but ended with tension.

"He spent the last several minutes threatening people," the senator said. "He said he wouldn't want to be a Democrat in a state that voted against this."

—Siobhan Hughes
and Kristina Peterson
contributed to this article.



Senate Majority Leader Mitch McConnell (R., Ky.) has been criticized for not engaging Democrats on the GOP's tax overhaul.

JOSHUA ROBERTS/REUTERS

GOP Tax Strategy Echoes Health-Care Approach

BY NATALIE ANDREWS

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—Siobhan Hughes
and Kristina Peterson
contributed to this article.

OBITUARIES

TAIZO NISHIMURO
1935 – 2017

CEO Burnished Toshiba Name in U.S.

Taizo Nishimuro rose to the top of one of Japan's best-known industrial conglomerates thanks in part to his negotiating prowess in the U.S. But by the time he died on Oct. 14 at age 81, the former Toshiba Corp. chief executive had seen a U.S. acquisition lay low the company.

Mr. Nishimuro joined Toshiba in 1961, when the company and its product line of televisions, computers and microwave ovens were a symbol of Japan's rise to economic superpower status.

Fluent in English, he spent 14 years with the company in the U.S., where he made strong connections with business leaders. That experience would pay off throughout his career. In the

1990s, when Toshiba battled Sony Corp. over the format of DVDs, Mr. Nishimuro tapped his Hollywood contacts to help make Toshiba's format the standard.

Even after he stepped down from the top job in 2000, Mr. Nishimuro remained a prominent figure at Toshiba, holding advisory roles. His legacy was tainted in recent years as a deal failed and an accounting scandal erupted.

In 2006, Toshiba expanded its nuclear-reactor business by buying Westinghouse Electric Co. Westinghouse filed for bankruptcy protection in March, and Toshiba had to sell its prized flash-memory business to survive.

—Takashi Mochizuki

ROGER RABER
1942 – 2017

Onetime Priest Pushed Corporate Governance

Roger Raber, ordained as a Roman Catholic priest as a young man, later found his calling as an advocate for better corporate governance.

He was chief executive of the National Association of Corporate Directors, a nonprofit seeking to improve the performance of boards, from 1999 to 2007, coinciding with scandals at Enron Corp. and WorldCom Inc. Those events gave resonance to his calls for independent directors willing to ask CEOs tough questions.

"Directors should have the duty of curiosity to ask difficult questions," Dr. Raber said in 2002 at a congressional hearing on Enron. Among other things, they should question whether reported results

reflect true profitability and whether auditors might have conflicts of interest.

The association offered seminars to help directors learn about the latest accounting rules and tricks. Dr. Raber said some attendees told him it was the first time they understood transactions that weren't recorded on a corporation's balance sheet.

He believed corporate boards' compensation committees were often too cozy with the CEO. Those panels should exclude anyone with personal or business ties to the company, he argued.

Dr. Raber died of complications from Alzheimer's in Washington on Oct. 10. He was 74.

—James R. Hagerty

FROM PAGE ONE

DEAL

Continued from Page One
and, if there is one, it may not come until closer to year-end, the people said.

Big companies are rushing to integrate different lines of health-care businesses, aiming to squeeze out costs and use their bulk to bolster leverage with suppliers.

For CVS, a deal would be a bulwark against the threat of competition from Amazon.com Inc., which is exploring a move into the pharmacy business.

CVS already manages pharmacy benefits for employers and insurers, while also selling medicines through its own drugstores. Adding Aetna will expand its reach on the health-care payer side, giving it oversight over all aspects of health-care spending as a medical insurer itself. It will likely accelerate CVS's existing efforts to remake its stores into health centers more akin to clinics, pushing it deeper into the health-care provider space. It will also lock in Aetna's 22 million members as customers.

"You have the basis for a less expensive delivery system, at places where employees actually go," said Robert Galvin, chief executive of Equity Healthcare, which negotiates contracts with health insurers on behalf of companies owned by big private-equity firms, including Blackstone Group, where he is an operating partner. "The diligence is going to be, what does this mean to an employer? Will it lower costs and improve care?"

UnitedHealth is already far down the road of integration.

It is the parent of the largest U.S. health insurer and a major pharmacy-benefit manager, as well as a rapidly growing stable of doctor practices and outpatient surgery centers. Humana Inc., which owns its own pharmacy-benefit manager, has talked about going deeper into providing health care to members in their homes. Anthem, which sold off its PBM in 2009, now plans to start a new one in 2020.

For insurers, the task is partly a reaction to the death of a previous round of deals; Anthem's acquisition of rival Cigna Corp. and Aetna's effort to buy Humana both ran around earlier this year after losing antitrust cases. Cross-industry combinations like a

A deal would be a bulwark against the threat of competition from Amazon.

CVS-Aetna deal would likely avoid much of that pushback because they are far more vertical than the insurer-insurer mergers would have been.

The insurance companies are facing off against pharmaceutical makers and hospital systems, which themselves have been merging and acquiring doctors, strengthening their hand in pricing negotiations and improving their ability to capture lucrative services. Insurers want to try to move care such as the infusion of specialty drugs away from hospitals and into other settings where costs can be far lower—in CVS's case, per-

haps a MinuteClinic or home-based offering.

"Employers are looking for more comprehensive solutions to solve the big health-care management challenges," said Nadina J. Rosier, a practice leader at Willis Towers Watson. They also want "a more seamless experience for the member."

During an earnings call in May, Aetna CEO Mark T. Bertolini said that Aetna and CVS, which already have a contract for pharmacy-benefit services, were "trying to fundamentally rethink how we could work closer together, both on just the pharmacy side but also on the local care delivery that could go on in the community, given that CVS has 9,000 stores within 3 miles of 80% of the American public."

He said Aetna believed "we need to get closer to home and closer to the community to help people...versus waiting for them to show up maybe once a year at the doctor to get information about how they're doing."

But the bottom-line question will be whether the bulked-up CVS can offer better economics than existing insurers and PBMs. "It'll all depend on the math," said Jim Winkler, a senior vice president at Aon PLC. "It will depend on the terms of the deal you can put in front of an employer and how transparent as an entity you are willing to be."

A deal with Aetna would be large—the insurer has a market value of nearly \$60 billion—and CVS would need to pay for it largely with stock, and a recent decline in the drugstore owner's shares makes that more expensive.

—Sharon Terlep contributed to this article.

the separate business dealings of former aides to Mr. Trump, including former campaign manager Paul Manafort, who is under investigation for alleged money laundering and tax issues, The Wall Street Journal has previously reported.

Mr. Mueller's prosecutors have been presenting evidence before a federal grand jury in Washington.

A spokesman for Mr. Manafort declined to comment. Mr. Manafort has previously said he has done nothing wrong.

Moscow has denied seeking to influence the election, and Mr. Trump has vigorously disputed allegations of collusion. The GOP president has called Mr. Mueller's inquiry a "witch hunt."

CHUCK AMES
1925 – 2017

Executive Led Endangered Industrial Firms

By JAMES R. HAGERTY

As a student at Illinois Wesleyan University in the late 1940s, Chuck Ames agreed to be president of his fraternity, largely because it meant a free room. He was a C+ student and, when he later applied to Harvard Business School, he figured his chances of acceptance were low.

Harvard's interviewer, noting that service as a fraternity officer, saw leadership potential. Harvard admitted him. Mr. Ames was launched on a career in which he rose to become a partner at McKinsey & Co. and was chief executive at three industrial companies struggling against tougher foreign competition. As U.S. manufacturers retrenched in the late 1980s, Mr. Ames joined the private-equity firm Clayton, Dubilier & Rice, where he eventually became vice chairman.

His memoir, published in 2013, is called "Lucky Breaks," but Mr. Ames made much of his own luck. He burnished his name by writing about management in the Harvard Business Review and was willing to work for old-line industrial companies while others flocked to more glamorous industries.

He took pride in his common sense. As a McKinsey consultant, he figured out that Hershey Foods Corp. could save money by buying chopped almonds rather than whole ones.

Mr. Ames died Sept. 22 at his home in Hunting Valley, Ohio. He was 92.

As a corporate director, Mr. Ames was impatient with long-winded answers. He sometimes told executives to limit their responses to yes, no or a number.

He didn't believe companies should make moonshot investments. "I'm not interested in Nobel Prizes," he told the Washington Post in 1988. "I want to focus on



market requirements."

Bruce Charles Ames was born June 27, 1925, in Elgin, Ill. (After schoolmates insisted Bruce was a sissy name, he switched to Chuck.) His father, a broker of milk and eggs, frequently moved the family in search of better opportunities and eventually owned a dairy.

He recalled being a young "hellion" who broke windows with a BB gun and put a hole in the ceiling while playing with his dad's pistol. At his father's dairy, young Chuck once spilled two 10-gallon cans of milk while loading a truck. "You know, Chuck, you're getting strong as an ox and just as smart, too," his father said, then deducted the cost from the son's paycheck.

Shortly before his 18th birthday, Mr. Ames enlisted in the Army and was sent to New Guinea and later the Philippines.

The GI Bill paid for his education at Illinois Wesleyan, where he majored in liberal arts and met his future wife, Joyce "Jay" Eichhorn.

His first job after Harvard, as a manager at General Telephone

Corp., was slow and uninspiring. After reading a Wall Street Journal article about McKinsey, he applied to the consulting firm and was hired for \$9,000 a year. The uniform was a suit, a white shirt, knee-length socks and a hat.

After 15 years, he left McKinsey for Reliance Electric Co., a maker of electric motors and other items, in 1972. Though he found running a company harder than being a consultant, he was soon promoted to CEO and rapidly expanded Reliance. His aim was to double earnings every five years and earn at least 15% on invested capital. Capital investments should pay off within five years, he believed.

Exxon Corp. bought the company for \$1.24 billion in 1979. Reliance later went through other ownership changes and was acquired by Switzerland's ABB Group.

The next stop for Mr. Ames was Acme-Cleveland Corp., a maker of machine tools for cutting and shaping metal, where he became CEO in 1981. German and Japanese companies were gobbling up the tools market. Mr. Ames slashed costs and tried diversifying into telecom equipment but felt he couldn't match foreign rivals' investments in new technology. After six years, he resigned as CEO. "I had done my best, and that wasn't good enough," he concluded. Acme was later broken up and sold.

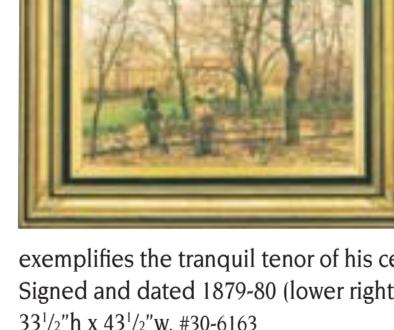
Clayton Dubilier hired Mr. Ames to run Uniroyal Goodrich Tire Co. in December 1987. Part of the job was to pretty up the company for ultimate sale," he wrote. It didn't take long. In 1989, Michelin Group of France agreed to buy Uniroyal Goodrich for \$1.5 billion.

Mr. Ames is survived by his wife of 67 years, three children and eight grandchildren.

◆ Read a collection of in-depth profiles at WSJ.com/Obituaries



VICTORIAN IDYLL JOHN ATKINSON GRIMSHAW



British master. Incredible color. Majestic composition. This original oil on canvas by John Atkinson Grimshaw beautifully showcases the esteemed painter's mastery over light and atmosphere. Capturing the idyllic countryside at dusk, the gold-washed composition exemplifies the tranquil tenor of his celebrated autumnal scenes.

Signed and dated 1879-80 (lower right). Canvas: 20" h x 30" w; Frame: 33 1/2" h x 43 1/2" w. #30-6163

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WORLD NEWS

Spain Seizes Power in Catalonia After Vote

Prime minister orders region's leaders to step down, sets new elections amid crisis

By JEANNETTE NEUMANN
AND MARINA FORCE

BARCELONA—The Spanish government ousted Catalonia's leaders on Friday, hours after separatist lawmakers declared the wealthy region an independent republic, plunging the country into its greatest political quagmire in decades.

Prime Minister Mariano Rajoy also said he was dissolving Catalonia's parliament and set new legislative elections for Dec. 21, invoking emergency constitutional powers granted to him by Spain's Senate earlier in the day.

The tensions between Madrid and the Catalan separatists now risk spilling over into the streets, with pro-independence forces pledging mass demonstrations and even civil disobedience as Mr. Rajoy vows to subdue the independence drive.

Mr. Rajoy didn't elaborate on how the central government would ensure that Catalan separatist leaders, who have repeatedly flouted Spanish authorities, would step down from their positions. Prosecutors in Madrid could order their arrests.

Officials in Spain's ministries will take over the responsibilities of Catalan agencies, including the regional police force. Regional parliamentary elections will be held in December and new leaders elected, an attempt by Mr. Rajoy to limit the time Madrid maintains direct rule in Catalonia. The premier also said he would take the Catalan parliament's proclamation of independence to Spain's top constitutional court.

"We are living a sad day in which irrationality has trumped the law and demolished democracy in Catalonia," Mr. Rajoy said in televised remarks.

No Spanish prime minister has ever invoked the constitutional powers to seize temporary control of a region. The potential for missteps, which risk fanning the flames of separatist sentiment further still, is great.

Mr. Rajoy has already stationed at least an additional 6,000 national police officers in Catalonia, according to union representatives, in a sign the central government is worried about how it will impose direct rule on the ground and whether Catalonia's 17,000-strong regional police, the Mossos d'Esquadra, will follow Madrid's orders.

"If the Mossos sides with pro-independence supporters, then the risk of an even more serious escalation of this crisis would increase," said Stephen Brown, an economist at Capital Economics in London. Mossos representatives have said in recent days that the force is awaiting details on the powers Madrid will assume.



Mayors in the Catalan parliament in Barcelona raised batons in support of independence for the region on Friday. The vote sparked alarm across the country and beyond.

LLUIS GEN/AGENCE FRANCE PRESSE/GETTY IMAGES

One risk is of clashes between Spanish police and protesters who have promised to protect Catalan government institutions in a bid to prevent Madrid from removing Catalan officials. The tensions could also escalate if Spanish prosecutors order the arrests of the separatist leaders, something pro-independence forces have vowed to prevent.

Separatists' strategy has been to "trigger an overreaction by the central government" to force the European Union to intervene and to keep support for independence strong in the streets, wrote Antonio Barroso, a Spanish political analyst at Teneo Intelligence, a consulting firm, in a research note Friday.

Catalan National Assembly, an influential pro-independence organization, on Friday published a statement recommending that civil servants in Catalonia "don't have to comply with the orders from someone who invokes (direct rule)...because they are clearly unlawful measures."

Earlier Friday, separatist lawmakers used a secret vote to approve the independence declaration, signaling concern that they could face arrest for flouting Spanish law by proclaiming a split with Spain.

Fifty-two opposition lawmakers abandoned the parliament in protest at what they branded a democratic farce, a direct attack on Spain's constitution and an affront to Catalans who don't support secession. Of those who remained, 70 voted in favor of independence and 10 against, while two lawmakers voted in blank.

Stocks, Bonds Hit By Political Unrest

Investors dumped Spanish stocks and bonds after the region of Catalonia declared independence on Friday, in a move that promises further turmoil for the country's markets.

Spain's IBEX-35 stock-market index dropped 1.4% on the day, while the broader Stoxx Europe 600 gained 0.3%, after the Catalan parliament voted to declare an independent Catalan Republic.

Banco de Sabadell SA and CaixaBank SA, two banks with a strong presence in Catalonia, were among the biggest decliners, losing 4.7% and 3.1%, respectively.

Investors also sold Spanish bonds, which so far have been hit less than stocks by the crisis. Yields on 10-year Spanish government debt rose to 1.574% from 1.558% the previous day. Yields on bonds issued by the Catalan government maturing next year rose to 2.493% from 2.313% Thursday. Bond yields move opposite to prices.

Pro-independence protesters gathered outside the regional parliament in central Barcelona broke out into cheers when the parliamentary vote was announced. Separatist lawmakers began to sing the Catalan anthem. Soon after the vote, about 20,000 people had gathered in central Barcelona in support of independence.

"Today the legitimate par-

Analysts say Spain and the European Union are unlikely to recognize Catalan independence, but Madrid's attempts to take over the regional government could spark social unrest.

The market sell-off reflects fears that uncertainty will be harmful for the Spanish economy, investors say.

"It reflects a negative impact on growth for one of the economies that was leading Europe and could now be affected," said Adrien Pichoud, chief economist at SYZ Asset Management, which has dumped Spanish stocks and bonds since the Catalan crisis escalated in September.

Until July, Spain's IBEX-35 index was outperforming benchmark indexes in Italy, France and Germany on a total return basis. Now, the stocks are the worst performers in this group.

The premium demanded by investors to hold Spanish bonds instead of German 10-year debt—a widely used measure of credit risk—also edged up Friday, but it remains narrow by historical standards.

—Jon Sindreu

Separatist Jitters

Spanish stocks tumbled Friday, led lower by Catalonia-focused banks that have steadily declined amid the standoff.

Spain's IBEX-35 stock-market index

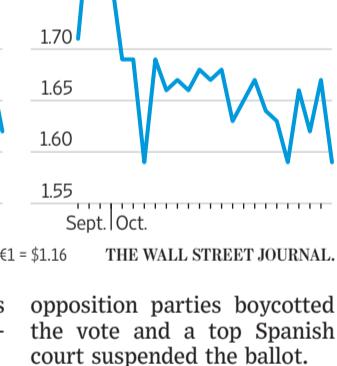
10400



CaixaBank's stock price



Banco de Sabadell's stock price



Source: FactSet Notes: Times are in EST; €1 = \$1.16 THE WALL STREET JOURNAL.

to Madrid and over complaints that Madrid suppresses its distinctive language and culture.

The separatist legislators said Catalan voters gave them a mandate for the declaration in an Oct. 1 referendum on independence. Catalan authorities say that around two million voters cast ballots and that the vast majority voted in favor of secession. However,

opposition parties boycotted the vote and a top Spanish court suspended the ballot.

Foreign leaders and governments quickly reiterated their support for Madrid in the standoff. The U.S. State Department said that Washington "supports the Spanish government's constitutional measures to keep Spain strong and united."

Catholic Hospital Chain Defies Vatican on Euthanasia

By FRANCIS X. ROCCA

VATICAN CITY—A chain of Catholic psychiatric hospitals in Belgium is granting euthanasia to non-terminal patients, defying the Vatican and deepening a challenge to the church's commitment to a constant moral code.

The board of the Brothers of Charity, Belgium's largest single provider of psychiatric care, said the decision no longer belongs to Rome. Truly Christian values, the board argued in September, should privilege a "person's choice of conscience" over a "strict ethic of rules."

The policy change is highly symbolic, said Didier Pollefeyt, a theologian and vice rector of the Catholic University of Leuven. "The Brothers of Charity have been seen as a beacon of hope and resistance" to euthanasia, he said. "Now that the most Catholic institution gives up resistance, it looks like the most normal thing in the world."

Belgium legalized euthanasia in 2002, the first country with a majority Catholic popu-



KRIS PANNECOLCKE FOR THE WALL STREET JOURNAL

Dr. Marc Desmet, center, often attends euthanizations at Jessa Hospital in Belgium, where he works.

lation to do so. Belgian bishops opposed the legislation, in line with the church's catechism, which states that causing the death of the handicapped, sick or dying to eliminate their suffering is murder.

But many Catholic health-

care specialist who is also a Catholic priest, frequently counsels patients who are considering euthanasia. "I do not say what they have to decide," he said.

Another Belgian priest, the Rev. Gabriel Ringlet, is author of a popular book on "spiritual accompaniment to euthanasia," and has encouraged people to develop their own unofficial rituals for the practice.

In this context, Belgium's branch of the Brothers of Charity, an international congregation, was one of the last Catholic holdouts. The organization, which was founded in 1807, now runs 15 psychiatric hospitals there, with around 5,000 beds.

In 2002, a majority of the hospital chain's board of directors were also consecrated brothers who take vows of poverty, chastity and obedience. After legalization, if patients at a Brothers of Charity hospital demanded euthanasia, official policy was to transfer them to other institutions.

By this year there were only three consecrated brothers on the 15-member board, and in

March it voted to grant euthanasia to patients, issuing an ethical rationale and a procedure for evaluating euthanasia requests. The board declined to comment about the decision for this article.

The Vatican responded to the decision with a public statement that Pope Francis wanted the hospital chain to reverse policy, and letters from the offices for doctrine and religious orders.

Brother René Stockman, world-wide head of the Rome-based Brothers of Charity and a prominent campaigner against euthanasia, warned the Belgian hospital chain in July that it would lose the right to claim a Catholic identity if it didn't abandon its euthanasia policy. That could mean losing buildings that belong to the religious order, he told the Journal.

The hospital chain in Belgium appears unmoved. One prominent board member, former Belgian Prime Minister Herman Van Rompuy, tweeted in August: "The time of 'Rome has spoken, the case is closed' is long past."

Marc Desmet, a palliative

WORLD NEWS

WORLD WATCH

ECB Rate Move Reopens Divide at the Top

By TOM FAIRLESS

FRANKFURT—The European Central Bank's reluctance to quickly phase out its bond-buying program has reopened a rift at the top of the world's second-most powerful central bank, pitting ECB President Mario Draghi against German Bundesbank head Jens Weidmann—just as discussions begin about whether the German will succeed the Italian.

The dispute is a headache for investors, making it harder to figure out when the ECB might end its bond purchases and start raising interest rates. It could affect who is picked as Mr. Draghi's successor when he steps down in late 2019, a decision that will influence the scope of the ECB's role in Europe's economy for years to come.

Mr. Weidmann, widely seen as a leading contender for the ECB's top job, has publicly opposed many of the bank's stimulus policies in recent years, notably its large-scale purchases of government bonds, known as quantitative easing or QE.

Although he toned down his criticism in recent months, Mr. Weidmann changed tack this week, publicly opposing a decision to extend QE through September 2018.

In a speech in Paris on Friday, Mr. Weidmann said the ECB should have announced a fixed end-date for QE, rather than leaving open the option



On Mario Draghi's watch, the ECB has become a proponent of policies such as negative interest rates.

ALEX KRAUS/BLOOMBERG NEWS

of another extension beyond September.

His opposition puts Mr. Weidmann at odds with national leaders in Southern Europe, who would need to approve his nomination as ECB chief. It suggests that a Weidmann-led ECB would be a very different animal from the one that Mr. Draghi has steered over the past six years.

The ECB's president has only one vote on its 25-member rate-setting committee, but

gets to decide which topics are discussed by council members.

"He has agenda-setting power," said Guntram Wolff, a German economist who is director of Bruegel, a Brussels-based think tank.

On Mr. Draghi's watch, the ECB has been transformed from a bastion of monetary conservatism modeled on the Bundesbank into an proponent of experimental policies such as negative interest rates. Its balance sheet has swelled by

about half, to around €4.4 trillion (\$5.2 trillion)—bigger than the Federal Reserve's—and is set to keep growing through much of next year.

The ECB "has become more Anglo-Saxon, much more like a modern central bank such as the Federal Reserve or **Bank of England**," said Mr. Wolff.

The bank has become one of the biggest players in global financial markets, so that uncertainty about the bank's future policy course affects a wide

range of interest rates and asset prices.

The ECB's newfound activism is controversial, however, with critics arguing it should have been up to politicians, not the central bank, to defend a politically created common currency.

One senior ECB official says the bank has become "more politicized than ever before" under Mr. Draghi's leadership, because its new policy tools have broader implications for the distribution of wealth. The ECB decides which banks to supply with cheap funds, and how much financial support to give to governments, the official said.

The post of ECB president is one of a handful of top European Union positions that are expected to be negotiated by EU leaders as a package over the coming months. They include ECB vice president, head of the "Eurogroup" committee of eurozone finance ministers, and head of the ECB's banking supervisor. The discussions could kick off in earnest after Germany forms a new government, possibly around the end of the year.

Mr. Weidmann's candidacy is expected to be strongly supported by Berlin, in part because a German has never run the ECB. The appointment needs a consensus among leaders of eurozone countries, however, and Mr. Weidmann's accession is far from guaranteed.

Chinese dissident poet Bei Ling said family members confirmed to him that Gui Minhai has been released, days after the Chinese and Swedish governments made similar announcements but provided few details.

Mr. Gui, a Swedish citizen who was born in China, was one of five employees of a Hong Kong bookshop believed to have been abducted and spirited to the mainland two years ago. The store specialized in salacious tales about high-level Chinese politics.

Mr. Gui disappeared from his Thai holiday home while the four other men, who have been released, were last seen in Hong Kong.

—Associated Press

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—Associated Press

Malaysia's Najib Seeks Support With More Spending

By YANTOULTRA NGUI

KUALA LUMPUR, Malaysia—Prime Minister Najib Razak announced his largest annual spending plan since becoming Malaysia's leader in 2009, as he seeks to shore up support for his government ahead of a general election in 2018.

The 2018 budget includes the highest-ever aid packages worth 6.5 billion ringgit (\$1.5

billion) for rubber tappers, farmers and fishermen, who represent a large cross-section of his government's support base.

The budget also includes the elimination of toll collections on three highways running through what are expected to be the most closely contested areas in the coming elections.

"This budget is the most important because it is a for-

mula for initiatives that have been driving the country's economy since I became prime minister [in 2009]," Mr. Najib told Parliament on Friday. The 280.25 billion-ringgit budget is 7.5% higher than the 260.80 billion ringgit allocated for this year.

The 2018 election, which is due around June next year, will be Mr. Najib's biggest electoral test since his govern-

ment was embroiled in the scandal at 1Malaysia Development Bhd, or 1MDB, in 2015.

1MDB, which Mr. Najib established in 2009 to spur the country's economy and drive investment, is being investigated by authorities in several countries including the U.S. on allegations that range from money laundering to misappropriation of funds. Both 1MDB and Mr. Najib have de-

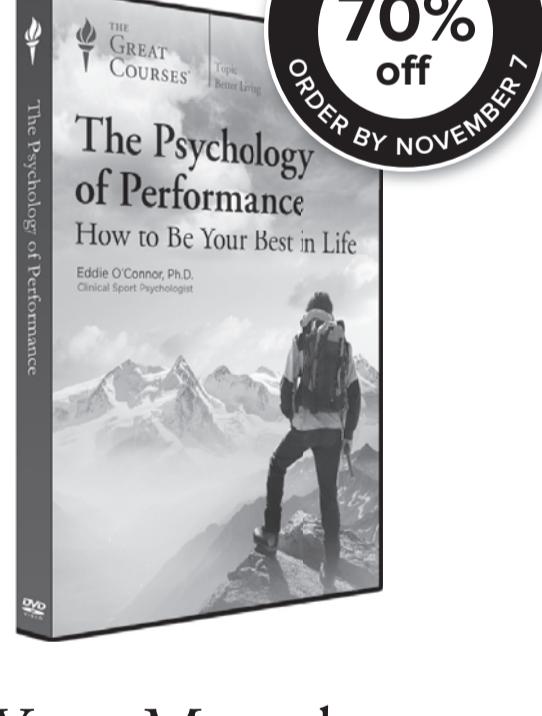
nied wrongdoing and said they would cooperate with any lawful international investigation.

"This is the classic election budget," said James Chin, a Malaysian academic who heads the Asia Institute at the University of Tasmania, said.

"The budget was designed to get votes from the core UMNO voters, the Malay community and the B40 [bottom 40% household group] voters."

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WORLD NEWS

Team in Niger Was Denied Armed Drone

U.S. military officials sought permission to send an armed drone near a patrol of Green Berets before a deadly ambush Oct. 4 in Niger, but the request was blocked, raising questions about whether those forces had adequate protection against the dangers of their mission.

By Julian E. Barnes,
Nancy A. Youssef
and Ben Kesling

New information shows the Green Beret team was part of a larger mission, one potentially more dangerous than initially described, and one believed to merit an armed drone. But the request was blocked in a chain of approval that snakes through the Pentagon, State Department and the Nigerien government, according to officials briefed on the events.

One focus of military investigations into what happened in Niger will be what a military official now says were two changes in the mission of the Green Beret team—from initially training Nigerien forces, to advising on a mission to capture or kill a wanted terrorist, to investigating the terrorist's abandoned camp.

On Oct. 4, after the U.S.-Nigerien team had destroyed the camp, four Americans and five Nigerien soldiers were killed in a firefight with suspected Islamic State fighters, and two other Americans and as many as eight Nigeriens were wounded.

The ambush and the circumstances surrounding it have taken on political weight in Washington as the deadliest military clash for Americans since President Donald Trump took office. Sen. John McCain (R., Ariz.), chairman of the Senate Armed Services Committee, has pressed for more information.

The drone request suggests that military officials were aware of a change in the security landscape in western Niger, where more than two dozen previous patrols had been conducted without incident. Intelligence indicated a low risk of enemy contact, and there had been no enemy attacks on U.S. forces there for the past year, according to officials investigating the incident.

The initial decision against the use of an armed drone reflects an effort by the U.S. mis-



Army Sgt. La David Johnson, killed in Niger, was buried recently in Fort Lauderdale, Fla.

sion in Niger to maintain a light footprint in the country amid local resistance to the deployment of armed aircraft.

After the firefight broke out on Oct. 4, some military officials also wanted an armed drone, but it is unclear if one was in the area and whether any request was made, according to a military official. An unarmed drone was dispatched, and French Mirage jet fighters arrived about an hour later, followed by French helicopters.

US officials have repeatedly modified the timeline as facts trickle in.

The Green Beret patrol was one of two operating in the area at about the same time, Pentagon officials said. The second consisted of an elite commando team specializing in missions to track down wanted jihadists; both were involved at the time in a hunt for an associate of Adnan abu Walid al-Sahawi, the leader of Islamic State in the Greater Sahara, according to current and former officials briefed on the events.

The Green Beret team's role in Niger was initially to help

train the country's security forces. But then, before the October mission began, the group was asked to advise the Nigerien quick-reaction force that was to assist the elite commando unit on its mission to capture or kill the terrorist target, according to a military official.

That mission was scrubbed because weather conditions increased the risk for helicopter flight to the site where the jihadist was thought to be, the official said. The commando unit then sought another U.S. team to check out what appeared to be an abandoned terror camp that the jihadist had used, according to current and former officials briefed on the events.

The Green Beret patrol, now available to be retasked, was sent to the camp, the officials said.

The patrol was made up mostly of Green Berets, with other soldiers attached. All were considered well trained, having gone through the comprehensive work-ups of the elite Special Forces, according to Pentagon records.

The team, along with 30 Nigerien troops, left the country's

capital, Niamey, the morning of Oct. 3. The new mission, to find the abandoned camp and shelter, was considered relatively low-risk. An assessment showed there was little likelihood of an enemy attack, officials have said, after the wanted terrorist was known to have abandoned the camp.

Military investigators have

The Green Beret patrol was one of two operating in the area at that time.

been examining the official orders that led to the assignment. A key unanswered question is who formally changed the Green Beret-led team's mission—the U.S. Africa Command, known as Africom, the U.S. Joint Special Operations Command, or another agency.

Investigators also are working to find out if there was adequate intelligence to evaluate the likelihood of enemy contact

and whether the team was prepared for helping an elite commando team track and kill Mr. Sahawi's associate.

The joint U.S.-Nigerien team relatively quickly located and arrived at the camp that had been abandoned by Mr. Sahawi's lieutenant. The team, according to military reports, collected some information and destroyed the shelter they found.

From there, late on Oct. 3, the team began the trek back to their base camp, according to a military official.

While on the route back to their camp, in the morning of Oct. 4, the Nigerien forces asked to stop at a village to get breakfast and refill their canteens.

At 10:40 a.m. local time, minutes after leaving the village, the troops were ambushed.

Investigators are probing the question of how the jihadists found the Green Berets, since intelligence hadn't documented any militants operating in the area of the village.

An hour into the fight, minutes after a request from the team for air support, the unarmed drone arrived, allowing

more senior military commanders to watch the firefight.

The French Mirage jet fighters from an airfield in Niamey were underway within a half-hour and in the area 30 minutes later, the Pentagon said. French helicopters left from Mali, officials said.

During the fight, four soldiers became separated from the rest of the team. Those soldiers would be the Americans killed.

Military officials declined to say why the initial request for an armed drone was made. The U.S. Africa Command typically must request permission from the U.S. ambassador or the chief of mission in a given country for any military operation, according to officials briefed on the events.

State Department officials denied that their teams in Africa can block military requests for drone flights or strikes and said diplomats didn't stop a request for an armed drone in Niger.

—Joe Parkinson, Gordon Lubold and Felicia Schwartz contributed to this article.

Kenya Vote Set to Return Leader to Power

By MATINA STEVIS-GRIDNEFF

KISUMU, Kenya—Uhuru Kenyatta looked set to secure a second term as Kenya's president, following an election rerun in which only one-third of the voters showed up and at least six people were killed in clashes with security forces.

Thursday's vote was called to end Kenya's democratic crisis but instead has polarized it further, as the abstention of pro-opposition voters, heavy rains and voter apathy in swaths of the country led only 6.5 million of the country's 19.5 million registered voters, or 33%, to the polls, the electoral commission said.

The electoral body has seven calendar days to announce the result of the election but, in view of the low turnout, an official announcement could come early next week.

The initial election in August, the result of which was annulled, had a turnout of about 80%.

A rerun of the vote in four counties that are opposition strongholds in western Kenya—including Kisumu, home county of Mr. Kenyatta's longtime nemesis, Raila Odinga—that had been planned for Saturday was postponed indefinitely.

The opposition had strongly



SIMON MAINA/AGENCE FRANCE PRESSE/GETTY IMAGES

Police in Nairobi on Friday confronted opposition supporters following Thursday's election

rejected the electoral commission's decision to attempt to hold a vote in these counties, claiming it was an attempt at profiling of its supporters and a ploy to unleash the security forces on them. The commission said it was postponing the vote on security grounds.

"When it comes to our staff...when their lives are in danger, as a commission we are deeply concerned," said Wafula Chebukati, the commission chairman.

The vote went ahead after a series of dramatic twists over the past few weeks that have deepened a rift between the two parties and made attempts to unify the East African nation tougher.

Mr. Kenyatta's victory on Aug. 8 was annulled by the Supreme Court in September because of widespread irregularities,

ties, and the rerun was scheduled. But Mr. Odinga withdrew from it and urged his supporters to boycott it, claiming the government planned to rig the poll and become an "electoral dictatorship."

Mr. Odinga promised supporters he would give them fresh instructions on Monday. But the 72-year-old may have few routes out of the corner where he finds himself. After

boycotting the election on technical grounds—claiming the country's electoral body wasn't ready to hold a credible repeat election after August's irregularities—he is now switching his strategy to undermining Mr. Kenyatta's legitimacy.

While he is encouraging his supporters to "resist" state authority and mount a civil disobedience movement, it isn't clear the millions he represents will be prepared to follow.

Having lost three elections in a decade, this may be the last stand by Mr. Odinga, who had been consistently trailing Mr. Kenyatta in polls and campaign spending in recent months.

Diplomats say he could be seeking a "political settlement," a mediated power-sharing deal with Mr. Kenyatta that would give him a seat in a government of national unity. But Mr. Kenyatta's side has rejected the idea outright, most recently through Deputy President William Ruto earlier this month.

Mr. Kenyatta tried to strike a conciliatory tone Thursday. "Campaigns are divisive and it is the responsibility of whoever is elected president to deal with those divisions, to heal and bring the country together," he said after voting.

Car Bomb Injures Top Hamas Official

Hamas's head of security forces in the Gaza Strip was wounded Friday by a car bomb in what the Islamist group called an assassination attempt.

By Abu Bakr Bashir in Gaza City and Rory Jones in Tel Aviv

Tawfiq Abu Naeem was injured in a small explosion after attending Friday prayers in central Gaza, Hamas officials said on Facebook, without blaming any group. Mr. Naeem was taken to a hospital for medical treatment, they added.

The attack comes as Hamas works to mend 10 years of mistrust with the rival Fatah party, despite opposition from some members of the movement and unease among Israeli officials over reconciliation between the two factions.

Earlier in September, President Mahmoud Abbas and his Fatah-led Palestinian Authority signed an Egyptian-brokered agreement with Hamas to restore the Authority to Gaza and work toward Palestinian presidential and parliamentary elections. The deal is opposed by extremists in Gaza, who in recent years have deepened relations with Islamic State's affiliate in Egypt's Sinai Peninsula.

Ahead of the reconciliation talks, Hamas agreed to cut ties with Islamic State militants. In recent months, Hamas has also heavily policed Islamists in Gaza that have tried to fire rockets into Israeli territory.

Ahmed Helles, a member of the Fatah central political committee said the attack was aimed at scuttling the talks.

Iraq Halts Operations Against Kurdish Fighters

By ISABEL COLES AND ALI NABHAN

ERBIL, Iraq—Iraqi Prime Minister Haider al-Abadi ordered his forces to halt an advance against Kurdish fighters for 24 hours on Friday after clashes between the two U.S. allies in the war against Islamic State raised fears of a new conflict in the north of the country.

The aim was "to avoid confrontation and bloodshed

among sons of one country," he said. The statement from Mr. Abadi's office said the pause would allow time for a coordinated redeployment of Iraqi forces in disputed areas controlled by Kurds, including border crossings.

Kurdish officials didn't respond to requests for comment on whether such an agreement had been reached. It would amount to their surrendering the last disputed territories under their control to Baghdad.

Iraqi forces have already

dislodged Peshmerga from a swath of disputed territory in the north of the country in recent weeks, seeking to reassert government control there after the Kurds, who run their own semiautonomous region, held a referendum on independence despite Baghdad's objections.

The Sept. 25 vote was held within the formal boundary of the semiautonomous region as well as in disputed territory—much of which the Kurds had effectively annexed after their

Peshmerga forces drove out Islamic State with the help of a U.S.-led coalition.

The Kurdish regional government made its first major concession on Wednesday, offering to suspend the results of the referendum in a bid to open dialogue with the federal government in Baghdad and avoid losing more ground to Iraqi forces. But Mr. Abadi spurned the offer, saying he would accept nothing short of annulment of the referendum.

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Ramin Beheshti Dow Jones & Company	Kumud Kalia Akamai Technologies Inc.	Mark Roelig Massachusetts Mutual Life Insurance Company
Otto Berkes CA Technologies	Tom Keiser Zendesk	Hector Roldan Banco de Credito e Inversiones
Scott Blandford TIAA	Atul Khanzode DPR Construction	Edward Roussel Dow Jones & Company
Michael Brown ExxonMobil Global Services Company	Dan Kiely Black & Veatch Holding Company	Casey Santos General Atlantic
Don Callahan Citigroup Inc.	Stuart Kippelman Platform Specialty Products	Joe Schulz Hewlett-Packard Enterprise
Paul Chapman Box Inc.	Joseph Kochansky BlackRock Inc.	Aarti Shah Eli Lilly and Company
Paul Cheesbrough 21st Century Fox	Kalyan Kumar HCL Technologies Limited	Samir Shah Fortune Brands Home & Security Inc.
Anil Cherian SunTrust Banks, Inc.	Elena Kvachko Barclays Bank Plc	Sri Shivananda Paypal
Jack Clare Dunkin Brands Group Inc.	Madelyn Lankton The Travelers Companies, Inc.	Mark Sims The Scotts Miracle-Gro Company
David Colville Nestle Waters North America	Jim Lott GTCR	Sukhvinder Singh Host Hotels & Resorts, Inc.
David Cooper Wex Inc.	Krish Mani JELD-WEN Inc.	Manish Sinha Ansys Inc.
Heather Cox USAA	Hidetoshi Maruyama Nippon Yusen KK	Julie St. John Capital Group Companies
Richard Daniels Kaiser Foundation Health Plan	Margaret McCarthy Aetna Inc.	Adam Stanley Cushman & Wakefield
Julia Davis Aflac Incorporated	James McGlennon Liberty Mutual Insurance	Brad Strock PayPal
Samir Desai Equinox	Diana McKenzie Workday	Luis Suarez H.I.G. Capital
Guillermo Diaz, Jr. Cisco Systems, Inc.	Ed McLaughlin Mastercard	Andy Swenson UPC Insurance
Amy Doherty AARP	Mike McNamara Target	Ken Thomas McCormick & Company Inc.
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Dana Drysdale SJW Group	Ross Meyercord Salesforce, Inc.	Andrew Timm PTC
Paul Eddy Wellmark Inc.	Todd Miner Yelp	Atticus Tysen Intuit Inc.
John Engates Rackspace	Shamim Mohammad CarMax, Inc.	Raja Ukil Wipro Ltd
Liv Fiksdahl DNB ASA	Gregory Morrison Cox Enterprises Inc.	Vic Verma International Flavors & Fragrances Inc.
Marc Frons News Corporation	Krishna Nathan S&P Global, Inc.	Edward Wagoner Jones Lang Lasalle Inc.
Martha Gallo AIG	Leslie Ottolenghi Caesars Entertainment Corp.	Philip Wiser Hearst Corporation
Sonny Garg Uptake	Tom Pageler Neustar	Angela Yochem Rent-A-Center, Inc.
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IN DEPTH

IMG

Continued from Page One

3,000 miles from northern California to IMG Academy, recently got an offer from Stanford. Recruiting experts say no other team is likely to produce even 20 scholarship players.

IMG Academy sits at the apex of the commercialization of high-school sports. Purists have long bemoaned how college football has become a big business like the professional game. Now, for many of the same reasons, that phenomenon has trickled down to even younger players and has turned a Friday night ritual into a form of career development.

IMG Academy players and their parents seem happy overall with the return on their investment. Critics say the school damages football's central role in communities when it lures budding stars away from their hometowns. Many high-school teams already are losing players because of fears about concussions and brain trauma.

After IMG Academy went to Texas in 2015 and throttled one of the state's top teams, the head of the Texas High School Coaches Association advised other coaches in an open letter not to schedule games against the Florida school, which hasn't played a Texas team since.

Georgia banned its teams from playing IMG Academy, citing restrictions on schools that aren't in a state association. California debated a similar ban.

'Scary for all of us'

"It is something that is scary for all of us," says Brenham High School coach Glen West, who wrote the letter. "This has turned into big money."

IMG Academy officials, noting the school isn't for everyone, say the complaints are out of step with modern-day parents, who have more high-school choices than ever before, and athletes, who require and benefit from increasingly specialized training.

"We live in a different time," says IMG Academy football coach Kevin Wright, whose father has coached high-school football in Indiana for more than 50 years. "The reality is that parents want to put their kids in the best situation possible, and I don't see anything wrong with that."

Players on this year's football team come from 29 states, and many were recruited to create a literal all-star team from around the country. High-school life at IMG Academy looks nothing like a John Hughes movie or "Friday Night Lights." There is no marching band, and cheerleaders at home games are supplied by a local cheerleading program.

Started in 1978 as a training ground for tennis prodigies of famed coach Nick Bollettieri, IMG Academy is no longer a weather-beaten facility wedged between tomato fields and strip malls, as it was for decades.

In the past several years, IMG Academy has been transformed into a 500-acre campus that includes 52 tennis courts, 24 athletic fields, two five-story dormitories and a 5,000-seat football stadium. Coming soon: a 150-room hotel for visiting parents and college coaches.

Those facilities are signs of a cultural shift in youth sports away from backyards and sandlots. The overall market for youth sports is expected to balloon to \$41.2 billion in 2023 from an estimated \$19.8 billion this year, according to Winter-Green Research Inc. of Lexington.



IMG Academy huddles before a game last month in Bradenton, Fla. As many as 30 current football players at IMG Academy are expected to get Division I scholarships

ton, Mass. Those figures include sports apparel, gear, facilities construction and travel.

vated high-school players a one-of-a-kind opportunity to grow, improve and thrive, partly because they are surrounded by similarly driven players.

"Who would send their kid to a regular high-school drama course if they had the opportunity to go to Juilliard?" says Brenda Radley, a real-estate broker. She says her son, Brendan Radley-Hiles, wouldn't take himself out of games at his previous high school when he was hurt because he thought the team needed him.

He was being recruited by major colleges, but she contacted IMG Academy so he could play his senior season against stronger competition. The experience is helping Brendan, a cornerback, "maximize his full potential," she says. He is one of Nebraska's top signees.

IMG Worldwide Inc. bought Mr. Bollettieri's tennis academy in 1987 and expanded it to golf and other individual sports. It became a de facto laboratory for whether the talent-management agency could build a business around young athletes who would later sign on as clients.

That happened with tennis stars Maria Sharapova and Kei Nishikori, each of whom has generated millions of dollars in fees for the firm, according to people familiar with the matter.

In 2014, IMG was acquired for \$2.4 billion by WME, a talent agency that began in 1898 as the William Morris Agency. The deal turned the combined company into a sports and entertainment conglomerate stretching far beyond Hollywood. It changed its name to Endeavor earlier this month.

At the time of the takeover, IMG Academy had annual revenue of about \$83 million, according to a company report.

Launching the football program in 2013 allowed IMG Academy to accommodate a roster of as many as 100 players a year. Along with the addition of other team sports like soccer and lacrosse, that solved the challenge of increasing the talent agency's sports-related business one prodigy at a time.

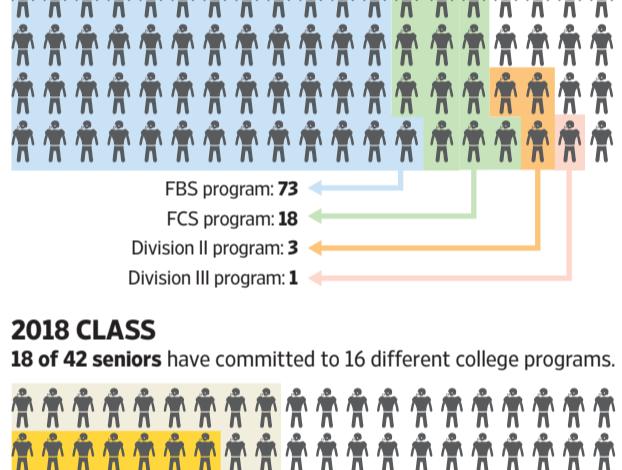
While some football players get financial aid, most pay the full cost of \$75,200 a year. Get-

College Football Factory

IMG Academy churns out football players who go to major colleges.

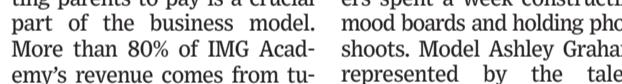
2014-17 CLASSES

95 of the 115 players who graduated wound up at an NCAA football program.



2018 CLASS

18 of 42 seniors have committed to 16 different college programs.



Seven are bound for a college team now ranked in the Top 25

Sources: IMG Academy; NCAA

THE WALL STREET JOURNAL.

ting parents to pay is a crucial part of the business model. More than 80% of IMG Academy's revenue comes from tuition, says Greg Phillips, a co-managing director at the school.

ers spent a week constructing mood boards and holding photo shoots. Model Ashley Graham, represented by the talent agency, made an appearance.

"What about screenwriter camps?" says Mr. Shapiro. "Culinary programs with our top-name chefs that we represent?"

The firm still has many major stars as clients, such as Charlize Theron and Dwayne Johnson, but has been on a shopping spree for assets with steadier revenue streams than the topsy-turvy entertainment business.

Recent acquisitions include the Professional Bull Riders league, Miss Universe Organization and UFC mixed martial-arts organization. There are occasional synergies with the talent agency. One PBR rider signed modeling contracts and was on "Dancing With the Stars." A UFC fighter had a cameo role in a "Fast & Furious" movie.

Brand-name companies are happy to pay IMG Academy for exposure to its elite athletes. PepsiCo Inc.'s Gatorade, a school sponsor since 2011, has "awe-

some access" to test athletes on how their bodies perform during intense training regimens, says Melissa Anderson, principal scientist at the on-campus center.

After finding that many athletes weren't consuming enough calories, the scientists recommended that they eat and drink more. Mr. Shapiro says Gatorade's main interest in IMG Academy is as a research lab where the sports-drink brand can "build products and enhance products."

The boarding school's expansion into team sports forced IMG Academy to reckon with an academic reputation that was "marginal," says Mike Stone, founder of Prep School Sports Connection, which helps match athletes with prep schools.

IMG Academy's Mr. Phillips responds that its academics "are much more rigorous now." Improvements include quadrupling the size of the academic center, upgrading classroom technology and dozens of new teachers.

Day-to-day life for players can be grueling, with little down time to socialize or relax. They usually wake up at 6 a.m. to be on the field by 7:45 a.m. for a four-hour block of meetings, film sessions and practice.

Kale for dinner

After lunch, classes and tutoring sessions run until 5:30 p.m., followed by dinner in the cafeteria. Think kale salads and protein shakes, not sloppy Joes and soda. The evening includes more team meetings and study hall before a 9:45 curfew. Mandatory lights out is at 10:45.

Other aspects of campus life resemble a college team's routine. Teachers travel with players to games, and an in-house media team helps juniors and seniors plan their college commitment announcements.

Many Ascenders games are nationally televised. Earlier this season, coaches struggled after the football team's wins in Arizona and California to get players back to the locker room and onto the team bus.

The delays were caused by local fans asking IMG Academy players for autographs.

FALL

Continued from Page One

making such a fuss over."

In late October, people usually expect the park to be ablaze with color. For invertebrate social-media photo-posting fanatics, it's one of the most irresistibly Instagrammable times of year.

This season, however, the foliage change has been inconsistent and subdued across some of New York state and other parts of the eastern U.S. "The colors aren't really popping as much this year," said Eric Scheffel, a public-information specialist with Empire State Development's division of tourism, who has been compiling a weekly fall-foliage report for 23 years.

Ryan Millier, 24, a professional photographer who lives in Long Island City, went to Central Park's Bethesda Fountain at sunrise last Sunday hoping to capture some autumn hues. "It definitely wasn't ready

for fall photos," he said. Nevertheless, he later posted a shot overlooking the fountain that included a patch of glorious burnt-orange trees.

His secret: post-processing software. "I shifted the yellows and the greens to make it look more like fall," he said. "I guess you could consider it a heavy amount. If you take the edit off of it, the trees wouldn't really look the way they do in my photo."

For fall-leaf enthusiasts without Photoshop skills, the best strategy is to seek safety in carefully phrased captions. They post about "hints" or "signs" of fall. One user this week went with "Tryin' to peep in the Park #Fall?"

To soothe the masses of disappointed would-be posters, Central Park put up its own Instagram post. It instructs people where to find trees that "received the early fall foliage memo," including the north end of the Mall, south of the Swedish Cottage and the Great Hill.



Faced with subdued fall colors, social-media mavens are taking turns posing with trees that have turned, such as this one in Central Park.

Colors have started to show in the last couple of days, said Jordan Jacuzzi, director of communications for the Central Park Conservancy, which manages the park for the city. "It seems that fall can never come soon enough for many New Yorkers."

The social-media team up at the Roosevelt-Vanderbilt National Historic Site in Hyde Park,

N.Y., decided to address this fall's unseasonably muted colors head on in an Instagram post.

"It's pretty obvious there hasn't been a lot of change," said Allan Dailey, a supervisory park ranger. "Someone came in who had taken a photo and said, 'Oh look, it's the only tree that's changed.' It was a pretty tree, so we were like 'let's put it on.'"

"We're seeing a lot of spotters peak at lower percentages of color change," he said. Because leaves are falling before

the typical colors emerge, spotters fear that even further along, "the overall scenery won't be as good."

"We're not seeing as many reds this year," Mr. Scheffel said, adding that there's more "mustard and goldenrod. A lot of shades of gold."

Some people who absolutely must post fall pictures online are turning to autumn's past. Maryann Johnson, a real-estate agent in Manhattan, starts her days with a motivational Instagram post. Fall is her favorite season for posts, but this one has been so dull she reposted a picture of Central Park this week that she readily admits can't be from this year. "Little bit of a cheat to get myself in a good mood," she said.

A commenter responded to the post by saying, "Beautiful photo! Is Central Park at its peak now with the autumn colours?" Ms. Johnson hasn't yet replied. "I'm going to answer," she said. "I would say, 'Central Park in my mind.'"

OPINION

THE WEEKEND INTERVIEW with Erica Komisar | By James Taranto

The Politicization of Motherhood

Motherhood used to be as American as apple pie. Nowadays it can be as antagonistic as American politics. Ask Erica Komisar.

Ms. Komisar, 53, is a Jewish psychoanalyst who lives and practices on the Upper West Side of Manhattan. If that biographical thumbnail leads you to stereotype her as a political liberal, you're right. But she tells me she has become "a bit of a pariah" on the left because of the book she published this year, "Being There: Why Prioritizing Motherhood in the First Three Years Matters."

Christian radio stations "interviewed me and loved me," she says. She went on "Fox & Friends," and "the host was like, your book is the best thing since the invention of the refrigerator." But "I couldn't get on NPR," and "I was rejected wholesale—particularly in New York—by the liberal press." She did appear on ABC's "Good Morning America," but seconds before the camera went live, she says, the interviewer told her: "I don't believe in the premise of your book at all. I don't like your book."

Conservatives cheer and liberals jeer a New York psychoanalyst's book on the science of early childhood development.

The premise of Ms. Komisar's book—backed by research in psychology, neuroscience and epigenetics—is that "mothers are biologically necessary for babies," and not only for the obvious reasons of pregnancy and birth. "Babies are much more neurologically fragile than we've ever understood," Ms. Komisar says. She cites the view of one neuroscientist, Nim Tottenham of Columbia University, "that babies are born without a central nervous system" and "mothers are the central nervous system to babies," especially for the first nine months after birth.

What does that mean? "Every time a mother comforts a baby in distress, she's actually regulating that baby's emotions from the outside in. After three years, the baby internalizes that ability to regulate their emotions, but not until then." For that reason, mothers "need to be there as much as possible, both physically and emotionally, for children in the first 1,000 days."

The regulatory mechanism is oxytocin, a neurotransmitter popularly known as the "love hormone." Oxytocin, Ms. Komisar explains, "is a buffer against stress." Mothers produce it when they give birth, breastfeed or otherwise nurture their children. "The more oxytocin the mother produces, the more she produces it in the baby" by communicating via eye contact, touch and gentle talk. The baby's brain in turn develops oxytocin receptors, which allow for self-regulation at a later age.

Women produce more oxytocin than men do, which answers the obvious question of why fathers aren't as well-suited as mothers for this sort of "sensitive, empathetic nurturing." People "want to feel that men and women are fungible," observes Ms. Komisar—but they aren't, at least not when it comes to parental roles. Fathers produce a "different nurturing hormone" known as vasopressin, "what we call the protective, aggressive hormone."

Whereas a mother of a crying baby will "lean into the pain and say, 'Oh, honey!'" a father is more apt to tell the child: "C'mon, you're OK. Brush yourself off; let's go back to play." Children, especially boys, need that paternal nurturing to learn to control their aggression and become self-sufficient. But during the first stages of childhood, motherly love is more vital.

Ms. Komisar's interest in early childhood development grew out of her three decades' experience treating families, first as a clinical social worker and later as an analyst. "What I was seeing was an increase in children being diagnosed with ADHD and an increase in aggression in children, particularly in little boys, and an increase in depression in little girls." More youngsters were also being diagnosed with "social disorders" whose symptoms resembled those of autism—"having difficulty relating to other children, having difficulty with empathy."

As Ms. Komisar "started to put the pieces together," she found that "the absence of mothers in children's lives on a daily basis was what I saw to be one of the triggers for these mental disorders." She began to devour the scientific literature and found that it reinforced her intuition. Her interest became a preoccupation: "My husband would say I was a one-note Charlie," she recalls. "I would come home and I would rant and I would say, 'Oh my God, I'm seeing these things. I've got to write a book about it.'"

That was 12 years ago. She followed her own advice and held off working on the book because her own young children, two sons and a daughter, still needed her to be "emotionally and physically present."

She uses that experience as a rejoinder to critics who accuse her of trying to limit women's choices. "You can do everything in life," she says, "but you can't do it all at the same time." Another example is Nita Lowey, a 15-term U.S. representative from New York's northern suburbs: "She started her career when she was in her 40s, and she said to me she wished she'd waited longer. She said her youngest was 9."

Ms. Lowey is a liberal Democrat, but she was born in 1937 and thus may have more traditional inclinations than women of the baby boom and later generations. Ms.



TERRY SHOFFNER

Komisar tells of hosting a charity gathering for millennials at her apartment. One young woman "asked me what my book was about. I told her, and she got so angry. She almost had fire coming out of her eyes, she was so angry at my message. She said, 'You are going to set women back 50 years.' I said, 'Gosh, I wouldn't want to do that.'"

Male attitudes have changed as well, Ms. Komisar says: "A lot of young men, particularly millennials, have been raised to believe that it's even-steven; that women are to bring in as much money, and they're always going to work." Young women "make promises to their partners, these young men: 'I'm going to work forever, I'm going to make as much money as you; maybe I'll make more than you.' It's almost like a testosterone kind of competition."

The needs of children get lost in all this—and Ms. Komisar hears repeatedly that the hostility to her message is born of guilt. When she was shopping for a literary agent, she tells me, "a number of the agents said, 'No, we couldn't touch that. That would make women feel guilty.'" Another time she was rejected for a speaking gig at a health conference. She quotes the head of the host institution as telling her: "You are going to make women feel badly. How dare you?"

In Ms. Komisar's view, guilt isn't necessarily bad. "My best patient is a patient who comes to me feeling guilty," she says. "Women who feel guilty—it's a 'signal' feeling, that something's wrong, that they're in conflict. If they go talk to a therapist or deal with the conflict head-on, they often make different choices and better choices."

That's "better," not "perfect," and Ms. Komisar is at pains to emphasize that "mothering is not about perfection." She acknowledges, too, that staying at home isn't right for all new mothers: Some lack the wherewithal to take time off work; some are depressed or distracted and "not really emotionally present." When the mother can't be there, Ms. Komisar says, the best alternative is a "single surrogate caregiver," optimally a relative.

"The thing I dislike the most is day care," she says. "It's really not appropriate for children under the age of 3," because it is "overstimulating" given their neurological development. She cites the "Strange Situation experiments," devised in 1969 by developmental psychologist Mary Ainsworth, a pioneer of attachment theory: "A mother and the baby are on the floor playing. The mother gets up and leaves the baby in the room alone. The baby has a separation-anxiety response. A stranger walks

in; the baby has a stressed reaction to the stranger."

Researchers sample the infant's saliva and test it for cortisol, a hormone associated with stress (and inversely correlated with oxytocin). In a series of such experiments in which Ms. Komisar herself participated, "the levels were so high in the babies that the anticipation was that it would . . . in the end, cause disorders and problems." In a more recent variant of the experiment, scientists use functional magnetic resonance imaging to look directly at the brain of an infant reacting to photos of the mother and of a stranger.

You can see why tradition-minded conservatives welcome Ms. Komisar so warmly. Think about how they are stereotyped—as backward, superstitious, hostile to science. She shows that science validates what they know as common sense.

But although she returns their affection, she doesn't share their distaste for contemporary mores. "We don't want the '50s to come back," she tells me.

"Women had children who didn't want to have children. Women didn't have other choices than having children, and women were ostracized if they didn't have children. And women were ostracized if they went out into the world and worked."

"What we do want," she says, "is to be a child-centric society." To that end, she offers a proposal many conservatives will find uncongenial: a government mandate that employers provide generous maternity benefits.

"All mothers and babies should have the right to be together in the first year," Ms. Komisar says. That means maternity leave at full pay, "and then the flexibility to be together as much as possible for the next two years—meaning mothers should have the ability to work flexibly and part-time."

Ms. Komisar sounds very much like a liberal when she observes of the U.S. that "we're the only civilized country that doesn't have a maternity-leave policy." I ask what she thinks of Ivanka Trump's proposal to mandate six weeks' paid leave for primary caregivers, regardless of sex. "It's a start," Ms. Komisar says. "It is not enough. Babies are just waking up from birth after six weeks, and even at three months they are incredibly vulnerable and not necessarily bonded with their mothers."

But if most conservatives find Ms. Komisar's solution too coercive or expensive, most liberals won't even acknowledge the problem. "If we defend the idea that mothers are not necessary," she asks, "what chance do we have to get a maternity-leave policy?" As important as her insights into child development are, her policy proposal seems destined for the political orphanage.

Mr. Taranto is the Journal's editorial features editor.

Charter and Traditional Schools Find a Common Purpose in Texas



CROSS COUNTRY
By Richard Whitmire

Charter-school operators and traditional school districts have long behaved like enemies. But an intriguing truce has emerged in an unlikely place: Texas. In the Lone Star State's three biggest cities, charters and traditional district schools have discovered that collaborating to help their high-school graduates earn college degrees is a win-win.

Knowledge is Power Program, a national charter network founded in Houston more than two decades ago, helped eight charter operators in San Antonio, Dallas and Houston join forces with local public school districts. Together they formed a new organization, United for College Success. The group's goal is to improve college graduation rates among alumni. In addition to sharing best practices, United for College Success has begun pressuring local colleges and universities to do more for their students, many of whom are the first in their families to pursue higher education.

This isn't the only promising collaboration between charters and local districts. In 2015 KIPP San Antonio struck a deal with the San Antonio Independent School District, where the student population is 62% Hispanic and 24% African-

American. Three quarters of kids in the San Antonio ISD are eligible to receive free and reduced lunch. By 2020, with KIPP's help, the district hopes to boost the percentage of its students going to college to 80% from the current 50%. Both KIPP and the San Antonio district want to see half of the city's graduates heading off to four-year colleges and 10% going to the top tier of schools ranked by U.S. News & World Report. Two years ago, 20% of San Antonio's college-bound graduates were headed to four-year colleges. Only 3% were enrolled in selective schools.

Like most urban districts, San Antonio's had never paid much attention to the college success of its graduates. Educators long viewed that as being up to students, parents and colleges—not high schools. But Mr. Martinez and his colleagues, to their credit, chose to take on the challenge, tapping into lessons learned from the now decade-old KIPP Through College Program aimed at matching low-income minority students with the schools where they are most likely to succeed. The KIPP team follows each student until college graduation, making sure that everything from financial aid to course credits stays on track.

In New York and Houston, the percentage of KIPP graduates earning bachelor's degrees within six years has risen steadily thanks to the Through College Program. In

both cities, roughly half of the program's graduates now earn their degrees in six years, up from about a third in 2011. Nationally only 9% of students from low-income families earn bachelor's degrees in that time frame.

The San Antonio partnership, funded by a grant from Texas energy giant Valero, has already borne fruit. At Thomas Jefferson High, the pilot school where a KIPP adviser spent most of her time, 53% of 2017 graduates were accepted into four-year colleges, compared with only 26% in 2016.

KIPP is collaborating with local districts to improve college admission and graduation rates.

"We're seeing a marked increase in the number of students who not only are graduating and going to college, but are being accepted to Tier One universities," said San Antonio ISD Superintendent Pedro Martinez. KIPP has benefited as well from the chance to run their college-success playbook at scale, the kind you find only in big traditional districts.

There's a reason why collaborations built around college success have proven popular with both traditional districts and charters. Un-

like the annual enrollment competition, in which districts lose students and dollars to charters, only high-school graduates are involved. There are no losers, no lost dollars and no closed schools. In fact, traditional districts stand to gain.

Charters are public schools, and their operations are funded by taxpayer dollars. But in most places charter founders need to raise outside funding to launch their schools. For years, traditional school districts watched resentfully as philanthropists and foundations poured hundreds of millions of dollars into new charters. The imbalance prompted teachers unions to wage national revenge campaigns, accusing "billionaires" of "privatizing" public education.

Yet the sometimes hostile dynamic between charters and traditional districts shifts when the topic changes to fostering college success. In San Antonio, for example, Valero stepped up with a \$3 million gift to KIPP's college program, \$700,000 of which was set aside for launching the collaboration with the San Antonio district. Early next month, Valero is expected to make an announcement of fresh funding for new, KIPP-trained college counselors for the district.

Much of what the college counselors do involves relatively simple data crunching. They look to see which universities in the San Anto-

nio area have amassed a positive record helping low-income and minority students earn bachelor's degrees within six years. St. Mary's University, for example, has a far higher graduation rate for Hispanics than does the University of Texas, San Antonio. KIPP tracks college success data like that for hundreds of colleges, a repository of crucial information that San Antonio district counselors can now access.

Recently, the Houston Independent School District's college-success program, Emerge, joined the United for College Success coalition with the charters. Among the questions they are exploring together: Is there a way to share the time-consuming task of checking in on students at their college campuses?

The participation of a large district such as Houston gives the coalition heft when pushing universities for changes to help first-generation college-goers. Collaborating with charter schools doesn't bother Emerge founder Rick Cruz, a former fifth-grade Teach for America teacher. At the end of the day, he says, these are all our kids.

If only that attitude could spread nationally.

Mr. Whitmire writes "The Alumni" series at The 74 and is author of "The Founders: Inside the Revolution to Invent (and Reinvent) America's Best Charter Schools."

OPINION

REVIEW & OUTLOOK

A Million-Dollar Mistake

House Speaker Paul Ryan has said tax reform will include a fourth tax bracket for millionaires above the top rate of 35% in the GOP framework, and now we hear it could be as high as 42%-44%. This bow to the lords of political envy would be a million-dollar mistake that undermines the purpose and much of the benefit of tax reform.

The "millionaire's tax" is one of those socialist gimmicks that keeps rising from the dead. Dan Rostenkowski used to float it in the 1980s when he ran House Ways and Means, and it always does well in opinion polls because there are relatively few millionaires. Why not soak the wealthy to finance more tax credits for having children or subsidies for windmills? Let us count the reasons.

Start with the fact that raising the top marginal tax rate—the rate on the next dollar of income—harms the incentive to work and invest. People don't work to pay taxes. They work to contribute to society and for personal dignity but also to make money to spend, save for retirement or pass on to heirs.

The current top marginal rate of 39.6%—as high as 44% if you count deduction phase-outs and the Medicare surcharge—already means that Uncle Sam takes nearly half of what a millionaire earns. Add the state tax rate of 13.3% in California and it's approaching 60 cents on the marginal dollar. The incentive to work those extra hours, write the next book or postpone retirement is substantially reduced.

Some on the redistributionist right say that cutting marginal rates has lost its economic power because the top rate is lower than it was under Reagan. But the Gipper cut the top rate to 50% from 70% in 1981, then to 28% with the 1986 tax reform. Raising the top rate now would reverse the Reagan reform, not replicate it, and nearing 60% is way back up the Laffer Curve of damaging incentives.

As Douglas Holtz-Eakin, former head of the Congressional Budget Office, put it in 2012, "High marginal tax rates have a damaging impact on investment, the competition for investment funds, saving, household portfolios, schooling decisions, the decision of one or both spouses to work, the hours of work, the intensity of work, that decision to pursue a promotion, and myriad other economic decisions. In each case, progressively higher tax rates have increasingly large damage."

But Warren Buffett says he doesn't care if his tax rates are high. Maybe that's because Mr. Buffett and his richest friends don't pay the top

A defensive GOP flirts with raising the top income-tax rate.

marginal income tax rate. The superrich more than anyone else have the means and flexibility to dodge high tax rates. They can move to lower tax climes or hire attorneys and investment advisers to shelter their income.

This is the oldest lesson in tax history. It's why Bjorn Borg, the tennis great, moved to Monte Carlo from Sweden, and why many NBA players and American retirees prefer to live in no-income-tax Florida or Texas.

One lesson of the Reagan tax cuts is that more people at higher income levels began to pay a higher share of the total income tax at lower rates. The richest 10% of American families paid 35.9% of all federal taxes in 1977 but 37.5% in 1984, and was more than 38% in 1988.

They reported more income because the economy was booming and because they had less incentive to shelter income when rates fell. The Treasury benefited from more tax revenue, and the economy benefited from fewer politically distorted investment decisions. This is why higher rates rarely yield the amount of new revenue that proponents claim.

Some Republicans concede these points but say they must keep the top rate high to counter the left's claim that they are favoring the rich. Good luck with that. Democrats will find other reasons to play the envy card: Death tax repeal, cutting the corporate rate to 20%, cutting the rate for "pass-through" businesses to 25%.

Did the class war end because Republicans folded during the health-care debate on the 3.8% Medicare surcharge? One political surrender leads to another.

* * *

Instead of being defensive about rates, Republicans should argue that the better way to soak the rich is to eliminate their loopholes. The mortgage-interest deduction mainly benefits the affluent, as does the state and local tax deduction. Eliminate those and tens of thousands of higher earners will pay more taxes even if their rate falls to 35%. Yet the GOP has already surrendered on the mortgage deduction and may do the same on state and local.

The point of tax reform is to eliminate loopholes and subsidies that distort economic decisions in favor of lower rates. Keeping rates high for millionaires will invite tax lobbyists and Congress to create more loopholes, and we will be back at the same stand. The only way to beat class-war politics is to make the case that reform and rate cuts will yield faster growth, higher wages, more jobs and broadly shared prosperity.

The Winds of Tax Reform

Readers of these columns know there is a debate between those who believe it is possible to return the U.S. to its historic growth rate of about 3%, a view we share, and those who think the country's economy has settled into a new normal closer to 2%. The Commerce Department announced Friday that the U.S.'s third-quarter growth rate was 3%, following 3.1% in the second quarter.

Two quarters don't settle the argument, but the details inside the Department's report should tilt the debate toward those who believe the Trump Administration's proposed business-tax reforms could return the economy to higher growth. Business investment, a laggard in recent years, is gaining strength. It rose 6.7% in the second quarter and 3.9% in the third, with

Two quarters of 3% growth and stronger business investment.

On Friday the White House Council of Economic Advisors released a new report detailing its case for dropping the U.S. corporate tax rate to 20%, which is that a globally competitive rate will

reduce the cost of capital here, spur capital investment and produce growth in output and workers' wages.

Next week House Ways and Means Chairman Kevin Brady plans to release the GOP tax bill, and the debate will be joined. But the strong numbers on business investment suggest that rising economic confidence is paying dividends and that companies are betting that tax reform will pass.

New Rules for More Media Competition

The price of trying to change Washington is furious political opposition, and the latest target is Ajit Pai, who has announced he wants the Federal Communications Commission to rewrite restrictions on local media ownership that have been in place since the Ford Administration.

Under current rules, media companies generally can't own a daily print newspaper and a TV or radio station in the same community, and there are also restrictions on holding multiple TV and radio stations. Chairman Pai wants to eliminate these rules, though the FCC would retain some limits on the radio and TV stations a single entity could hold in the same area. Another rule allows the acquisition of two TV stations only if at least eight independently owned competitors also operate in the area. Mr. Pai would eliminate this "eight-voices test" and weigh other broadcasting expansions case by case.

The FCC created ownership restrictions to ensure no single entity dominates the news. But the rules were written when newspapers were thriving and there were only a handful of TV channels. In the Digital Age, media competition has never been more intense.

Pew Research Center reported in September that 43% of Americans often get their news online, second to TV at 50%. Among those under age 50, digital media has already surpassed TV. More than 90% of Americans now consume some news online, and two-thirds read some on social media.

Broadcasters now compete with cable news, satellite radio, podcasts, YouTube, Netflix and myriad other digital sources. Craigslist killed

Limits on media ownership don't reflect Digital Age reality.

classified ads, and Facebook and Google have swallowed up digital advertising, profiting off the work of newsrooms they don't own or run. Newspaper ad revenue dwindled in 2016 to a third of what it was 10 years earlier.

Mr. Pai's critics fret about local-media consolidation, but the alternative may be its extinction. The FCC's archaic ownership rules have cut off bleeding local newspapers from would-be investors. Broadcasters and print newsrooms could combine to save money on everything from human resources to information technology.

Opponents also worry that bigger media companies would reduce or eliminate local news. But more efficient newsrooms have more money to pay for local reporting. The FCC's research shows that cross-owned TV stations provide more local news than their non-cross-owned counterparts.

Critics also point out that Sinclair Broadcasting would benefit from eliminating the "eight-voices test." Sinclair has a conservative political bent, and it's seeking the FCC's approval to acquire Tribune Media Group. The merger would leave Sinclair with up to 177 stations. But there are plenty of media alternatives for these markets (including our sister company, 21st Century Fox), and anyone who fears conservative media dominance isn't paying attention to the real world.

Many of those who oppose Mr. Pai also fret that Donald Trump wants to control the media. But Mr. Pai's reforms would decrease the federal government's control over the American media marketplace. The new FCC rules would encourage competition, not stifle it.

OPINION

LETTERS TO THE EDITOR

Speakers Aren't the Problem; the Thugs Are

Regarding Kent Fuchs and Glenn C. Altschuler's "How White Supremacists Exploit Public Higher Education" (op-ed, Oct. 23): As a student at radical Swarthmore College in the 1960s, I heard Communist Party USA Chairman Gus Hall and the ambassador of South Africa speak without student heckling or riots. In 2015 as a retiree from the University of Missouri, I witnessed students and faculty disrupt the campus and demand the president resign. The football team and coaches threatened a boycott of the next game. Mizzou caved and has suffered ever since.

What happened in the interim? Sympathetic universities encouraged the growth of the hard left by giving in to many of the "nonnegotiable" demands of left-wing protesters. Over the years these demands naturally escalated. We now see in academia a race-obsessed, oppressive PC culture as the left struggles to bottle its imaginary will-o'-the-wisps.

It is richly ironic that, reaping the whirlwind, two academics in these pages should address the symptoms, not the problem, and call for more government spending for university security in the face of the protests their universities have fostered for decades. Instead of whining for taxpayer money, universities should simply issue fair and tough rules governing protests and enforce them impartially with expulsions, dismissals and prosecutions.

L. HUNTER KEVIL, PH.D.
Columbia, Mo.

The authors suggest three solutions to the problem. I have a fourth proposal: Florida and Cornell could stop taking federal money. Then they could invite or disinvite anyone they like.

CHRIS PHILIPS
Lake Forest Park, Wash.

Messrs. Fuchs and Altschuler mention "Mr. Spencer and his ilk." That deceptive verbal trick bundles Ben Shapiro, Ayaan Hirsi Ali, Richard Dawkins, Condoleezza Rice, Maajid Nawaz, Joe Biden and Christine Lagarde together with Mr. Spencer, while avoiding mention of their names. At the same time it makes the tiny, white supremacy movement appear large and fearsome. Neat trick.

PETER LAWRENCE
Hollywood

I cannot believe President Fuchs's myopia in not seeing the elephant in the lecture hall. The \$600,000 he spent for security was not to keep the

WALTER NOLL
Etna, N.H.

California's Cap-and-Trade Plan Is Working

The entirely theoretical argument presented by Richard Sexton and Steve Sexton ("The Fatal Flaw in California's Cap-and-Trade Program," Cross Country, Oct. 21) falls short in just one place: the real world. The facts show that under California's law to limit climate pollution, our economy is thriving, jobs are being added at a faster rate than the national average and emissions are decreasing ahead of schedule.

The authors complain about a potential problem with some cap-and-trade systems: the risk of emissions and economic leakage, while also decrying one of the solutions, allocating free allowances to trade-exposed industries in proportion to their output. This ensures that producers aren't penalized for making more goods, and producers who make more goods with fewer emissions are rewarded. Total emissions are still limited by the cap.

There's a good reason that the authors limit their case to hypotheticals.

The real flaw is the goal in the first place, never mind the solution. California's real impact on the environment will never come from being a carbon-neutral state. It comes from its example to the world of high environmental standards while still being one of the world's largest economies. But one has to wonder how much longer other states and countries will look to California's leadership when they see the sky-high cost of living and middle-class jobs leaving the state. The governor should focus on that first, and the rest of his goals will follow.

TOM MYSZ
Oakland, Calif.

Environmental Quality Is More Than Just the Climate

"Troubled Waters" (Review, Oct. 21) ought to remind us that the biggest environmental problem in the world isn't climate change but miserable national environmental scorecards that measure the health of a country's water, air, land, human health and habitats.

Environmentalists would have us believe that development and affluence are the chief culprits, but the evidence clearly shows that transparent representative democracies with strong and affluent middle classes have far better environmental scorecards than autocracies (Russia, China, Iran) and graft-laden nominal democracies with fragile middle classes (Turkey, Brazil, India). If we don't get the root cause right, how can we find the right solutions?

THOMAS M. DORAN
Plymouth, Mich.

The authors believe that California's cap-and-trade program is flawed because it does nothing to reduce pollution. But it created another state agency, which means more government and higher taxes. It also hurts business. Mission accomplished.

JAMES ELLIOTT
Doral, Fla.

Pepper ... And Salt

THE WALL STREET JOURNAL



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OPINION

The Computer That Could Rule the World

By Arthur Herman

During World War II the federal government launched the Manhattan Project to ensure the U.S. would possess the first atomic bomb. Seventy-five years later, America is in another contest just as vital to national security, the economy and even the future of liberal democracy. It's the race to build the first fully operational quantum computer.

America's leading adversaries are working urgently to develop such a computer, which uses the principles of quantum mechanics to operate on

To understand the power of quantum computing, imagine 1,000 Equifax hacks happening at once.

data exponentially faster than traditional computers. Such a system theoretically would have enough computing power to open the encrypted secrets of every country, company and person on the planet. It would also enable a foreign creator to end America's dominance of the information-technology industry and the global financial system.

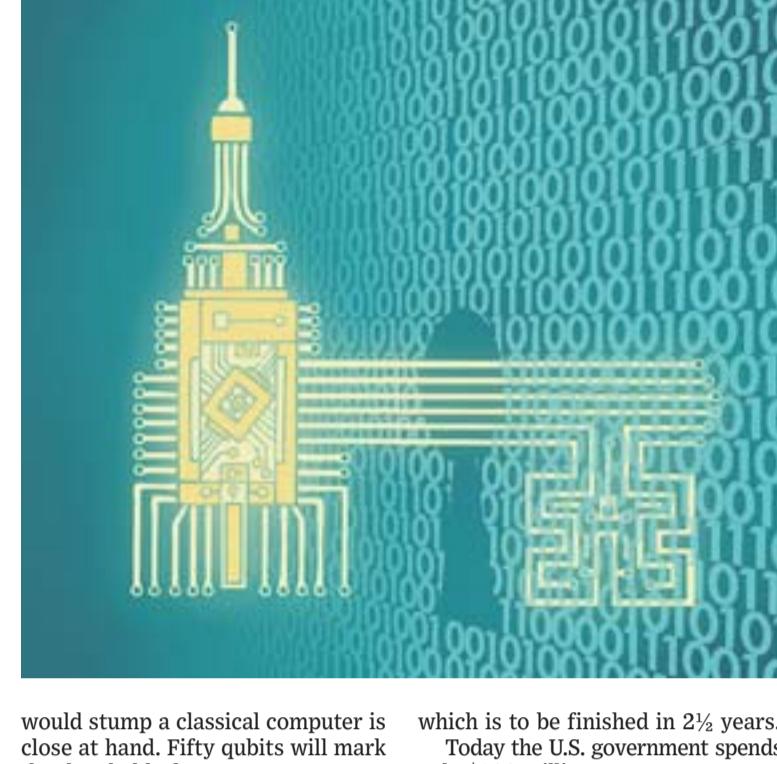
How does quantum computing work? In the bizarre world of quantum mechanics, electrons and photons can be in two states at once. All current computers process data in a linear sequence of one and zeros. Every bit, the smallest unit of data, has to be either a zero or a one. But a quantum bit, or "qubit," can be a zero and a one at the same time, and do two computations at once. Add more qubits, and the computing power grows exponentially. This will allow quantum computers of the future to solve problems thousands of times as fast as today's fastest supercomputer.

This poses a problem for most encryption systems, because they are based on math problems that would take a conventional computer centuries to solve. The encryption that protects credit-card information and bank accounts, for instance, relies on two keys. One is the "private key," which consists of two large prime numbers only known to the bank. The "public key" sits in cyberspace and is the product of multiplying together the two "private" primes to create a semiprime. The only way a hacker could access encrypted credit card or bank information would be by factoring or breaking down the large "public key"—often 600 digits or longer—back to the correct two numbers of the "private key." This Herculean task simply takes too long for current computers.

A future quantum computer will be able to decrypt such systems almost instantaneously. Even Blockchain will not be able to withstand the first quantum attack if it relies on two-key encryption architecture, which protects nearly all digital information today. To understand the scale of the threat, imagine a thousand Equifax breaches happening at once.

As a September article in the journal *Nature* noted: "Many commonly used cryptosystems will be completely broken once large quantum computers exist." Most quantum experts believe that such a breakthrough may only be a decade away. If quantum computers will hold the key to the global future, the U.S. needs to secure that key.

Scientists already know that quantum computing is possible. The problem now is engineering a system that takes full advantage of its potential. Since subatomic particles are inherently unstable, assembling enough qubits to do calculations takes persistence, time and resources. Quantum computers with 10 qubits already exist. A quantum computer capable of solving problems that



DAVID KLEIN

would stump a classical computer is close at hand. Fifty qubits will mark the threshold of quantum supremacy.

Other countries understand that. While most of the work on quantum computing in the U.S. is being done by companies like Google and Microsoft, the European Union has made quantum research a flagship project over the next 10 years and is committed to investing nearly €1 billion in the effort. Australia, the U.K. and Russia have entered the quantum race, too.

But the real national leader in quantum research investment is China. This summer it launched the first satellite capable of transmitting quantum data. It's building the world's largest quantum research facility to develop a quantum computer specifically for code-breaking and supporting its armed forces, with quantum navigation systems for stealth submarines. Beijing is investing around \$10 billion in the facility, which is to be finished in 2½ years.

Today the U.S. government spends only \$200 million a year on quantum research of all kinds, spread haphazardly over a variety of agencies—from the National Security Agency to the Energy Department.

While IBM recently set a new benchmark with its 17-qubit processor, and Google insists it will reach the 50-qubit threshold before the end of this year, China is steadily advancing toward a 40-qubit prototype—and remains determined to reach "quantum supremacy." At the same time, countries will need to revamp their encryption systems to keep up with the new quantum reality.

The U.S. can achieve both goals through a new Manhattan Project. Call it the National Quantum Initiative. Like its atomic predecessor, the new program should marshal federal government money, the efficiencies of private industry, and the intellectual capital of the nation's laborato-

ries and universities, while keeping everyone focused on the essential mission: winning the quantum race.

The Manhattan Project cost some \$30 billion in today's dollars. In comparison, the National Photonics Initiative has called for an additional \$500 million of federal funding over five years to help the U.S. secure its grip on quantum supremacy.

Recognizing this, Congress held its first hearings on a national initiative for quantum computing on Oct. 24. Congressional leaders should now pass a bill funding a National Quantum Initiative.

Equally important is to make sure that America's financial system, critical infrastructure and national-security agencies are fully quantum resistant. Companies and labs are currently developing algorithms and tamper-proof encryption based on quantum technology. But without a concerted and coherent national effort, it will take years for government and industry to agree on the standards for quantum-safe replacements for today's encryption methods, and to make sure they are deployed in time to prevent a quantum attack. In a world of quantum proliferation, the risks are too great to ignore.

Since the end of World War II, the U.S. has led the world in nuclear research, making this country stronger and safer. For three decades the U.S. has been the leader in information technology, which has made Americans more innovative and prosperous. The U.S. cannot afford to lose that leadership now—not when the future hangs in the quantum balance.

Mr. Herman, a senior fellow at the Hudson Institute, is author of "1917: Lenin, Wilson, and the Birth of the New World Disorder," forthcoming from HarperCollins in November.

Peggy Noonan is away.

Buddha Meets Bubba: The South's Surprisingly Diverse Heritage

By Roy Hoffman

Fairhope, Ala. Often when people think of Southern culture, distinct images come to mind—historic homes and rural churches, SEC football, civil-rights marches. But other expressions of Southern culture are hiding in plain sight.

In Biloxi, Miss., there's the Bodhisattva in front of the Buddhist temple, five minutes from Beauvoir, Jefferson Davis's retirement home. In Daphne, Ala., stands Malbis Memorial Church, a Greek Orthodox

In Alabama, a Catholic and a Jew hosted a citizenship party for an Indian Muslim friend.

chapel, 10 miles from Blakeley State Park, where the Battle of Fort Blakeley, one of the last battles of the Civil War, is re-enacted each April. In Mobile, Ala., my hometown, we have the Ben May public library, named for a Jewish philanthropist whose wealth came from Alabama timber; nearby stands a statue to a Confederate naval officer and resident, Adm. Raphael Semmes.

These glimpses of the unexpected South, as I call it, from groups that settled below the Mason-Dixon Line long after Robert E. Lee's surrender, or have been considered marginal to Dixie's main story, are reflective of our history, too.

The current re-evaluation of Confederate statues across the South will, one hopes, lead to revelations about these other, more hidden Southern stories. Our religious and ethnic minorities may not outnumber those in other parts of the country, but these communities have a vibrant presence, too.

On my trips through the South I

frequently encounter this interplay of cultures. After a recent visit to William Faulkner's home, Rowan Oak, in Oxford, Miss., for example, I drove by a Hispanic market, then stopped into an Amish farm stand near Pontotoc, Miss. Eventually I arrived in West Point, Miss., where the statue of blues legend Howlin' Wolf stands.

New faces representative of various minorities have emerged in politics, too. From Jim Gray, the openly gay mayor of Lexington, Ky., who challenged Rand Paul in the state's last U.S. Senate race, to Charles Nana, a Birmingham businessman born Nana Tchienkou in Cameroon, who felt Alabamian enough for a run in a Democratic primary.

The monuments to these groups are rarely cast in plaster but are shored up in stories—sepia photos from Tennessee to South Carolina of a grandfather from Lebanon or an aunt from Cuba, or the marriage certificate, newly minted, of a same-sex couple in Mississippi or Georgia.

Names still grace storefronts of families that arrived in Dixie more than a century ago, fresh from Eastern Europe or the Mediterranean, like my grandparents, Romanian Jews who ended up in coastal Alabama. My late dad, himself born above that store in 1909, became a lawyer. He spoke English with a Deep South accent and was conversant in Yiddish, too.

His memories were my living link to the Civil War. He recalled as a boy seeing the defiant pride of veterans marching down the street on Confederate Memorial Day, and the weathered dignity of former slaves making their way down those same streets.

In 1963, with that war a century behind us, my fourth-grade class took a field trip to Montgomery, Ala., posing for a photo with Gov. George Wallace, who'd raised the Confederate flag over the capitol, flying it as a symbol of segregationist defiance.

By the time I was a teenager in

the late '60s, whatever our family backgrounds, the cohesiveness of our Southern culture was fracturing. I remember playing "Dixie" with my all-white military high-school band at a cemetery in Mobile. We were respectful but detached. The statues we filed past, in graveyards or parks, did not enoble great figures so much as ossify them. The "lost cause" of our generation, even for those with bloodlines stretching back to Shiloh or Antietam, was Vietnam. After the ceremony we jumped in our cars, blasting "In-A-Gadda-Da-Vida" from 8-track tapes.

We could dismiss history, of course, but not escape it. Whether we stayed close or moved to Los Angeles or New York, the South was imprinted on us, if only in questions we'd have

to answer to folks elsewhere about where we stood on issues like statues of Robert E. Lee. How do I respond to discussions of what to do about Civil War statues? If we move them to museums we will have room in our town squares and in our heads, I believe, for narratives that grip and inspire us collectively.

And with the internet so readily available, the history of the Civil War will never be difficult to access. On my smartphone, I can click anytime I want on the wrenching tales of former slaves in "Born in Slavery: Narratives From the Federal Writers Project" or Matthew Brady's ghostly battlefield photos like "Harvest of Death."

Last summer, my wife and I, a Catholic and a Jew, hosted a U.S. cit-

izen ship party for a friend who is Indian and Muslim. We welcomed guests who were Muslim, Hindu and Protestant, of diverse complexions and accents, Alabamians all. Many of us could have told a story of prejudice—our honoree, for example, stopped wearing her hijab for fear of being publicly misunderstood, and I've witnessed anti-Semitism in red states and blue. But we were filled with optimism. Our parents or grandparents were from all over the world, but our new stories were unfolding, roots sunk in, right here in Alabama.

Mr. Hoffman is author of "Alabama Afternoons," an essay collection, and the novels "Chicken Dreaming Corn" and "Come Landfall."

The Trump Dossier Dam Is Breaking

please tell us more about your role.

Let's also hear from Adam Schiff, top Democrat on the House Intelligence Committee.

He claimed on TV to have "circumstantial" and "more than circumstantial" evidence of Trump collusion with Russia. In the event, what he delivered in a committee hearing was a litany of routine, innocuous business and diplomatic contacts between Trump associates and Russian citizens, interspersed with claims from the Trump dossier.

A U.S. political party applied to a hostile power for lurid stories about a domestic opponent.

He failed to mention, though, that the Trump dossier was manufactured by Democrats paying a D.C. law firm to pay a retired British spook to pay unknown, unidentified Russians to tell stories about Mr. Trump, in reckless disregard for whether the stories were true.

Mr. Schiff, a Harvard Law graduate, will know the phrase is not our coinage. "Reckless disregard" is the standard by which the Supreme Court says, even in a country that bends over backward to protect the press at the expense of public figures, the press can be held liable for defamatory untruths about a public figure.

Even so, journalists are presumed to know their sources, not to have paid a long chain of surrogates to elicit sensational claims from perfect strangers, let alone anonymous agents of a foreign regime with a known habit of disinformation. It is impossible to exaggerate how reckless Democrats have been under this standard. If they found the Trump dossier on the sidewalk, they'd be in

a better ethical position now. Let's hear what Mr. Schiff knew and when he knew it.

Finally, let us hear from James Comey.

The Trump dossier was reckless and irresponsible in the extreme, but only consequential after Election Day. It didn't prevent Mr. Trump from becoming president. In the new spirit of *non-non-disclosure*, it's time for Mr. Comey to tell us about the Russian intelligence scam that may really have changed the election outcome.

In closed hearings, he reportedly acknowledged that his intervention in the Hillary Clinton email case was prompted by what is now understood to have been planted, fake Russian intelligence. The fake Russian intelligence purported to discuss a nonexistent email between then-DNC chief Debbie Wasserman Schultz and George Soros-employed activist Leonard Benardo.

This led directly to Mr. Comey's second intervention, reopening the case 11 days before Election Day, a shocking development that appears now to have moved enough votes into Mr. Trump's column to account for his win.

At the time, the press was all too happy to blame Bill Clinton for his wife's loss when Mr. Comey, for nonclassified consumption, cited Mr. Clinton's tarmac meeting with Attorney General Loretta Lynch as the reason for his intervention.

The press is silent now. The new story satisfies nobody's agenda, and only makes the FBI look foolish. Mr. Trump is not eager to hear his victory portrayed as an FBI-precipitated accident. Democrats cling to their increasingly washed-out theory of Trump-Russia collusion.

And yet, if Mr. Comey's antic intervention in response to Russian disinformation inadvertently led to Mr. Trump becoming president, this was the most consequential outcome by far.

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SPORTS

NFL

How the Texans Finally Found a QB

Most teams refuse to ditch players after investing millions. Houston did it repeatedly until landing Deshaun Watson

BY ANDREW BEATON

HOUSTON TEXANS coach Bill O'Brien managed to sound excited in the preseason when he declared that Tom Savage, a former fourth-round pick who had never thrown a touchdown, would become the team's fourth opening-day quarterback in as many years.

Then the season began. It took all of 30 minutes for the Texans to light that plan on fire. Savage was sent to the bench after an extraordinary offensive meltdown. O'Brien gave rookie Deshaun Watson a shot.

A few weeks later, the Texans have what may be the NFL's best offense, to the slack-jawed amazement of the entire league. It's a testament not just to Watson, but also to the unorthodox philosophy that pushed Watson forward so quickly.

In a league where teams are notoriously stubborn about admitting they've made mistakes—especially at the hyper-important and ultra-expensive quarterback position—the Texans are the exact opposite. When their quarterback play stinks, as has often been the case in recent years, they don't let it fester. They try someone else. Anyone else.

"We've tried to cultivate and develop a competitive environment," says general manager Rick Smith.

Every team in the NFL says that. Here's where the Texans are different. "The quarterback," Smith said, "is not excluded from that competitive environment."

The Texans enter Sunday's game against the Seahawks at 3-3 and have arrived there in shocking fashion: This franchise, which has struggled to score pretty much since its inception, has become the league's most unstoppable juggernaut. Watson's offense, in its last four games, has averaged 39.3 points per game.

How the Texans reached this position—with an eagerness to look for a better option at quarterback at any given moment—sounds obvious. But it's borderline radical in a league where coaches and executives attach themselves to their most prized investments with feverish devotion.

Maybe it's because teams actually believe in a certain player, in spite of poor results. Or perhaps it's because they think the only thing worse than missing on a player is publicly admitting that mistake after a brief period of time.

The propensity to stick with a quarterback too long isn't just an anecdotal phenomenon favored by frustrated fans sick of losing with the same players. It has backing in research and hinges on the basic economic concept of sunk costs—the idea that money spent can't be recovered. Typically, the more teams



Unlike most franchises, the Texans were willing to jettison poor performers quickly, which eventually led them to budding star Deshaun Watson.

invest in a player, the more they'll let him play.

A 2015 study on defensive players, by Quinn Keefer, an assistant professor of economics at California State University San Marcos, concluded that "the sunk-cost fallacy is persistent throughout the entire career of an average NFL player." A 2017 paper by Keefer in the Journal of Sports Economics looked at players drafted at the end of the first round and beginning of the second round, whose talents are pretty much indistinguishable. It found that those selected at the end of the first round, who are paid more, start nearly three more games on average than the high second rounders.

That's why the author of those papers marvels at how the Texans have bucked this trend, saying the Texans' willingness to repeatedly move on is "rare."

"The Texans got this one correctly," Keefer said. "This is a great example of economic decision making, but this is not the norm."

For the Texans, this has been part of a quest to fix what has arguably been the league's most frustrating quarterback situation. For years, the Texans have had one of the NFL's best defenses but struggled miserably on offense. Their quarterback rating last year ranked 30th in the league—and they still made the playoffs, a testament to an other-worldly defense. That helped the Texans defy the sport's No. 1 rule, which says a team without a good quarterback can't be any good at all.

But no matter how maddening this has been for the team's fanbase, Houston has not settled for a mediocre option. In 2014, the team started three quarterbacks: Ryan Fitzpatrick, Case Keenum and Ryan Mallett. A year later, there were four: Brian Hoyer, Mallett, T.J. Yates and Brandon Weeden.

Then, before last season, the Texans thought they finally had an answer: They shelled out \$72 million for Brock Osweiler, an un-

proven backup from the Broncos who many believed had the tools to become a star.

That seemed like a reasonable plan until Osweiler actually stepped on the field for the Texans, when he posted one of the worst passer ratings in the league. By December, with tens of millions still owed to Osweiler, Houston was willing to admit its mistake. Down 13-0 to the Jaguars, O'Brien sent Osweiler to the bench in favor of Savage, who salvaged the game and the team's playoff hopes in a 21-20 comeback win.

This past off-season, the Texans were so committed to giving up on Osweiler that they paid the Browns, in the form of draft picks, to take on his salary.

In the draft, they selected Watson in the first round to compete with Savage for the starting job.

But in the first half of the first game of the season, Savage was sacked six times and fumbled twice. The Texans went scoreless, while

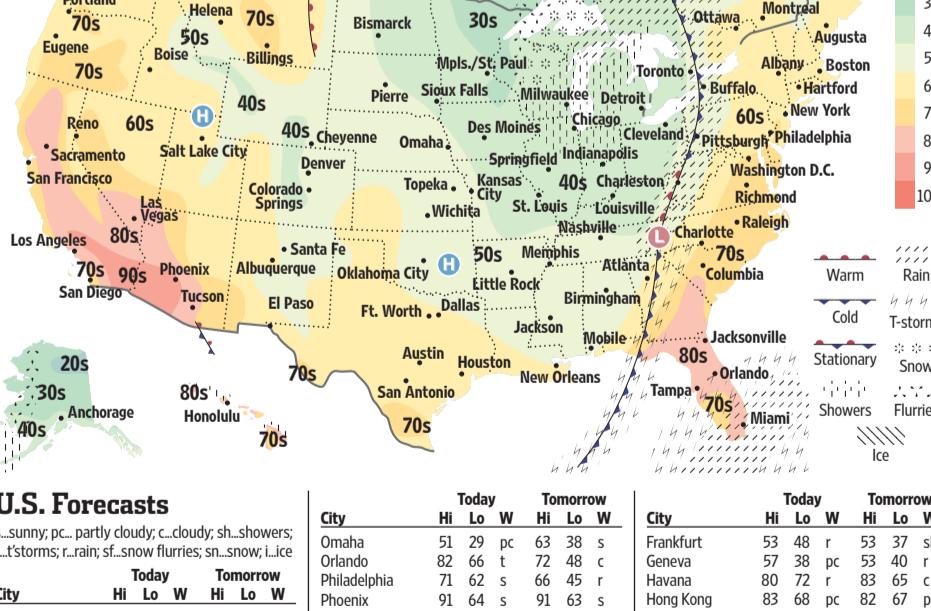
one of those fumbles was returned for a touchdown. The offense gave up more points than it scored.

In came Watson, who was far from perfect but at least scored in the loss. And since then, the Texans have been one of the most dangerous offensive teams in the league.

Now, of course, Houston hopes Watson ends this quarterback carousel. A superstar at Clemson, where he toppled Alabama for last season's national championship, Watson has done it all so far in his NFL debut. He has thrown 15 touchdowns, tied for second in the NFL, despite only playing in five and a half games. He has also run for 202 yards and two more scores.

Whether that continues remains to be seen. Still, the Texans know they can't let anybody struggle at the game's most important position for too long—because the season is too short. "We only get 16 chances," Smith, the team's general manager, said. "You can't mess around."

Weather



U.S. Forecasts

S=sunny; pc=partly cloudy; c=cloudy; sh=showers; sf=snow flurries; sn=snow; l=ice; t=tstorms; r=rain; sf=snow flurries; sn=snow; l=ice

Today Tomorrow

City Hi Lo W Hi Lo W

Anchorage 44 38 c 43 39 r

Atlanta 60 37 t 55 36 s

Austin 64 33 s 75 43 s

Baltimore 71 59 pc 60 40 r

Boise 68 42 s 67 41 s

Boston 66 55 s 65 59 r

Burlington 69 54 s 62 54 r

Charlotte 72 50 t 57 33 c

Chicago 45 31 c 48 36 pc

Cleveland 48 38 r 49 37 c

Dallas 61 40 s 77 51 s

Denver 57 41 pc 69 32 s

Detroit 47 35 r 49 35 c

Honolulu 84 69 pc 84 71 pc

Houston 63 38 s 70 47 s

Indians 44 32 c 46 32 c

Kansas City 50 28 pc 60 40 s

Las Vegas 84 60 s 85 60 s

Little Rock 55 30 s 62 37 s

Los Angeles 88 64 s 81 62 s

Miami 82 73 r 83 56 t

Milwaukee 47 33 sh 48 37 pc

Minneapolis 40 27 c 43 32 sh

Nashville 52 34 pc 53 33 pc

New Orleans 60 44 pc 64 46 s

New York City 68 62 s 67 48 r

Oklahoma City 55 34 s 70 42 s

Today Tomorrow

City Hi Lo W Hi Lo W

Amsterdam 59 50 r 55 46 sh

Athens 72 54 p 67 57 pc

Baghdad 98 66 s 94 67 s

Bangkok 91 76 pc 90 70 pc

Beijing 61 35 c 57 33 s

Berlin 52 45 r 49 37 r

Brussels 55 51 r 56 42 sh

Buenos Aires 69 56 s 73 55 t

Dubai 96 77 s 97 77 t

London 58 51 c 55 40 pc

Dublin 58 51 c 55 40 pc

Edinburgh 60 42 c 50 33 pc

AccuWeather.com

City	Today	Tomorrow	City	Today	Tomorrow	
Hi	Lo	W	Hi	Lo	W	
Orlando	82	66	t	72	48	c
Philadelphia	71	62	s	66	45	r
Phoenix	91	64	s	91	63	s
Pittsburgh	53	34	r	46	35	sn
Portland, Maine	61	49	s	60	54	c
Portland, Ore.	69	47	s	64	47	pc
Sacramento	85	49	s	81	48	s
St. Louis	49	31	c	56	40	pc
Salt Lake City	65	43	s	70	43	s
San Francisco	71	54	s	65	53	s
Santa Fe	57	33	s	66	36	3s
Seattle	66	48	s	63	45	pc
Sioux Falls	47	25	pc	55	32	pc
Washington, D.C.	71	58	pc	59	45	r

City	Today	Tomorrow	City	Today	Tomorrow	
Hi	Lo	W	Hi	Lo	W	
Frankfurt	53	48	r	53	37	sh
Geneva	57	38	pc	53	40	r
Havana	80	72	r	83	65	c
Hong Kong	83	68	pc	82	67	pc
Istanbul	64	50	c	61	53	pc
Jakarta	90	78	t	89	77	t
Jerusalem	70	51	pc	71	55	s
Johannesburg	57	46	c	69	51	c
London	61	53	c	57	39	pc
Madrid	76	44	s	76	43	s
Manila	88	76	pc	87	77	pc
Melbourne	70	52	pc	80	51	pc
Mexico City	72	51	pc	74	52	pc
Milan	66	44	pc	71	46	pc
Moscow	37	31	c	40	37	c
Mumbai	93	78	s	95	78	s
Paris	58	49	pc	59	40	sh
Rio de Janeiro	92	72	t	84	71	t
Riyadh	92	65	s	94	66	s
Rome	69	47	pc	67	49	pc
San Juan	88	78	sh	88	77	sh
Seoul	72	50	s	60	39	s



BUSINESS A THIRST FOR COGNAC B3

BUSINESS & FINANCE



VENEZUELA BONDS GET A BOOST B10

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THE WALL STREET JOURNAL.

Saturday/Sunday, October 28 - 29, 2017 | B1

DJIA 23434.19 ▲ 33.33 0.1% NASDAQ 6701.26 ▲ 2.2% STOXX 600 393.43 ▲ 0.6% 10-YR. TREAS. ▲ 7/32, yield 2.426% OIL \$53.90 ▲ \$1.26

GOLD \$1,268.50 ▲ \$2.20 EURO \$1.1610 YEN 113.67

Tech Stocks Fly High Again

Rally is a reminder of 2000, but e-commerce and cloud-computing growth looks strong

BY CHRIS DIETERICH

For one day at least, it felt like 2000 again in the U.S. stock market.

A swell of enthusiasm for shares of America's best-known technology and internet companies carried the Nasdaq Composite Index to

another record, up 2.2% in its biggest one-day point gain since August 2015.

The headiest gains were in Amazon.com Inc., Google parent Alphabet Inc., Microsoft Corp. and Intel Corp. The surge in those shares added a collective \$146 billion in market value to the companies. That one-day rise eclipsed the entire value of International Business Machines, at \$143 billion.

Investors cheered buoyant quarterly earnings of each company, bidding up stocks on

the hope that fast-growing e-commerce, cloud-computing and digital advertising businesses would continue to grow in importance.

Eye-watering gains caught some seasoned market watchers off guard. Some said the huge advances could reflect confidence that is out of whack with even the most optimistic forecasts.

"Today is the craziest behavior I have seen since early 2000," said Michael O'Rourke, chief investment strategist at JonesTrading Institutional

Services, referring to the year in which the internet boom crested with the Nasdaq hitting 5000, a level it quickly relinquished and wouldn't regain for more than a decade.

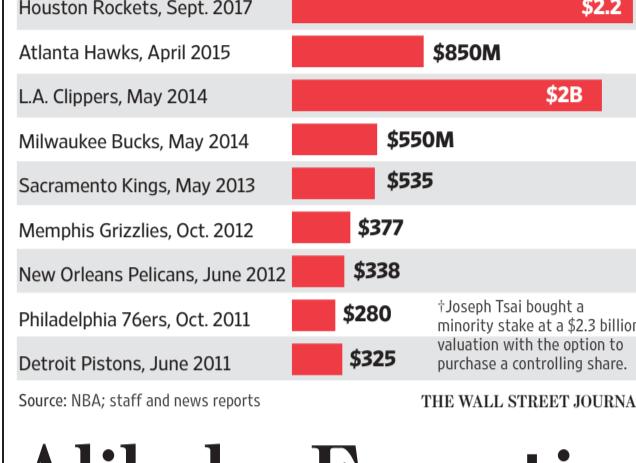
"It can only be described as euphoria," he said.

More days like Friday could signal the beginning of a new phase in the stock-market rally that has for months been characterized by a steady, persistent grind higher, albeit to records, Mr. O'Rourke said.

This year, the Dow Jones
Please see RALLY page B2

The Cost of Holding Court

The 10 most recent NBA franchise valuations:



Source: NBA; staff and news reports

†Joseph Tsai bought a minority stake at a \$2.3 billion valuation with the option to purchase a controlling share.

THE WALL STREET JOURNAL.

Alibaba Executive Buys Stake in Nets At Record Value

BY BEN COHEN

Alibaba Group Holding Ltd. co-founder Joseph Tsai is buying a 49% stake in the Brooklyn Nets at a record valuation of \$2.3 billion.

Mikhail Prokhorov has agreed to sell the interest in the National Basketball Association franchise and give Mr. Tsai, who helped build Alibaba into an e-commerce giant, the option to purchase a controlling stake in four years, according to people familiar with the matter.

Terms of the deal weren't disclosed, but 49% of a \$2.3 billion valuation would equate to \$1.13 billion.

The sale does not include Barclays Center, the downtown arena the Nets built when they moved to Brooklyn in 2012, two years after the Russian oligarch became the league's first overseas owner.

It represents a big profit for Mr. Prokhorov. He paid \$260 million for 80% of the team, 45% of the new arena and the right to purchase real estate around the Brooklyn site.

The latest biggest deal in league history, which was earlier reported by ESPN, represents another billionaire's big bet on the NBA.

The Nets could become the sixth team to change hands since 2013 as franchise valuations across the league have soared with the NBA booming in popularity.

The Los Angeles Clippers sold for \$2 billion in 2014, and the Houston Rockets went for \$2.2 billion last month.

The NBA has a young, diverse fan base, international allure, and a generation of culturally relevant and highly marketable stars. It struck a \$24 billion television deal in 2014 that secured its media rights for another decade at a time of great uncertainty and upheaval across the industry. And the frothy market also

may persuade more of the league's owners to explore sales of their own teams.

Mr. Tsai was born in Taiwan but educated in the U.S. He was an undergraduate and law student at Yale University, where he gave \$30 million last March to support the work of the Yale Law School's China Center and made another donation toward the creation of the university's Tsai Center for Innovative Thinking, which houses an accelerator for social ventures.

Mr. Tsai has long been interested in sports, too. He made Yale's lacrosse team as a walk-on, and he became a

A 49% stake with a \$2.3 billion valuation equates to a purchase price of \$1.13 billion.

frequent pickup basketball player in law school. He also bought a National Lacrosse League team in San Diego this year as he explored this deal with the Nets.

The eloquent and amiable former private-equity investor was part of Alibaba's founding team when the Chinese internet company was started in 1999. Mr. Tsai took over as executive vice chairman in 2013 and has been responsible for handling corporate investments at China's biggest e-commerce company.

He ranks as Alibaba's second-largest individual shareholder after its chairman, Jack Ma, holding 1.7% of the common shares outstanding in the company.

As of last month, his stake in the company was valued at more than \$7 billion, according to S&P Global Market Intelligence.

—Liza Lin contributed to this article.



The top five Western oil companies are on track to post their highest annual earnings since crude plummeted three years ago.

Oil's Profits Fail to Draw Investors

BY BRADLEY OLSON AND SARAH KENT

Big oil is back in the black, but investors aren't biting.

Profits at many of the world's largest energy companies soared in the third quarter, with Exxon Mobil Corp. and Chevron Corp. reporting increases Friday of 50%, and Total SA reporting a 40% rise from a year earlier. Their improved earnings rose at more than twice the rate of oil prices in the period.

The top five Western oil

companies, including Royal Dutch Shell PLC and BP PLC, which report next week, are now on track to post the highest annual profits since crude plummeted three years ago and forced them to restructure for a prolonged era of lower prices. They have cut spending by more than \$80 billion compared with 2013.

Still, the companies' turnaround didn't immediately carry over to investor sentiment, even as prices for Brent crude, the leading global benchmark, topped \$60 a barrel

rel Friday for the first time in more than two years, a sign of continued market optimism.

Chevron shares fell more than 4% and Exxon, which beat analyst expectations, rose only slightly. This year, Exxon has fallen 7% and Chevron is down 3.5%. Shell's American depositary receipts have risen nearly 13%, while Total and BP's U.S. shares have had modest gains. All have fallen short of the increase in the S&P 500 index.

Even as profits continue to improve, investors have

soured on oil companies, put off by years of poor returns and strategies oriented toward growth that didn't improve profitability. Only about \$1.3 billion has flowed into energy-focused equity funds for the year through Oct. 20, compared with over \$6 billion in 2016 and \$20 billion in 2015, according to data from EPFR Global.

The caution comes as the *Please see EARNS page B2*

◆ Brent crude hits \$60 a barrel..... B11

Carlyle's Next Generation

The private-equity firm taps a deal whiz and a homegrown quarterback to lead

BY MIRIAM GOTTFRIED

Carlyle Group LP's new leadership tandem is made up of a homegrown protégé and a problem-solver with a relatively short tenure at the firm.

Carlyle veterans Glenn Youngkin and deal-making whiz KewSong Lee will become co-chief executives of the Washington, D.C., private-equity firm in January, replacing the company's long-time leaders, who will step into senior roles on the board, Carlyle said Wednesday.

Mr. Youngkin is seemingly Carlyle embodied. The even-keeled Washingtonian started with the firm in his 20s, grew up professionally under the tutelage of Carlyle's three founders and eats, sleeps and breathes the firm, people familiar with the CEO transition said.

Mr. Lee, on the other hand, joined Carlyle only four years ago, defecting from rival Warburg Pincus LLC. The executive, who splits his time between New York City and Washington, has a knack for strategy and deal making. He is decisive and brings the promise of new ideas and swift execution, the people



Carlyle Group named KewSong Lee, left, and Glenn Youngkin as its co-chief executives.

said.

Together, they are tasked with taking the helm of a world-wide investment firm that was founded in 1987 and has grown to manage \$170 billion of assets invested across private equity, real estate and credit. Though Messrs. Youngkin and Lee aren't being asked to execute

a turnaround, Carlyle's shares have underperformed peers and the S&P 500 since 2012, when it became the last of the large private-equity firms to go public.

Mr. Youngkin said in an interview that he likes the new perspective Mr. Lee brings to the firm. "One of the great opportunities we have is to com-

bine the freshness with our long history of success at Carlyle," he said.

Mr. Youngkin, 50 years old, started at Carlyle when he was 27. Mentored by founders David Rubenstein, William Conway and Daniel D'Aniello, Mr. Youngkin has adopted as his mantra the firm's "One

Please see CARLYLE page B2

At the end of October, the stock market crashed. By Oct. 26, the Dow Jones Industrial Average had already fallen 13% for the month. On Oct. 28, it dropped 13% more. On Oct. 29, it collapsed a further 12%.

That crash was in 1929, of course, not 2017. Did anyone see the Great Crash coming, and what can we learn from looking back?

Then, as they still do today, market pundits claimed

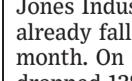
to have seen a crash coming. Speculator Joseph Kennedy, later the first head of the Securities and Exchange Commission, is said to have gotten out of the market when he noticed a shoeshine boy bragging about his stock picks.

One forecaster, it might seem, did call the crash almost perfectly. In his book "The Stock Market Crash—and After," published in 1930, economist Irving Fisher credited Karsten Statistical Laboratory of New Haven, Conn., for demon-

Please see INVEST page B5

THE INTELLIGENT INVESTOR | By Jason Zweig

Lessons, and Warnings, From the Crash of 1929



At the end of October, the stock market crashed.

By Oct. 26,

Jones Industrial Average had already fallen 13% for the month. On Oct. 28, it

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CARLYLE

Continued from the prior page
Carlyle" philosophy, which emphasizes cooperation and collaboration, a person familiar with the matter said.

"Glenn is the business world's version of Aaron Rodgers," said Brad Burns, a long-time friend of Mr. Youngkin. "He has amazing vision, is incredibly strategic, is the best leader, and you want the ball in his hands with time winding down on the clock."

Currently president and chief operating officer, Mr. Youngkin has worked as the firm's interim chief financial officer and led its industrial investment team. He ran the firm's buyout activities in the U.K. and played a big part in building Carlyle's energy and infrastructure businesses and its investment-solutions segment.

In April 2008, the founders asked Mr. Youngkin to take a step back from deal making and focus more on Carlyle's broader strategy. That put him in the position of navigating the firm through the global financial crisis, during which Carlyle conducted its first and only layoffs. "When you have to tell people they can't come to work tomorrow, that's as tough as it gets," Mr. Youngkin said. The athletic Mr. Youngkin, who has a strong weekend golf game, played basketball for Rice University.

As part of the leadership transition announced Wednesday, Messrs. Rubenstein and Conway, who had been co-CEOs, will become co-executive chairmen. Mr. D'Aniello, the current chairman, will become chairman emeritus.

Mr. Lee, a 52-year-old first-generation Korean American,

came to Carlyle in 2013 after a 21-year career at Warburg to take on a newly created role heading up corporate private-equity investment under Mr. Conway. While running the consumer and industrial services buyout group at Warburg, he developed a reputation as a shrewd deal maker, leading lucrative deals involving Neiman Marcus Group Ltd., Aramark and Arch Capital Group Ltd., among many others.

"I was from the very beginning—and am still in my soul—an investor," Mr. Lee said in an interview.

Joseph Neubauer, former chief executive of Aramark, recalled an intense Labor Day weekend in 2007 that he spent with Mr. Lee and others involved in taking his company private. "Kewsong always had very good judgment. He understood the big picture," Mr. Neubauer said.

When Mr. Lee left Warburg, its \$11.2 billion fund was the largest corporate private-equity pool raised since the financial crisis. But Carlyle was raising a fund that would soon eclipse it. Mr. Lee said he was eager to take on a role at a bigger firm. At Carlyle, Mr. Lee built and launched its long-dated private-equity fund. He also made the difficult decision to close the firm's troubled hedge funds and led the complex process of winding them down.

Mr. Lee plays the piano and the violin and directed music for musical-theater productions while at Harvard University.

"Kewsong is rapier smart," said Mark Goldstein, co-head of sponsor banking at RBC Capital Markets. "Glenn is also extraordinarily bright. They're both gracious people, which is not a given in this world."

billion in profits analysts expect this year from Facebook Inc., Apple Inc., Amazon.com Inc., Netflix Inc. and Google parent Alphabet Inc., according to FactSet. Those so-called "FAANG" stocks have soared in the past several years.

Shareholders want to see continued improvement in profits and more cash, analysts said. Chevron has gone more than a year without raising its dividend, although it may do so soon. Some European oil companies have made investor payments with shares, a quick fix investors have accepted in the short term, even though it risks diluting their holdings over time.

In a strong signal to investors, Norway's Statoil ASA said Thursday it will move away from paying dividends in the fourth quarter and that it can cover its costs and investor payouts at \$50 a barrel.

That is more than 50% higher than the estimated \$90

BUSINESS & FINANCE

Chemical Merger Thwarted

BY BRIAN BLACKSTONE

ZURICH—Swiss chemicals company Clariant AG and U.S.-based Huntsman Corp. on Friday said they had terminated their planned \$15 billion merger after facing pressure from investors who wanted to block the deal.

The deal's failure highlights the growing influence of activist investors across Europe, with Swiss consumer giant Nestlé SA, Dutch paint company Akzo Nobel NV and London-listed miner BHP Billiton PLC all facing high-profile tussles with shareholders agitating for change.

The pressure facing Clariant was particularly extreme because it came from its largest shareholder, White Tale Holdings, which blasted the proposed Huntsman merger as detrimental to shareholders. It also steadily increased its stake to more than 20% while waging its war of words.

White Tale comprises investment funds **40 North Latitude Master Fund** Ltd., controlled by U.S. investors David Winter and David Millstone, and **Corvex Master Fund** Ltd., controlled by well-known activist investor Keith Meister.

Clariant and Huntsman eventually threw in the towel, saying that the continuing stake building by the activists—and the fact other share-



Clariant CEO Hariolf Kottmann, left, and Peter Huntsman in May.

holders had started to support their cause—meant there was "too much uncertainty" that they would secure the two-thirds shareholder approval needed for the deal to proceed under Swiss law.

The merger, first announced in May, would have created a trans-Atlantic giant offering an array of chemicals and other products used across industries from aerospace to agriculture to household cleaning.

Shares in Clariant fell more than 5% in early trading in Zurich on Friday, but they later regained ground to close down 0.9%. Huntsman shares gained

4.2% in U.S. trading.

"Now Clariant is again the No. 1 takeover target among EU chemicals," said analysts at Baader Helsva Equity Research. "However, we doubt that bidders will already now raise their hands."

Clariant Chief Executive Hariolf Kottmann said it was too soon for the company to discuss future options but that the company was well prepared to continue on its own.

"While White Tale's position on the merger has been different from ours, we share a common interest in increasing Clariant's value," Mr. Kott-

mann said.

Huntsman Chief Executive Peter Huntsman said that the merger "is not the only option for Huntsman to create real and lasting value." Also on Friday, Huntsman reported third quarter net income of \$179 million versus \$64 million in the prior year period.

White Tale didn't have a comment on the termination of the merger.

White Tale had urged Clariant to explore options other than the Huntsman merger. Mr. Kottmann defended the deal and said it was "pure nonsense" to say the company hadn't explored all of the options available to it.

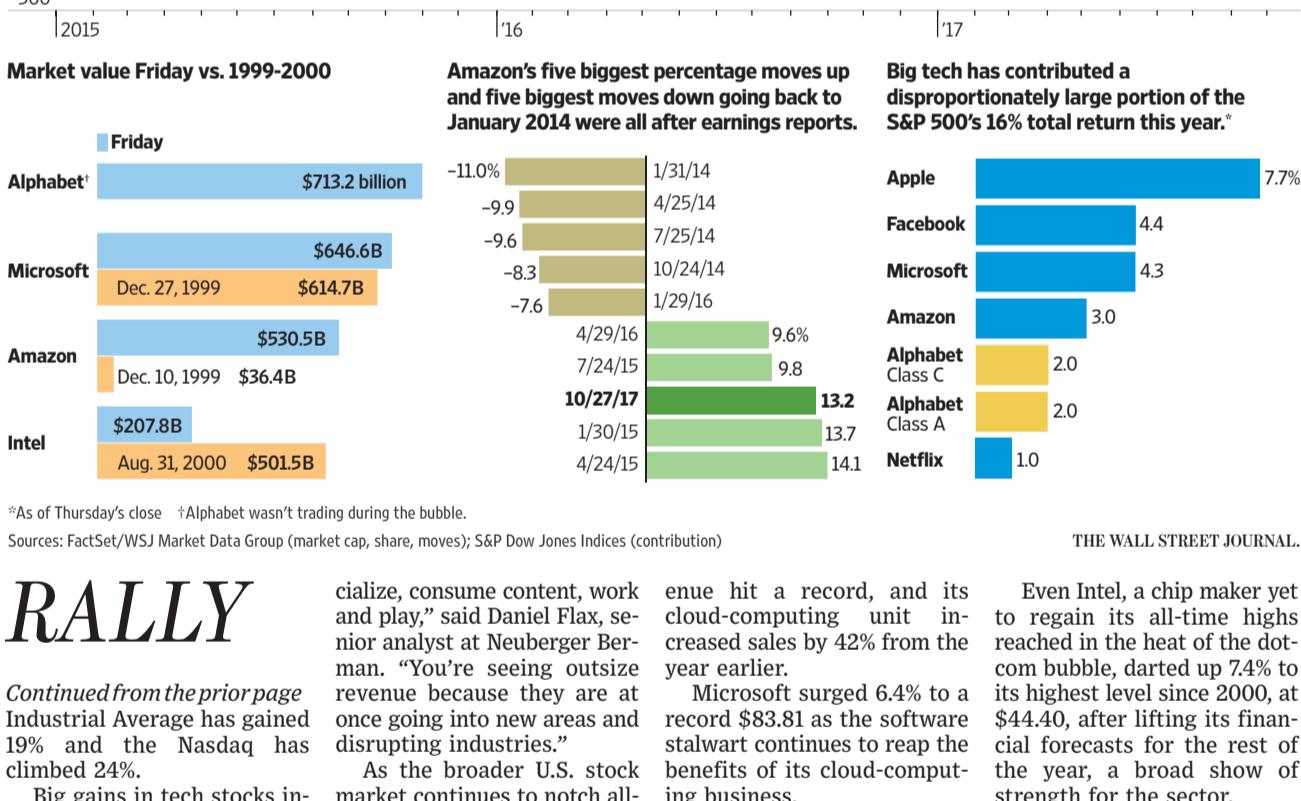
He also appeared to bemoan some of the consequences of the increased role activist investors are playing.

"I think you have clearly to distinguish that management of companies try to increase the enterprise value" for shareholders, he said, while "activist shareholders try to increase the value of their investment," and when they meet their objectives, "they are out."

In an interview with Swiss newspaper Finanz und Wirtschaft published Oct. 6, Messrs. Millstone and Winter said they were "long-term oriented investors" and that they were "here to stay, to make and build" with Clariant.

Like Before but Different

A rally in large technology stocks intensified Friday, as Amazon surged 13%, Microsoft hit a new record and Google parent Alphabet exceeded \$700 billion in market value. Intel rose to its highest price since 2000. The frenzied trading echoed the internet boom, but analysts emphasize that these firms are far healthier and their multiples less stretched than was the case then.



*As of Thursday's close †Alphabet wasn't trading during the bubble.

Sources: FactSet/WSJ Market Data Group (market cap, share, moves); S&P Dow Jones Indices (contribution)

RALLY

Continued from the prior page
Industrial Average has gained 19% and the Nasdaq has climbed 24%.

Big gains in tech stocks invite comparisons with the bubble that crushed the Nasdaq nearly two decades ago. Bulls say that the key difference between then and now is that whereas tech-stock gains then were premised on the idea that the internet would change people's lives, this one is based on the reality that these companies already are.

"These big web giants are changing the ways people so-

cialize, consume content, work and play," said Daniel Flax, senior analyst at Neuberger Berman. "You're seeing outsized revenue because they are at once going into new areas and disrupting industries."

As the broader U.S. stock market continues to notch all-time highs, investors are showing an affinity for ubiquitous brands tied to the web. On Friday, the Nasdaq notched its 61st record close of the year, matching its 1999 performance and one short of its 1980 record.

Amazon.com surged 13%, or \$128.52 a share, to \$1,100.95 in its biggest one-day gain in more than two years. The internet retailer's quarterly rev-

enue hit a record, and its cloud-computing unit increased sales by 42% from the year earlier.

Microsoft surged 6.4% to a record \$83.81 as the software stalwart continues to reap the benefits of its cloud-computing business.

Alphabet jumped 4.8%, also to a record, \$1,019.27, after its profit spiked 33% as the company's ads on the web and smartphones proliferate.

Upbeat quarterly earnings routinely jolt stock prices higher, particularly in the technology and internet sector, but Friday's tech-focused buying rewarded recent market darlings and legacy contenders alike.

Even Intel, a chip maker yet to regain its all-time highs reached in the heat of the dot-com bubble, darted up 7.4% to its highest level since 2000, at \$44.40, after lifting its financial forecasts for the rest of the year, a broad show of strength for the sector.

Optimism spilled into other big technology stocks as well, with Apple Inc., the hardware company that is the largest U.S. company by market value, rising 3.6%. Facebook Inc., due to report its next quarterly results Wednesday, rose 4.3% Friday to notch a high.

All told, tech stocks in the S&P 500 soared 2.9%, their biggest one-day ascent since March 2016.

the companies have curbed their ambitions, turning instead to smaller, incremental developments that pay back more quickly than multibillion-dollar megaprojects.

"These companies are becoming much more streamlined," said Brian Youngberg, an energy analyst at Edward Jones. "They've all been aggressive in driving costs down to maintain profitability even if oil prices remain low. You're not seeing as many big, expensive projects. Those days are gone."

The speed at which the companies have managed to reset has taken even some executives by surprise.

"Frankly, if somebody had told me three years ago that we would be at 10% return on equity by mid-2017 or third quarter, I would have been very happy," Total CEO Patrick Pouyanne said in an interview. "It would have seemed to me impossible."

for chemicals and fuels like gasoline and diesel, and a move to developments that can pay off quickly.

BUSINESS NEWS

United Investors Restless for Takeoff

BY SUSAN CAREY

United Continental Holdings Inc. has promised investors for years that it will close the profit-margin gap with its major rivals and start delivering the fruits of its 2010 merger. But the third-largest U.S. carrier by traffic continues to be an industry laggard.

As airlines wrapped up third-quarter earnings this week, United posted in-line but tepid results and gave a disappointing outlook for costs and revenue in the final quarter. Despite ambitious cost-shaving and revenue-enhancing initiatives announced nearly a year ago, the Chicago-based carrier is still far from catching up with industry darling **Delta Air Lines** Inc. by most measures.

Oscar Munoz, United's 59-year-old chief executive, has asked investors for more time.

"We've dug ourselves historically in a little bit of a competitive hole as a company," he said in a call with analysts and investors last week. "In order to get ourselves out of it, we have to do something a little bit [more] extraordinary than others."

The day of the call, investors lost patience. United shares suffered a 12% one-day selloff last Thursday and have yet to recover. The selling spree helped shaved \$7.6 billion from the company's market capitalization since the stock's June high. Shares are down 17% year to date and closed Friday at \$60.25.

Investors and analysts who follow the stock said they are frustrated that United appears to be more focused on providing reasons for the lack of progress than on addressing cost headwinds that now extend into 2018.

On the earnings call, United refused to talk about 2018 costs and capacity growth, which they normally would. They also failed to give detailed results from cost and revenue initiatives. Aside from saying most of the initiatives were on track, United executives wouldn't speak about that work.

"It's been six years post-merger, and it's one excuse after another" at United, said Hunter Keay, of Wolfe Research. "New faces, same results."

United declined to make executives available for comment.

Cognac Lovers Outdrink Hennessy

Booming demand for the liquor tests its biggest producer; rationing in the U.S.

BY MATTHEW DALTON

COGNAC, France—Global demand for cognac is booming, and Hennessy, which controls half of all production of the brown liquor, is scrambling to keep drinkers sated.

Hennessy, part of the Paris-based luxury conglomerate **LVMH Moët Hennessy Louis Vuitton** SA, faces capacity constraints here in the Cognac region of southwestern France. It can't bottle enough of the stuff, and it is trying to persuade vineyard owners to cultivate more grapes. This year, a springtime frost also hit supply.

LVMH said earlier this month that its third-quarter cognac sales volumes fell from a year earlier—it didn't say by how much—because Hennessy held back stock to have enough for the holiday season in the U.S. The brand is one of LVMH's biggest and most profitable.

Hennessy sales last year were about €1.6 billion (\$1.89 billion), according to analyst estimates; that represents only 4.2% of LVMH's overall revenue, but roughly 10% of its operating profit.

Shortages have so far been limited mostly to the U.S., one of the brand's biggest markets.

Liquor distributors have been rationing Hennessy V.S., the low-price cognac that is the brand's top-seller in America. But Hennessy executives say they are cautious about raising prices for fear of angering customers.

Gotham Wines & Liquor on the Upper West Side of Manhattan is out of stock and is waiting for the next allocation from its distributor. Staff "look at the history of client buying and they determine how much Hennessy you get for the month," said Jack Battipaglia, manager of Gotham.

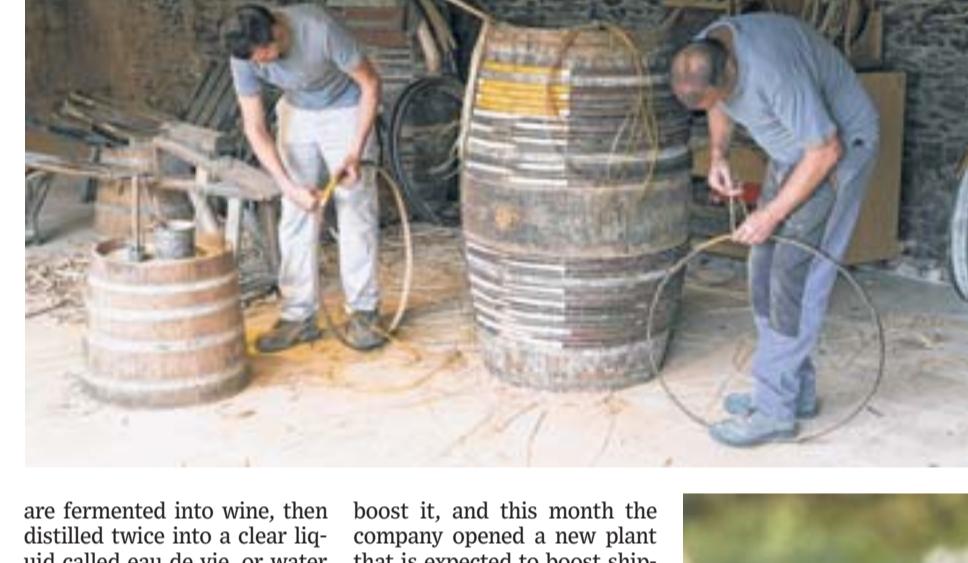
The Pennsylvania Liquor Control Board, which sells liquor across the state, said Hennessy has agreed to boost shipments by 10%, but that isn't enough to keep up with demand. "That's created out-of-stock situations for various Hennessy products," said Shawn Kelly, a spokesman for the board.

Last year, cognac makers sold 179 million bottles worldwide, or about €2.8 billion in sales, up 6% from the previous year and 17% from five years ago. In North America, sales have doubled over that stretch.

Cognac can only be made from grapes grown near the Charente river here. The grapes



Hennessy, a unit of LVMH, this month opened a new plant in France that is expected to boost its cognac shipments by more than 14%.



are fermented into wine, then distilled twice into a clear liquid called eau de vie, or water of life. Eau de vie is aged anywhere from two years to more than a century in wooden barrels, giving the cognac its brown color.

An April frost that damaged the grape crop across France put Hennessy under more pressure than other suppliers. That is because its main product is V.S., which is aged for just three years. The frost forced Hennessy to delay shipments immediately in the tightly choreographed production of V.S. to help make up for shortfalls anticipated three years from now.

One of Hennessy's key constraints has been bottling capacity. It is investing more than a hundred million euros to

boost it, and this month the company opened a new plant that is expected to boost shipments by more than 14%.

Despite its size, Hennessy is at the mercy of the region's grape-growing families, which have been in the business for generations. The giant has been trying to persuade skeptical growers to expand grape production, which once stood at 247,000 acres of cultivated land but has fallen to 185,000 acres. Growers are wary, having been forced in the past to uproot vineyards because of oversupply at a time when cognac was in lower demand.

Bernard Peillon, president of Hennessy, said he hopes as part of negotiations next year to persuade growers to plant an additional 5,000 acres.



Penney Cuts Goals, and Stock Tumbles

BY CARA LOMBARDO

J.C. Penney Co. spooked investors ahead of the holiday season, after the struggling department-store chain slashed its profit goals for the year and warned of weakening sales.

Penney said its decision to discount and clear out slow-moving inventory in women's apparel and other clothing departments increased revenue in September and October but significantly hurt earnings. Its shares tumbled on the news.

The Plano, Texas, company now expects per-share earnings, excluding certain costs, of 2 cents to 8 cents for its fiscal year ending Jan. 28, well below its previous guidance of 40 cents to 65 cents.

Penney added that comparable sales are unlikely to improve for the year as it makes

extensive efforts to overhaul its inventory. The company now expects same-store sales to be flat to down 1% for the year; it previously predicted a range of minus 1% to plus 1%.

Penney's profit was also hurt by increased sales of appliances, which carry lower margins than the apparel and other goods it sells.

The retailer said that despite the near-term profit shortfall, its inventory decision was right for the long term. Chief Executive Marvin Ellison said he was encouraged by improved women's clothing sales after the extensive liquidation, which he called a "comprehensive reset."

Investors, though, weren't seeing the positives. Shares of Penney fell 54 cents, or 15%, to \$3.12. At its lowest point Friday, \$2.76, the decline knocked

winds as mall traffic wanes and the shift to e-comm should also continue to weigh on profitability," Mr. Konik wrote in a note to clients.

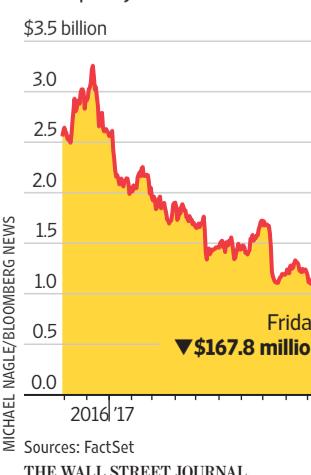
Penney, like other department stores, has closed stores this year to fight online competition, announcing plans to shut as many as 140 of its roughly 1,000 stores. Those closings produced liquidation sales that weighed on results earlier this year. In August, Mr. Ellison said the retailer never had liquidated that many stores at one time, which made forecasting difficult. But he added: "We walked away from the liquidation event a stronger company."

Friday, Penney said that during the third quarter, it took steps to create a system designed to help streamline the retailer's pricing, promotion and markdown strategies.

The system—which is under the oversight of the retailer's new financial chief, Jeffrey Davis—aims to improve the retailer's predictive analytics and provide "a more focused view of current sales trends," Penney said. That information allowed the retailer in the third quarter to liquidate what wasn't working and increase spending on new and trending merchandise, the company said.

For the third quarter, Penney now expects an adjusted per-share loss of 40 cents to 45 cents, wider than the average analyst loss of 18 cents on Thomson Reuters. The company forecast same-store sales would rise 0.6% to 0.8%.

—Suzanne Kapner contributed to this article.



Penney said comparable sales are unlikely to improve for the year.

BUSINESS WATCH

MERCK

Drugmaker Cites Cyberattack Costs

Merck & Co. said a cyberattack over the summer caused temporary production shutdowns and cut sales by at least \$135 million in the third quarter.

The June attack on major companies around the globe disrupted Merck's world-wide operations, including manufacturing, research and sales. In addition to the lost sales, Merck's efforts to fix the damage added \$175 million in costs for the third quarter, finance chief Robert Davis said on a conference call with analysts.

The company said it also had to borrow doses of its Gardasil 9 vaccine from a U.S. Centers for Disease Control and Prevention pediatric vaccine stockpile to fulfill customer orders, because the cyberattack caused a temporary production shutdown. That cut third-quarter sales by \$240 million, but Merck will recognize that revenue as it replenishes the stockpile, expected in 2018.

Overall, sales fell 2% to \$10.33 billion. Still, the company saw big results from its Keytruda cancer drug, which got an important Food and Drug Administration approval in May.

Sales of the drug increased to \$1.05 billion from \$356 million.

The company posted a third-quarter loss of \$56 million, or 2 cents a share, compared with a profit of \$2.18 billion, or 78 cents a share, in the same quarter last year.

—Austen Hufford and Peter Loftus contributed to this article.

TENET HEALTHCARE

Hospital Operator To Eliminate Jobs

Tenet Healthcare Corp. expects to cut 1,300 jobs as part of a new cost-cutting initiative.

The Dallas-based company, which operates more than 500 hospitals and outpatient centers in the U.S., said Friday it is eliminating a regional management layer in its hospital operations and other business and "streamlining corporate overhead and centralized support functions."

The company said the 1,300 job cuts include contractors.

Tenet, one of the largest for-profit hospital chains in the U.S., had more than 130,000 employees at the end of 2016, the bulk of which were in hospital operations.

—Allison Prang

CANADIAN NATIONAL RAILWAY

Railroad Takes Step To Ease Congestion

Canadian National Railway Co. has struck a deal to interchange trains with **Norfolk Southern** Corp. outside of the key Chicago rail hub in a move that will ease congestion, the companies said Friday.

CN and Norfolk Southern are among six major U.S. and Canadian railroads that converge in Chicago to exchange railcars and reassemble them onto new trains. The hub is the busiest interchange in North America. It is frequently cited by railroad executives as a congestion-heavy pinch point that often leads to delays.

—David George-Cosh

BUSINESS NEWS

Hackers' Next Act Is Mining Bitcoin For Money

By ROBERT McMILLAN

Hackers are commandeering the horsepower of unwitting victims' computers to secretly generate cryptocurrencies, hoping to cash in as the price of bitcoin has soared to \$6,000.

New forms of malicious software have mushroomed, appearing on desktop computers attacked by such hackers. They are also sneaking code that generates digital currency onto misconfigured cloud-computing servers and even on websites, which have been reprogrammed so visiting browsers become unsuspecting digital-currency generators.

Digital currencies such as bitcoin need a broad network of computers to process transactions. To lure participants, they pay off the computers that join the network with newly minted digital currency. These computers are called miners. At current rates, a typical personal computer can generate about \$3.40 a day in bitcoin, according to data provided by BitMiner, an online mining group.

In recent months, currency-mining software has been found on cloud-based internet servers operated by the British insurer Aviva PLC and Times Publishing Co., owner of the Tampa Bay Times, security companies say.

Unwanted mining software is also showing up more frequently on desktop computers, security companies say. Starting last May, researchers at the threat-intelligence firm Recorded Future Inc. saw offer-

ings of such malware spike on dark web forums, where they typically sell for between \$50 and \$850. Recorded Future has found 62 different types of currency-mining malware for sale.

"Most of this software was offered for sale in the past year," said Andrei Barysevich, a researcher at Recorded Future. "So criminals are definitely taking notice of a spike in cryptocurrency values."

The value of bitcoin, the world's most popular cryptocurrency, has jumped nearly 10-fold over the past year, from just over \$600 in October 2016 to more than \$6,000 earlier this month. That has made the mining software that performs the calculations required to process transactions on the bitcoin network much more valuable. On Friday, the price of bitcoin was about \$5,700.

Hackers are continually seeking new ways of converting the computers they hack into cash. They have stolen online banking credentials, rented out hacked machines to spammers or online attackers, and most recently have infected them with ransomware, malicious software that renders computers unusable until a ransom is paid.

Bitcoin isn't the only digital currency motivating hackers. In recent weeks, software that mines another digital currency, Monero, was spotted on websites belonging to the Tampa Bay Times' PolitiFact fact-checking website and CBS Corp.'s Showtime Networks, according to Troy Mursch, a computer-security researcher.

Hackers were able to install their script on the fact-checking website after discovering a misconfigured cloud-computing server, said PolitiFact Executive Director Aaron Sharockman.

A Showtime spokeswoman declined to comment.

Last month, hackers discovered Aviva computer consoles that hadn't been properly secured, according to RedLock Inc., a seller of cloud-security services. The Aviva team fixed the issue after being notified by RedLock and it "had no impact," an Aviva spokesman said.

Wait Time for iPhone X Got Longer

After online preorders opened, shipping estimates quickly rose to five-to-six weeks

By TRIPP MICKLE



FREDERIC J. BROWN/AGENCE FRANCE PRESSE/GTY IMAGES

Ads for the iPhone X, which goes on sale Friday, cover the sides of buildings in Los Angeles.

there's very limited capacity."

The shipment projections are being scrutinized because they offer the first insight into consumer appetite for one of Apple's most anticipated launches. Investors have sent Apple shares up about 35% over the past year and pushed the company's market value above \$800 billion, largely on a bet that new iPhones will deliver record sales.

Apple's ability to deliver largely rests on the iPhone X. The iPhone 8 and 8 Plus—which hit the market Sept. 22 and feature the same basic design as preceding models—posted the weakest sales of any of the company's new smartphones in recent years.

The iPhone X offers an edge-to-edge display and facial-recognition system that led Apple to call it the smartphone of the future.

For the iPhone X to succeed, Apple must prove consumers will pay \$999 or more—the highest starting price ever for a major smartphone. The company also must overcome production issues that delayed iPhone X manufacturing at least a month over the summer. Production was later slowed by an imbalance in supply of key components for its facial-recognition camera.

"The biggest risk for Apple is the supply chain," said Raj Aggarwal, co-founder of Localytics, a mobile-engagement

firm. "Are they going to be able to fill preorders for the iPhone X? If they can, they're in good shape. If they can't, they're going to miss some numbers this year."

Some buyers also experienced glitches in ordering Friday. In the U.S., some weren't able to log onto Apple's store to place orders for roughly 10 minutes after the advertised start time. Some customers worldwide later received reservation or confirmation numbers but no follow-up emails regarding their orders.

Analysts expect Apple to provide more clarity on both supply and demand for the iPhone X when it announces earnings Thursday. More pre-

orders of the iPhone X than the iPhone 8, which starts at \$699, would be encouraging for investors, especially after reports of weak iPhone 8 sales.

The iPhone X launch comes as Apple aims to shore up its position as the world's second-largest smartphone maker behind Samsung Electronics Co. Competition from lower-priced smartphones in China helped reduce its share of the global smartphone market to 14.5% last year from 16.1% in 2015, according to market research by Strategy Analytics.

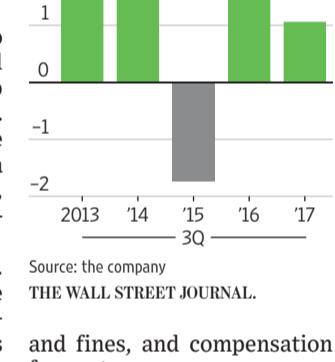
Despite that, analysts are projecting strong iPhone sales this year because consumer loyalty is high and many consumers own older iPhones due for an upgrade. About 95% of iPhone owners who plan to buy a new device say they will buy another iPhone, according to UBS, much higher than the 53% of Samsung customers who say they plan to buy another device from the South Korean phone maker.

It is unclear if iPhone loyalists who plan to upgrade will choose an iPhone X, iPhone 8 or an older device. Some 40% of consumers who plan to buy a new device in the next six months said they wanted to see the iPhone X at a store before deciding what model to buy, according to a survey by Creative Strategies, a tech research firm. "A good portion of buyers don't have their mind made up," analyst Ben Bajarin said.

—Yoko Kubota and Takashi Mochizuki contributed to this article.

Costly Scandal

A charge tied to its emissions cheating weighed on Volkswagen's third-quarter profit



Source: the company
THE WALL STREET JOURNAL.

and fines, and compensation for customers.

—Max Bernhard in Barcelona contributed to this article.

VW Profit Drops on Diesel Charge

By WILLIAM BOSTON

BERLIN—Volkswagen AG reported a steep drop in third-quarter earnings Friday, as Europe's biggest car maker grapples with the mounting costs of its diesel-emissions scandal.

The story of Volkswagen's earnings is like a tale of two companies. When diesel-related costs are factored out, the company is raking in record profits. But the bottom line—what's left for shareholders after all costs are stripped off—is being eroded by the scandal's costs.

Volkswagen took a fresh

diesel-related charge of €2.6 billion (\$3 billion) against quarterly earnings, putting its

net income in the three months to Sept. 30 at €1.06 billion, down from €2.28 billion a year earlier. The upshot: investors' earnings per share plunged to €2.12 from €4.54 a year earlier.

Investors shrugged off the one-time hit to earnings and focused instead on a 15% jump in operating income before adjustments for the diesel charge to €4.32 billion, from €3.75 billion a year earlier.

Volkswagen's widely traded preference shares closed up 4.13% at €151.25 on the Frankfurt stock exchange.

So far this year, the company has paid out €14.5 billion in diesel-related costs and expects to shell out another €2.5 billion by the end of 2017,

Chief Finance Officer Frank Witter said.

"The diesel issue is nowhere near an end and will continue to necessitate great efforts throughout the entire group," he added in a statement.

Revenue from Volkswagen's dozen brands that include luxury car maker Audi, sports car maker Porsche, VW, Lamborghini, MAN and Scania trucks and Ducati motorcycles rose 5.8% to €55 billion from €52 billion.

Encouraged by lower costs and higher margins at its VW brand, the company's biggest business by sales, Volkswagen slightly raised its outlook for operating income for the full year, but noted challenges.

The company said growth in global auto markets is slowing.

In western Europe, Volkswagen sales are up just 1.1% so far in 2017, and 1.3% in China, the company's largest single market.

As new car sales appear to soften worldwide, the diesel scandal continues to chip away at the company's profits.

"I don't believe this will be the last time they take a charge," said Frank Schwope, an automotive analyst at German bank NordLB.

In the two years since U.S. authorities disclosed that the company had rigged diesel engines to cheat on emissions tests, Volkswagen has taken charges of around €25 billion to pay for legal fees, penalties

Ford Adds Laser Maker to Driverless-Car Effort

By TIM HIGGINS

Argo AI LLC, a driverless-car developer controlled by Ford Motor Co., has purchased a company that makes laser systems needed to operate cars without intervention.

cars by 2021, and Ford Chief Executive Jim Hackett has said the company is studying the best way to deploy the technology. On Thursday, Mr. Hackett suggested to analysts that a test deployment in a market may occur next year.

Ford is racing against a long

list of competitors in both the auto and tech industries aiming to perfect driverless cars. Along with GM, Toyota Motor Co., Volkswagen AG and Alphabet Inc. are among those

spending an increasing amount of resources on the project.

Lidar is a key component in helping auto makers or tech firms meet their autonomous-vehicle targets. Many industry have said it is difficult finding a company to produce enough of the devices.

Owning lidar development in-house could allow the Argo team to work more closely to integrate its abilities into the autonomous vehicle software. It is a path forged by Google

for the technology.

"I'm not just buying an idea or some interesting [intellectual property] that may or may not play out," Mr. Salesky said. "I'm really getting a very knowledgeable team that knows how to build these products."

Dozens of companies are racing to develop lidar—which stands for light detection and ranging and works by bouncing lasers off objects to create a 3-D view of the world—but large-scale production hasn't kicked in yet.

Velodyne LiDAR Inc. in January opened a new factory in San Jose, Calif., to ramp up production with the aim of making more than a million sensors there next year.

Last year, Ford invested \$75 million into Velodyne as part of an effort to lower the cost of the sensors to between \$300 and \$500 a unit. The first Velodyne sensor cost \$75,000, too much for mass production on cars.

Regulators Probe Loose Ford Fusion Steering Wheels

U.S. regulators are investigating complaints of loose steering wheels in Ford Motor Co.'s Fusion cars, the latest batch of the auto maker's vehicles to come under scrutiny for safety concerns.

The National Highway Traffic Safety Administration opened an investigation after receiving three complaints of steering-wheel fastening bolts loosening in 2014-16 Fusion midsize sedans, according to government documents dis-

closed Friday.

The agency's preliminary evaluation covers roughly 841,000 cars. Officials haven't received reports of any crashes or injuries, and Ford hasn't launched a recall.

"We are cooperating with the agency, as we always do," a Ford spokeswoman said. "Customers with concerns should contact their local dealer."

One vehicle owner reported that the steering wheel completely detached from the steering column while attempting to turn into a gas station, according to the agency's report opening the probe. Two other complaints reported that the bolt attaching the wheel to the

steering column loosened during operation and had to be retightened at a repair shop.

Investigators said they

planned to assess the scope, frequency and possible safety risks arising from the alleged defect.

In the midst of delivering

hefty profits amid booming truck sales, Ford has nonetheless been dogged by safety and quality concerns. The auto maker earlier this month recalled 1.3 million 2015-2017 F-150 pickup trucks and 2017 Super Duty trucks in North America to address faulty door latches. The recall is expected to result in a \$267 million hit to Ford's fourth-quarter profit.

Ford separately this month

also recalled some newer F-150 trucks to address gearshift problems. The trucks are the best-selling vehicles in the U.S. and helped Ford earlier this week report a 63% surge in third-quarter profit to \$1.6 billion.

Still, Ford booked a \$295 million charge in the first quarter stemming from fire risks in some SUVs and vans, and faulty door latches on some car models. In the second quarter, problems with the drive shaft in transit vans cost \$142 million.

Ford is separately offering voluntary fixes to owners of 1.4 million late-model Explorer SUVs to address complaints of exhaust fumes leaking into vehicle cabins.

—Mike Spector

WEEKEND INVESTOR

A Value Investor Identifies Some Merit in Bitcoin

BY JASON ZWEIG

Fund manager Bill Miller, who beat the stock market for 15 years in a row only to lose 55% in 2008, is bullish on bitcoin, the digital currency.

The former manager of the Legg Mason Value Trust mutual fund, Mr. Miller now runs his own investment firm, **Miller Value Partners LLC**, in Baltimore. Among its \$2.3 billion in assets is a \$154 million hedge fund, MVP 1. The fund is up 73% this year, Mr. Miller said in an interview. It has about 30% of its assets in bitcoin, he said, up from about 5% in 2016.

In his latest letter to the hedge fund's investors, released this past week, Mr. Miller said the fund paid an average price of about \$350 for its bitcoin, which traded on Friday above \$5,700.

He isn't buying more for the fund at these prices, although he noted in an email that if he didn't already own bitcoin in his personal account, he would be willing to "put 1% of my liquid net worth in it here."

In the letter, Mr. Miller pointed out that a "Murderers' Row" of revered investors have been declaring that bitcoin is overpriced or a "bubble," including **Berkshire Hathaway Inc.**'s Warren Buffett, James Dimon of **J.P. Morgan Chase & Co.**, Laurence Fink of **BlackRock Inc.**, **Bridgewater Associates LP**'s Ray Dalio and Howard Marks of **Oaktree Capital Management LP**.

On the other hand, "my view on bitcoin is that it is a technological experiment that may or may not prove to have any long lasting value," Mr. Miller wrote in his letter. "Bitcoin has a market capitalization greater than 90% of

the companies in the S&P 500, but it still might fail. I don't know and neither does anyone else, no matter how certain they are of their opinion."

As of Friday, Bitcoin had a total value in circulation of about \$96 billion, according to coinmarketcap.com.

Added Mr. Miller, "I believe there is still a nontrivial chance bitcoin goes to zero, but each day it does not, that chance declines as more venture capital flows into the bitcoin ecosystem and more people become familiar with bitcoin and buy it."

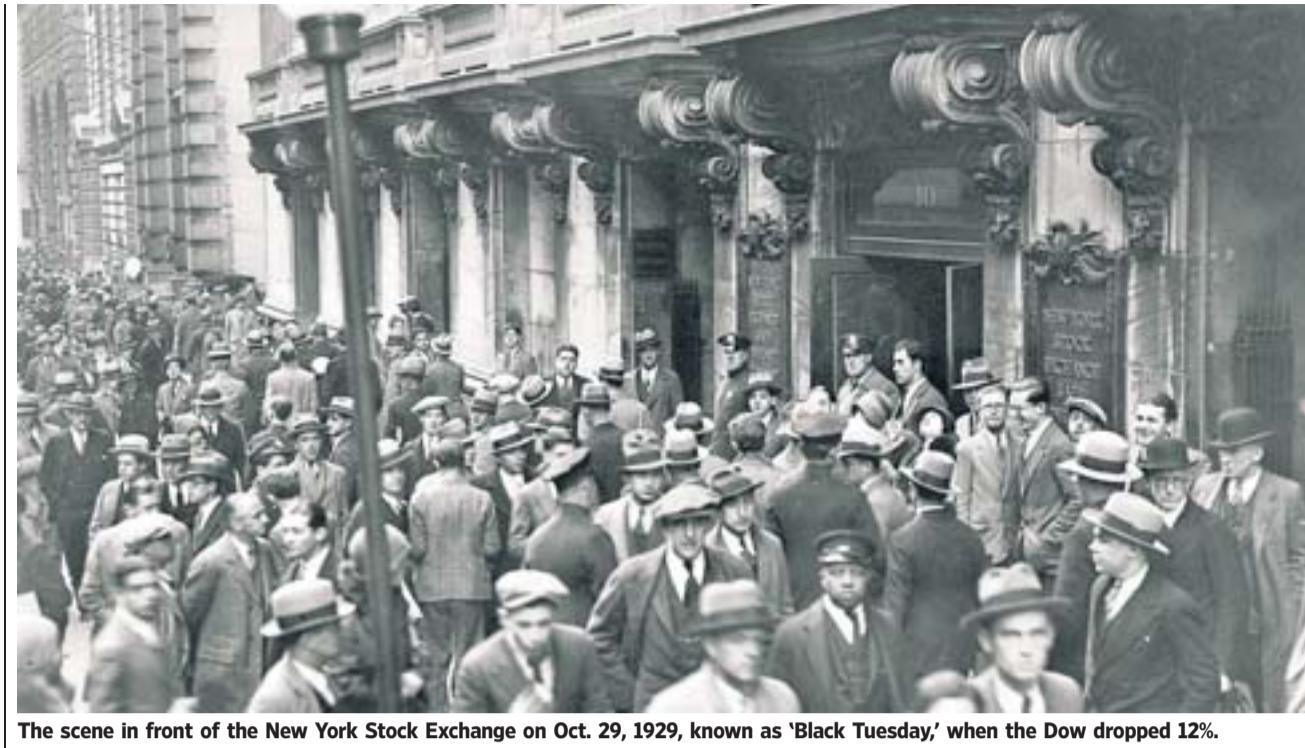
Mr. Miller has some credibility when it comes to spotting value in assets that other investors regard as overpriced. In the 1990s, he was among the few value investors specializing in cheap companies who dared to buy hot technology stocks like AOL and **Amazon.com Inc.**

On the other hand, his Legg Mason Value Trust racked up horrific results during the financial crisis with big bets on **American International Group Inc.**, **Eastman Kodak Co.** and **Freddie Mac**.



DAVID PAUL MORRIS/BLOOMBERG NEWS

Bill Miller



The scene in front of the New York Stock Exchange on Oct. 29, 1929, known as 'Black Tuesday,' when the Dow dropped 12%.

INVEST

Continued from page B1

strating mathematically that the stock market was up to 25% overvalued by early 1929.

Mr. Fisher, then the most eminent economist in the U.S., remains notorious for having proclaimed in a speech in mid-October 1929 that stock prices had reached "what looks like a permanently high plateau." In his book on the crash, he declared that with hindsight, "it is easy to appreciate" that Karsten's numbers foretold a crash.

Karl G. Karsten, the statistician behind those forecasts, wasn't so sure.

In a book, "Scientific Forecasting," published in 1931, Mr. Karsten ripped his own prediction methods to shreds.

He had analyzed data back to 1866, Mr. Karsten wrote, but his forecasts had two fatal flaws. First, the stock market's huge rise in the late 1920s swamped everything that had come before, blurring the guideposts of the past. Second, market psychology was "a potent factor and one which no statistical series could be

found to reflect in advance."

So Mr. Karsten renounced the work that Mr. Fisher had praised. And Mr. Karsten laced his book with warnings about placing excessive confidence in any forecasts, including his own.

Diving even deeper into the data, however, he made discoveries that anticipated many of the ideas behind hedge funds and "smart beta," or mechanical strategies to earn excess returns, that are so popular today.

By 1928, Mr. Karsten was investing based on his theories. He wasted two years trying to combine subjective judgment with statistical analysis, but on Dec. 17, 1930, he launched a small fund run with real money and nothing but math.

Under what Mr. Karsten called "the hedge principle," his Demonstration Fund appears to have bought the three biggest stocks in the industry sector whose share prices had been rising the most; at the same time, it simultaneously sold short, or bet against, the rest of the stock market. The fund rotated from one sector to another based on whichever had the best price momentum.

By June 3, 1931, Mr. Karsten

wrote, the Demonstration Fund was up 78%, net of trading costs. The Dow fell 21% over the same span.

Mr. Karsten warned, presciently, that techniques like his couldn't work if too many people tried them. Such an investing approach, he wrote, "can be used only by a limited amount of capital when a very much larger amount of capital is ignorant of this system, and willing to be exploited."

Born in 1891, Mr. Karsten entered college before his 16th birthday, graduating from the University of New Mexico in 1911. He was a Rhodes Scholar, did graduate work at Columbia University and, in 1917, founded Karsten Statistical Laboratory.

It isn't easy to say what happened to the Demonstration Fund. Walter Friedman, a historian at Harvard Business School who wrote about Mr. Karsten in his 2014 book,

"Fortune Tellers: The Story of America's First Economic Forecasters," says Mr. Karsten's papers at the Library of Congress are so moldy that Mr. Friedman had to handle them wearing special gloves and a respiration hood. The Demonstration Fund seems to have dwindled by 1937, and

there doesn't appear to be any record of a fund after 1942.

Mr. Karsten also wrote an unpublished novel, "Horse in a Limousine," about a future so prosperous that even horses would get to ride in chauffeur-driven vehicles. He died in 1968.

In the essay "Characteristics of Scientific Method," published the same year as Mr. Karsten's book on forecasting, the great philosopher Bertrand Russell pointed out a paradox. "All exact science is dominated by the idea of approximation," wrote Russell. "It is characteristic of those matters in which something is known with exceptional accuracy that, in them, every observer admits that he is likely to be wrong, and knows about how much wrong he is likely to be."

If Mr. Karsten were here today, I think he would have two warnings for investors.

When someone uses historical data to forecast a cataclysmic market crash with near certainty, bear in mind that the patterns of the past may no longer hold. And remember that trendy strategies like smart beta are likely to work best when most investors doubt they will work at all.

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MUTUAL FUNDS

Explanatory Notes

Data provided by LIPPER

Top 250 mutual-fund listings for Nasdaq-published share classes with net assets of at least \$500 million each. NAV is net asset value. Percentage performance figures are total returns, assuming reinvestment of all distributions and after subtracting annual expenses. Figures don't reflect sales charges ("loads") or redemption fees. NET CHG is change in NAV from previous trading day. YTD%RET is year-to-date return. 3-YR%RET is trailing three-year return annualized.

e=Ex-distribution. f=Previous day's quotation. g=Footnotes x and s apply. i=Footnotes e and s apply. k=Recalculated by Lipper, using updated data. p=Distribution costs apply. 12b-1: r=Redemption charge may apply. s=Stock split or dividend. t=Footnotes p and r apply. v=Footnotes x and e apply. x=Ex-dividend. z=Footnote x, e and s apply. NA=Not available due to incomplete price, performance or cost data. NE=Not released by Lipper; data under review. NN=Fund not tracked. NS=Fund didn't exist at start of period.

Friday, October 27, 2017

Fund	NAV	Net YTD Chg %Ret	Fund	NAV	Net YTD Chg %Ret	Fund	NAV	Net YTD Chg %Ret	Fund	NAV	Net YTD Chg %Ret	Fund	NAV	Net YTD Chg %Ret		
American Century Inv	TxExA p	12.99 ...	4.6	IntlVal	19.83 +0.05 21.1	LSPBalncd	NA	... NA	PamEqFd	43.80 +0.10 12.4	DivIntlInst	NA	... NA	STBondAdmI	10.43 ... 1.3	
Ultra	44.38 +0.67 27.2	WshA p	45.49 +0.27 15.3	OTC	107.32 +2.33 34.7	LSGwth	NA	... NA	PIMCO Fds Instl	Prudential CI Z & I	STGradeAdmI	10.68 +0.01 2.2	STGradeAdmI	10.68 +0.01 2.2		
American Funds Cl A	Baird Funds	18.06 +0.16 13.6	IntlSco	21.33 +0.06 23.3	John Hancock Instl	AllAsset	NA	... NA	DispValMCi	TotRt	TRBdZ	NA	... NA	TotRtBdAdmI	10.74 +0.02 2.9	
AmcApA p	31.79 +0.36 18.5	AggBdInst	10.86 +0.02 3.6	500dxlnst	90.33 +0.73 17.1	SrsEmrgMkt	21.20 +0.10 35.0	PIMCO Funds A	S&P Sel	40.32 +0.33 17.1	TotRtBdIdxlnst	21.88 +0.04 1.8	TotRtBdIdxlnst	21.88 +0.04 1.8		
AMutlA p	41.12 +0.16 13.3	CorBdInst	11.22 +0.02 4.0	500dxPre	90.32 +0.72 17.1	SrsIntVal	16.20 +0.09 25.9	PIMCO Funds D	EqdIdxlnst	19.35 +0.15 16.6	TotRtBdIdxlnst	21.88 +0.04 1.8	Welln	42.69 +0.05 11.3		
BalA p	27.43 +0.21 12.2	BlackRock Funds A	US Small	36.66 +0.15 9.1	IntlIdxPrm	62.79 +0.39 14.4	Fidelity Selects	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3	
BondA p	12.92 +0.08 10.5	GblAlloc	20.25 +0.12 11.4	US CoreEq	22.06 +0.15 15.8	IntlIdxPrm	62.79 +0.39 14.4	Fidelity Selects	IncomeFd	NA	... NA	PIMCO Funds P	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3
CapBdA p	62.72 +0.16 11.5	BlackRock Funds Inst	US TgdVal	25.19 +0.07 5.8	US CoreEq2	19.45 +0.06 24.7	Fidelity Selects	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3	
CapWGrA	51.98 +0.41 20.4	EqtyDivd	23.09 +0.02 13.1	US SmCpVal	38.98 +0.11 12.7	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3		
EupacA p	56.62 +0.15 28.2	GblAlloc	20.37 +0.11 11.6	Blch	86.60 +0.17 31.2	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3		
FdlnvA p	63.41 +0.78 18.7	HylrdBd	7.85 ... 7.6	Balanc	23.62 +0.14 13.8	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3		
GwthA p	51.26 +0.95 21.9	StatinCapitals	9.88 +0.01 4.4	Blch	86.60 +0.17 31.2	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3		
Hl TrA p	10.48 -0.01 6.7	Bridge Builder Trust	Income	13.81 +0.02 3.9	Contra	126.58 +0.29 29.5	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3	
ICAA p	41.49 +0.41 15.0	CoreBd	10.17 +0.02 3.5	Contra	126.58 +0.29 29.5	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3		
IncoA p	23.42 +0.08 10.5	Dimensional Fds	Stock	20.28 +0.12 12.9	CapA	10.30 +0.02 10.6	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3	
N PerA p	44.90 +0.48 27.1	DoubleLine Funds	DoubleLine Funds	7.91 +0.01 3.3	CapA	10.30 +0.02 10.6	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3	
NECoA p	46.94 +0.38 30.6	EmgMktvA	30.32 +0.07 28.4	CapA	10.30 +0.02 10.6	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3		
NwWrldA	65.84 +0.40 28.0	EmkMtCorEq	22.29 +0.11 30.3	CapA	10.30 +0.02 10.6	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3		
SmCpA p	56.14 +0.34 22.1	IntlCoreEq	14.13 +0.03 23.4	CapA	10.30 +0.02 10.6	Fidelity Invest	IncomeFd	NA	... NA	PIMCO Funds Instl	EqdValue	28.36 +0.02 13.3	Welln	42.69 +0.05 11.3		
John Hancock Class 1																

New Highs and Lows | wsj.com/newhighs

The following explanations apply to the New York Stock Exchange, NYSE Arca, NYSE MKT and Nasdaq Stock Market stocks that hit a new 52-week intraday high or low in the latest session. % CHG=Daily percentage change from the previous trading session.

Friday, October 27, 2017

Stock	52-Wk % Sym Hi/Lo Chg	Stock	52-Wk % Sym Hi/Lo Chg	Stock	52-Wk % Sym Hi/Lo Chg	Stock	52-Wk % Sym Hi/Lo Chg	Stock	52-Wk % Sym Hi/Lo Chg	Stock	52-Wk % Sym Hi/Lo Chg	Stock	52-Wk % Sym Hi/Lo Chg		
NYSE highs - 181															
Allstate	ALE 79.85 0.8	AmRtlyInv	ARL 10.05 6.0	BroadridgeFinl	BRL 85.97 1.0	CashFlows	CFZ 10.05 6.0	CharterRiverLab	CHRL 110.66 -0.6	CharlesRiverLab	CHRL 110.66 -0.6	ChinaCoatings	CIKA 34.47 17.0	ChinaFins	CTA 16.20 1.3
Accenture	ACN 143.61 0.9	AllianceBernstein	AB 26.60 1.3	AmerWaterWks	AWK 88.20 0.1	CloudFlare	CDRL 10.05 6.0	Cloudflare	CDRL 10.05 6.0	Cloudflare	CDRL 10.05 6.0	Cloudflare	CDRL 10.05 6.0	Cloudflare	CDRL 10.05 6.0
AdamsDivEquityFd	ADX 15.64 1.4	AllynFinancial	ALLY 43.15 4.8	Amtek	AMEK 69.42 -0.1	Cognos	CGNS 30.29 1.1	Comcast	CMCSA 26.85 2.1	Comcast	CMCSA 26.85 2.1	Comcast	CMCSA 26.85 2.1	Comcast	CMCSA 26.85 2.1
AcProds	APPD 16.68 -0.3	AmericaExpress	AXP 96.02 0.1	AristaNetworks	ANET 196.68 2.0	Antennet	ANTM 21.20 2.1	Antennet	ANTM 21.20 2.1	Antennet	ANTM 21.20 2.1	Antennet	ANTM 21.20 2.1	Antennet	ANTM 21.20 2.1

Dividend Changes

Dividend announcements from October 27.

Company	Symbol	Yld %	New/Old	Frq	Payable / Record	Company	Symbol	Yld %	New/Old	Frq	Payable / Record
Increased						Decreased					
1st Constitution Bancorp	FCCY	13 .06 /05 Q		Nov24/Nov16		2nd Constitution Bancorp	APB	14.51 ...	Canon	CAJ	37.53 1.8
BankFinancial	BFIN	19 .08 /07 Q		Nov24/Nov08		2nd BankFinancial	AVY	106.24 1.0	DouglasDynamics	PLOW	42.60 2.5
Cass Info Systems	CASS	15 .24 /2090 Q		Dec15/Dec09		2nd Cass Info Systems	CIK	7.92 0.22	Forte	FTV	74.38 0.9
Churchill Downs	CHDN	0.71 152/132 A		Jan05/Dec01		2nd Churchill Downs	EMN	90.64 0.45	FTV	GTT	35.75 0.8
CRA International	CRAI	16 .17 /14 Q		Dec15/Nov07		2nd CRA International	FCOR	2.6 ... 10.7	GTT	GTT	35.75 0.8
Delek Logistics Partners	DKL	9.51 715/705 Q		Nov14/Nov07		2nd Delek Logistics Partners	FLTB	1.8 ... 0.7	GTT	GTT	35.75 0.8
Energy Transfer Partners	ETP	133 565/55 Q		Nov14/Nov07		2nd Energy Transfer Partners	FBND	2.5 ... 10.5	GTT	GTT	35.75 0.8
Evercore Cl A	EVR	20 .40 /34 Q		Dec08/Nov24		2nd Evercore Cl A	FWD20	3.5 ... 0.7	GTT	GTT	

COMMODITIES

WSJ.com/commodities

Futures Contracts

Metal & Petroleum Futures

	Contract		Open		Contract		Open	
	Open	High	Low	Settle	Chg	Open	High	Low
Copper-High (CME) -25,000 lbs.; \$ per lb.								
Oct 3.1475	3.1475		3.0740	3.0935	-0.0740	328		
Dec 3.1785	3.1795		3.0730	3.1035	-0.0740	172,252		
Gold (CMX) -100 troy oz.; \$ per troy oz.								
Oct 1268.40	1268.40		1267.10	1268.50	2.20	86		
Dec 1268.00	1275.20		1263.80	1271.80	2.20	387,969		
Feb'18 1272.20	1279.00		1268.10	1276.00	2.20	79,708		
April 1275.30	1282.10		1272.00	1279.80	2.10	16,443		
June 1279.20	1286.80		1276.00	1283.70	2.10	13,672		
Dec 1291.90	1298.20		1290.10	1295.90	1.90	10,355		
Palladium (NYM) -50 troy oz.; \$ per troy oz.								
Oct 985.00	985.00	▲	985.00	959.35	-9.85	1		
Dec 966.20	967.20		956.35	958.25	-9.85	29,298		
March'18 957.50	958.00		949.00	950.65	-9.45	3,990		
June 948.70	948.70	▲	946.60	945.20	-9.60	85		
Platinum (NYM) -50 troy oz.; \$ per troy oz.								
Oct 920.20	920.20		920.20	910.60	-7.60	5		
Jan'18 920.40	924.00		912.90	914.60	-7.50	69,941		
Silver (CMX) -5,000 troy oz.; \$ per troy oz.								
Oct 16.890	16.945		16.890	16.702	-0.062	38		
Dec 16.800	16.870		16.600	16.752	-0.059	140,716		
Crude Oil, Light Sweet (NYM) -1,000 bbls.; \$ per bbl.								
Dec 52.80	54.20		52.25	53.90	1.26	600,132		
Jan'18 53.01	54.36		52.46	54.09	1.23	305,126		
Feb 53.13	54.45		52.60	54.18	1.18	133,665		
March 53.21	54.47		52.69	54.21	1.11	242,665		
June 53.14	54.22		52.66	54.01	0.95	197,502		
Dec 52.16	53.07		51.79	52.89	0.71	263,828		
NY Harbor USLD (NYM) -42,000 gal.; \$ per gal.								
Nov 2.899	2.899	▼	2.723	2.752	-1.38	5,740		
Dec 3.052	3.054	▼	2.946	2.964	-0.087	284,884		
Jan'18 3.174	3.177	▼	3.084	3.102	-0.073	205,239		
Feb 3.178	3.180	▼	3.091	3.107	-0.071	85,029		
March 3.139	3.139	▼	3.057	3.069	-0.070	172,713		
April 2.955	2.955		2.896	2.903	-0.050	128,977		

Agriculture Futures

Corn (CBT)		5,000 bu.; cents per bu.		Soybeans (CBT)		50,000 bu.; cents per bu.	
Dec 350.20	350.25		347.50	348.75	-1.75	761,979	
March'18 364.25	364.25		361.50	362.50	-2.00	324,264	

Bonds | WSJ.com/bonds

Global Government Bonds: Mapping Yields

Yields and spreads over or under U.S. Treasuries on benchmark two-year and 10-year government bonds in selected other countries; arrows indicate whether the yield rose (▲) or fell (▼) in the latest session

Country/	Maturity, in years	Latest (●)	Yield (%)		Spread Under/Over U.S. Treasuries, in basis points	Friday					
			0	20	40	60	100	120	Previous	Month ago	Year ago
1.500	U.S. 2	1.600	▼	1.590	1.619	1.478	0.888				
2.250	10	2.423	▼	2.410	2.464	2.311	1.853				
2.750	Australia 2	1.887	▲	1.873	1.895	1.709	28.7	25.4	82.1		
2.750	10	2.785	▲	2.765	2.798	2.333	36.2	30.1	48.0		
0.000	France 2	-0.602	▼	0.580	-0.560	-0.498	-0.574	-220.1		-217.9	-146.2
2.750	10	0.663	▼	0.640	0.712	0.764	468.0	-176.0		-175.2	-138.5
0.000	Germany 2	-0.763	▼	0.740	-0.744	-0.700	-0.623	-236.3		-236.2	-151.1
0.500	10	0.386	▼	0.366	0.418	0.470	0.172	-203.7		-204.6	-168.1
0.050	Italy 2	-0.192	▼	0.170	-0.181	-0.084	-0.059	-179.2		-179.9	-94.6
2.050	10	1.944	▼	1.920	1.963	2.155	1.534	-47.9		-50.1	-31.9
0.100	Japan 2	-0.153	▼	0.130	-0.147	-0.125	-0.252	-175.3		-176.6	-113.9
0.100	10	0.069	▲	0.050	0.068	0.053	-0.050	-235.5		-239.6	-190.3
2.750	Spain 2	-0.338	▲	0.310	-0.343	-0.315	-0.165	-193.8		-196.2	-105.3
1.450	10	1.583	▲	1.560	1.563	1.639	1.223	-84.0		-90.1	-63.0
1.750	U.K. 2	0.462	▼	0.440	0.481	0.463	0.290	-113.8		-113.8	-59.7
4.250	10	1.352	▼	1.330	1.387	1.384	1.153	-107.0		-107.7	-70.0

Source: Tullett Prebon

A Week in the Life of the DJIA

A look at how the Dow Jones Industrial Average component stocks did in the past week and how much each moved the index. The DJIA gained 105.56 points, or 0.45%, on the week. A \$1 change in the price of any DJIA stock = 6.89-point change in the average. To date, a \$1,000 investment on Dec. 31 in each current DJIA stock component would have returned \$35,726, or a gain of 19.09%, on the \$30,000 investment, including reinvested dividends.

The Week's Action — Pct. Stock price change in average		Point chg. % change in average		Company		Symbol	Close	\$1,000 Invested (year-end '16)
9.82	3.97	27.34	Intel	INTC	\$44.40			\$1,251
6.34	5.00	34.43	Microsoft	MSFT	83.81			1,372
6.06	13.42	92.40	3M	MMM	234.74			1,339
5.47	2.90	19.97	Nike	NKE	55.96			1,112
4.91	6.45	44.41	Caterpillar	CAT	137.81			1,530
4.35	6.80	46.82	Apple	AAPL	163.05			1,425
4.02	3.7							

MARKETS DIGEST

EQUITIES

Dow Jones Industrial Average

23434.19 ▲ 33.33, or 0.14%
High, low, open and close for each trading day of the past three months.

Trailing P/E ratio 21.23 19.85
P/E estimate * 19.54 17.19
Dividend yield 2.19 2.59
All-time high 23441.76, 10/24/17

Current divisor 0.14523396877348

Last Year ago

23500
23000
22500
22000
21500
21000
20500

Session high
DOWN UP Close
Session open ► Close
Open Session low

65-day moving average
Bars measure the point change from session's open

July Aug. Sept. Oct.

Weekly P/E data based on as-reported earnings from Birnvi Associates Inc.

S&P 500 Index

2581.07 ▲ 20.67, or 0.81%
High, low, open and close for each trading day of the past three months.

Trailing P/E ratio 24.16 24.31
P/E estimate * 19.49 18.02
Dividend yield 1.92 2.16
All-time high: 2581.07, 10/27/17

Last Year ago

2570
2540
2510
2480
2450
2420

65-day moving average

Session high
DOWN UP Close
Session open ► Close
Open Session low

65-day moving average
Bars measure the point change from session's open

July Aug. Sept. Oct.

2390

Nasdaq Composite Index

6701.26 ▲ 144.49, or 2.20%
High, low, open and close for each trading day of the past three months.

Trailing P/E ratio 26.00 24.09
P/E estimate * 21.55 19.35
Dividend yield 1.07 1.21
All-time high: 6701.26, 10/27/17

Last Year ago

6700
6600
6500
6400
6300
6200

65-day moving average

Session high
DOWN UP Close
Session open ► Close
Open Session low

65-day moving average
Bars measure the point change from session's open

July Aug. Sept. Oct.

6100

Major U.S. Stock-Market Indexes

	High	Low	Latest Close	Net chg	% chg	High	52-Week Low	% chg	YTD % chg	3-yr. ann.
	Dow Jones	Industrial Average	Transportation Avg	Utility Average	Total Stock Market	Barron's 400	Nasdaq Composite	Nasdaq 100		
Industrial Average	23449.40	23353.16	23434.19	33.33	0.14	23441.76	17888.28	29.0	18.6	11.7
Transportation Avg	9931.89	9878.07	9931.65	50.19	0.51	10038.13	8008.38	23.9	9.8	4.8
Utility Average	754.02	745.07	751.62	5.01	0.67	754.80	625.44	13.5	13.9	8.9
Total Stock Market	26754.76	26572.93	26743.96	206.13	0.78	26743.96	21514.15	21.9	14.9	9.5
Barron's 400	691.58	684.99	691.56	3.65	0.53	691.56	521.59	30.0	14.9	10.3

Nasdaq Stock Market

Nasdaq Composite	6708.13	6625.78	6701.26	144.49	2.20	6701.26	5046.37	29.1	24.5	14.3
Nasdaq 100	6223.51	6129.79	6213.47	175.60	2.91	6213.47	4660.46	29.3	27.8	15.4

Standard & Poor's

500 Index	2582.98	2565.94	2581.07	20.67	0.81	2581.07	2085.18	21.4	15.3	9.6
MidCap 400	1839.12	1823.92	1839.12	9.85	0.54	1839.12	1476.68	22.6	10.8	10.1
SmallCap 600	916.46	907.28	916.43	5.21	0.57	918.72	703.64	27.5	9.4	12.4

Other Indexes

Russell 2000	1508.32	1493.49	1508.32	10.86	0.73	1512.09	1156.89	27.0	11.1	10.5
NYSE Composite	12366.70	12308.36	12366.43	14.01	0.11	12430.52	10289.35	18.0	11.8	5.5
Value Line	543.46	539.46	543.46	1.43	0.26	545.98	455.65	16.8	7.4	4.5
NYSE Arca Biotech	4120.99	4057.75	4116.16	35.14	0.86	4304.77	2834.14	38.8	33.9	7.9
NYSE Arca Pharma	542.19	536.89	537.49	-2.57	-0.48	560.52	463.78	12.4	11.6	1.0
KBW Bank	102.43	101.66	102.23	0.27	0.26	102.23	73.36	37.1	11.4	13.7
PHLX® Gold/Silver	81.91	80.66	81.57	0.48	0.59	96.72	73.03	-3.8	3.4	3.0
PHLX® Oil Service	128.68	125.49	128.32	0.71	0.56	192.66	117.79	-16.5	-30.2	-18.5
PHLX® Semiconductor	1264.66	1239.98	1263.55	26.52	2.14	1263.55	802.88	54.3	39.4	27.2
CBOE Volatility	11.12	9.74	9.80	-1.50	-13.27	22.51	9.19	-39.5	-30.2	-15.1

\$Philadelphia Stock Exchange

Sources: SIX Financial Information; WSJ Market Data Group

Late Trading

Most-active and biggest movers among NYSE, NYSE Arca, NYSE Amer. and Nasdaq issues from 4 p.m. to 6 p.m. ET as reported by electronic trading services, securities dealers and regional exchanges. Minimum share price of \$2 and minimum after-hours volume of 5,000 shares.

Most-active issues in late trading

Company	Symbol	Volume (000)	Last	Net chg	After Hours % chg	High	Low
VanEck Vectors Gold Miner	GDX	11,771.7	22.60	0.03	0.13	22.60	22.46
iShares Russell 2000 ETF	IWM	6,294.0	149.69	-0.10	-0.07	149.90	148.79
Chesapeake Energy	CHK	4,368.3	3.75	-0.02	-0.53	3.77	3.62
Bank of America	BAC	4,297.6	27.76	-0.04	-0.14	27.81	27.74
PwrShrs QQQ Tr Series 1	QQQ	2,906.7	151.02	-0.22	-0.15	151.37	150.91
AT&T	T	2,349.0	33.97	...	unch.	34.00	33.88
Twitter	TWTR	2,222.5	21.70	0.02	0.09	21.74	21.28
Intel	INTC	2,054.5	44.50	0.10	0.23	44.66	43.66

Percentage gainers...

Company	Symbol	Volume	Latest	Session % chg	High	Low

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BIGGEST 1,000 STOCKS

How to Read the Stock Tables

The following explanations apply to NYSE, NYSE Arca, NYSE Mkt and Nasdaq Stock Market listed securities. Prices are composite quotations that include primary market trades as well as trades reported by Nasdaq OMX BXSM (formerly Boston), Chicago Stock Exchange, CBOE, National Stock Exchange, ICE and BATS.

The list comprises the 1,000 largest companies based on market capitalization.

Underlined quotations are those stocks with large changes in volume compared with the issue's average trading volume.

Boldfaced quotations highlight those issues whose price changed by 5% or more if their previous closing price was \$2 or higher.

Footnotes:
 i-New 52-week high.
 l-New 52-week low.
 dd-Indicates loss in the most recent four quarters.
 FD-FIRST day of trading.

h-Does not meet continued listing standards
l-If Late filing
q-Temporary exemption from Nasdaq Bankruptcy Code, or securities requirements.
t-NYSE bankruptcy

Wall Street Journal stock tables reflect composite regular trading as of 4 p.m. and changes in the closing prices from 4 p.m. the previous day.

Friday, October 27, 2017

YTD 52-Week										YTD 52-Week										YTD 52-Week																	
% Chg	Hi	Lo	Stock	Yld	% Chg	Hi	Lo	Stock	Yld	% Chg	Hi	Lo	Stock	Yld	% Chg	Hi	Lo	Stock	Yld	% Chg	Hi	Lo	Stock	Yld	% Chg	Hi	Lo	Stock	Yld	% Chg							
20.36	25.82	20.26	ABB	2.0	24	25.36	-0.07				32.23	20.77	13.57	KKR	3.3	20	20.35	0.05	14.90	12.07	9.25	SempraEnergy	SRE	2.8	17	115.64	0.53										
-7.23	12.47	10.60	AES	4.5	44	10.78	-0.08	0.21	18.82	13.43	KT	..	11	14.12	0.08	26.80	50.83	35.10	SensataTech	ST	..	28	49.39	0.13	46.89	24.85	14.95	Carlryl	CG	7.5	17	22.40	-0.20				
20.61	85.70	66.50	Aflac	AFL	2.12	83.94	0.31	22.88	109.13	79.05	KCS	1.4	20	104.26	-0.42	25.42	35.89	24.95	ServiceCorp	SCI	1.7	19	35.62	0.2	51.51	112.50	61.72	CboeGlobalMkts	CBOE	1.0	12	119.15	0.46				
-20.13	43.33	33.33	AT&T	T	5.8	16	33.97	0.29	1-18.25	78.37	59.2	Kellogg	K	3.6	27	60.26	-0.29	18.77	38.76	23.91	Cerner	CERN	..	33	65.31	-6.01	-15.19	147.17	94.55	Celgene	CELG	..	23	98.17	-1.82		
44.18	56.69	37.38	AbbottsLab	ABT	1.9	43	55.37	-0.11	0.55	19.53	13.83	KeyCorp	KEY	2.1	16	83.37	-0.15	69.13	129.56	72.80	ServiceNow	NOW	..	dd	125.73	-0.41	37.87	73.86	47.01	Cerner	CERN	..	108	319.76	3.47		
46.81	88.26	56.56	AbbVie	ABBV	2.8	23	91.23	0.29	1-21.11	44.29	31.81	KeySightTechs	KEYS	..	33	44.29	1.30	10.02	23	31	19.02	ShawCom	B	SJR	2.4	22	80.07	0.66	39.12	119.20	78.78	CheckPointFw	CHKP	..	26	117.50	1.62
22.33	143.61	112.33	Accenture	ACN	1.6	24	18.28	1.31	-3.61	78.33	66.98	Kirkland Realty	KRC	2.4	46	70.58	0.41	47.88	98.22	23.98	SherwinWilliams	SHW	0.9	35	39.79	0.79	151.62	142.80	41.69	ChinaLodging	HTHD	..	70	130.44	0.26		
-31.26	261.63	143.28	AcuityBrands	AYI	0.3	21	15.68	-0.59	1-20.82	41.68	32.16	ConagraBrands	CAG	2.5	34	33.69	0.31	22.18	48.98	11.30	KimberlyClark	KMB	3.5	19	112.43	1.18	-6.23	81.98	68.11	CincinnatiFin	CINF	2.8	20	71.03	-4.99		
43.69	86.42	39.66	Adient	ADNT	1.3	44	82.40	0.57	-27.03	26.64	17.02	KimcoRealty	KIM	6.1	36	18.36	0.03	150.22	123.94	37.74	Shopify	SHOP	..	dd	107.27	3.16	31.15	152.83	102.07	Cintas	CTAS	1.1	35	151.56	0.01		
-51.56	177.83	83.11	AdvanceAuto	AAP	3.6	31	89.13	-0.22	1-12.49	23.01	17.82	KinderMorgan	KMI	2.8	32	18.03	0.03	11.83	19.25	15.10	ServiceMaster	SERV	..	27	45.19	0.10	13.93	34.73	29.13	SystemsCom	CSCO	3.4	18	34.43	0.16		
25.49	6.70	4.89	AdvEnrgy	ADM	3.6	15	6.52	0.09	23.16	44.45	26.68	Kellogg-Swift	KNS	..	43	41.67	0.29	26.25	64.26	43.66	SmithCo	SMCO	AOS	0.9	29	56.60	-0.07	11.06	408.83	241.50	CharterComms	CHTR	..	108	319.76	3.47	
26.00	51.39	40.35	AerCap	AER	9	52	43.04	-0.23	1-37.59	21.86	15.56	Kohl's	KSS	5.2	24	45.82	-0.06	10.01	11.43	10.68	Smucker	SJM	..	32	103.71	-0.43	34.55	75.51	51.12	CognizantTech	CNX	0.8	24	75.39	0.81		
39.60	184.98	104.59	Atenra	ATR	2.8	17	13.23	-0.22	-5.57	21.89	16.51	KoreaElectrPwr	KEP	6	17	45	0.07	89.88	181.31	140.83	Snap	SNAP	..	dd	155.45	1.04	89.98	181.31	140.83	SnaphanFin	SHNG	..	8	45.65	0.15		
31.23	198.40	130.48	AffiliatedMngrs	AMG	0.4	21	19.00	-0.68	-7.49	33.44	22.08	Kirkland's	KIRK	2.4	22	16.57	-0.25	12.28	48.98	11.30	ShinhanFin	SHNG	84.95	0.03	-6.23	81.98	68.11	CincinnatiFin	CINF	2.8	20	71.03	-4.99		
27.44	41.25	28.05	Albany	ALB	2.1	12	49.94	0.21	1-16.35	16.09	12.36	ColonyNorthStar	CNS	8.7	96	12.48	0.08	150.22	123.94	37.74	Shopify	SHOP	..	dd	107.27	3.16	31.15	152.83	102.07	Cintas	CTAS	1.1	35	151.56	0.01		
20.13	43.33	33.33	AltT	T	5.8	16	33.97	0.29	1-17.80	47.57	42.27	ConocoPhillips	COP	2.1	42	104.26	-0.42	15.25	35.85	24.49	ServiceCorp	SCI	1.7	19	35.62	0.2	-15.19	147.17	94.55	Celgene	CELG	..	23	98.17	-1.82		
44.18	56.69	37.38	AbbottsLab	ABT	1.9	43	55.37	-0.11	1-17.61	86.73	81.90	CornerBrands	CMC	1.5	18	79.79	0.08	23.16	44.45	31.29	Shopify	SHOP	..	dd	107.27	3.16	31.15	152.83	102.07	Cintas	CTAS	1.1	35	151.56	0.01		
46.81	88.26	56.56	AbbVie	ABBV	2.8	23	91.23	0.29	1-17.80	46.81	42.86	ComEd	CCE	2.3	26	70.40	-0.81	11.83	19.25	15.10	Leidos	LEDS	..	dd	125.73	-0.41	13.93	34.73	29.13	SystemsCom	CSCO	3.4	18	34.43	0.16		
22.33	143.61	112.33	Accenture	ACN	0.3	21	15.68	-0.59	1-23.02	31.33	27.04	Alcon	ACN	0.3	21	15.68</td																					

MONEY & INVESTING

Venezuela Bonds Rise on Payment Pledge

Venezuelan bonds rallied after the country's state-owned oil company said it would make a debt payment that was due Friday, allaying concerns that a default was imminent.

By Julie Wernau,
Carolyn Cui
and Kajal Vyas

The bond in question, the **Petróleos de Venezuela SA** bond maturing Oct. 27, 2020, gained 5% to 85.76 cents on the dollar as of midday Friday, according to MarketAxess BondTicker. The PdVSA bond due on Nov. 2, 2017, added 4.9% to 97 cents on the dollar.

PdVSA said it had begun making the corresponding bank transfers to accounts managed by **J.P. Morgan Chase & Co.** used to pay bondholders the \$842 million in principal due Friday. It didn't specify if it would make the interest payment that also was due, which **Bank of America Merrill Lynch** said amounts to \$143 million.

The status of the payment process wasn't immediately clear Friday. Paying agent Delaware Trust Co., the administrator set up to receive the funds, said the payment hadn't been received as of the 10 a.m. EDT deadline.

Both the country and Pd-



Residents carry gas canisters after a weekly delivery in the port city of La Guaira in early October.

VSA have fallen behind on several interest payments in recent weeks, which have a 30-day grace period. But there is no grace period for the principal payment, according to bond documents, meaning a delay could lead to a default.

The strategy of prioritizing the payments that are immediately due shows that "it is a

country and a company that continues to be in financial stress," said Russ Dallen, managing partner at investment bank **Caracas Capital Markets**, which trades Venezuelan bonds. "They are using the same 30-day grace period to delay payments on all of the coupons they have been late on," he said.

Venezuela's information ministry didn't respond to a request for comment.

The PdVSA Twitter account sent out several English-language messages regarding the debt deadline on Friday. "The Bolivarian Republic of Venezuela, through PDVSA, has consistently honored its obligations...thus proving wrong the

tion of an emerging-market bond index, the J.P. Morgan EMBI Global Diversified, is up 57% from the beginning of 2015 through Thursday versus 21% for the broader index.

But some investors remain nervous about future debt obligations. The country has a \$1.2 billion payment due Nov. 2. The South American country is stretched for cash with prices for oil, its main export, still at half the level of three years ago.

But while it has cut food and medicine imports, the Maduro administration has continued to pay bondholders. Some analysts say a default would paralyze its oil industry, leaving foreign assets and crude tankers vulnerable to seizure by creditors.

"I really want to emphasize how day to day the situation is," said Patrick Esteruelas, head of research at EMSO Asset Management. "Just because they've secured enough to make today's payment doesn't mean that they have the money to pay next week."

Mr. Esteruelas said he thinks PdVSA is buying as much time as possible, knowing that even if the company misses Friday's deadline it likely will take time for bond investors and those in the credit-default-swap market to declare a default.

Wells Fargo Trading Under Scrutiny

BY EMILY GLAZER
AND NICOLE HONG

Federal prosecutors are investigating foreign-exchange trading at **Wells Fargo & Co.** and have subpoenaed information from the firm, which recently fired bankers in that business, according to people familiar with the matter.

The investigation, which is in the early stages, is being conducted by the U.S. Attorney's Office for the Northern District of California, some of the people said. The office subpoenaed information in recent days, according to some of the people. A week ago, The Wall Street Journal reported that Wells Fargo had fired four foreign-exchange bankers amid an internal investigation.

Issues within the bank's foreign-exchange operation revolve around a single trade and ensuing dispute with one client, **Restaurant Brands International Inc.**, the people said. This company is the owner of Burger King, Tim Hortons and Popeyes Louisiana Kitchen, and—like Wells Fargo—counts Warren Buffett's **Berkshire Hathaway Inc.** as a major shareholder.

In a statement, Wells Fargo said it "learned of an issue associated with a foreign-exchange transaction for a single client. The matter was reviewed, the client was promptly notified regarding the issue, and Wells Fargo leadership took steps to hold accountable the individuals who were involved. Wells Fargo



The probe is separate from sales-practices issues that hit the bank.

remains committed to our foreign-exchange business, meeting our clients' financial needs in an ethical way, and ensuring ongoing review of this and all business operations."

A spokesman for the U.S. Attorney's Office for the Northern District didn't respond to requests for comment.

Investigations into Wells

Fargo's foreign-exchange business, which is housed within its investment bank, are separate from sales-practices issues that rocked the bank more than a year ago. But they come at a sensitive time for the bank: Wells Fargo remains under political and regulatory pressure because of the sales scandal, which remains under separate investigation by the Justice Department and other agencies. The U.S. Attorney's Office for the Northern District also is involved in one of those investigations.

The foreign-exchange issue revolves around a trade made within the past three years that included positions running into the billions of dollars for Restaurant Brands, the people said. The trade resulted in a loss to Restaurant Brands, the people added, which led to a dispute between it and the bank.

Wells Fargo is planning to refund Restaurant Brands hundreds of thousands of dollars because of the loss, one of the people familiar with the matter said.

In addition to the Justice Department, potential issues around the Wells Fargo trade also are being examined by the Federal Reserve, some of the people said.

The bank recently fired the four foreign-exchange bankers

for cause and launched an internal investigation, according to people familiar with the

matter. Those fired were Simon Fowles, recently head of foreign-exchange trading; Bob Gotelli, recently head of foreign-exchange sales; Jed Guenther, recently a regional head of foreign exchange, and Michael Schaufler, chief spot dealer, The Wall Street Journal has previously reported.

A spokeswoman for the bank has confirmed that these individuals no longer work for Wells Fargo.

The bankers didn't respond to requests for comment.

Federal prosecutors are looking into the sequencing of the trade in question and whether it could have involved so-called front-running, some of the people familiar with the matter said.

Front-running typically involves a trader jumping ahead of a client's order, buying or selling for their own account to profit when the larger transaction moves a price.

In its statement, Wells Fargo said, "The departure of these employees was not related to issues involving market collusion, front-running or market manipulation."

Wells Fargo's investment banking, securities and markets division, known as Wells Fargo Securities, is a fraction of the size of its U.S. big-bank peers, as is its foreign-exchange business. The bank doesn't break out financial results or metrics for that group or its foreign-exchange business.

—Julie Jargon
and Ryan Tracy
contributed to this article.

Dimon Made \$100M By Being a Contrarian

BY DAVID REILLY
AND EMILY GLAZER

Looking for a way to make money in bank stocks? Follow James Dimon's lead.

Over the past eight years, the J.P. Morgan Chase & Co. chief has only sporadically waded into the open

market to buy stock in his bank. But when he has, his timing has been shrewd.

And with J.P. Morgan's shares topping the \$100 mark this week, the executive's rewards have swelled: His three open-market purchases have gained nearly \$100 million in value.

Of course, Mr. Dimon's windfall is the result of contrarian moves. In each instance where he made an open-market purchase, Mr. Dimon stepped in at points where the market was punishing J.P. Morgan's stock or the overall banking sector.

He bought 500,000 shares in January 2009, a time when bank stocks were being slaughtered and just two months before the stock market reached its financial-crisis nadir.

In July 2012, Mr. Dimon bought another 500,000 after the stock was hammered due to the so-called London Whale trading debacle that resulted in a \$6 billion loss to the bank.

Mr. Dimon again purchased 500,000 shares in January

2016 after markets tumbled on the back of the oil-price rout and fears China was in for a hard economic landing.

In all, he spent about \$55 million to buy shares at prices ranging from \$22.93 to \$53.18. Today, those holdings are worth about \$152 million, a gain of around 175% on his initial investment.

These are gains only on his open market purchases during recent stressed times. All told, Mr. Dimon directly owns about 9.6 million shares from prior purchases and stock and option awards, although this includes a number of unvested stock units, according to the bank.

Mr. Dimon hasn't sold shares since joining J.P. Morgan, except at times when exercising options or to use share sales to fund tax costs for purchases of stock. Mr. Dimon is also restricted in when he can buy and sell J.P. Morgan stock.

Mr. Dimon has also benefited as the Federal Reserve in recent years has given the bank a green light to increase its dividend. After the most recent approval from the Fed, J.P. Morgan said it would increase its quarterly dividend to 56 cents a share from 50 cents. On that basis, Mr. Dimon over the next four quarters would receive payouts of \$3.4 million from his open-market purchases in recent years.

New Highs and Lows | WSJ.com/newhighs

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Stock	Sym	Hi/Lo Chg	52-Wk %	Stock	Sym	Hi/Lo Chg	52-Wk %	Stock	Sym	Hi/Lo Chg	52-Wk %	Stock	Sym	Hi/Lo Chg	52-Wk %	Stock	Sym	Hi/Lo Chg	52-Wk %	Stock	Sym	Hi/Lo Chg	52-Wk %	Stock	Sym	Hi/Lo Chg	52-Wk %
PCM Fund	PCM	11.98	0.6	AlticeUSA	ATUS	-0.28	-2.8	Satm JC Pen	HJV	-0.15	-0.2	SPDR Memento IPAC	IPAC	58.87	0.7	SPDR Momentum IITM	IITM	150.93	1.2	Autodesk	ADSK	139.73	1.8	Fiserv	FISV	130.20	1.0
PNM Resources	PNM	43.40	3.2	AnadarkoPetroln	SGC	-0.35	-2.8	SPDR SP&P 900ETF	IVV	259.64	0.6	SPDR S&P MidCap SPVX	MDV	152.69	0.9	BBB Bancorp	BLMT	31.50	1.3	PowerInt'l Corp	PWRD	50.66	0.9	BurtonScience	BURS	0.47	-0.6
PPG Ind	PNG	119.85	-0.6	SmartFinance	WAA	-0.11	-2.4	SmartCorpHdgNt	HDX	29.91	-1.6	SPDR S&P 500 Div Svs	SHV	68.67	0.7	DivExChin83	YANG	31.04	-0.9	FinCorp	FCN	38.00	1.3	CN Finance	CNFN	8.40	-1.4
PaycomSoftware	PAYC	82.52	1.3	ArlingtonAsset	AII	-0.16	-0.2	SPDR S&P 500 Div Hldy	POWLS	1.60	-1.2	SPDR S&P 500 Div SCHB	SCHB	62.37	0.8	Bio-Techne	BVBY	12.05	1.7	PwC Worldwide	PWRR	101.37	1.3	CapellaEducation	CPLA	65.15	-2.2
PeninsulaMS	PEP	10.00	3.6	AvonProducts	APP	-0.21	-1.4	SPDR S&P 500 Div SFS	SFS	2.11	-1.4	SPDR S&P 500 Div SCHW	SCHW	61.60	1.0	Blackbaud	BKBD	102.93	5.3	Capita	CATM	22.66	0.2				
PerkinsCo	PERK	72.77	-0.2	BT Group	BT	-0.16	-1.2	SPDR S&P 500 Div TCO	TCO	47.01	-1.3	SPDR S&P 500 Div MDV	MDV	334.37	0.5	McBride	FORR	45.25	-1.9	Prudential	PWRR	28.09	1.2	Global X	GLOX	1.66	-0.2
PFGE	PFGE	69.20	-0.1	GroupHg	BHG	-0.26	-1.5	SPDR S&P 500 Div TCS	TCS	29.62	-0.5	SPDR S&P 500 Div XTD	XTD	159.30	0.6	DivExChin93	YANG	16.28	-5.1	Capita	CATM	11.68	-2.2	Global X	GLOX	1.66	-0.2
Photuris	PHOT	89.95	-1.5	BoardwalkProp	BWP	-0.13	-0.3	SPDR S&P 500 Div TEV	TEV	13.05	-0.8	SPDR S&P 500 Div XTD	XTD	159.30	0.6	BlackRock	BLKB	19.76	1.0	Global X	GLOX	1.66	-0.2				
PublServiceEnt	PSI	49.64	-1.3	BrixmorProp	BRX	-0.12	-0.2	SPDR S&P 500 Div ATT	ATT	7.67	-0.2	SPDR S&P 500 Div XTD	XTD	159.30	0.6	Global X	GLOX	1.66	-0.2	Global X	GLOX	1.66	-0.2				
RuiteGroup	PRG	16.06	1.9	BrookfieldLiving	BRK	-0.12	-0.2	SPDR S&P 500 Div ATT	ATT	7.67	-0.2	SPDR S&P 500 Div XTD	XTD	159.30	0.6	Global X	GLOX	1.66	-0.2	Global X	GLOX	1.66	-0.2				
RoperTech	ROP	257.82	0.7	Cloudera	CLDR	-0.12	-0.2	SPDR S&P 500 Div ATT	ATT	14.50	-0.4	SPDR S&P 500 Div XTD	XTD	159.30	0.6	Global X	GLOX	1.66	-0.2	Global X	GLOX	1.66	-0.2				
RoyalBankScotland	RBS	156.91	3.7	BrookfieldLiving																							

MARKETS

Euro Gets Hit After ECB Announcement

Currency falls the most since Brexit vote last year as gulf between central banks widens

BY RIVA GOLD
AND MIKE BIRD

This summer, investors bet that developed-world central banks would move in tandem when exiting from crisis-era stimulus.

On Thursday, the European Central Bank gave notice that its stimulus will loiter longer, widening a gap between monetary-policy expectations in the eurozone and U.S. that is set to further influence their financial markets.

That sent the euro down 1.4% against the dollar Thursday, its biggest daily decline in European trading since the U.K.'s Brexit vote last year, while boosting eurozone bonds and equities. The euro continued its decline on Friday, falling 0.4% to \$1.1610 in late New York trading. The ECB's move cemented investors' growing sense that it would continue the extraordinary monetary

stimulus that has supported local markets.

The ECB said it would halve its monthly bond-buying to €30 billion (\$35 billion) but keep buying until the end of September 2018, while reiterating that interest rates would remain at current levels well past the end of the asset-purchase program.

The realization the central bank is in no hurry to unwind stimulus has already acted as a weight on the common currency and sent the gulf between U.S. and German government bonds to multiyear highs this month, trends that investors now expect to continue.

Meanwhile, investors' expectations for U.S. interest-rate rises have climbed over the past month, the Bank of Canada has been raising rates, and most expect the Bank of England to raise borrowing costs in November for the first time in a decade. The Federal Reserve is expected to raise its benchmark rate for the third time this year in December, and this month it started reducing its bondholdings.

"There's this continued divergence between what the ECB is doing and what the [Fed] is doing," said Antoine Lesne,

The spread between yields on two-year German government bonds and their U.S. equivalents is now at its widest since 1999.



who runs SPDR strategy at State Street Global Advisors. "This tone of caution [from ECB President Mario Draghi] lets the market believe they're going to be there for quite some time."

The ECB's decision to extend its asset-purchase program until September was taken by

June 2019 from March 2019, according to derivatives markets.

"The longer the program goes on, the further into the future any prospect of a rate hike is," said James Athey, investment manager at Aberdeen Standard Investments.

The central banks of Europe, the U.S. and Japan knocked rates to ultralow levels and began to buy bonds in a bid to stimulate economies that had been hit hard by the financial crisis. But as economic growth has gathered steam, most central banks have begun to either tighten those monetary taps or hint that they will do so.

The divergent policy expectations between the U.S. and eurozone have pushed the yield gap between two-year Treasurys and two-year bonds to its widest since 1999, when the euro traded around \$1.05. At Europe's close on Friday, Germany's two-year bonds offered yields 2.37 percentage points below two-year Treasurys, according to Tradeweb.

Bastien Drut, fixed-income and currency strategist at Amundi, said he expects that gap to widen further in coming months as the Fed continues

reducing its balance sheet and raising short-term rates.

That also has helped stall the rapid move higher for the euro that pushed the currency up 13% against the dollar in the first eight months of the year. Late Thursday in New York, the euro was down 1.4% to \$1.1653, wiping out all of its gains from the start of the quarter. The difference between government-bond yields is often used as an indicator in currency markets, as investors tend to shift to areas where investments offer higher returns, weakening the currency in the region where yields are low.

The euro's ascent in the first few months of the year is over for now, said Philippe Waechter, chief economist at Natixis Asset Management. "The ECB doesn't want to take any risks on the current economic recovery" by changing policy too quickly, he said.

The Euro Stoxx 50 index of eurozone companies rose 1.3% Thursday and another 0.4% Friday. Eurozone stocks had added roughly 11% through Thursday since the ECB first announced its asset-purchase program in January 2015.

Ant Puts Plans for An IPO on Hold

BY CHUIN-WEI YAP

HONG KONG—Flush with cash, Chinese financial-technology firm Ant Financial Services Group is putting on hold plans for an initial public offering while it steps up investments in everything from startups to artificial intelligence, according to a senior company executive.

Ant, which was founded by billionaire Jack Ma and born out of a spinoff from **Alibaba Group Holding** Ltd., has quietly grown into one of the world's most valuable fintech companies. Its biggest asset is Alipay, a mobile-payments platform used on Alibaba's e-commerce sites and by hundreds of millions of Chinese consumers to pay for everything from meals to college tuition fees.

Investors and analysts have been expecting Ant to go public sometime in 2018. The company last raised \$4.5 billion from private investors in April 2016 in a deal that gave it a \$60 billion valuation—and its business has since expanded significantly.

An IPO "is not a necessity or a priority" right now, said Douglas Feagin, Ant's president of international business, in an interview with The Wall Street Journal in Hong Kong.

Mr. Feagin, an American who was a Goldman Sachs Group Inc. investment banker for more than two decades, said he can appreciate the benefits of going public but Ant has other, more pressing, plans to implement.

Among Ant's pursuits: expanding Alipay's global footprint within and beyond the 70 countries the payments system is used in, while plumbing for new technology investments globally in things like facial-recognition and ma-

chine-learning systems.

"It is the time now to deploy artificial intelligence in ways that are much more sophisticated than we've ever done: The technology is there, the data is there, [as is] the receptivity of consumers," Mr. Feagin said.

He declined to detail exactly how much Ant plans to invest, but pointed to affiliate Alibaba's plans to spend more than \$15 billion over three years on research and development.

Ant has, in the past three years, invested more than \$16 billion in more than 50 startups that include online lenders, insurers and technology firms, according to database ITjuzi.

The company led a \$40 million financing round announced Tuesday for DeePhi Tech, a Beijing-based startup that creates applications for "deep learning," a technology that teaches computers to differentiate data the way a human brain does.

As a closely held business, Ant doesn't disclose its financial results publicly. But data from Alibaba—to which Ant pays fixed royalties and fees under a profit-sharing agreement—indicate Ant's pretax profit reached \$773 million in the quarter ended in June. That is close to Ant's profit for its entire previous fiscal year ended in March, which rose 86% from a year earlier to \$814 million, according to Alibaba filings.

Some analysts expect the company to go public eventually. "Ant Financial's strategy is to defend share, grow into new areas and generate profits—leading to the business becoming 'IPO-ready' in 2018," said Sanford C. Bernstein & Co. research analyst Bhavtosh Vajpayee.

Chinese Fund Sees Slowdown In Growth

SHANGHAI—Asset growth in the world's largest money-market fund slowed sharply in the third quarter, after rapid expansion raised Chinese regulators' concerns.

Yu'e Bao, an online money-market fund managed by a unit of **Ant Financial Services Group**, an affiliate of **Alibaba Group Holding** Ltd., said its assets increased 8.9% from July through September, after swelling 41% and 25% in the first and second quarters, respectively.

The four-year-old fund finished with 1.56 trillion yuan (\$234.94 billion) under management, nearly twice as much as a year earlier. Yu'e Bao, whose name means "leftover treasure," draws funds from users of Alipay, a mobile-payment network used by hundreds of millions of Chinese.

Inflows slowed after regulators pressed the fund's manager, Beijing-based **Tianhong**

—Yifan Xie

Bonds Climb Amid Spain Tensions

BY GUNJAN BANERJI

U.S. government bonds strengthened Friday amid investor concerns about tensions in Spain and the prospect of a change of leadership at the Federal Reserve.

CREDIT MARKETS The yield on the benchmark 10-year U.S. Treasury fell to 2.426%, snapping a three-day streak of gains, from 2.452% on Thursday.

Yields fall as bond prices rise. Yields fell Friday as increasing tensions between the Spanish government and Catalan separatists fueled investor fears about the impact of civil unrest on a major European economy. That helped spur demand for 10-year Treasurys,

with investors turning to assets typically considered relatively safe, said John Canavan, a market analyst at Stone and McCarthy Research Associates.

"There's just a concern about what this could do to longer-term implications for Spain's economy, and what that could mean if there were any spillover effects to other parts of Europe," Mr. Canavan said.

Another factor driving yields lower was a Bloomberg report that President Donald Trump is leaning toward naming Federal Reserve governor Jerome Powell the next chairman of the Federal Reserve, some investors said.

Mr. Powell and Chairwoman Janet Yellen appear less likely to be as aggressive in raising interest rates as other con-

tenders for the top post.

Those moves reversed early weakness in Treasurys after fresh data revealed the U.S. economy posted its best six-month stretch in three years.

Gross domestic product, a measure of goods and services made in the U.S., expanded at a 3% annual rate in the third quarter, the Commerce Department said Friday.

Yields have risen for two consecutive weeks amid geopolitical tensions and signs of progress on a plan to cut taxes, which some think could fuel growth and inflation while increasing the supply of Treasury debt.

Still, there is a split between monetary-policy expectations in the eurozone and U.S., after the European Cen-

tral Bank said that it would whittle its monthly bond-buying to €30 billion but keep scooping up bonds until the end of September 2018.

The gap between U.S. and German two-year government bonds, which are typically the most sensitive to those expectations, have hit multiyear highs.

Despite the recent climb in the 10-year yield, its widening gap with German bonds could still encourage buying from international investors, driving yields back down, some investors said.

"It would definitely slow down the pace of increases in U.S. yields," said Boris Rjavin-ski, director of rate strategy at Wells Fargo Securities.

"We're sort of caught in crosswinds," he said.

Dollar Takes Breather After Rise

BY IRA JOSEBASHVILI

The dollar pared gains Friday, after rising to its highest level in more than three months on data showing the U.S. economy grew more than expected in the third quarter.

The Wall Street Journal Dollar index,

which gauges the U.S. currency against a basket of 16 others, closed unchanged at 87.77. The measure reached 88.20 earlier in the session, its highest level since July 11.

Gross domestic product, the broadest measure of goods and services made in the U.S., expanded at a 3% annual rate in July through September, the Commerce Department said Friday. Economists surveyed by The Wall Street Journal had projected a 2.7% gain.

The stronger-than-expected number bolstered the case for the **Federal Reserve** to raise rates at a faster pace in coming months. Higher rates tend to make the dollar more attractive to investors seeking yield.

The morning's GDP data "was like the icing on the cake for dollar bulls," said Omer Esiner, chief market analyst at Commonwealth Foreign Exchange, in a note to clients.

On Thursday, the dollar received a boost after Republicans overcame internal divisions to adopt a budget that sets the stage for a rewrite of the U.S. tax system. Some investors believe tax reform would likely boost the U.S. economy.

Earlier that day, European Central Bank President Mario Draghi said the bank's bond-buying program could be extended beyond September 2018, sending the euro tumbling against the dollar.

The dollar is up nearly 4% from its September lows, although it remains down on the year.



Oil prices have posted gains for three weeks in a row on declining stockpiles and rising demand.

Brent Crude Hits \$60 a Barrel

BY ALISON SIDER
AND CHRISTOPHER ALESSI

Oil prices pressed higher, with Brent crude topping the \$60-a-barrel mark for the first time in more than two years amid hopes that OPEC will continue curbing output.

On Friday, Brent, the global benchmark, rose \$1.14, or 1.9%, to \$60.44, its highest settlement value since July 2015. U.S. crude prices

rose \$1.26, or 2.4%, to \$53.90, an eight-month high.

The \$60 threshold is one that oil-producing nations and bullish investors have been eyeing all year. They've often been frustrated. Despite production cuts by the Organization of the Petroleum Exporting Countries and other major exporters, rallies have been fleeting.

But the outlook has shifted in recent weeks, with oil prices posting weekly gains three weeks in a row.

Brent prices rose 4.7% this week and West Texas Intermediate, the U.S. benchmark, gained 4%.

"It's been a slow train coming," said Mark Benigno, co-director of energy trading at

INTL FCStone, but investors have come around to the idea that OPEC's efforts are paying off. "People wrote off the story like, 'forget OPEC.' But it's happening the way they were hoping it would," he said.

Crude and fuel stockpiles have declined steadily, and demand is increasing.

Saudi Arabia and Russia have thrown their support behind extending production cuts through the end of 2018.

Near-term Brent prices are

higher than prices for oil delivered in future months, a

market structure that indicates tighter supplies available for immediate delivery.

"That's telling me this is happening—this is working," said Michael Hiley, a trader at LPS Futures LLC. "The underlying fundamentals keep nudging us higher."

Rising geopolitical risk has also boosted oil prices. Clashes between Iraqi government troops and forces from the semiautonomous Kurdish region have disrupted some oil production and exports.

Some expect oil to encounter

stauch resistance on its march higher.

U.S. oil producers are likely to take advantage of the rally

to hedge, or lock in higher prices for output next year.

"It can't really go above \$60" a barrel, Giovanni Staunovo, a commodity analyst at UBS Wealth Management, said of the price of Brent.

If it goes too high, it's an indication to U.S. shale producers to produce more oil," a development that could undermine the oil market rebalancing under way, he said.

Mr. Staunovo said UBS expects the price of Brent to stay in a range of \$55 to \$60 a barrel.

OPEC and some major producers outside the cartel, including Russia, first agreed

late last year to cap their production at around 1.8 million barrels a day lower than peak

October 2016 levels, with the aim of alleviating global oversupply and boosting prices.

The deal has already been extended through March 2018,

but many market participants are now anticipating that it will be pushed even further out.

Gasoline futures rose 1.8 cents, or 1%, to \$1.7686 a gallon.

Diesel futures rose 2.5 cents, or 1.4%, to \$1.8669 a gallon, its highest settlement

value since June 30, 2015.

MARKETS

Strong Corporate Earnings Boost Stocks

Tech shares, signs of solid U.S. economic growth put Nasdaq, S&P 500 at records

By RIVA GOLD
AND CORRIE DRIEBUSCH

A busy week of robust corporate earnings lifted the S&P 500 and Nasdaq Composite to fresh highs.

More than half of companies in the S&P 500 had reported third-quarter results as of Friday, and more than three-quarters of those results have surpassed analysts' expectations, according to FactSet. Standout corporate results, which ranged from machinery maker Caterpillar to technology stalwart Microsoft, drove broader stock-market gains.

Among the best performers during the week were Google parent Alphabet and Amazon.com, both of which reported strong revenue. Earlier in the week, Twitter's shares jumped after the social-media company said it added more new monthly users than analysts expected and boosted its guidance for the fourth quarter. On Friday, shares of Intel climbed \$3.05, or 7.4%, to \$44.40, after the company lifted its guidance.

The strong tech gains propelled the Nasdaq Composite up 144.49, or 2.2%, to 6701.26, and the S&P 500 up 20.67, or 0.8%, to 2581.07, on Friday.

The Nasdaq hit its 61st high of 2017, a tie for the most records in a year since 1999.

The gains in tech companies helped offset a drop by Mattel shares, which fell 1.37, or 8.9%, to 14, and a decline in Expedia shares, which tumbled 23.56, or 16%, to 123.79, following their quarterly reports.

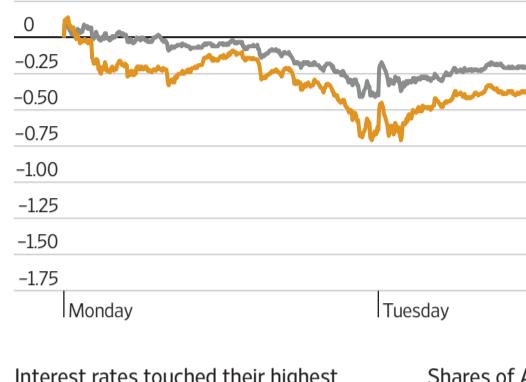
The Dow Jones Industrial Average gained 33.33, or 0.1%, to 23434.19.

Though some analysts say they worry about the big run for

Tech Is on a Tear

U.S. stocks rose to fresh records during the week, as a big batch of quarterly results beat analysts' expectations.

Strong performance by tech stocks contributed to outsize gains by the Nasdaq.



Interest rates touched their highest levels since March after Congress passed a budget resolution that paves the way for a tax revamp.

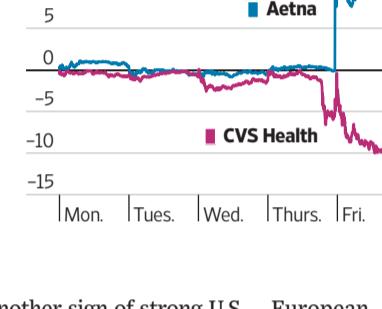
10-year U.S. Treasury yield



Source: FactSet

Shares of Aetna soared late Thursday after The Wall Street Journal reported CVS Health was in talks to buy the health insurer.

Share-price performance



tech stocks, which have soared in recent months, others say these strong earnings reports support the high stock prices.

"Valuations across the board may be frothy, but I think there are plenty of companies who can justify their valuations," said Jon Mackay, investment strategist at Schroders. The tech sector is large, and there are plenty of high-performing hardware companies as well as those known for their innovative products, he added.

Also lifting stocks Friday

was another sign of strong U.S. economic growth. Gross domestic product, the broadest measure of goods and services made in the U.S., expanded at a 3% annual rate in the third quarter, the Commerce Department said, above economists' estimates.

The growth came during a three-month period in which the country faced hurricanes that temporarily shut down major population centers.

The upbeat tone in global markets also came after the

European Central Bank on Thursday extended its bond-buying program but at a reduced level, confirming market participants' expectations that the central bank would only slowly ease off crisis-era stimulus policies.

The decision weighed down the euro but boosted German government bonds and euro-zone stocks, which have been supported by the bank's expansive stance for several years.

Spain's IBEX 35 index fell 1.5% as Catalonia's Parliament

declared the region an independent republic on Friday. The declaration escalates a standoff with Madrid, as lawmakers there agreed to grant Spain's prime minister the power to impose direct rule on the region.

More broadly, however, European stocks advanced as the euro fell, as a 10% gain in the common currency against the dollar this year has dragged down earnings of companies that translate revenue from overseas.

The Stoxx Europe 600 gained 0.6%, a day after its biggest daily rise since July.

Earlier, Asian markets rose following Thursday's gains in Europe and the U.S. and the upbeat results from the U.S. tech sector.

Hong Kong's Hang Seng Index rose 0.8% and South Korea's Kospi gained 0.6%. Japan's Nikkei Stock Average climbed 1.2% to a two-decade high, helped by a decline in the yen during Asian trading as global risk appetite improved.

HEARD ON THE STREET

FINANCIAL ANALYSIS & COMMENTARY

WSJ.com/Heard

Email: heard@wsj.com

Bonds' Missing Factor: Inflation

Moving Apart

Gap between 10-year U.S. and German government bond yields



support for sustained growth and for higher levels of neutral interest rates.

In addition, speculation about U.S. tax overhauls and the next leader of the Federal Reserve, as well as a smaller focus on geopolitical risks, have boosted bond yields.

But inflation is still missing in action. In the U.S., the Fed's preferred measure of core inflation has been below its 2% target for years;

in the eurozone, the ECB's determination to carry on with bond purchases is informed by its forecast that headline inflation will still be well below 2% even in 2019.

This leaves the bond market in a problematic spot. As long as inflation doesn't rise, there is a resistance to much higher yields. Investors figure that rising real yields, likely accompanied by a stronger dollar, would act as a drag on growth. That could be reflected in falling stock markets, which would support bonds. But if inflation climbs more than expected, the market will be wrongly positioned and forced to rethink central-bank policy.

This would mark a key change in bond-market psychology, which so far has interpreted higher yields as a buying opportunity. It also would have potentially far-reaching consequences for the valuations of stocks, corporate bonds and emerging-market assets that have been charged by low bond yields.

—Richard Barley

OVERHEARD

In the era of Airbnb, the hotel industry has done stranger things, but not much stranger.

In time for the premiere of the second season of Netflix's hit series "Stranger Things" on Friday, a New York hotel is offering a package for fans of the show to binge watch it in style and comfort. For \$249, guests of The Gregory get a room for the night, two cans of House Wine, a box of Eggo waffles, two protein snacks and a mug.

The Gregory, which bills itself as "our standout among boutique hotels near Penn Station," is located in Manhattan's densely packed garment district, a far cry from Hawkins, Ind.

Alternatively, fans of the series could book a plain, old room for two and watch the show on a laptop, buy their own snacks and wine, and forgo the mug. But, according to the hotel's website, the cheapest room for October would set them back \$271.20, which really is strange.

UBS Banks On Wealthy Asian Clients

Asia's rich are back in the markets, and that is good for UBS Group. They are helping the Swiss bank recover from a summer stumble, and although its shares have climbed 10% since early September, they have further to run.

UBS highlighted the revenue gains and 37% profit growth in Asian private and investment banking over the first nine months of 2017. Its rival, Credit Suisse Group, suffered profit and revenue declines in Asia in the first half. The latter has a different regional focus, but it might shine, too, when it reports next week.

Equities-related business boosted UBS. Its investment bank advisory revenue was 35% higher in the third quarter versus the same period last year in dollar terms, better than any U.S. rival.

UBS's weak spots in its second-quarter results were U.S. wealth management and a surprise drop in its capital ratio. In U.S. wealth, UBS had net outflows again in the third quarter, though less than in the second.

On capital, it also did better. A surprise jump in risk-weighted assets in the second quarter pushed UBS's common equity capital ratio down from 14% to 13.5%. There were no such problems this time, and the ratio recovered to 13.7%.

Those second-quarter issues pushed UBS's share valuation down from 1.2 times forecast year-end book value to less than 1.1 times. Since early September, that has climbed back toward 1.2 times, comfortably ahead of European rivals. But Friday's results should lift year-end forecasts and so create room for UBS's stock to climb a little more.

—Paul J. Davies

The Tech Rally Is Juiced by Highflying Cloud Business

Big Tech can generate big numbers, but it was fast growth in the cloud business that helped ignite a buying frenzy Friday that drove up market values by nearly \$139 billion in 30 minutes.

The stunning growth of the cloud businesses at Amazon.com, Microsoft and Google-parent Alphabet were a relatively small part of the strong quarterly results the three companies reported Thursday. But fast growth in cloud revenue, along with relatively stable service prices that helped profit margins during the quarter, gave investors reasons to bet the three giants could maintain their growth

trajectories.

Shares of the three companies kept rising Friday, with their combined \$132 billion market-value gain topping the value of more than 90% of the other companies in the S&P 500, including nearly every other company selling cloud-based software services.

The latest gains raise the bar for future performance. But investors are confident growth can continue because cloud services still make up a rather small portion of corporate technology spending, which leaves a lot up for grabs. That's encouraging for Microsoft and Google, which are racing to catch up to

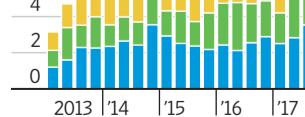
leader Amazon. But Amazon still has a large lead: AWS revenue jumped 42% year over year in the third quarter to nearly \$4.6 billion.

Microsoft's comparable Azure service generated a 90% revenue gain. That brought Azure's total revenue to about \$1.5 billion in revenue for the quarter, estimates J.P. Morgan Chase. Google's "other" segment, which includes its cloud platform as well as its expanding device business, saw revenue jump 40% year over year to \$3.4 billion. Alphabet CFO Ruth Porat said the cloud made up the largest portion of that gain.

Investors should expect

Billed Out

Capital spending per fiscal quarter



^aIncludes capital leases

Source: the companies

the strong gains to continue, along with the bills that come with it. The three companies combined had \$10.6 billion in capital expenditures and new capital lease

obligations in the third quarter. That's up 34% year over year, the highest combined increase by the three in nearly three years.

A considerable sum even for deep-pocketed tech giants, but that spending helps Amazon, Microsoft and Google fuel the expansion of their large global networks along with the addition of new capabilities, such as artificial intelligence. It also helps deepen the competitive moat around their businesses that makes it difficult for others to dislodge them.

Being the smart money may not be cheap, but it appears to be worth the cost.

—Dan Gallagher

The 'pet effect':
They may not
improve our
health, but they
bring us together
C3



REVIEW



How Alexander Calder—and his sculptures—got moving. A new biography
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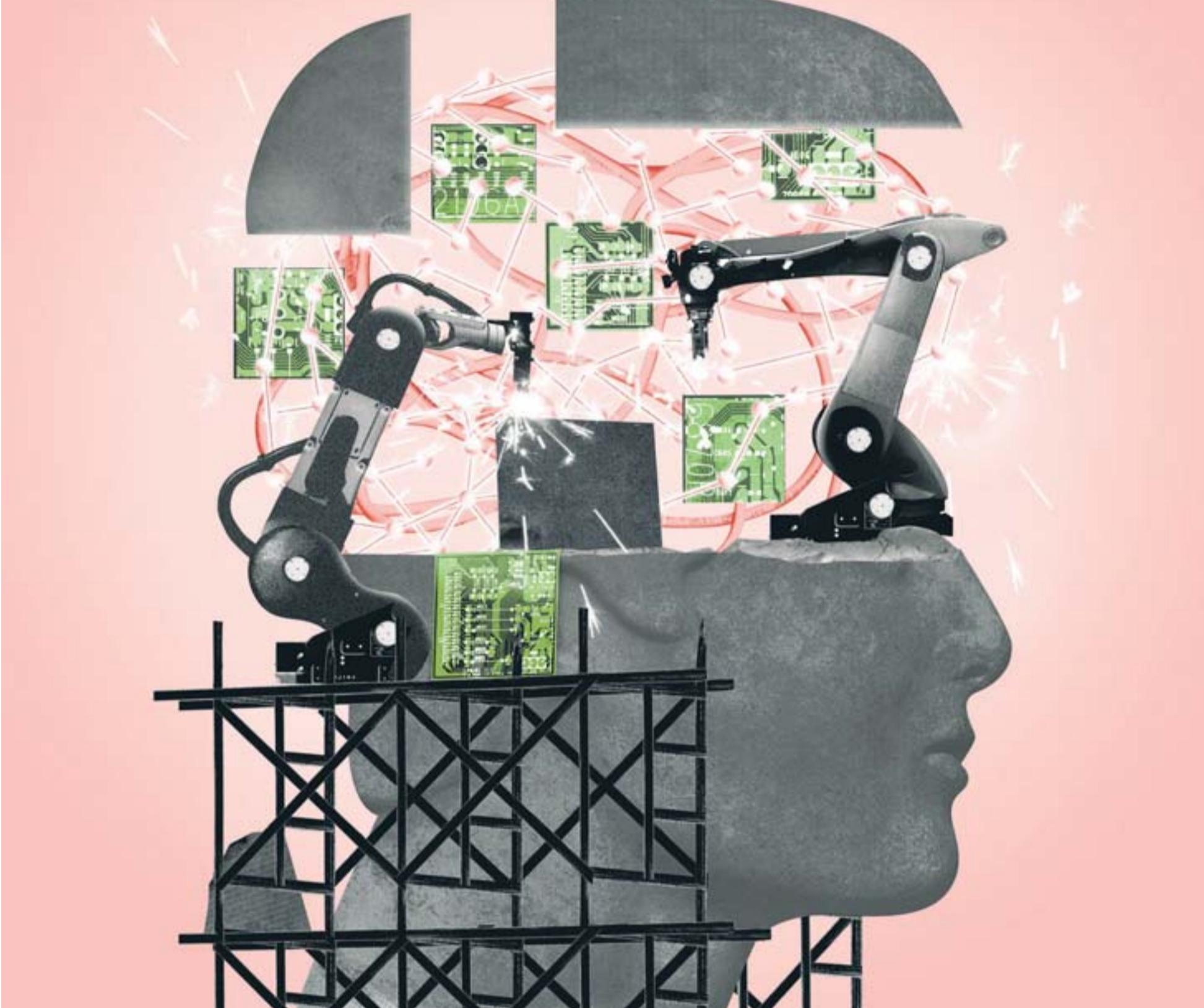
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THE WALL STREET JOURNAL.

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DOUG CHAYKA

We'll Need Bigger Brains

To avoid a dystopian future fueled by the rise of artificial intelligence, we must move quickly to create technologies that enhance the human brain.

BY CHRISTOF KOCH

WHEN DO WE START PANICKING? DeepMind, an artificial intelligence company in London, just announced another breakthrough in machine intelligence. Starting from nothing but the rules of the ancient and sublime board game Go, the algorithm taught itself to play through trial and error. After playing four million games against itself, the software, called AlphaGo Zero, reached superhuman performance. And it did that in less than a month, compared with the decade or two of training it takes for a human to become a highly skilled Go master.

As usual, some experts have played down public fears about AI, emphasizing that such astounding progress is no cause for alarm, given that playing Go isn't a useful, real-world skill. It isn't close to the sort of general intelligence that humans are capable of. Yet many others rightly worry that AI will do great harm to society—putting people out of work, adding to inequality and removing warfare from human control, even posing an existential risk to the long-term future of *Homo sapiens*. Whether you are among those who believe that the arrival of human-level AI signals the dawn of paradise, such as the technologist Ray Kurzweil, or the sunset of the age of humans, such as the prominent voices of the philosopher Nick Bostrom, the physicist Stephen Hawking and the entrepreneur Elon Musk, there is no question that AI will profoundly influence the fate of humanity.

There is one way to deal with this growing threat to our way of life. Instead of limiting further research into AI, we should turn it in an exciting new direction. To

keep up with the machines we're creating, we must move quickly to upgrade our own organic computing machines: We must create technologies to enhance the processing and learning capabilities of the human brain.

AI was essentially born in the summer of 1956 when scientists, mathematicians and engineers convened at Dartmouth College to discuss so-called thinking machines. Since then, we've lived through stunning progress. In 1997, IBM's Deep Blue computer defeated the reigning world chess champion, Garry Kasparov. In 2005, AI learned to drive, when an autonomous vehicle completed a 132-mile off-road course in the Nevada-California desert in under seven hours.

In 2011, another IBM computer, Watson, bested humans in the quiz show "Jeopardy!" Last year, AlphaGo (a predecessor to AlphaGo Zero) rose to international prominence by unexpectedly beating Lee Sedol, a top Go player. AlphaGo was trained on 160,000 games from a database of previously played Go games. AlphaGo Zero dispensed with any accumulated human wisdom and decisively annihilated its parent, AlphaGo, 100 to 0.

By now, machines are better than humans in games such as checkers, chess and Go, in which every player

can see everything. And computers are taking the edge in games involving gambling, deception and other social skills, too. Earlier this year, Libratus, software developed at Carnegie Mellon University, beat four top players over a 20-day tournament of No-Limit Texas Hold

Please turn to the next page

At some point, the pace of progress will exceed the ability of individuals to adapt.

Dr. Koch is the chief scientist and president of the Allen Institute of Brain Science in Seattle.

INSIDE

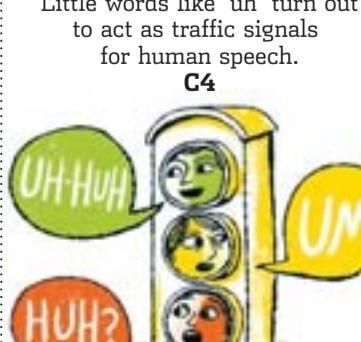
MOVING TARGETS



Ugly sneakers were just the start. Joe Queenan on scary trends in men's clothing.
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A century after the Balfour Declaration, a commemoration renews Middle East divisions.
C3

REVIEW

Keeping Up With the Machines

Continued from the prior page

'em poker. Code doesn't need to bluff—it simply outthinks humans.

AI has learned to listen and speak as well, in the form of digital personal assistants. We now have Apple's Siri, Amazon's Alexa, Microsoft's Cortana and Google Now, though their conversational skills are still minimal. Within a decade or two, their voices will become indistinguishable from any human—except that they will be endowed with perfect recall, poise and patience.

These spectacular advances are powered by Moore's law, the empirical observation that the number of components per integrated circuit doubles every year. It isn't easy to wrap your head around such exponential growth. The raw computational power of computers has increased by about 10 billion since they were created to help design atomic bombs. We're now seeing the first commercial quantum computers that will further boost computational power.

All of us will be swept up by the changes brought on by this fourth industrial revolution. The first, powered by the steam engine, moved us from agricultural to urban societies. The second, powered by electricity, ushered in mass production and created consumer culture. The third, centered on computers and the internet, shifted the economy from manufacturing into services.

All of them profoundly increased human productivity, welfare and lifespan. Employment adapted as machines gradually replaced more and more aspects of human labor over time.

Yet this is not a law of nature. In the future, there are no guarantees that all or even most adults will have a job, in particular as the speed of technologically driven disruption accelerates. At some point, the pace of progress will exceed the ability of individuals and of society at large to adapt. This could prove catastrophic.

A recent study by the McKinsey Global Institute estimated that 10% to 50% of job tasks in the U.S. could be automated using existing AI and robotic technology. In about 60% of the 800 occupations surveyed, at least 30% of their activities can be replaced by software, with some jobs (such as driver, retail worker and fast-food employee) becoming entirely obsolete.

Automation will bring many benefits, including a range of powerful new products we can't even fully imagine today—but only for those who are wealthy or gainfully employed. AI will further accelerate the inequality between the haves and the have-nots.

Machine learning will also transform warfare. Once it's developed, weaponized AI can fight armed conflict at a much bigger scale and at a much faster speed than humans can comprehend and react to. Sooner or later, willfully or not, AIs will have the capability to kill without a human in the loop to override its lethality.

Some see a time when we reach the singularity—an ill-defined point in time when machines surpass humans in intelligence, triggering even more rapid technological progress and a new era that is beyond our current comprehension.

Unlike say, the speed of light, there are no known theoretical limits to intelligence. While our brain's computational power is more or less fixed by evolution, computers are constantly growing in power and flexibility. This is made possible by a vast ecosystem of several hundred thousand hardware and software engineers building on each other's freely shared advances and discoveries. How can the human species keep up?

The traditional answer is education. But training (and retraining) people takes time, and not everybody can, or wants to, switch from driving trucks, serving fast food or scanning items at the supermarket to developing code, designing computer chips, walking dogs or caring for elders (to list a few jobs that won't be made redundant anytime soon).

In the face of this relentless onslaught, we must actively shape our future to avoid dystopia. We need to enhance our cognitive capabilities by directly intervening in our nervous systems.

We are already taking steps in this direction.

Transcranial direct current stimulation is a noninvasive brain technology that induces a weak electric field in the cortex underlying the skull. Research in animals and in human volunteers suggests that this may enhance neuroplasticity, the process in which the brain improves its performance when an action is repeated, over and over. Users wear headphones that gently stimulate their motor cortex while lifting weights, swinging a golf club or playing piano. With time, the athlete learns more quickly or better.

Another consumer product senses the slow brain waves characteristic of deep sleep via electroencephalogram (EEG) electrodes built into a headset. When it detects them, the device plays low sounds that enhance the depth and strength of these waves, leading to more restful sleep.

But the billions of tiny nerve cells inside the skull are quite remote from the scalp, and only the faint echoes of neuronal chatter can be picked up by EEG. We aren't anywhere close to selectively silencing or amplifying the activity of small cliques of neurons. Ultimately, to boost our brain power, we need to directly listen to and control individual neurons: the atoms of perception, action, mem-

ory and consciousness. And for that, we need to directly access brain tissue, requiring (for now) at least some neurosurgery to penetrate the skull.

Progress has been much faster than expected, in particular for brain-machine interfaces. Consider Nancy Smith, who was injured in a car accident seven years ago. She is a tetraplegic, only able to move her shoulder and head. Neurosurgeons and neuroscientists in California implanted a tiny "bed of nails" array of electrodes in the region of her cortex that encodes her intention to grasp a cup or to press piano keys. Algorithms decode her neural signals and pass instruction to a musical synthesizer, so that she can play music with her mind.

Bill Kochevar was likewise paralyzed below the shoulders following a bike accident many years ago. A Cleveland-based team of doctors and neuroscientists placed electrodes into his left motor cortex; these read out the electrical tremors of about 100 neurons, decoding the patient's intention and then electrically stimulating muscles in his arm and hand to enable him to reach and to grasp. Such functional electrical stimulation is akin to "writing" the nervous system, giving instructions that mimic, however crudely, what occurs naturally. Functional stimulation lets Mr. Kochevar eat and drink by himself. There are more than 50 such patients with listening devices installed in their brains.

Writing the cortex isn't far behind. When we move in the world, our bodies receive massive feedback from sensors in our limbs that signal their location in space and from touch sensors in the skin. Neuroscientists are seeking to replace these signals in patients who don't feel their limbs by electrically stimulating their somatosensory cortex using implanted electrodes.

Funding for such research comes through the Brain Research Through Advancing Innovative Neurotechnologies (BRAIN) Initiative, a public-private collaboration started in 2013 whose partners include the National Institutes of Health and U.S. defense and intelligence agencies. The 12-year initiative is expected to inject more than \$4 billion into research for therapies. Its portfolio of funded grants includes direct brain stimulation for obsessive-compulsive disorder, treatment-resistant depression, essential tremor, Parkinson's disease, epilepsy, stroke recovery and blindness.

The Allen Institute for Brain Science, which I direct, is adding to the effort. We just freely released data showing the intricate wispy axons and dendrites of hundreds of cortical neurons from living human neurosurgical samples and their electrical responses when tickled by tiny currents to their cell bodies. With the permission of patients, we receive these sugar-cube sized chunks of cortical tissue extracted during surgery to reach a deep-tissue tumor or epileptic focus (and usually discarded as medical waste) and put these samples on life support to study their structure and function for days on end in our laboratories.

This constitutes a remarkable advance, as almost everything we know about human nerve cells derives from postmortem (dead) brains, without a trace of electrical activity. In tandem, we provide computer code to simulate the electrical behavior of these cells.

This confluence of basic knowledge about the human brain with the burgeoning neuro-tech industry helps neurological patients recover their lost functionality, including driving a car, with their minds.

With more research, enhanced cognition could be within reach for all of us.

Brain enhancement could help older people who have trouble adapting to a new workplace by giving them back the flexibility they had as a child, effortlessly soaking up dozens of new words every day, learning novel skills and facts without even trying. Once we fully understand neuroplasticity, we should be able to control its mechanisms at will.

My hope is that someday, a person could visualize a concept—say, the U.S. Constitution. An implant in his visual cortex would read this image, wirelessly access the relevant online Wikipedia page and then write its content back into the visual cortex, so that he can read the webpage with his mind's eye. All of this would happen at the speed of thought. Another implant could translate a vague thought into a precise and error-free piece of digital code, turning anyone into a programmer.

People could set their brains to keep their focus on a task for hours on end, or control the length and depth of their sleep at will.

Another exciting prospect is melding two or more brains into a single conscious mind by direct neuron-to-neuron links—similar to the corpus callosum, the bundle of two hundred million fibers that link the two cortical hemispheres of a person's brain. This entity could call upon the memories and skills of its member brains, but would act as one "group" consciousness, with a single, integrated purpose to coordinate highly complex activities across many bodies.

These ideas are compatible with everything we know about the brain and the mind. Turning them from science fiction into science fact requires a crash program to design safe, inexpensive, reliable and long-lasting devices and procedures for manipulating brain processes inside their protective shell. It must be focused on the end-to-end enhancement of human capabilities.

To accelerate the diffusion of this technology, the relevant government agencies, academia, the biomedical device industry and the smaller companies that are the true risk takers and pioneers must freely, openly and rapidly share data and procedures to speed up innovation. And we must shorten the very lengthy regulatory process to quickly bring these benefits to everyone.

While the 20th century was the century of physics—think the atomic bomb, the laser and the transistor—the 21st will be the century of the brain. In particular, it will be the century of the human brain—the most complex piece of highly excitable matter in the known universe. It is within our reach to enhance it, to reach for something immensely powerful we can barely discern.



WILCZEK'S UNIVERSE: FRANK WILCZEK

Something Out There: The Dark- Matter Mystery

I'VE BEEN THINKING about "dark matter" problems for years now, but only recently did it dawn on me how deeply the quest for dark matter penetrates into philosophy and even theology.

Today's dark-matter problems arise when we study the motion of stars and galaxies, the bending of light from very distant galaxies, or how the expansion of the universe changes with time. In all those cases, when we work back from the observed motions to their causes, we find discrepancies. There's too much gravity. The objects we can see, using all the tools of astronomy, just don't have enough mass to generate the gravitational forces we infer. Everything can be accounted for if there's a new form of matter, so far unidentified, which interacts very feebly with ordinary matter (and with itself) and if space has a small density.

That two-pronged "solution" might seem desperate, but the quest for things inferred yet invisible has a glorious pedigree.

In the 19th century, precise calculations of the orbit of Uranus disagreed with accurate observations. In 1846, Urbain Le Verrier and John Couch Adams proposed that the influence of another planet, as yet unseen, might cause the discrepancy. Le Verrier was able to tell observers where they should point their telescopes. He nailed it. They looked—and discovered Neptune.

Around the same time, Friedrich Bessel proposed that jittery movements of two stars, Sirius and Procyon, occurred because each had a companion invisible to the telescopes of the time. Only decades later did astronomers develop sufficiently powerful tools to see the stars' partners—members of a very dense, Earth-sized class of stars, the white dwarfs.

In 1930, Wolfgang Pauli postulated new subatomic particles, neutrinos, as a kind of dark (that is, unseen) matter. They could account for "missing" energy and momentum in radioactive decays. At the time, Pauli said that he had done something very bad by proposing "a particle that cannot be detected." But in 1956, neutrinos were detected, and today their study is an industry in experimental physics.

Long before these advances, in 1692, Isaac Newton had posed the deepest dark-matter question. He wrote that the idea "that one body may act upon another at a distance thro' a Vacuum, without the mediation of any thing else...is to me so great an Absurdity" that no competent thinker could fall for it. For Newton, space could not be a void. There had to be something, yet undetermined, to support the forces between bodies.

Centuries later, the theory of electric and magnetic "fields," entities that fill all space, vindicated Newton's intuition. The Scots physicist James Clerk Maxwell, whose 1864 equations epitomized the new understanding, rhapsodized, "The vast interplanetary and interstellar regions will no longer be regarded as waste places in the universe, which the Creator has not seen fit to fill...so full, that no human power can...produce the slightest flaw in its infinite continuity."

In Einstein's general relativity theory, space itself becomes, even more tangibly, a material medium. Space can bend: That's how general relativity accounts for gravity. And as this year's Nobel Prize celebrates, space can "ring" like a bell (reverberating with gravitational waves)! So it's not unreasonable, as Einstein anticipated, that space has nonzero density, as astronomers recently discovered. By dumping a lot of energy into a small volume, at high-energy accelerators, we can shatter space and see what it's made of. We've unearthed a lot of things that contribute, but how they conspire to give the density we observe remains deeply mysterious.

Physicists also have some promising ideas about what the hypothetical dark-matter particles might be. They are designing fantastically sensitive new kinds of instruments to observe them.

Effects without apparent causes inspire us to look at the world in new ways. Thus do we render darkness visible.

FROM TOP: ALLEN INSTITUTE; RUSSELL LEE/CASE WESTERN RESERVE UNIVERSITY/CLEVELAND FES CENTER



BRAIN SENSORS allow Bill Kochevar, who was paralyzed after an accident, to feed himself.

REVIEW



The Real Benefits Of Pet Ownership

Animals may not make us healthier, but they help bring people together

BY JOHN BRADSHAW

IT'S REFERRED TO as "the pet effect." Some researchers have proposed that having a pet bestows a dazzling array of health benefits, such as lower cholesterol, reduced blood pressure and a reduced risk of cardiovascular disease. Others have claimed that pets can combat stress, relieve depression and enhance self-esteem, and that their company makes children more empathetic. "Pet therapy" is widely practiced in hospitals and facilities for the elderly.

Until fairly recently, many animals were seen as harmful—carriers of parasites and disease. But now they're considered part of a healthy lifestyle. While most people probably don't acquire a pet because they think it will make them live longer, they might believe it will be a kind of panacea for modern living.

The problem is that these claims about the

benefits of pet ownership don't always hold up to scientific scrutiny. Some early studies did show that dog owners were generally in better shape than those without dogs, but a recent analysis of the health records of more than 40,000 California residents by the Rand Corp., working in conjunction with the University of California, Los Angeles, shows that these differences can be attributed to other characteristics of pet owners. Owners are more likely to be white, married and homeowners—attributes that are all linked to good health. Rather than pets making people healthy, it's more likely that healthy people choose to own pets. Anyone with a hint of declining health will think twice before going out to get a dog. (They may choose a cat instead. Several studies indicate that cat owners have poorer-than-average health. There is no reason to believe that cats make people sick; it's more likely that less healthy people choose cats for companions, given that they require far less work than dogs.)

Stroking a dog results in a surge of oxytocin and endorphins.

The Rand study also cast doubt on the fact that children raised alongside pets become more empathetic, acquire better social skills or have higher self-esteem. Once the many other advantages enjoyed by pet-owning families were factored in, these differences disappeared.

Children whose parents have spare cash to spend on education, have stable jobs and live in a house with a yard to play safely all outperform their less fortunate peers on measures of health and behavior. These same factors make it more likely that parents will add a pet to the family. Caring for a pet may teach children responsibility, but it doesn't necessarily make them better people.

Even if pets don't make us healthier, or better, they do earn their keep in other ways. For one, they can have a strong calming effect. Studies have shown that interacting with a dog can improve a person's mood. Stroking a dog results in a surge of oxytocin and endorphins—hormones that promote bonding and feelings of well-being.

These hormonal effects are generally short-lived, but in the same way that people in long-term relationships tend to be healthier than those who live alone, the effects may accumulate over time. Still, as every pet

This aura of trustworthiness may be the true power behind the "pet effect." A 2015 study published in PLOS One surveyed almost 2,000 residents in Nashville, San Diego and Portland, Ore., and found that pet owners were more likely to get to know people in their neighborhood than those without pets. Dog owners met other owners on walks, of course, but cat owners also bonded with one another through mutual offers to watch each others' pets while they were on vacation. Pets help build communities, breaking down barriers between people and paving the way for us to build networks of friendships.

The same effect may account for much of the effectiveness of animal-assisted therapies, with the animal drawing the patient into relaxed conversation with the human therapist.

Pets make people happy, and bring people together. Does it really matter if they don't have the power to prolong our lifespans?

Dr. Bradshaw is director of the Anthrozoology Institute at the University of Bristol. His latest book is "The Animals Among Us: How Pets Make Us Human," to be published by Basic Books on Oct. 31.

100 YEARS AFTER BALFOUR, DECLARATIONS OF DIVISION

BY SIMON CLARK AND LAURENCE FLETCHER

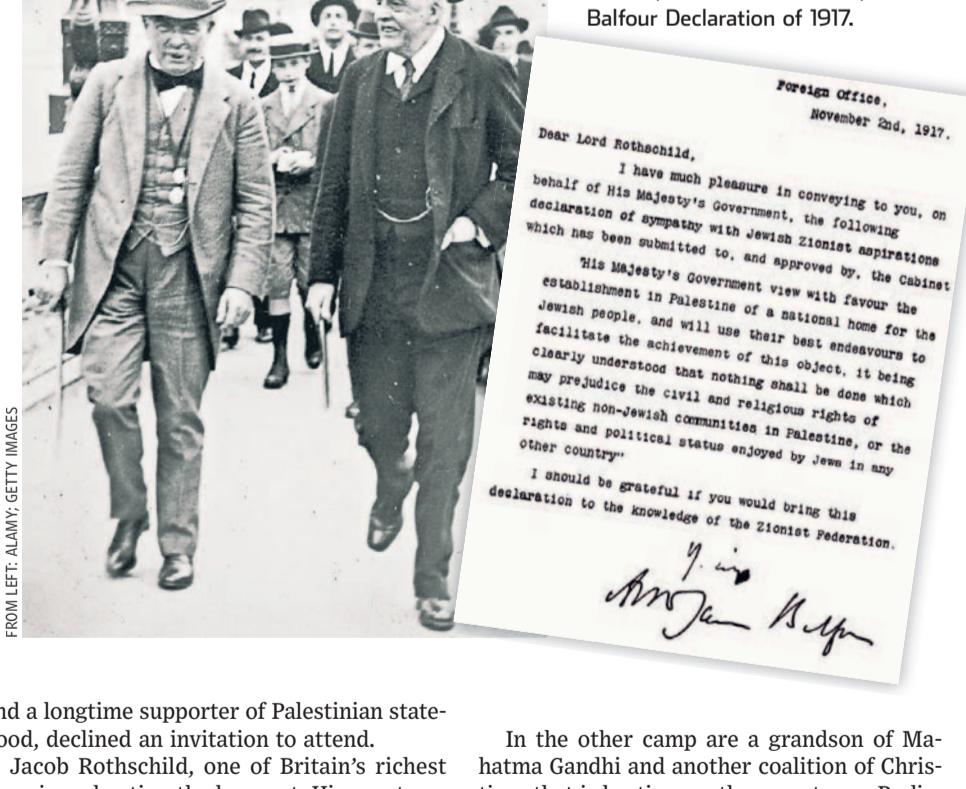
A CONTROVERSIAL BANQUET in London on Nov. 2 will take place under tight security.

It will mark 100 years since the signing of the Balfour Declaration—a promise by the U.K. government to "view with favor" a Jewish "national home" in Palestine. Two descendants of David Lloyd George, the British prime minister at the time of the signing and a key supporter of the promise, sharply disagree on the declaration's legacy. Robert Lloyd George, a great-grandchild of the former premier, will attend and represent his family in a spirit of celebration. Yet Gwyneth Daniel, another great-grandchild, intends to protest in the street outside the dinner, to be held at an opulent house near Buckingham Palace.

Today's prime ministers of Britain and Israel, Theresa May and Benjamin Netanyahu, are expected to attend the banquet. A member of the Trump administration is also expected to be there, organizers said. Details of the guest list are being kept under wraps. Palestinian leaders aren't going.

"Britain could well owe the Palestinian people an apology rather than celebrating" the declaration, said Ms. Daniel, a 71-year-old psychotherapist. "I think it is completely outrageous that our government is taking the line that it is."

The Lloyd George family spat reflects the passions running ahead of the declaration's centenary. Like the family, politicians and religious groups are divided. Mrs. May, a Conservative, has said that the centenary should be celebrated "with pride." The Palestinian Authority has asked for an apology, but Mrs. May's government has said that it won't express regret for the declaration, whose 67 words paved the way for the creation of Israel after British rule over the holy land ended in 1948. Critics say Balfour's highhanded imperialism deprived the Palestinians of their rights and sowed the seeds of conflict. Jeremy Corbyn, leader of the U.K. opposition Labour Party



and a longtime supporter of Palestinian statehood, declined an invitation to attend.

Jacob Rothschild, one of Britain's richest men, is co-hosting the banquet. His great-uncle Walter, a leader of Britain's Jewish community, received the declaration in 1917 from David Lloyd George's foreign secretary, Arthur Balfour. "The Balfour Declaration is the foundation stone of Israel," Lord Rothschild said. "In spite of the huge difficulties, Israel has been worthwhile for the world."

Lord Rothschild is leading a group celebrating the creation of today's Jewish state on land the British Army wrested from the Ottoman Empire in 1917. A coalition of Christians, some of whom see the declaration as fulfilling a biblical promise to return Jews to Israel, will celebrate at London's Royal Albert Hall.

In the other camp are a grandson of Mahatma Gandhi and another coalition of Christians that is hosting another event near Parliament. They want the British government to acknowledge how, they say, the declaration suppressed the legitimate national aspirations of the Palestinians, who are mainly Muslims and Christians.

Lloyd George's great grandchildren agree that the declaration changed history—but disagree on Britain's responsibility. "It was a task that history gave us at that moment," said Mr. Lloyd George, a 65-year-old fund manager. "I don't think the authors of the declaration should be blamed for everything that has happened since."

The declaration led to the creation of "a nation which has always acted with impunity,"

said Ms. Daniel. "Britain does very, very little to rein Israel in."

Britain ruled Palestine after World War I. Jews represented 11% of the population of 757,182 in a 1922 census. A U.N. plan to partition the territory into two states—one Arab, one Jewish—fell through after Britain left under fire in 1948 and the newly declared state of Israel was attacked by its Arab neighbors. Hundreds of thousands of Palestinians fled and became refugees. In 1967, during the Six Day War, Israel occupied the West Bank and Gaza, where Palestinians want a state. More than 130 countries voted in 2012 in the U.N. General Assembly to make Palestine a nonvoting member of the world body. The U.S., Israel and Canada voted against; Britain abstained.

Mr. Lloyd George said that his great-grandfather's Christian upbringing was important to his ancestor's support for a Jewish home. Mr. Lloyd George, himself a practicing Christian, said that his ancestor was "right" to help create a nation-state for a long-persecuted people.

Ms. Daniel said she is "very proud" of her forefather but called his decision to put the rights of one group over others in Palestine a "disaster" that sowed a century of strife. Ms. Daniel is married to Avi Shlaim, a leading historian and critic of Israel's occupation. She is still working on protest plans for the banquet. "If I got dressed up looking unbelievably smart, I might get as far as being turned away at the door," she said.

For Roderick Balfour, 68, whose great-great uncle gave his name to the declaration, a "cruel" clause of the declaration has been overlooked. He read it aloud in his London apartment: "it being clearly understood that nothing shall be done which may prejudice the civil and religious rights of existing non-Jewish communities in Palestine, or the rights and political status enjoyed by Jews in any other country."

Lord Balfour is co-hosting the dinner with Lord Rothschild, but in a more somber mood. "We can commemorate it, but I don't feel we can really celebrate it until we get peace," he said.

REVIEW



Speech Relies on Some Little Words

When we say 'mm-hmm' or 'uh,' we send the traffic signals that guide human conversation

BY N.J. ENFIELD

WORDS LIKE "um," "uh-huh" and "huh?" are widely despised by those who would teach or regulate the proper use of language. Such little words can seem like rude imperfections that disrupt the flow of speech. Actually, they are essential to it.

Language, after all, is our way of coping without telepathy. Our task in conversation isn't just to infer what others want to say. Amid the rapid to-and-fro of dialogue, we also need to know at every stage: Is our interlocutor done talking? Can I respond yet? What did she mean, anyway? Without figuring out these elements, a dialogue can quickly encounter turbulence: interruptions, false starts, misunderstandings. Conversation is a form of traffic without external regulatory signals. Language provides its own.

Conversation is rife with noise, distraction and ambiguity. The pace is fast. No script tells us who should talk and when. So if we run into a problem in understanding or hearing what someone just said, we need to resolve it now or never. And that is why people rely so heavily—whether we know it or not—on little signals ("Pardon?" "What?" "Huh?"), which help us "repair" glitches in conversation.

In a range of languages, from Siwu to Icelandic, people use these dedicated traffic signals to catch problems before they pass us by. In Lao, the query "huh?" is "hā"; in Cha'palaa, which is spoken in Ecuador, it's "aa"; in Chinese, it's "ha."

We use such words all the time. Hardly a minute goes by in which we don't encounter some kind of conversational hitch: a mishearing, an inapt phrasing, a name we didn't recognize. In a study of 12 languages from five continents, published in 2015 in the journal PLOS One, my colleagues and I found that a "repair sequence" occurs in informal conversations, on average, once every 84 seconds.

While some of these little signals address con-

versational problems as they arise, others actively smooth the flow of traffic. When we say "mm-hmm" and "uh-huh" as we listen to someone's story, we aren't just showing them that they have our attention; we are also helping them formulate their narrative.

In a study published in 2000 in the Journal of Personality and Social Psychology, the psychologist Janet Bavelas of Canada's University of Victoria and her colleagues gave listeners tasks that distracted them from listening to a person telling a story. Some subjects, for example, were asked to press a hidden button whenever the narrator used a word starting with the letter T. That left them less able to give the usual signals of attention to the speaker, which in turn disrupted the fluency and quality of the narrator's speech.

We often think of a narrative as a monologue, involving just one person. But in language as we live it, a listener's traffic signals—which say, in effect, "I'm following you, so keep going"—feed back into the narrator's performance. That highlights the cooperative underpinnings of language.

Some of the most common linguistic traffic signals update listeners on delays in speech. Looking at a sample of more than 23 million words of spoken English, the University of Pennsylvania linguist Mark Liberman found that, on average, one out of every 60 words that people utter will be either "um" or "uh."

Such words are often dismissed as junk syllables intruding upon otherwise clean speech. But we now know that they are crucial to the flow of dialogue. In conversation, we all have to balance the overlapping pressures of listening, speaking, planning and thinking. An appropriately placed "um" or "uh" lets the other party know where we stand: "I need a moment to prepare what I want to say, so expect a brief delay—and I'm not ready

to yield my turn at talking."

As trivial as this message might seem, traffic signals like these take us to the core of the human capacity for language, in several ways. For one thing, such little words underscore the curious property—unique to human language—of a communication system that can communicate about itself. A word like "um" doesn't add information to the topic being discussed. Instead, it adds information about the speaker's state of mind and about the conversation's flow and direction.

Second, these signals make sense within the high-speed system of turn-taking in conversation that we all employ. People are exquisitely sensitive to the passage of time: The average conversational delay before a new speaker starts up, such as when we answer a question, is 200 milliseconds—around the time it takes to blink the eye. Even the subtlest delays will be taken as meaningful. A silence after a question may suggest that the person didn't hear it or doesn't think that the questioner is done. Signals like "um" and "uh" let us avoid that silence while we take the time to formulate our next move. The signal conveys that we are indeed going to speak, that we haven't tuned out or lost track, and that we will soon resume, with everything under control.

Third, when we use "um" and "uh," we assume that our listeners will cooperate. We presume that others will abide by the "wait" signal we are sending and refrain from jumping in. The signals of language assume a cooperative, law-abiding community.

Could conversational traffic signals arise from general principles of communication that are independent of language? If so, we would expect to see these same features in nonhuman communication. But we don't. Animal communication can be complex, but as far as we know, no animal shows finely timed, cooperative turn-taking, mechanisms for repair or communicative traffic signals.

The universal query word "huh?" is a case in point. Only humans use it, obliging our conversational partners to back up and repeat or rephrase their point. Signals like "huh?" aren't complex, but they demonstrate the unique and fundamentally cooperative nature of human language.

Dr. Enfield is a professor of linguistics at the University of Sydney and the author, most recently, of "How We Talk: The Inner Workings of Conversation," out Nov. 14 from Basic Books.

WORD ON THE STREET: BEN ZIMMER

'Dogcatcher,' As Insult, Is Still Elected

IN HIS FEUD with Tennessee Republican Sen. Bob Corker, President Donald Trump pulled out a venerable political insult. On Twitter earlier this week, Mr. Trump wrote that Mr. Corker "couldn't get elected dog catcher in Tennessee." Mr. Corker has declined to seek a third term in the Senate.

Mr. Trump has frequently used the "dogcatcher" slam for politicians he has sought to paint as deeply unpopular. As Denis Slattery noted this week in the New York Daily News, as early as 1993 he called former Connecticut Gov. Lowell Weicker a "fat slob who couldn't get elected dog catcher in Connecticut."

In 2015, Mr. Trump lobbed "dogcatcher" tweets at two other former governors, John Sununu of New Hampshire and George Pataki of New York. During last year's presidential primaries, Sens. Marco Rubio and Lindsey Graham were on the receiving end of the insult. And at a post-debate rally in October 2016, Mr. Trump said, "Without the media, Hillary Clinton couldn't be elected dog catcher."

The political barb long predates Mr. Trump. But could anyone ever actually be elected dogcatcher? Philip Bump of the Washington Post uncovered evidence that "dogcatcher" has occasionally been an elected position in some American towns. But the vast majority of the time, the position of dogcatcher—considered the lowest of the low on the political totem pole—has simply been the butt of jokes.

The roots of the phrase go back to early 19th-century American politics. The researcher Peter Reitan (who blogs under the name Peter Jensen Brown) wrote recently that "the office of 'dog catcher' has served as the benchmark for electoral futility since at least 1831." In that year, the Boston Masonic Mirror disparaged a member of the Antimasonry Party as a nobody: "He is probably some obscure citizen, or disappointed office seeker, who is willing even to be known as a dog-catcher," rather than not get any newspaper coverage.

Twenty years later, in 1851, a correspondent for the Cincinnati Gazette despaired at news that leaders of the Whig Party had

The joke has proved more popular than 'fiddler general.'

agreed to a controversial new constitution. "Neither of them could get my vote for the office of dog-catcher," he wrote.

In the 1870s and '80s, the now-familiar joke began to take shape. A writer for the New York Herald in 1874 remarked that thanks to the corruption of Boss Tweed, "candidates who could not be elected to the position of 'dog catcher' in any other country" could win in New York easily. And in 1885, an Ohio newspaper said of a politician from Kansas that "he could not be elected dog catcher" in his home state.

Other elected offices, both real and imagined, have been used in the same joking formula, such as "fiddler general." When David Burnet ran for president of Texas in 1841, when it was an independent republic, Sam Houston soundly defeated him, and a military veteran said Burnet "could not get elected fiddler general." The lowly bureaucratic position of "path-master" (a kind of road commissioner) also sometimes filled the gap in 19th-century versions of the joke. But nothing had the satisfying bark and bite of "dogcatcher."

Answers
to the News Quiz on page C13:

**1.C, 2.C, 3.B, 4.A, 5.D, 6.D, 7.C,
8.C, 9.A**

PHOTO OF THE WEEK



Terrifyingly Tasty

A ring-tailed lemur joined the Halloween celebrations on Friday at a zoo in Amersfoort, Netherlands, by digging into a Jack-o'-lantern.

BOOKS

THE WALL STREET JOURNAL.

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The Most Elegant Tinkerer

Trained as an engineer, Alexander Calder introduced motion to the ancient art of sculpture

Calder: The Conquest of Time

By Jed Perl
Knopf, 687 pages, \$55

BY HENRY PETROSKI

ALEXANDER CALDER was born into a family of artists but devoted himself entirely to art only after studying and practicing engineering as a young man. Calder's father and grandfather, both also named Alexander, were sculptors in a classical vein; his mother, Nanette, was a painter. In "Calder: The Conquest of Time," the first volume of Jed Perl's long-gestating biography of this most original of modern artists, the author tells the story of the youngest Alexander Calder's life from birth to midlife, by which time he had established himself as a force to be reckoned with in the international art world.

Like many a young artist, Calder experimented with a variety of creative forms, including drawing, painting, portraiture, wire sculpture, performance art and motor-driven assemblages. The last three of these, especially, he created with his own mark of distinction, which was not universally acknowledged as brilliant. His preoccupation with using motion instead of more traditional formal artistic compositional elements, however, would in time manifest itself in his signature genre of mobiles. "This I consider a rather natural turn for me," he would write, "for I was once an engineer, and am a graduate of Stevens Institute of Technology."

In this volume we meet first Calder the child, then Calder the engineer and, finally, Calder the emerging artist. Mr. Perl describes Calder's life in mostly chronological order, to a degree of detail that has not previously been achieved. Although Calder did dictate autobiographical notes that, transcribed by his son-in-law, were published in 1966 in book form as "An Autobiography With Pictures," Mr. Perl's biography is the first to benefit from extensive access to archives, including those of the protective Calder Foundation, making this, if not an authorized biography, certainly a highly encouraged one.

While Calder, as a child, did show signs of creativity and artistic leanings, such as making occasional jew-



MASTER OF CEREMONIES Calder in 1929, at work on his 'circus,' whose figures he would manipulate for intimate performances in Paris and New York.

elry for his mother and sister, he seems simply to have led the life of just a curious child. He was fascinated by construction projects and spent countless hours as a sidewalk superintendent, observing constructions in progress. From an early age he also retreated into his own workshop, something his parents always made sure he had, no matter where they lived—and they lived from coast to coast, depending on the elder Calder's health and where he received his commissions for sculptures.

The family was living in California when young Alexander and his sister, Peggy, came of college age. Peggy attended the University of California, Berkeley, and the apparently fulfilling college experience she had there made him determined to attend college himself. Being neither encouraged nor discouraged from

pursuing an artistic career by his parents, who knew firsthand the difficult life of securing commissions and moving to where work took them, the young "Sandy" Calder was left to his own devices to choose what to study.

Following a friend's lead, Calder settled on engineering—not a surprising choice given his mechanical curiosity and workshop tinkering. The elder Calder, through one of his own friends, identified the Stevens Institute of Technology in Hoboken, N.J., as the place for young Sandy to go to study mechanical engineering. Stevens is just across the river from Manhattan, where the elder Calder would move his family while he worked on the bas-relief of George Washington that adorns the arch in Washington Square Park.

Sandy appears to have thrown himself into engineering studies, and

he worked seriously as an engineer for a while after graduation, even cultivating a mustache to look more experienced in the profession. It was while giving engineering a chance that he began to take his first formal

It was Marcel Duchamp who suggested the name 'mobile' for the artist's innovative creations.

art classes and transition toward a career in art. But he would not forget what he learned at the school whose only course of study was mechanical engineering, and a perusal of the textbooks used when he was a student shows the seeds of art in motion in their pages.

Mr. Perl tells much of the story of Calder's engineering education and practice in two chapters, one titled "The Stevens Institute of Technology" and the following, "Engineering." Instead the remaining 26 chapters of this literally heavy 700-page book deal not unexpectedly with Calder's life as a struggling and then successful artist, living mostly in New York and Paris, becoming part of the avant-garde art scene and finding his most mature artistic voice in his mobiles (and, we can expect, in the sequel, his stabiles). But Mr. Perl curiously stops short of pursuing in any depth the influence of engineering study and practice on Calder's art.

Among the aspects of Calder's engineering career that Mr. Perl plays down is his design of children's toys, especially those that moved in

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A Wonder Boy on the Wrong Side of History

Hoover

By Kenneth Whyte
Knopf, 728 pages, \$35

BY EDWARD KOSNER

HERBERT HOOVER was an American tragic hero—a man brought down by the very qualities that made him great.

People think of Hoover, if they think of him at all, as a stiff old man in a double-breasted suit doddering out of the Waldorf Towers on Park Avenue with a wan wave. Historians often rate him with Warren Harding, Andrew Johnson and James Buchanan as among the worst American presidents. Hoover's presidency was overwhelmed by the Great Depression, and he was swept from the White House by Franklin D. Roosevelt's 1932 landslide that heralded the New Deal.

So what's to be gained from another door-stopping biography of the 31st president? As it happens, a great deal. Time and the erosion of American history and civics courses have all but obliterated Hoover from American consciousness. That's a shame, because Hoover's life is one of the most fascinating in our annals, and some of the issues that bedeviled and ultimately destroyed his presidency still resonate today.

In these frantic times, it's nearly impossible to grasp the sustained reach of Hoover's career and achievements. He was born in 1874, during President Ulysses S. Grant's second term and lived to meet John F. Kennedy Jr. in Hoover's final year, 1964.

He served in one way or another Presidents Wilson, Harding, Coolidge, Truman and Eisenhower. Conceived during the Panic of 1873, he graduated in Stanford's first class right into the Panic of 1893. In 1929, barely six months into his presidency, what turned out to be the Great Depression convulsed the country. America ultimately recovered, but Hoover's reputation never did.

Kenneth Whyte, a Canadian newspaper and magazine editor and chronicler of William Randolph Hearst, is the latest to try to retrieve this perplexing figure from the controversy and contempt that have enveloped him. Mr. Whyte's "Hoover: An Extraordinary Life in Extraordinary Times" is an exemplary biography—

Hoover was a prodigy of ability and insecurity, scruple and ambition, ruthlessness and charity.

exhaustively researched, fair-minded and easy to read. It can nestle on the same shelf as David McCullough's "Truman," a high compliment indeed.

On the very first page, the author proclaims his subject "a blur," but then goes on to detail how Hoover was actually one of the most peculiar men ever to win the White House—a prodigy of ability and insecurity, scruple and fervent ambition, ruthlessness and philanthropy. High-minded to a fault, he could be a shark in business. He was at once taciturn and compulsively gregarious, hard-pressed to

grunt out a "yes" or "no" to guests at his crowded dinner parties. He was married to the love of his life for 45 years, but they rarely lived together in any of his many houses at the same time. They signed their frequent letters to each other "Herbert Hoover" and "Lou Hoover." He was never happier than standing alone for hours in a freezing trout stream waiting for a nibble.

Hoover was one of those people who wake up in adolescence and realize that they are smarter, more energetic, more disciplined and thus more capable than anyone else they encounter. Born to a poor Quaker blacksmith and fervently religious mother in the farming hamlet of West Branch, Iowa, he was orphaned at 9. He was parceled out to relatives as far west as Oregon, always the outsider in these surrogate families. At 14, he went to work as an office boy at an uncle's land-management firm, and soon made himself indispensable. At 17, he was admitted to Stanford, eventually graduating only after a sympathetic professor rewrote a required essay.

His pre-presidential résumé was as odd in its way as Donald Trump's, and it prefigured his ordeal in the White House. Hoover studied geology at Stanford and expected to graduate into a good job at the U.S. Geological Survey. The economic downturn scuttled that, so he set off to seek his fortune 9,000 miles away in the gold

rush country of Western Australia, a sun-scorched, lawless wilderness, where he sloshed through the muck of long-shot mine tunnels.

Over the next 20 years he made millions as a mining engineer in Aus-



DRIVEN The 31st president of the United States (1929-33).

three of the colored races in simple tasks like shoveling, and as high as one to eleven in the more complicated mechanical work." In China, he ran a lucrative joint venture with a well-connected Mandarin. Over time, Hoover managed to seize control of the operation using such shady tactics that he was excoriated by a British judge as a fraudster.

Hoover sold off most of his interests for \$4 million in today's money and re-established himself in London as World War I loomed. Then fate intervened—changing Hoover's life and America's destiny. The outbreak of war stranded tens of thousands of American tourists in London and on the Continent. Unbidden, Hoover showed up at the American consulate to get the refugees safely home. Efficient as always, he organized the rescue effort—the first of a series that established Hoover's reputation as the autocratic savior of the distressed and propelled him to the presidency. After Germany invaded Belgium, he promoted himself into the job of feeding the starving Belgians. This was a ticklish operation involving raising hundreds of millions of dollars, persuading the British to allow food ships to penetrate their blockade of the North Sea

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BOOKS

'Empires die, like all of us dancers in the strobe-lit dark . . . not dancing but twitching. . . . Life is a terminal illness.' —David Mitchell

Cosmic Retribution

The Fate of Rome

By Kyle Harper

Princeton, 417 pages, \$35

BY JAMES ROMM

'THESE LATE ECLIPSES in the sun and moon portend no good to us,' remarks Gloucester in Shakespeare's 'King Lear,' just as the mythic British monarchy he serves begins to collapse. Tragedians from the Greeks onward have maintained that political disasters are attended by disruptions of nature: Comets presage the deaths of rulers, earthquakes and storms herald the downfall of states.

It is not hard to see the self-flattering appeal of such an idea: Man's fate corresponds to the arrangement of the cosmos itself, one sphere affecting the other. Yet in literary form, such a correspondence can appear more imagined than real, leaving the linkage open to dispute. Thus Edmund, Gloucester's coldly rational son, dismisses his father's astrology as 'the excellent folly of the world': To believe that the stars guide earthly events, Edmund says, is merely to shift responsibility away from human agency and onto unseen, uncontrollable forces.

Amid the earthquakes and hurricanes and the solar eclipse that our continent has witnessed in the past few months, many of us are no doubt hoping that Edmund, not Gloucester, is right about such matters: that we need not read portents into nature. But rationalism has provided a new spin on this old debate. Killer storms like Irma and Maria have been blamed on global warming, a trend likely accelerated, if not caused, by human factors. The growth of industrial civilization has, in this view, produced changes in the natural order that now wreak havoc on the very societies that spawned them. Modern science thus lends support to the idea that human overreach leads to cosmic retribution, a pattern that has deep roots in classical myth and tragedy.

Myth and science rub shoulders in 'The Fate of Rome: Climate, Disease, and the End of an Empire,' an original and ambitious, if not wholly successful, study by University of Oklahoma classicist Kyle Harper. Mr. Harper has assembled vast amounts of precise measurements, including the lengths of skeletal femur bones and beryllium isotope readings from ancient mineral deposits, in support of his thesis that climatic instability and infectious disease hastened the collapse of the western Roman Empire.

Yet Mr. Harper's mode of presentation is far from that of a dispassionate scientist. The book's title, which deploys the word 'fate' where another writer might have used 'fall,' invokes ideas and patterns from the world of tragedy, as do chapter headings such as 'Apollo's Revenge,' 'The Wine-Press of Wrath' and 'Judgment Day.' Mr. Harper's prose style, with its florid descriptions of the end of days, sometimes savors of the Book of Revelation or the famous Jonathan Edwards sermon 'Sinners in the Hands of an Angry God.' The effect



TIME AND TIDE Detail of a Roman mosaic from the first century B.C. depicting the Nile River in flood.

can be enthralling, though the underlying analysis may require a calmer, more thorough review of the evidence to judge properly.

It has long been recognized that Rome's golden age of expansion and empire was blessed by what is now routinely labeled the Roman Climate Optimum—"a warm, wet, and stable climate regime" that "turned the lands ruled by Rome into a giant greenhouse." (A greenhouse, in this context, of course implies a state of optimal growing conditions and is not an emblem of trouble, as it has become with our worry over "greenhouse gases.") Opinions vary widely on the dates of the RCO, but Mr. Harper, citing various bodies of evidence, argues that its span ranged from 200 B.C. to A.D. 150—almost exactly the era of Rome's greatest efflorescence.

The breakdown of the RCO was not the Romans' fault to any great degree, though their cutting down of trees for fuel and farmland did contribute to it. More prominent in Mr. Harper's retributive scheme are the three great plagues that ravaged the empire in the second, third and sixth centuries, contagions that thrived amid the density and interconnectedness of Roman populations. These pestilences, Mr. Harper suggests, arose as a result of the growth, expansion and complexity of the empire. They were "Apollo's Revenge," a kind of divine payback for the overreach of a great, grasping, global state.

The disasters that Mr. Harper charts reinforced and amplified one another. Climate changes in later antiquity, as the stable RCO gave way to extreme fluctuations, contributed to the spread of disease. Increased rainfall in Asia, for example, may have driven plague-bearing rodents out of their holes and into closer proximity to towns and cities. Human populations, too, were unmoored by disruptions in weather patterns. Thus Mr.

Harper characterizes the Huns, who burst upon Rome from beyond its northeastern frontier in the late fourth century, as "armed climate refugees" more than as marauding invaders, their native lands newly ravaged by drought: "The nomads who called central Asia home suddenly faced a crisis as dramatic as the Dust Bowl." Frontier defenses collapsed in part because plague had depleted their manpower. The chain of Rome's misfortunes, set alongside climate change, plagues and migrations, thus seems to be part of a vast "feedback loop."

Mr. Harper proceeds chronologically, kicking off each chapter by recounting, in broad strokes, the political and social evolution of Rome in one of its final centuries. Then calamities arrive. Mr. Harper's gift for prose style allows him to keep the

is the research that went into it. Mr. Harper has had to master specialized fields far outside the normal scope of the classicist. His evidence comes not only from obscure and difficult literary testimonia but from tree rings, ice cores and speleothems (excrencences found in caves from which ancient humidity levels can be deduced). He has had to cope with contested questions like the size of the empire's population and the identification of pathogens based on reports of their symptoms. At the heart of his study is the most vast and most contested question of all, the reasons for Rome's decline—a topic that, over the centuries it has been studied, has spawned more than 200 separate theories (according to a count Mr. Harper cites). These range widely—from the changing ethnic and religious makeup of the empire to the contamination of drinking water by lead pipes—or else give way to a sense that all empires eventually decline and, to borrow again from "King Lear," the wonder is that Rome endured so long.

Has "The Fate of Rome" finally resolved this question? Hardly. Mr. Harper has nicely laid biological and climatic disasters side by side with the various stages of Rome's fall, but the relationship between the two is much harder for him to establish.

At key points he hesitates to characterize it as one of cause and effect, and hesitate he should, for his evidence is often too thin, or too poorly presented, to bear out such a thesis.

Did Rome collapse because it got sick, or did it get sick because it was in collapse? Mr. Harper does not convince us that he knows the answer, but he does provide a panoramic sweep of the late Roman Empire as interpreted by one historian's incisive, intriguing, inquiring mind.

Mr. Romm is the author of "Dying Every Day: Seneca at the Court of Nero."

tension high even though his story follows a predictable downward path. He particularly relishes incantatory lists of systemic failures: "Anarchy was loosed on the world. . . . The stupendous fabric was about to come undone. . . . The structural integrity of the imperial machine burst apart. The frontier system crumpled." These four sentences are densely bunched on a single page, and one can find many pages in this book that carry similar aggregations of woe. It's debatable whether such passages should be classed as history or rhetoric, but in either case, fans of the dystopian and apocalyptic will find them greatly entertaining.

This book's ambitions are vast, as

Reclaim Your Brain

How to Think

By Alan Jacobs

Currency, 157 pages, \$23

BY BARTON SWAIM

THE ONLY TROUBLE with Alan Jacobs's book is the title. You can't give it as a gift, for one thing. Imagine receiving a book called "How to Think." Of all the nerve! For another, who wants to be told "how to think" by some bearded academic who teaches English and thinks it's normal to take the summers off?

Yet it is precisely this sort of intellectual presumptuousness that Mr. Jacobs wants to discourage in this wise and delightful treatise. Our rancorous politics and cultural bifurcation encourage us to reject arguments with which we may disagree before we even hear them, and social media tempt us to treat the people who make those arguments in ways we rightly find outrageous and abusive when directed at us. Plenty of books have lamented these trends and offered partial explanations for them. What makes Mr. Jacobs's so refreshing is that he considers bad thinking not as a cognitive problem but as a volitional one. The problem, he thinks, isn't one of "overcoming bias." Everyone is biased, especially those who think they've overcome their biases. "The fundamental problem we have may best be described as an orientation of the will: we suffer from a settled determination to avoid thinking."

In seven brief chapters, Mr. Jacobs suggests methods by which readers may cultivate habits that encourage the charitable and clear expression of

Few of us are really good at thinking. Indeed, most of us suffer from a settled determination to avoid it.

thought. Some of these may sound obvious but evidently aren't: For instance, always state views with which you disagree in a way that the holders of those views would find fair and accurate. Others seem (for me anyway) less obvious: Wait five minutes before responding to any opinion you find wrong or odious.

Another: Learn to think by spending time with people with whom you may not always agree but whom you know and trust. That rules out social media, where one's natural inclination is to gravitate toward those with the same opinions and where one knows and trusts almost no one. Learning to think among friends and colleagues takes work, and it runs counter to the popular ideal of good thinking captured in the phrase "think for yourself." When people urge you to start "thinking for yourself," Mr. Jacobs suggests, "they usually mean 'ceasing to sound like people I dislike and starting to sound more like people I approve of.'

Language itself poses the most serious problems for clear thought, and Mr. Jacobs treats these with balance and verve. The trouble, he suggests, is this: We think in keywords, metaphors and myths. By "myths" he means what the philosopher Mary Midgley means by the term: "imaginative patterns, networks of powerful symbols that suggest particular ways of interpreting the world." There's no use pretending we can somehow free ourselves from these linguistic features: They are the means by which the human mind functions. But metaphors and myths get in the way when allowed to sit too long; they stagnate. Mr. Jacobs offers the terms "intersectionality" and "white privilege" as words relied upon so heavily by their users that they become hindrances rather than aids to thought. I would add another: "globalist."

Mr. Jacobs is a Christian in the Augustinian tradition, and it shows. The reasons educated and otherwise well-functioning Americans have fallen into habits of name calling and gross intellectual dishonesty, he argues, can't be boiled down to philosophical disagreements or some atavistic cultural neurosis. It's the result of laziness. Mr. Jacobs insists we must try harder. *Of all the nerve!*

Mr. Swaim writes a column on political books for the Journal.

The Extraordinary Herbert Hoover

Continued from page C5

and the Germans not to commandeer the rations. It was a spectacular success, and prompted Woodrow Wilson to add Hoover to the U.S. delegation to the Versailles peace conference, where he presciently warned against punitive German reparations.

Warren Harding proclaimed Hoover "the smartest gink I know," and made him secretary of commerce, a role that Hoover inflated into czar of the American economy. "Control was almost as oxygen to him," writes Mr. Whyte. He managed to escape the stigma of the scandals that emerged after Harding's death in 1923 and prospered under the new president, Calvin Coolidge. When the great Mississippi flood of 1927 inundated much of the Midwest, Hoover organized the disaster recovery effort—pioneering what became a half-century later FEMA, the Federal Emergency Management Agency. Silent Cal found Hoover valuable but insufferable and dubbed him "wonder boy."

Like many fiascos, Hoover's presidency started off promising enough. He temporized enough about Prohibition ("a great social and economic experiment") during the 1928 campaign to thrash Al Smith, the wet Roman Catholic Democratic candidate, winning 58% of the vote and 40

states. The stock market had quintupled since the bull run's start in 1921. The rampant speculation and loans to brokers spooked Hoover, and he tried to impose restraint. He was stunned by the eventual crash, but as he had in earlier crises, he mobilized to control the damage.

Working 14- and 16-hour days, he extracted promises from corporate chiefs not to impose layoffs and from union bosses not to call strikes. He even came up with a version of a stimulus bill to recharge the economy.

But self-reliance was bred in Hoover's bones, and he rebuffed the clamor for vigorous federal intervention. He vetoed an early version of the Tennessee Valley Authority and a plan to set up government job exchanges and refused to pay veterans' bonuses early, inciting the bonus marchers who stormed the capital until subdued by troops led by Maj. Dwight Eisenhower and Maj. George Patton. He did set up the Reconstruction Finance Corp., which proved so effective later under FDR. But Hoover's reticence kept him from comforting the stricken even as false signs of recovery yielded to deeper collapse. The spreading encampments of the destitute were appropriately labeled "Hoovervilles."

Roosevelt's 1932 triumph embittered Hoover, who watched the new president's muscular embrace of policies like the bank holiday and fudging the gold standard that he himself had been too timid to push. He spent broody hours alone playing solitaire and compiling lists of people who had been disloyal to him. He finally roused himself to castigate the New Deal as "a muddle of uncoordinated and reckless adventures in government" and equated it with "Bolshevism, Hitlerism, Fascism."

Just 58 when he left office, Hoover fashioned a third act as a conservative evangel of small government and personal responsibility. On the brink



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of World War II, he was a fervent America-first noninterventionist. "Hoover did recognize Hitler as a madman and a menace to the peace," writes Mr. Whyte. But he insisted that Germany and Japan were no threat to the U.S., even if Hitler should conquer Great Britain. Roosevelt should stop provoking Japan, he argued, and let Hitler and Stalin fight to the death. As America mobilized, Hoover lamented to a friend, "We are the lepers. At least our consciences are clear."

Hoover stayed active to the end. He ran commissions on government reorganization for Truman and Eisenhower, established a conservative think tank at Stanford, and was hailed at Republican conventions. He wrote seven books in his last five years at the Waldorf Towers. When he died, he had lived longer than any American president except John Adams.

Mr. Whyte is neutral almost to a fault in his judgment of Hoover, particularly the choices he made as president and beyond. However brilliant the man, he managed time and again to put himself on the wrong side of history, his inescapable legacy.

Mr. Kosner is the former editor of Newsweek, New York, Esquire and The New York Daily News.

BOOKS

'Diversity of opinion within the framework of loyalty to our free society is not only basic to a university but to the entire nation.' —James B. Conant

Citizen Conant

Man of the Hour

By Jennet Conant
Simon & Schuster, 587 pages, \$30

BY STEVEN SHAPIN

THE PRESIDENT OF HARVARD calls for the periodic confiscation of all personal property. He demands "really effective inheritance and gift taxes and the breaking up of trust funds and estates." He says that he would not be upset if private education disappeared, and he calls for a radical increase in American social mobility, if necessary using "a bit of totalitarian power . . . to reorder the 'haves and have-nots.'

It is 1943; the president is the chemist James Bryant Conant; his opinions are broadcast in the *Atlantic Monthly*; and the reaction of the Harvard establishment is explosive—predictably so, as such a high proportion of its undergraduates, and future donors, come from private schools, and since the "Corporation," its aptly named governing body, represents one of the nation's more spectacular stores of accumulated wealth. One Corporation Fellow Tom-Brownish snips at Conant—Old Boston but from the wrong side of the tracks—that this isn't a "dignified or sportsmanlike" way of talking. The Wall Street Journal surprisingly approves Conant's call for a "more fluid society." Meanwhile, some Corporation Fellows begin Vatican-style plotting to secure Conant's resignation.

The Atlantic essay was an inflection point in the career of one of the 20th century's most remarkable men. You can understand quite a lot about Conant, Harvard and the state of the nation by asking what led him to say such things and why his proposal never had a chance of succeeding. Conant's public life has been treated before. James Hershberg leveraged his sprawling 1993 biography into something like a case study of American science and its political relations—justifiably, since Conant positioned himself, like a spider, at the center of the post-World War II web that joined the government, the military, the scientific establishment and academia. Jennet Conant's "Man of the Hour" is more compact, more punchily novelistic and far more readable. Ms. Conant is her subject's granddaughter, and much of this book's vividness comes from family reminiscences. One strand tracks Conant's public life, and if it doesn't add hugely to Mr. Hershberg's account of Conant's political acts and beliefs, it's better on his Harvard career and his views about American education in general. The author calls "My Several Lives" (1970), her grandfather's guarded autobiography, "remarkably impersonal," and another strand of "Man of the Hour" sensitively describes the appalling family life that Conant worked so hard to keep private: his marriage



YARD WORKER James B. Conant at Harvard in 1933, the year he was installed as president of the university.

was miserable; he was an emotionally cold and bullying father; his eldest son was afflicted with serious manic depression; and, in the end, Conant himself suffered a nervous breakdown. The intercutting of the rough and private with the smooth and public gives "Man of the Hour" a gripping and disturbing effect—like a draft of a John Cheever novel.

Conant (1893-1978) was no ivory-tower scientist. Even before he completed his doctorate in organic and physical chemistry at Harvard, he helped start up a company in Queens that manufactured the food preservative benzoic acid. With America's entry into World War I, Conant took a commission in the Chemical Warfare Service. His task was to develop poison gases—first mustard gas, then an even nastier brew called lewisite. Conant had Quaker branches on his family tree, but he had no qualms: What, he asked, was the moral difference between killing soldiers with explosives and killing them with gas?

His wartime work made Conant a hot prospect for chemical companies, but he turned down lucrative industry offers and returned to a teaching position at Harvard, where he successfully courted his posh

Doktorvater's high-strung daughter. His academic career flourished and, in 1929, he was made full professor. Early on, Conant had told his bride about his career ambitions: one was to be "the greatest organic chemist in America" and another was to become "President of Harvard." In

Conant was at the center of the web that joins the government, the military, science and academia.

1933, the Corporation elected him president, succeeding the patrician A. Lawrence Lowell. Conant now left the lab for good and devoted himself to the university.

Harvard stands always in urgent need of reform, and Conant set about systematically unwinding at least some of the results of his predecessor's bigotries. Having earlier supported Lowell's restrictions on admitting Jews, and despite sharing a then-common genteel anti-Semitism, President Conant now started to dismantle a formal quota system.

He agitated for full-freight scholar-

ships to open up Harvard to students of modest means, and he encouraged the admission of more "meatballs"—hard-working, lower middle-class, often non-WASP students—and fewer of the privileged elites. (One Jewish beneficiary praised Conant as "the first president to recognize that meatballs were Harvard men too.") He began his long-lasting support for the development of the Scholastic Aptitude Test, intended to guarantee a meritocratic element in admission. Withstanding faculty revolts against his authoritarian and heavy-handed leadership, Conant instituted a system of president-chaired ad hoc committees to vet faculty appointments, pressing for Harvard's famous "up or out" conventions, supposedly to weed out "deadwood"; and he overcame his own reluctance "to open Harvard College to young ladies," finding wartime efficiency-based reasons to relieve the professors of having to give duplicate lectures at Harvard and Radcliffe.

Yet while Conant was keen to appear on the side of the excluded and the downtrodden, he ensured that many of Harvard's hallowed traditional ways remained intact. Throughout his presidency, meritocratic rhetoric poorly matched insti-

tutional realities. There were more "meatballs," but no more than Olde Harvard could digest; alumni "legacies," the produce of private schools, and "balanced" athletes continued to arrive in suitable numbers; the proportion of Jews increased, but not alarmingly so.

By 1941, and without giving up the Harvard presidency, Conant was back at war again. He was recruited to chair the powerful National Defense Research Committee, coordinating the mobilization of wartime scientific resources. When his Atlantic essay poked the Corporation hornet nest, the Fellows wondered what was so important in Washington that Conant could not return and devote his full attention to Harvard, but the president could not say: his work was secret—and the Top Secret was the atomic bomb. Conant was present at the Trinity test; he advised that the weapon should be used on a Japanese war materiel "plant employing a large number of workers and closely surrounded by workers' homes"; and he never regretted the Hiroshima bombing.

After the war, Conant came back again to Harvard, but his mind, and much of his time, had turned to politics. He continued as a key figure in the politics of nuclear weapons development, and he finally resigned the presidency in 1953 to become U.S. High Commissioner for Germany. But most of his political and intellectual energies were now devoted to national education policy. Conant described himself as "one of the first of the Cold Warriors," and his Atlantic essay wasn't motivated by socialist convictions but by a fear that blocked social mobility and restrictive university admissions policies were wasting strategic human resources in the coming death-struggle with the U.S.S.R. The "top 15 percent" of the country's brains were America's "secret weapon": You needed objective testing to identify those brains and you needed a more open college admissions policy to ensure that they could be effectively developed into a stockpile of Cold War talent. There was nothing soft-headed about Conant's vision of meritocratic access: Its ultimate justification was national security in the world the Bomb had made.

The subtitle of Conant's autobiography was "Memoirs of a Social Inventor." He had invented poison gas; he had managed the invention of the Bomb; he had helped invent the modern Harvard; and he aimed to reinvent American education as a whole. But his greatest invention was himself: a new type of social being on the American scene—the scientist-administrator-social engineer. His granddaughter's biography is an outstanding portrait of a technocrat, at work and at home.

Mr. Shapin, a professor of the history of science at Harvard, is the author of "The Scientific Revolution."

The Early Years of Alexander Calder

Continued from page C5

amusingly animated ways when pulled. These inventions relied upon bent axles, eccentric wheels, clever cams and other kinematic curiosities—all staples of machine-design—to result in cartoonlike animals such as waddling ducks, flapping birds and swimming fish. Calder's design drawings for these, and for the waddling duck, especially, show a clear sensitivity to engineering as well as artistic considerations. Yet they are all but missing from Mr. Perl's otherwise exhaustive treatment of Calder's artistic development.

We are, however, thoroughly introduced to one important precursor to Calder's mechanical art—his "Cirque Calder," a unique performance piece consisting of miniature circus figures animated by the hammy hand of the bear of an artist. In the 1920s and 1930s, Calder transported the components of his three-ring show from place to place in as many as five valises. He shaped his small performers out of wire and put them in motion riding horses, swinging from trapezes and walking along tightropes, just like real circus performers do. He would spend hours setting them up on the floor of galleries and living rooms, where he put on performances that enthralled small audiences in Paris and New York.

The Calder Circus is generally credited with gaining the young artist attention for his creativity and

playfulness, though not everyone was amused. One notable critic was the writer Thomas Wolfe, who witnessed anonymously a performance of the circus in a fashionable New York apartment and incorporated an uncomplimentary depiction of the

former art critic for the *New Republic* and now a regular contributor to the *New York Review of Books*, is eminently knowledgeable about artists, art movements and galleries, as well as the influences of the 1920s and 1930s that are the focus of this

creations, and it had been in Piet Mondrian's studio that Calder got the idea of introducing motion into his art. According to Mr. Perl, it was (among other things) "the implicit speed of Mondrian's stripped-down compositions . . . that came together in Calder's work."

Mr. Perl does an excellent job of placing Calder's work in the context of that of his artistic contemporaries, all the while moving the biographical narrative forward to chronicle his young family's transatlantic commuting and, finally, how

The Stevens Institute of Technology in Hoboken shaped Calder as much as did Paris and New York.

he and his wife settled down in Roxbury, Conn., where they raised a family. There Calder designed and supervised the construction of his famous studio, with its walls of windows and its clutter of rods, wire, sheet metal and wood mixed among his tools, including his favorite ones of wire cutters and bending pliers—not to mention crowded clouds of mobiles hanging from the ceiling.

A photograph of Calder dwarfed in his studio is the last of some 350 well-chosen images—a good number

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POISED Jed Perl calls Calder's 'Steel Fish' (1934) 'rawboned, loose-limbed, frank.'

event in his novel, "You Can't Go Home Again," with the character Piggy Logan being a thinly disguised Calder. The artist was angry that Wolfe did not introduce himself at the soirée.

As might be expected, Mr. Perl, a

book. Just about every well-known artist—and many obscure ones—is mentioned, because Calder interacted with so many of them socially and creatively. For example, it was Marcel Duchamp who suggested the name "mobile" for Calder's moving

in color—that Mr. Perl has included in his book, and all very thoughtfully placed. It was rare that I read on one page of some artist or work that I did not find a relevant image on the same or the following page. There is one by André Kertész of a moustachioed Calder intently at work on his circus act. There is another of a young Calder in his Paris studio, standing behind one of his dynamic creations while employing wooden pulleys and string and, perhaps, a hidden motor, something Calder used in many of his early moving sculptures but ultimately abandoned in his delicately balanced and air-current-driven mobiles.

This image of the young Calder, which also appears on the book's dust jacket, is the most striking in the book. It reminded me of so many engineering graduate students I have known, working in their laboratories on some jerry-rigged apparatus. Had Calder not studied at Stevens a century ago, the world of art and the general culture might not know mobiles and stabiles as they do today: His genius was a blend of art and engineering, with the latter being something the artist never forgot.

Mr. Petroski is a professor of engineering and history at Duke. His book "The Road Taken: The History and Future of America's Infrastructure" is now out in paperback.

BOOKS

'Our country's strong, our country's young / And her greatest songs are still unsung.' —John Latouche

Words and Shadows

The Ballad of John Latouche

By Howard Pollack

Oxford, 565 pages, \$39.95

BY BRAD LEITHAUSER

BIOGRAPHIES GENERALLY break into two categories. When the subject is famous, the biographer will set out to prove that here at last has arrived the most insightful or comprehensive or fresh portrait available. When the subject is obscure, the biographer's first and chief task is to convince us to spend substantial time with a relative stranger.

Howard Pollack's "The Ballad of John Latouche: An American Lyricist's Life and Work" falls into the second category. Latouche died in 1956. This is his first biography. During his frenetic and too-brief life—he died of a heart attack at age 41—he was a whirling phenomenon, both ubiquitous and transient. He never sat still. Collaborators found him bright and beguiling and irksome.

Those collaborators included some of the most esteemed names in American theater and popular song. Latouche provided lyrics for Duke Ellington (who called him a "great American genius") and Leonard Bernstein and Vernon Duke. Frank Sinatra and Paul Robeson and Bing Crosby sent his words sailing out over the airwaves. He wrote for films, he adapted plays by Cocteau and Strindberg, he translated poems by Verlaine and Brecht. During his abbreviated career, he roused a chorus of voices, yet most of the echoes proved to be short-lived. These days, Latouche is pursued by silence.

Born in Baltimore, reared in Richmond, Va., he set out in 1933 for Columbia University, where in a rocky freshman year he somehow managed to flunk, among other subjects, personal hygiene. (We're not told exactly how he did that.) Manhattan became his adopted home. He played up the Southern and French side of his ancestry (his father's) and downplayed the Jewish side (his mother's), establishing himself as an exotic transplant from warmer and friendlier climes.

Though he often worked with the best, what resulted wasn't always their best work. Vernon Duke spun out some of the most beloved melodies in the great American songbook: "April in Paris," "Autumn in New York," "I Can't Get Started." But none of these was done with Latouche. It appears their only lasting collaboration was the charming "Taking a Chance on Love" ("Here I slide again / About to take that ride again / I'm starry-eyed again / Taking a chance on love"). The song was recorded by pretty much everybody (including—my favorite—a plaintive 1943 rendition by Benny Goodman and Helen Forrest). But when you consider the talents of Vernon Duke, let alone those of Bernstein or Ellington,



PAS DE DEUX IN BLUE Duke Ellington and John Latouche in 1946.

you can't help lamenting that richer fruit didn't spring from so fertile a shared soil.

Perhaps some personality flaw in Latouche stifled the best in his artistic partners. Or he was unlucky. Or he was beset by a crippling ambivalence. (His friend the novelist and composer Paul Bowles recalled that Latouche "made his living writing song lyrics, although he called himself a poet, and bitterly resented my calling him a lyricist.") In any event, given his formidable gifts—a flair for foreign languages, a keen memory, a profound knowledge of folksongs and English pub ballads—you might have expected him to claim a larger role in the spacious auditorium of the American popular song.

Mr. Pollack portrays Latouche as a kind of minor-league Lorenz Hart, but this is unconvincing. Hart had both an adroit, jokey tenderness ("Your looks are laughable, / Unphotographable, / Yet you're my favorite work or art") and a headlong zaniness ("When love congeals / It soon reveals / The faint aroma of performing seals") that Latouche lacked. What Latouche did possess in abundance, as demonstrated in a 1984 album by Richard Rodney Bennett, "Take Love Easy: The Lyrics of John Latouche," was a winsome straightforwardness. You have to admire the deft simplicity of the opening to "Lazy Afternoon":

It's a lazy afternoon
And the beetle bugs are zoomin'
And the tulip trees are bloomin'
And there's not another human
In view
But us two.

He shone brightest when he didn't seek to be flashy.

At the end of the day, though, Latouche's reputation must rest with "The Ballad of Baby Doe," Douglas Moore's 1956 opera, to which Latouche provided libretto and lyrics. Among 20th-century operas in English, it's something of a rarity in both the ardor of its followers (the self-styled "Doe-heads") and its many revivals.

Ellington called Latouche 'a great American genius... a man so imitated today by other people writing shows.'

"The Ballad of Baby Doe" is a sunrise work, a tale of the dawning American West in an era of grubstakes and the great silver boom. It follows two colorful, indeed scandalous, historical figures, the millionaire mine owner Horace Tabor and his much younger lover-become-wife, Elizabeth, nicknamed Baby Doe. Unfortunately, the opera played a sun-set role in the life of Latouche, who lived to see its Colorado premiere but not its breakthrough success at City Opera in 1958. (Beverly Sills later called it the "first major triumph of my career.")

In retrospect, Latouche's life itself carries a sunset feeling. He dwelt among crepuscular shadows. He was careless with manuscripts and correspondence, and much of his daily life remains unlit. In one two-page stretch

of Mr. Pollack's biography we come upon the phrases "seem to have been written" and "as seems probable" and "what appears to be" and "could help illuminate" and "might have influenced" and "whether or not." Latouche was gay, like Hart, and while he was mostly comfortable in his own skin, his romances remain sparsely documented. For all of Mr. Pollack's commendable thoroughness, his biography gives us scant impressions of what it might have been like to be Latouche's lover—or, for that matter, his wife. (In 1940, Latouche married Theodora Griffis, about whom "little is known," though she was "primarily homosexual.")

Little emerges, indeed, about what it was like to be Latouche's friend. Though popular and admired, he somehow inspired largely undetailed reminiscences from those who loved him. He was regularly described as a "brilliant" conversationalist, but few examples of wit or insight have survived.

Latouche was quite short, as everyone in recalling him seemed to point out: a "little guy," "very small," "impish in size," etc. After a while, such phrases sound less like references to physical stature than to a perceived sprightliness: In the enchanted forest where he chose to make his home, the midsummer night's dream of the theater, he cast himself as Puck, part magician and part errand-boy.

Latouche never made it to Europe, for all his foreign languages and deep reading in Continental literature. If "The Ballad of Baby Doe," with its boom-and-bust mine owners and women of dubious reputation, represents one sort of quintessential American tale, Latouche's own life represents another: that of those word-mad emigrants to New York in its heady Tin Pan Alley days who sought to get everyone in an expanding, vibrant country up on their feet, dancing and singing.

John Latouche's very shadowiness finally turns him into a sort of everyman, or everypoet. He was not an Ira Gershwin or Cole Porter, Irving Berlin or Johnny Mercer—not one of those Tin Pan Alley giants whose verses dominated jukeboxes and p.a. systems and radios, floating through luncheonettes and hotel lobbies, bar-rooms and waiting rooms and bedrooms. But he might stand in for all those who, though belonging to the second or third rank, enduringly enriched our culture.

Sometimes in a bar or restaurant, when one of the old standards is piped in, you'll overhear a timeless discussion. "Isn't this a Cole Porter song?" "No, it's got to be the Gersh-wins." "No, no, it's somebody else... It's somebody else..." Well, it could just be John Latouche.

Mr. Leithauser's latest book is "The Oldest Word for Dawn: New and Selected Poems."

MYSTERIES: TOM NOLAN

The Case of The Vanishing Waitress

MANFRED Baumann, the middle-aged bank manager in Scottish author Graeme Macrae Burnet's "The Disappearance of Adèle Bedeau" (Arcade, 225 pages, \$24.99), is a quiet man of rigid habits. Constantly paranoid that others are "about to ridicule him or accuse him of some misdemeanor," in Mr. Burnet's telling, he goes out of his way to appear predictable. But that changes when he becomes obsessed with a young waitress at his favorite bistro in the small French town he lives in—the titular character in this gripping psychological thriller.

Baumann spies on the girl as she meets with a beau. He even takes the bold (for him) step of exchanging words with her on the street. When she suddenly disappears from her job

Sometimes murder is just a matter of chance. Two people meet and something bad happens.

and apartment, Baumann's anxiety soars, and he becomes convinced the police suspect him of having something to do with the missing girl.

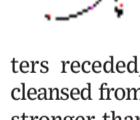
Enter Georges Gorski, the police detective assigned to investigate the disappearance of Adèle Bedeau. "The case was of the worst sort," thinks Gorski. "It was not even clear whether a crime had been committed." As the detective observes: "Sometimes murder is just a matter of chance.... Two people meet and something bad happens. Maybe even by accident."

In this riveting tale, Mr. Burnet touches on themes of free will and fate, falsity and authenticity. He revisits the physical and emotional terrain mapped by Georges Simenon but explores this classic turf in distinctive fashion—combining the moodiness of Simenon's stand-alone character studies with the pace of his Inspector Maigret series.

Gorski questions Baumann, one of the last people to see Adèle in public. Baumann's insistence that he can be of no further assistance only increases the policeman's interest: "In my experience, when people say that they wish they could be of more help, they very often can be." Baumann may have more to say than he lets on—not only in regard to Adèle, but also concerning violent events of long ago which shaped this frightened man's entire life.

FICTION CHRONICLE: SAM SACKS

Life After Landfall



IN SCRIPTURE, the great flood was a purifying event. When, after 40 days and nights, the rain ceased and the waters receded, wickedness had been cleansed from the earth. (It grew back stronger than ever, but never mind.)

But real floods, C. Morgan Babst reminds us in "The Floating World" (Algonquin, 370 pages, \$26.95), her debut novel about Hurricane Katrina and its aftermath, don't wash away human contamination; they bring it to the surface. The waters that rose in New Orleans in August 2005 were sludgy with petroleum, arsenic, farm run-off, industrial waste and human effluvia. The inundation had not

"come as a great wave rising above the river levee," one of Ms. Babst's characters reflects. "It had snuck in along channels dug to lead it away. It had acted as if with the intent to swallow, to smother, to ruin, to uproot, but most of all, to lift. It had raised sewage, dirt, poisons, furniture, cars, homes, families high above the ground as if to allow God to get a better look, and the things He rejected it had dropped, left them strewn in ruined piles."

The focus of this novel is the psychological rather than the physical debris exposed by the storm. It introduces the Boisdoré family, whose house is destroyed by the floodwaters. The parents, Tess and Joe, evac-

uated to Houston, and their older daughter, Del, was living in New York. But their 28-year-old daughter, Cora, stayed behind with her boyfriend, Troy. When "The Floating World" begins, a month after the devastation, Cora's legs are covered in chemical burns from the toxic water and she refuses to talk about what she went through. But the discovery in an abandoned house of a woman—Troy's mentally unstable sister—killed by a shotgun blast speaks to a traumatic event even more terrible than the flooding.

The mystery of the death propels the novel in a zigzag fashion, flashing back to the storm and then leaping forward in time to a hard-earned resolution. The force of Katrina has opened old wounds among the Boisdorés, and tangents in the story brush against marital infidelity, mental health and biases in class and race. Ms. Babst has a delicate way of depicting souls confronted by more hardship than they can bear, but the cataract of fears and grievances can make for punishing reading. Troy likens the flood to a great welling-up of sorrow. Once a feeling that powerful breaches the levees erected to contain it, it becomes all-consuming. "And you can't do a thing about it," he says. "It's like dropping sandbags in a river."

"Malagash" (ECW, 175 pages, \$12.95), the sly and affecting novella by Canadian writer Joey Comeau,

portrays a family in the vise of a more personalized tragedy. The setting is northern Nova Scotia, where a husband and father of two has opted against a last-ditch round of chemotherapy, the better to enjoy his final days with his family. As he awaits his death, his daughter, Sunday, a prize-winning computer programmer, is making plans to memorialize him. She's converted secret recordings on her phone into hundreds of brief sound files of her father talking. These files will be turned into a be-

A debut novel about the psychological flotsam and jetsam washed up by Hurricane Katrina.

nign self-replicating computer virus that "will live forever on the hard drives of strangers," granting him a form of technological immortality.

His voice is one you want preserved. Determined to face the end laughing, he lightens every visit with a barrage of tasteless jokes. ("To be honest, I feel kind of foolish for eating all those salads.") But there's more to "Malagash" than Sunday's attempt to archive and disseminate all his stories and punch lines. As her father becomes more remote, she forges a binding relationship with her vulnera-

ble younger brother, Simon, apprenticing him in the mysteries of computer coding. Mr. Comeau grasps a crucial truth that the most important characters in fiction about death are the survivors, and this book ends not with visions of the deluge but the promise of the rainbow sign.

Anyone who enjoyed James

McBride's "The Good Lord Bird," the

"Railroad Box Car Set," about an antiquarian toy collector's hunt for a model train owned by Robert E. Lee. "The Fish Man Angel" imagines that the future of the republic turns on the conversation between a black carriage driver and a black stableman overheard by Abraham Lincoln. "The Christmas Dance" is a genuine heart-breaker about a forgotten division of black soldiers in Italy in World War II.

The centerpiece is a quartet of stories set in a poor neighborhood of Uniontown, Pa., around the time of the Vietnam War. Butter, the 14-year-old narrator, and his friends Bunny, Dex, Ray-Ray, Beanie and Goat form the Five-Carat Soul Bottom Bone Band, and the linked stories chronicle their misadventures playing gigs, getting drinks at the Cool Out Spot and taking on their rival gang The Sixes at baseball: "Lightbulb saw Goat running and said, 'One of you girls better bring my glove,' and Bunny who was pitching for us said, 'Get your own glove, caveman,' and we laughed and them Sixes charged, which meant we had to show them Sixes who's boss. We did what The Five-Carat Soul Bottom Bone Band does best. We scattered quick."

The book's single fault is that these characters are so engaging and their world so richly conceived that the four stories only whet the appetite for more. If Mr. McBride decided to go back to Uniontown for his next book, I doubt anyone would complain.

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GETTY IMAGES



BOOKS

'I have always looked on disobedience toward the oppressive as the only way to use the miracle of having been born.' —Oriana Fallaci

Questions and Answers

Oriana Fallaci

By Cristina De Stefano
Other Press, 282 pages, \$25.95

BY MICHAEL MOYNIHAN

IN A RARE MOMENT of introspection, Henry Kissinger once confessed that a surrender to vanity led him into "the single most disastrous conversation I have ever had with any member of the press." In 1972, he submitted to an interview by the Italian journalist Oriana Fallaci because, he later wrote, "fame was sufficiently novel for me to be flattered by the company I would be keeping in her journalistic pantheon."

Fallaci had made a career of battering politicians, celebrities and dictators. Mr. Kissinger claimed to have seen only her resume, not understanding that it was a roll call of Fallaci's victims. He would fare no better, later accusing Fallaci of "skillful editing," while never exactly denying the cringe-inducing quotes that maximized his role in formulating American foreign policy. "The main point arises from the fact that I've always acted alone," he boasted. "Americans like the cowboy who leads the wagon train by riding ahead alone on his horse." Enchanted by Fallaci's angular beauty, Mr. Kissinger also simultaneously bragged about and minimized his reputation as a lothario. "For me women are only a diversion, a hobby," he told Fallaci. "Nobody spends too much time with his hobbies."

Outside her native Italy, Fallaci is now a largely forgotten figure. But she was once one of the world's most recognizable journalists, famous for her ability to extract embarrassing quotes from powerful men. So great was her fame that she routinely complained about being stopped by admirers and bemoaned the heaps of unopened fan mail that cluttered her apartment. Despite claiming to have "never sought out success," La Fallaci—a nickname of her own coining—was never just a byline. She was the co-star of her own journalism, always a prominent character in her interviews, at times even pervasive to a fault.

In her authorized biography, "Oriana Fallaci: The Journalist, the Agitator, the Legend," Cristina De Stefano reminds readers of Fallaci's journalistic legacy while clumsily attempting to disappear her many flaws. But one must pity Ms. De Stefano, tasked with recounting the life of someone who once declared she "never authorized, nor will I ever authorize, a biography." To borrow a phrase from another trailblazing female journalist, Clare Boothe Luce, Fallaci had a rage for fame but bristled when written about critically.

Despite her hunch that Fallaci, who died in 2006, would have hated this



DOCUMENTARY A passport, notebooks, publicity portraits and personal papers that belonged to the Italian journalist Oriana Fallaci.

book, Ms. De Stefano dutifully fulfills the implied requirement that any authorized Fallaci biography be hagiographic. In the 1990s, Fallaci did sanctify a biography—which provided access to private papers and correspondence—but the author judged her to be "a celebrity determined to control absolutely my written words and her own official image."

Fallaci's toughness was forged from an early age. Born into a country consumed by fascism, at 14 she acted as a courier for the partisans. By 18, she was writing a column for a Florence newspaper. She would eventually distinguish herself by "the Fallaci style": the interview as blood sport. She was like a spider, disorienting her quarry before dismembering them—knocking them off balance with an insult, finishing them off with a question to which there was no good answer. To Yasser Arafat, leader of the Palestine Liberation Organization: "How many Israelis do you think you've killed up to this date?"

Her interviews were substantive but almost comically performative. If her subject refused to provide the appropriate drama, Fallaci would. With the activist and future president of Poland Lech Wałęsa, her opening gambit was to observe that the anti-communist hero bore a striking resemblance to Joseph Stalin. In the company of Iran's Ayatollah Khomeini, Fallaci was forced to wear a chador, providing her the opportunity

to later dramatically remove the "stupid, medieval rag." When Libyan dictator Moammar Gadhafi indulged in anti-Semitic conspiracy theories, she replied, "Hitler would have been a very good friend for you."

Fallaci traded in moral outrage, but her moral compass was often in need of calibration. She judged Mr. Wałęsa "a vain, presumptuous man, a bigot" with a "certain air of protofascism about him." Unlike most dreary communist apparatchiks, Chinese dictator Deng Xiaoping proved a formidable debater—and became an object of her affection. She later claimed that such a clever man couldn't have ordered the Tiananmen Square massacre. None of this is mentioned by Ms. De Stefano. Nor does she confront accusations, from Mr. Kissinger and others, that Fallaci wasn't the most reliable narrator.

Reading Fallaci now, one senses that she needlessly inflated experiences that were already impressive. As a Washington Post writer pointed out in 1977, Fallaci "seems to spin a web of tales and fantasy when she talks." One new example unearthed by Ms. De Stefano is Fallaci's previously unpublished—and doubtful—claim to have once discharged a weapon in battle during the Vietnam War. Ms. De Stefano writes without skepticism that this was "not unusual," even though journalists rarely carried weapons in Vietnam and it would have been unthinkable for the military to distribute them to reporters in the field.

There is, though, much to say in Fallaci's defense. She was an uncommonly brave reporter, a muscular and meticulous writer and the rare interviewer who refused to ignore her subjects' little hypocrisies, obfuscatory verbs and weasel adjectives.

She was a complicated woman: a brave reporter with a strong style, a rage for fame and a thin skin.

She was a self-declared woman of the left, variously identifying as an anarchist and social democrat, but her natural ideological comrades treated her with suspicion. She was a reflexive anticommunist in an era when opposition to U.S. policy frequently drove its critics into the embrace of its illiberal enemies. She vigorously opposed America's presence in Vietnam, but wasn't far off when she later argued that she "was the only journalist, the only one, who wrote the truth about Hanoi, back in 1969." She had a deep affection for the U.S., but was nevertheless infected with a lazy, *bien-pensant* anti-Americanism.

Having retreated from public view in the 1990s, her slight body ravaged by cancer, Fallaci spent her final years in repose on the Upper East Side of Manhattan. When, on September 11,

Islamists committed mass murder in her adopted city, Fallaci found a subject to occupy her final years. The resulting obsessive hatred of Islam would do much to sully her legacy. In angry and clogged prose, she produced a best-selling anti-Islam screed, "The Rage and the Pride," and a slightly more restrained sequel, "The Force of Reason." With an acknowledged crudity more "a scream rather than an essay," Fallaci denounced the supposed Islamization of Europe, an irreversible demographic trend because the "sons of Allah breed like rats." It was an ugly comparison with very dark lineage. Ms. De Stefano devotes only a handful of pages to Fallaci's anti-Muslim turn and avoids quoting any of the controversial passages, instead offering perfunctory descriptions of her critics ("Some accuse her of inciting racial and religious hatred") and breezing toward 2006, when Fallaci succumbed to cancer.

Oriana Fallaci's career was varied and imperfect, but she is deserving of a serious treatment by a serious writer. Instead, Ms. De Stefano has produced a single-author Festschrift that, in examining the life of a journalist who reveled in controversy, studiously avoids it. Perhaps, then, Ms. De Stefano was right. Fallaci, enemy of stenographic journalism, probably would have hated this book.

Mr. Moynihan is a national correspondent for Vice News on HBO.

CHILDREN'S BOOKS: MEGHAN COX GURDON

From Aesop's Mice to Modern Martial Arts

CIVIL WAR looms in 17th-century England, but at first the threat of political violence seems remote to a girl named

Makepeace, who faces terrors far more immediate. In "A Skinful of Shadows"

(Amulet, 415 pages, \$19.99), a sophisticated historical fantasy by Frances Hardinge, Makepeace has always suspected that something separates her and her mother from their Puritan neighbors. One night, in a terrifying graveyard ordeal, she learns the truth.

From her father's rich and ancient family, the Fellmottes, she has inherited a sickening vulnerability: Ghosts can sense her presence and, with their "smoky, molten faces," will try to claw their way inside her and possess her unless she can develop defenses against them. She must "sharpen [her] stick" with repeated sessions in the cemetery, her mother insists, so that she is ready to fight.

As Makepeace soon discovers to her greater horror, the Fellmottes plan to put her ghost-hosting capacities to dark purpose. Her father's family is not merely one of long lineage, it seems, but one whose younger members are conscripted for use as vessels by their cruel forebears. As conflict intensifies between Parliament and the crown, Makepeace becomes a prisoner in the Fellmottes' great house, Grizehayes. Before escaping, she learns not only the depth of the family's depravity but also the surprising supernatural

nature of her own inner resources. With the elegance and deftness that young readers may remember from her superb 2015 novel, "The Lie Tree," Ms. Hardinge weaves a complex and thrilling tale of loyalty, legacy and political intrigue for readers ages 12 and older.

Brute power seems to emanate from the pages of "Norse Myths: Tales of Odin, Thor, and Loki" (Candlewick Studio, 225 pages, \$27.99), a collection of Viking stories retold with

vigor and dash by Kevin Crossley-Holland. Jeffrey Alan Love's stunning illustrations here are so potent and menacing that they seem less to have been created with acrylic and ink than to have been hammered from iron.

Twenty short chapters explore Norse cosmology from the nine worlds attached to the roots of the great ash tree, Yggdrasil, to the twilight of the gods of Asgard. In the "brilliant, fast-moving, ice-bright" Viking myths, as Mr. Crossley-Holland describes them, we meet gods such as Odin and Thor, the goddesses Freyja and Frigg, greedy dwarves and ferocious giants, a monster serpent and the monstrous trickster Loki. Emerging, as they do,

from an ancient marauding culture, Viking stories are not suitable for dainty tea parties. Clashes are violent and vengeful: Skulls get smashed, lips are sewn together, and a giant's maimed body hisses, gurgles and sags "like a pig's bladder with a leak in it." For the young mythology enthusiast, this would be a fine volume for solitary savoring, but given its heft and

Well, of course the girl must experiment. After a bit of ineffectual kicking and whacking, she strikes a perfect crane pose and (yikes!) summons a colossal bird that begins prancing around and trashing her room. To quell the crane, the girl conjures a leopard, and the animals commence battle. In a panic, the girl works her way through the book, calling forth a

spacious design, it's even better for sharing aloud.

A little girl unleashes the forces of a different warrior culture by accident in "The Five Forms" (Farrar, Straus & Giroux, 32 pages, \$17.99), a picture book by Barbara McClintock. In colorful, thickly outlined illustrations, we see the child in her bedroom looking with curiosity at a book of martial-arts poses. "Some forms mimic the postures and temperaments of animals," she reads. "When practiced correctly, these forms release the power of the animals they represent."

In Sabina Gibson's "Wolfie Paints the Town" (Knopf, 24 pages, \$16.99), the first in a planned picture-book series, a soft white-felted figurine, Wolfie, moves through a kindly pastel landscape pulling a little red wagon that holds her easel, paints and palette. The pleasure here for children ages 2 to 4 is less in the story, which is uneventful (Wolfie "paints the town" and has an art show at the end), and more in the tender and captivating depiction of animal friends in a soft-focus world of lovely green grass, dainty flowers, and felted snails, swans, and butterflies.

Maggie Rudy's reimagining of an Aesop tale, "City Mouse, Country Mouse" (Holt, 32 pages, \$16.99), has more ambition as a story and a wider scope of illustration. Using toy mice, real plants and "scavenged materials," Ms. Rudy fashions miniature scenes of bucolic coziness for Tansy Mouse, who lives in a little house made of bark and lichen and who one day surprises a visitor in her strawberry patch. It is William Gray, a city fellow who enthuses about "the shops and cafés, the crowded sidewalks, the sounds and smells" of the metropolis.

In accordance with the traditional telling (so far), Tansy agrees to visit the city (see left), a meticulously crafted place of brick houses, shops and coffee houses. There's push and pull between city and country as each mouse tries in vain to adjust to an unfamiliar setting, before Tansy and William depart from Aesop and meet in the middle.

The fable of the city mouse and the country mouse, charmingly retold as a tale of courtship.

GODWIN BOOKS/HENRY HOLT



snake and then a dragon—now the room is a flurry of fighting and fury—before hitting on the final saving pose that will restore tranquility. Parents who read this book to small children should brace themselves for a lot of exuberant kicking and whacking afterward.

Two final picture books offer young readers a sweet antithesis to turbulent tales of ghosts, Vikings and martial arts. Each enlists woodland creatures, and each evokes the special charm of miniature tableaux captured in photographs.

BOOKS

'A phenomenon of such extended malignancy as the Great War does not come out of a Golden Age.' —Barbara W. Tuchman

Serling Silver

The Twilight Zone Encyclopedia

By Steven Jay Rubin
Chicago Review, 429 pages, \$29.99

BY JOHN J. MILLER

'YOU'VE BEEN LOOKING behind you,' a father on 'The Twilight Zone' tells his grown son. 'Try looking ahead.' The scene comes at the climax of 'Walking Distance,' one of the best episodes in the enduringly popular television series. The story involves a burned-out businessman, time travel and a warning about the dangers of nostalgia.



In today's play-on-demand world, of course, fans of 'The Twilight Zone' can partake in as much harmless nostalgia as they please. They can binge watch their way through the five seasons that aired on CBS from 1959 to 1964, enjoying the famous four-note theme music, the memorable introductions by creator Rod Serling and a black-and-white cinematography that feels classic rather than dated. They may also consult a growing library of good books that offer insights and interpretations, from 'The Twilight Zone Companion,' by Marc Scott Zicree, to 'Everything I Need to Know I Learned in the Twilight Zone,' by Mark Dawidziak.

Now comes 'The Twilight Zone Encyclopedia,' by Steven Jay Rubin, who previously wrote 'The Complete James Bond Movie Encyclopedia.' His new guide contains spoiler-free entries for all 156 episodes as well as for hundreds of actors, writers and settings. Many of these include fascinating and even chilling details: Gig Young, the actor who played the son in 'Walking Distance,' for example, married Kim Schmidt in 1978. Three weeks later, he murdered her and committed suicide.

Mr. Rubin's entry for Young displays both the strengths and the weaknesses of 'The Twilight Zone Encyclopedia.' It offers a useful mini-biography of a half-forgotten actor who was born Byron Barr in Minnesota and took his stage name from a character he portrayed in a 1942 film. Known for his supporting roles—he won an Oscar for best supporting actor for 1969's 'They Shoot Horses, Don't They?'—Young received \$5,000 to star in 'Walking Distance.'

When Young married Schmidt, he was 64 and she was 31, though Mr.

Rubin incorrectly reports her age as 21. Everyone makes mistakes, but editors of encyclopedias have a special responsibility to the facts. Their tomes are called reference works for a reason.

Yet 'The Twilight Zone Encyclopedia' suffers not just from blunders but also from blind spots. Attentive viewers of 'Walking Distance,' for instance, will hear Young's character quickly mention a Dr. Bradbury. This was Serling's hat-tip to Ray Bradbury, whose 1957 novel 'Dandelion Wine' may have inspired 'Walking Distance.' At the very least, the two works shared enough similarities that Bradbury wondered whether Serling had ripped him off. Bradbury's suspicions extended to another episode in the series that he thought resembled a story in his 1950 book 'The Martian Chronicles.'

Bradbury never accused Serling of stealing his ideas, at least not in public. He even wrote a script for 'The Twilight Zone' (the third season's 'I Sing the Body Electric'). Yet Serling routinely annoyed him for appropriations and other slights. Sam Weller's 2005 biography of Bradbury, 'The Bradbury Chronicles,' describes their troubled relationship, but Mr. Rubin writes little about it in a book that ought to approach the controversy with keen interest.

Other entries are similarly frustrating. The one for Earl Hamner Jr.—the writer of eight scripts for 'The Twilight Zone' and best known as the creator of the television series 'The

Spoiler-free entries for all 156 episodes as well as for hundreds of actors, writers and settings.

Waltons"—reports a few facts that are easily found on Wikipedia. Then there's a long and meandering quote from Hamner that serves no special purpose. Mr. Rubin cites the transcript of a 2002 panel discussion, but seems not to have consulted a better source: the definitive 2005 biography of Hamner by James E. Person Jr., which reveals, among other things, the episode that Hamner regarded as his best (the fourth season's 'Jess-Belle').

'The Twilight Zone Encyclopedia' should brim with such trivia, and yet this occasionally satisfying book often feels incomplete. It might be said that Mr. Rubin's volume—to borrow one of Serling's signature lines—occupies "a middle ground between light and shadow."

Mr. Miller is director of the Dow Journalism Program at Hillsdale College and host of the "Great Books" podcast for National Review.

CHICAGOREVIEW

FIVE BEST: A PERSONAL CHOICE

Mark Helprin

on the world before World War I

Theodore Rex

By Edmund Morris (2001)

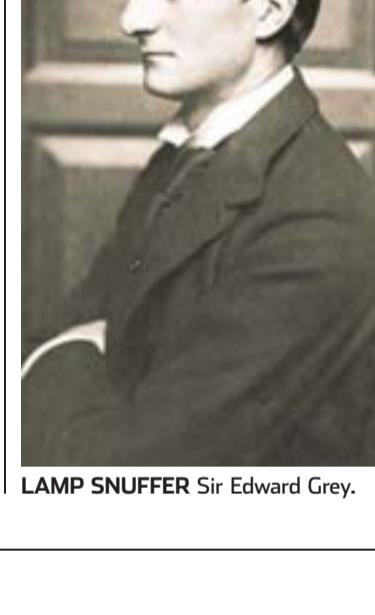
THIS IS AN EXTREMELY

shock of World War I are more interesting than the war itself, not least in their similarity to the present. 'Theodore Rex' is a beautifully written portrait of Theodore Roosevelt's presidency. It conveys both the catastrophic fault lines of the time and the swelling power that nonetheless drove the country and the world across them at full speed. Roosevelt's volcanic energy and immunity to hesitation may remind us of recent presidents, but unlike them he was educated rather than ignorant, brilliant not dim-witted, experienced and courageous rather than vacuously narcissistic. But in the fire of his unceasing action alert readers will find haunting notes: the tragic formation of his character at the death of his young wife, and a foreshadowing of his son's death in the century of war that he, like Churchill, did not imagine. In 1902, he wrote, "As civilization grows, warfare becomes less and less the normal condition."

Twenty-Five Years, 1892-1916

By Edward Grey (1925)

2 OF THE MILLIONS of words written about the war, perhaps the most famous, beautiful and apt were Sir Edward Grey's often misquoted coda to the years the war put to rest: "The lamps are going out all over Europe; we shall not see them lit again in our lifetime." In "Twenty-Five Years," he describes how he and Theodore Roosevelt spent days together bird-



GETTY IMAGES

LAMP SNUFFER Sir Edward Grey.

watching in the English countryside. Grey was a quiet, analytical man whose perspective from the Foreign Office is unmatched as a diplomatic portrait of the Belle Époque. Unlike Joseph Chamberlain ("I cannot conceive of any point which... would bring ourselves and the Germans into antagonism."), T.R. and Churchill, he recognized that "the consequences of... a foreign crisis do not end with it. They seem to end, but they go underground and reappear later on." He represents the British view if not more energetically than Churchill in "The World Crisis," then more eloquently and objectively.

The Annals of America, Vol. 13: 1905-1915

Edited by Mortimer J. Adler (1976)

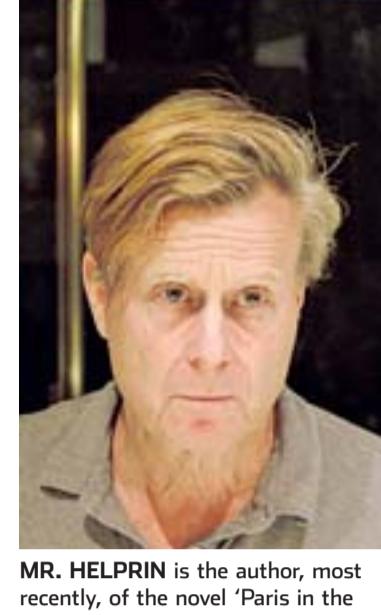
3 THIS IS AN EXTREMELY

well-chosen omnibus of 119 articles and hundreds of striking photographs and illustrations. Among the authors are Theodore Roosevelt, Louis Brandeis, Richard Wright, Jack London, Upton Sinclair, Mark Twain, Eugene Victor Debs, William Howard Taft, John D. Rockefeller, William James, George Santayana and Clarence Darrow. Equal attention is given to such things as the "Corollary to the Monroe Doctrine," presidential addresses, commission reports, and to poetry, cinema, art, architecture, literature, crime, religion, labor, baseball, technology, et al. European annals are usually deadly. Perhaps it's American exceptionalism, but "The Annals of America" are not only an education but an entertainment. If you don't believe me, read the punch and counter-punch of "A Dim View of the Automobile" and "In My Merry Oldsmobile," or of Jack London's "How I Became a Socialist" and John D. Rockefeller on philanthropy.

Dreadnought

By Robert K. Massie (1991)

4 WRITTEN IN A RICH, discursive style and yet plain-spoken, the fact-laden thousand pages of Robert K. Massie's book race by and draw you in. He begins before Trafalgar and ends with Margot Asquith's account of being alone with her husband, the prime minister, in the last moments before the war: "So it is all up," I said. He answered without looking at me: "Yes, it's all up." I sat down beside him with a feeling of numbness in my limbs.... I got up and



MR. HELPRIN is the author, most recently, of the novel 'Paris in the Present Tense.'

leant my head against his; we could not speak for tears." Seldom does a book illustrate so well the many colorful tributaries that flow into the uncontrollable flood of history. Unlike those French historians committed to ignoring the forest for the trees, Mr. Massie deals expertly with both. Whether technical naval details, the fascinating personalities of great figures, grand strategy, natural description, or economic, political and diplomatic history, he weaves them together so compellingly that you may lose track of time and be late for dinner.

Death in Venice

By Thomas Mann (1912)

5 AT LEAST in hindsight, Thomas Mann's 1925 novella "Disorder and Early Sorrow" can be read as a prologue to the greatest war in human history, precisely divined from the tenor of times more than a decade earlier. Similarly, his 1912 "Death in Venice" is savagely prophetic of World War I. In only its second sentence, it refers to "a spring afternoon... when Europe sat upon the anxious seat beneath a menace that hung over its head." Like all great works, it flows along and across many levels. In and through Gustav von Aschenbach, its protagonist, we witness the overpowering reflex before death to hold on to the youth, beauty and innocence of the beginning of life; his agonizing struggle to turn away from false hope; the elegiac picture of a world that was dying; and the horrifying recognition of the Götterdämmerung that would come. Magnificently written, sensual and complex, it beautifully illuminates not only the era, its dilemmas and its tragedies but—unlike histories, no matter how competent—representations of the human condition that anneal historical understanding with the fire and the gold that only great literature can bestow.

Best-Selling Books | Week Ended Oct. 22

With data from NPD BookScan

Hardcover Nonfiction

TITLE	AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Leonardo da Vinci	Walter Isaacson/Simon & Schuster	1	New
Capital Gaines	Chip Gaines/Thomas Nelson	2	New
The Wisdom of Sundays	Oprah Winfrey/Flatiron Books	3	New
Discipline Equals Freedom	Jocko Willink/St. Martin's Press	4	New
Killing England	Bill O'Reilly & Martin Dugard/Henry Holt & Company	5	1

Nonfiction E-Books

TITLE	AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Leonardo da Vinci	Walter Isaacson/Simon & Schuster	1	New
Discipline Equals Freedom	Jocko Willink/St. Martin's Press	2	New
Capital Gaines	Chip Gaines/Thomas Nelson	3	New
Killing England	Bill O'Reilly & Martin Dugard/Henry Holt & Company	5	5
Prayer	Timothy Keller/Penguin Books	6	6
Grant	Ron Chernow/Penguin Publishing Group	7	2
What Happened	Hillary Rodham Clinton/Simon & Schuster	8	New
The Little Book of Hygge	Melik Wiking/HarperCollins Publishers	9	-
The Startup Way	Eric Ries/Currency	10	New

Hardcover Fiction

TITLE	AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Origin	Dan Brown/Doubleday Books	1	1
Turtles All the Way Down	John Green/Dutton Books for Young Readers	2	3
Dork Diaries 12	Rachel Renée Russell/Aladdin Paperbacks	3	New
Deep Freeze	John Sandford/G.P. Putnam's Sons	4	New
Turtles All the Way Down(Signed)	John Green/Dutton Books for Young Readers	5	2

Fiction E-Books

TITLE	AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Deep Freeze	John Sandford/Penguin Publishing Group	1	New
Origin	Dan Brown/Doubleday Books	2	1
Vanish	Tess Gerritsen/Random House Publishing Group	3	-
The Cuban Affair	Nelson DeMille/Simon & Schuster	4	6
Don't Let Go	Harlan Coben/Penguin Publishing Group	5	8
Killing England	Bill O'Reilly & Martin Dugard/Henry Holt & Company	6	2
Before We Were Yours	Lisa Wingate/Random House Publishing Group	6	10
Ruthless King	Meghan March/Meghan March	7	New
A Column of Fire	Ken Follett/Penguin Publishing Group	8	-
Edgedancer	Brandon Sanderson/Tom Doherty Associates	9	New
Milk And Honey	Rupi Kaur/Andrews McMeel Publishing	10	6
Little Fires Everywhere	Celeste Ng/Penguin Publishing Group	10	-

Methodology

NPD BookScan gathers point-of-sale book data from more than 16,000 locations across the U.S., representing about 85% of the nation's book sales. Print-book data providers include all major booksellers (now inclusive of Wal-Mart) and Web retailers, and food stores. E-book data providers include all major e-book retailers. Free e-books and those sold for less than 99 cents are excluded. The fiction and nonfiction lists in all formats include adult, young adult, and juvenile titles; the business list includes only adult titles. The combined lists track sales by title across all print and e-book formats; audio books are excluded. Refer questions to Peter.Saenger@wsj.com.

Hardcover Business

TITLE	AUTHOR / PUBLISHER	THIS WEEK	LAST WEEK
Principles: Life and Work	Ray Dalio/Simon & Schuster	1	3
Strengths Finder 2.0	Tom Rath/Gallup Press	2	2
Blue Ocean Shift: Beyond Competing	W. Chan Kim and Renée Mauborgne/Hachette Books	3	4
The Five Dysfunctions of a Team	Patrick M. Lencioni/Jossey-Bass	4	6
Building a StoryBrand	Donald Miller/HarperCollins Leadership	5	1
Total Money Makeover	Dave Ramsey/Thomas Nelson	6	9
The Sentient Enterprise	Oliver Ratzesberger & Mohanbir Sawhney/Wiley	7	New
Emotional Intelligence 2.0	Travis Bradberry & Jean Greaves/TalentSmart	8	7
The Energy Bus			

REVIEW



JOSH WOOL FOR THE WALL STREET JOURNAL

WEEKEND CONFIDENTIAL: ALEXANDRA WOLFE

Joachim Frank | The Nobel-winning scientist has literary ambitions

SOON AFTER Joachim Frank won the Nobel Prize in chemistry in early October, he called a literary magazine to ask, "What's going on?" The Columbia University professor, who is also a novelist and short-story writer, was wondering whether his win had changed the status of one of his fiction submissions.

The magazine had been promising to publish one of his short stories for three years, he says. Did he mention that he won the Nobel? He laughs sheepishly and says,

"Well, I told them about it to speed them along." The story was published on Friday.

Dr. Frank, 77, was honored along with Jacques Dubochet and Richard Henderson for his role in discovering cryo-electron microscopy, or cryo-EM, a technique used to visualize features of molecules in high, atomic-level 3-D definition. It allows scientists to understand molecules they couldn't see before and then develop new drugs based on the knowledge of their structures.

Knowing the shape of viruses, for example, can speed the creation of vaccines. "When we get to the atomic level, we can design drugs for anything," Dr. Frank says.

While he sees his Nobel as a crowning achievement in his day

job, he also hopes it will help bring more attention to his other career, as a fiction writer. Dr. Frank is the author of three unpublished novels and dozens of short stories. He has been writing almost as long as he has been teaching and researching chemistry.

"I think I have a heavily compartmentalized brain, which means that certain routines are simply running without me realizing it," he says of his dual career. He thinks of each job on a project-by-project basis. "I take a certain time and switch compartments when I have a finished product," he says.

Originally from Germany, Dr.

Frank writes in his adopted language. "I love the English language, the colors of it, the many, many nuances, the different influences," he says. "I find German stilted, in a way, by comparison."

Dr. Frank's life as a scientist has provided the setting for some of his fiction. He started writing after attending a conference in the Netherlands more than 30 years ago. The rundown hotel where he stayed gave him the idea for a novel in which the hotel became the entrance to a time warp. In another novel, an entrepreneur buys an astronomical institute's observatory and converts it into a strip club and bordello.

With cryo-EM, scientists can now start to develop drugs to treat such diseases as African trypanosomiasis, which causes fevers, confusion and ultimately death, and Chagas' disease, another insect-borne illness that often causes heart disease. Dr. Frank hopes his Nobel will help advance both of his careers. "I sense I have more of a leverage now to decide directions, on a bit more longer terms," he says with a smile.

Meanwhile, Dr. Frank is having fun with his newfound fame. Soon after winning the Nobel, a fellow professor tweeted a photograph of him in a classroom, back at work. He retweeted it, writing, "Now I'm worried that I'm under constant surveillance. Life was so much easier before!"

point in being alive?"

I am told to keep my eyes peeled for outfits that look like the "big suit" worn by David Byrne in the Talking Heads concert movie "Stop Making Sense." Also looking good: belts that resemble boa constrictors, socks made of burnished rawhide and designer frog-skin everything.

For now, the focus is still on products that just make men's feet look silly. Arriving in stores just before the holidays are grotesque hybrids such as platform booties, high-heeled moccasins and bedroom slippers with cleats.

As Reno Salamone, creative content purveyor at London shoemaker Millennial Cobbler, puts it: "Often someone asks, 'Why would anyone wear loafers with 36-inch titanium tassels sticking out in front, where they might trip you?' Our customers reply, 'I saw somebody wearing them in Brooklyn.' That's good enough for me."

Coming soon: Viking helmets, see-through pajamas.



LAST WEEK, The Wall Street Journal reported on the ugly-sneaker craze taking over the country and perhaps the world. Cutting-edge types are sporting bulky, hideous, ostentatiously unattractive, incredibly expensive footwear in public.

The Journal made clear that the overpriced men's sneakers are meant to be ridiculous in the same way that Ed Sheeran's music is designed to be inane and trips to the DMV are meant to be infuriating. The sneakers, which can cost \$850, are big and bulky and clunky and stupid. Their owners love them, the article says, and savvy "content managers" and "creative strategists" are piling on the trend, as are purveyors of "maximized sneakers" brought to you by companies like Balenciaga and Acne (yes, a real company).

The question—and this is always the question when putatively idiotic fashions erupt—is this:

What if this craze spreads beyond the usual appalling hipsters?

The bad news is that it already has. My exhaustive research has uncovered disruptions throughout the male clothing universe. Take hats. I found that cutting-edge design firms are quickly selling out of garish banana-colored Viking helmets with polystyrene horns, colorful Sioux war bonnets and French berets the size of Rhode Island, with creases down the middle, available in chartreuse, ocher and peppermint. Can mega-retro Honest Abe stovepipe hats be far behind?

Go ahead and laugh, but keep in mind that the idea of investment bankers wearing baseball caps with their \$2,000 suits started out as a joke. So did the idea of senior citizens wearing baseball caps turned backward. Now we see that look everywhere.

When irony spreads to the hoipolloi, no good can come of it. Or

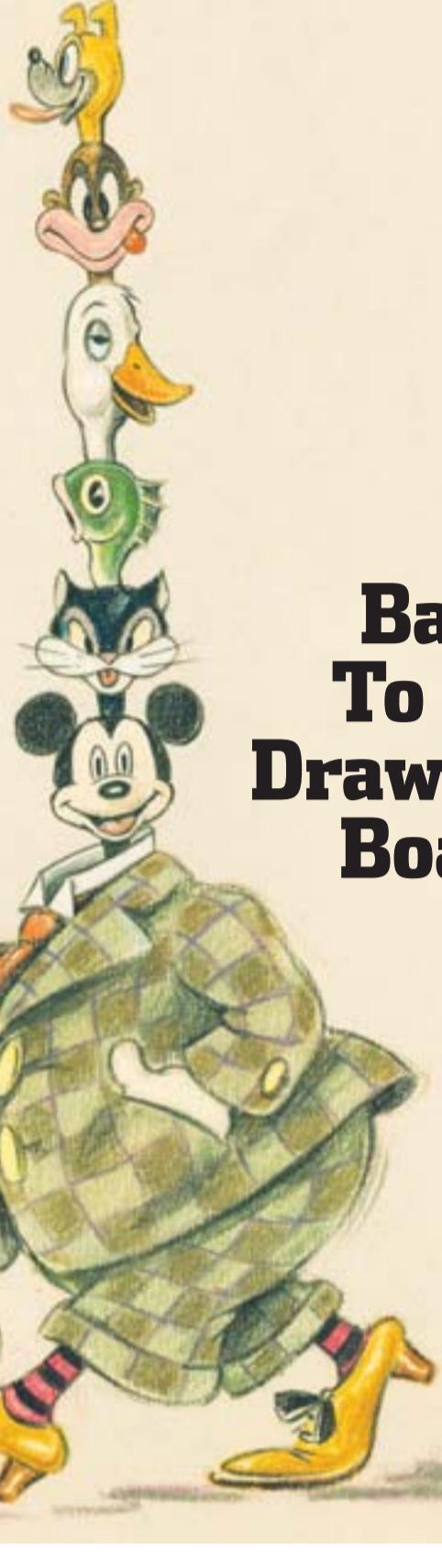
maybe that's just my narrow-minded opinion. Seasoned purveyors of maximized chapeaux vehemently disagree with this fussy verdict. "When someone says, 'That's an ugly Viking helmet. What are you, a furloughed heldentenor?' our clients love it," says Fargo McGarry, chief headwear maximizer at hatmaker Exzema, with outlets in Santa Barbara, Cannes and Beijing. "Stupid hats are for everyone."

It's not just hats. Content managers and well-respected purveyors of maximized nightwear report that men are now wearing billowing, see-through pajamas and diaphanous harem pants to bed. Stealing a page from the female-underwear-as-outerwear craze that Madonna helped spawn a generation ago, men are also wearing Jockey shorts over their Brooks Brothers suits.

"Context is everything," says Druid Weisberg, underwear maximizer at Pardo, the Barcelona couturier. "Without context, what's the

REVIEW

EXHIBIT



Back To the Drawing Board



DUMBO, GOOFY AND PETER PAN didn't just burst onto the big screen. It took dozens of drawings to get them ready for their star turns. In a new book, "They Drew as They Pleased: The Hidden Art of Disney's Late Golden Age, the 1940s—Part Two" (Chronicle Books, \$45), author Didier Ghez showcases hundreds of illustrations of Disney characters—including ones that never made it to film. The book profiles six artists from the company's short-lived character model department, which encouraged employees to be creative and free with their designs, writes Mr. Ghez. The artists took their work seriously: They "were extremely aware of art history and new modern trends," he says. —*Alexandra Wolfe*



ABOVE: These animals comically stacked on top of each other, created as a concept for one of the clowns in the film 'Dumbo,' were typical of artist Johnny Walbridge's playfulness.

TOP RIGHT: Jack Miller came up with early ideas for the characters of 'Peter Pan,' such as this study for Tiger Lily. **NEAR RIGHT:** This concept for 'El Gaucho Goofy,' drawn by James Bodrero, never made it to the screen. **FAR RIGHT:** Artist Eduardo Sola Franco spent months creating images for a film version of 'Don Quixote,' but it was ultimately abandoned.

CHRONICLE BOOKS

PLAYLIST: GRAEME MACRAE BURNET

The Man in Black

In a lonely Highlands house, a Scottish author cues up a dark Johnny Cash song

Graeme Macrae Burnet, 50, is the Scottish author of "The Disappearance of Adele Bedeau" and "His Bloody Project," which was a Man Booker Prize nominee. His latest is "The Accident on the A35" (Arcade). He spoke with Marc Myers.

Country music is massively popular in western Scotland. The melodies relate to Celtic music, and the people who live there share a love for sentimentalism and suffering in silence. Johnny Cash's "HURT" fits in well.

I first heard "Hurt" in my early 30s after I purchased Cash's "American IV: The Man Comes Around" in late 2002. It would turn out to be the Man in Black's last album released while he was still alive.

When I first put the album on my stereo, "Hurt" was the second song, and it took me by surprise. Cash's voice was so deep and harrowing.

Although I knew "Hurt" was originally released by Nine Inch Nails in 1994, Cash made it feel entirely his own. When Cash's video for the song came out, it made the song even more haunting. In the video, Cash clearly is in the last months of his life.

The song opens with Cash playing "Hurt's" chords on his acoustic guitar. Then he sings the first verse, which seems to portend his impending death: "I hurt myself today / To see if I still feel / I focus on the pain / The

only thing that's real."

Throughout much of the song, there's an unrelenting piano chord that's played on each beat, like a drone. It needles away at you with an inevitability:

"What have I become, / my sweetest friend / Everyone I know / goes away in the end."

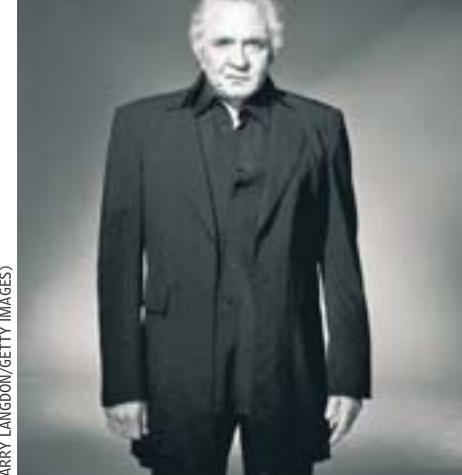
"Hurt" isn't a song I'd play on a nice sunny day, but I do take the album with me whenever I drive up from Glasgow to the house that once belonged to my grandparents in the Scottish Highlands.

I go there when I want to write undisturbed. In the fall, it gets dark there at around 4 p.m. Listening to "Hurt," I feel an intense engagement with the song. The lyrics remind you of your own mortality.

My mother grew up in the house, and I'm surrounded by old clocks, old photographs and fading memories. Cash's "Hurt" is completely at home.

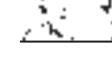
Covering Nine Inch Nails.

HARRY LANGDON/GETTY IMAGES



JOHNNY CASH, photographed around 2002.

ASK ARIELY: DAN ARIELY



Don't Just Stand There...

Hi Dan,

I was recently at a very good lecture about global warming, and by the end of the lecture I was highly motivated to make real changes in my life and have a more positive impact on the environment. Two months later, I realized that despite my good intentions, I had done very little to change anything about my behavior. Why is it so difficult for me to take any action? —Rachel

This is very human and common. There are many cases in which we feel we should take particular actions, but then we don't—such as exercising, eating healthy, washing your hands, practicing safe sex or texting while driving. I think that getting people to care about the environment is perhaps one of the toughest behavioral challenges we have. In some ways, it's as if the issue were perfectly designed to maximize human apathy: The consequences are probabilistic and somewhere in the far future, and anything we can do is just a drop in the bucket. In short, all the elements that create human apathy are rolled into one challenge.

So how can you make sure that you're acting on your beliefs? Come up with very specific rules (change the setting of your thermostat, eat less meat, etc.), write them down, tell other people that you have committed to them, and then try to follow them.

Dear Dan,

As an oral surgeon, I encounter patients in pain (or anxious about possible pain) every day. I have a solution for many of them: intravenous sedation! Unfortunately, the cost (about \$600) deters many patients and they prefer to suffer to avoid the payment. Do you have any advice about how best to guide patients who would benefit from IV sedation to pick it instead of suffering? —Andrew



Helping people figure out how they'll feel in a future state, especially one that they've never experienced, is tricky. I would suggest that you try to create a comparison between the pain of the surgery and another type of pain. Suggest that your patients put their hands in a bucket with ice for three minutes (which is very painful), and when they are experiencing this pain, say:

"Here is what surgery would most likely feel like without the IV sedation."

The only difference is that the surgery will take about an hour. Would you rather pay for the IV sedation or do the surgery without it?"

Now, the patients can make a more informed decision, and my guess is that many more will pick the IV sedation.

Dear Dan,

I notice that at farmers markets, I am generally less worried about price and tend to spend more than I do in regular grocery stores. Does the presence of the crowd make me less concerned with the way I spend my money? I wonder if the same tendency is true for visitors to county fairs, flea markets, carnivals and other outdoor venues where lots of people gather in a temporary mini-community. Or is something else entirely going on in this context? —Paul

My guess is that it is the result of excitement, but the excitement is not with the crowd but with scarcity—with having a small window of time to buy, say, locally grown kale or handmade stuff. The knowledge that this window of opportunity will soon close and that we will not have a way to get back to our beloved kale makes us want the product more—and get it without paying much attention to the price.

Have a dilemma for Dan?
Email AskAriely
to wsj.com.

PETER OUAMSKI



PLAY

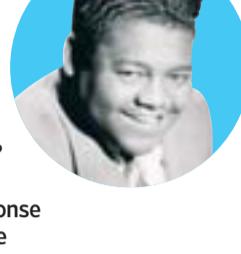
NEWS QUIZ: Daniel Akst

From this week's
Wall Street Journal

1. China concentrated power in the hands of Xi Jinping. He's also part of a new lineup in what governmental body?

- A. The Flying Tigers
- B. Make China Great Again
- C. The Standing Committee
- D. The Beijing Seven

2. Rock 'n' roll piano pioneer Fats Domino died at 89. What was his real first name?



- A. Alphonse
- B. Andre
- C. Antoine
- D. Auguste

3. Buildings across the U.S. are wrapped in the same panels that fueled a deadly London fire. What's in the panels that makes them so flammable?

- A. Kerosene gel
- B. Polyethylene
- C. A peat derivative
- D. Seaweed insulation

4. An entrepreneur with a long-distance commute has embraced futsal. What is it?

- A. A fast-paced, typically indoor version of soccer
- B. A seated form of yoga
- C. A self-administered foot massage
- D. A salt-filled sock to prevent thrombosis

5. Super Cruise is touted as the auto industry's first true hands-free driving system for the freeway.

To see answers, please turn to page C4.

Which of these is rolling it out?

- A. Mercedes
- B. DeLorean
- C. Tesla
- D. Cadillac

6. According to a survey of college officials, about what proportion of freshmen get financial aid?

- A. 20%
- B. 40%
- C. 60%
- D. 90%

7. Part of Lord & Taylor's flagship New York store will become the headquarters of what real-estate startup?

- A. MoreLand
- B. RightAddress
- C. WeWork
- D. Towers of Power

8. General Electric is looking to exit from one of its oldest businesses. Which?

- A. Lightbulbs
- B. Consumer appliances
- C. Locomotives and other railroad equipment
- D. Nuclear power

9. Cargill is trying out a new technology to track turkeys from farm to store. What is it?

- A. A digital record-keeping system called blockchain
- B. Bar-code tattoos
- C. Wattle prints, each unique
- D. Under-the-skin microchips



VARSITY MATH

Provided by the **National Museum of Mathematics**

This week,

the coach has some Halloween puzzles for the team.



Pumpkin Crop

Having sorted them by weight, a grower takes his crop of pumpkins to the market. He sells the 42 lightest pumpkins to a customer and notes that they account for 25% of the crop's total

weight. He sells the 50 heaviest pumpkins to another customer and notes that they account for 30% of the crop's total weight.

How many pumpkins were originally in the crop?

ILLUSTRATION BY LUCI GUTIÉRREZ

The Halloween Goblin

The coach poses the following question: Imagine that 47 partygoers, including yourself, are trapped by a goblin. You are all brought into a dark room, where the goblin puts one of 47 different cards from a standard deck of 52 playing cards on each of your foreheads, then turns on the light and asks you each in turn, "What card is on your forehead?" You see the cards on all foreheads

but your own and hear the answers of those before you. When you are questioned, you may only respond with the name of a card. Those who say the name of their card go free.

If you are allowed to confer with the others in the group before the cards are placed, what is the maximum number of the group you can guarantee will be released?

+ Learn more about the National Museum of Mathematics (MoMath) at momath.org

SOLUTIONS TO LAST WEEK'S PUZZLES

Varsity Math

In last week's

Making 25,

$4 \times 6 + 1$ and $4 / 16$

both equal 25.

In Two Ways to

$32, 5^2 - 4$ and

$5 \times (7 - 6)$ both

equal 32.

Quiet Time

OGRES ALLI DOA PIPPIN

MOOCH LEONURIS SATURN

NOMORE BACKTALK ORATED

VIAN WIFI OHHS TREX SUB

ORICA CANITALREADY OPT

RUED ATTIN NOISY SILC

ENDED TOAT TOT SMOKE

PRAY TOFS BBC BIDE

SPLITON SUFI AAABONDS

IRIV STOP BUGGINGME LIII

DIETSDODA HEMS PACTEN

ECHO NOR STEP ASCH

DEATHS SST SOFT HINDU

DOO BIP POD ROBIS LOON

ALLE SHUTYOUNTRAP INCH

SON TORY DNA GYRBE STA

SWORE IN MALICE EASTON

USUALS NOTANOOTHERWORD

REGRET ALLOPECTALARAM

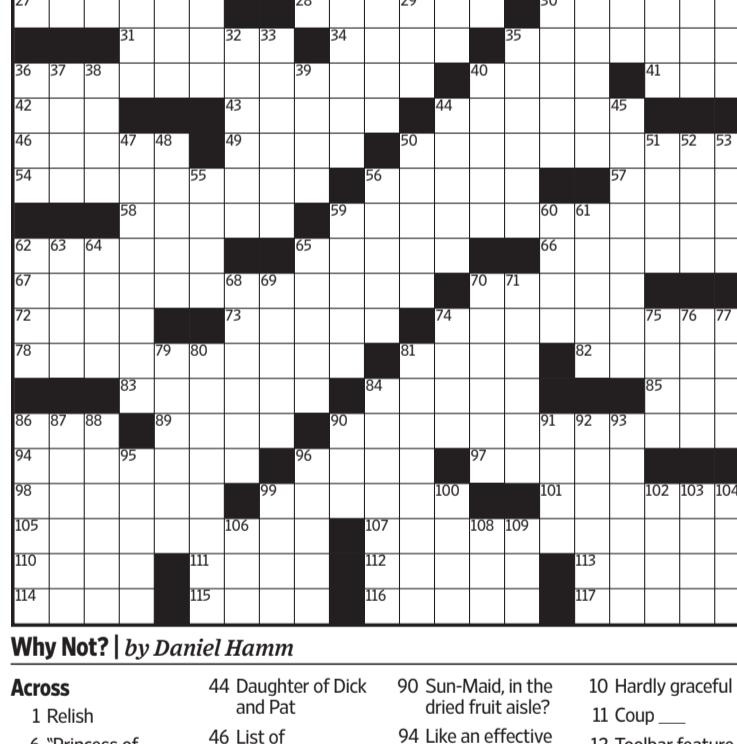
ETHER PEP DOTS STYLE

Acrostic

Dylan Thomas, "[Quite] Early One Morning"—
"A poet is a poet for such a very tiny bit of his life;
for the rest, he is a human being, one of whose
responsibilities is to know and feel...all that is
moving around and within him, so...his poetry...can
be his attempt at an expression of the summit of
man's experience."

A. Dresser; B. "Your Song"; C. Leon Uris; D. Aphelion;
E. Nontoxic; F. Tipstaff; G. Hit it off; H. Obeisant;
I. Movie set; J. Ab initio; K. Spitfire; L. Exhibit A;
M. Astatine; N. Road show; O. Lothario; P. Yma
Sumac; Q. "Oh, behav!"; R. News feed; S. Eniwetok;
T. Mishmash; U. On the map; V. Reprisal;
W. Nephthys; X. In effect; Y. Nepotism; Z. Gunnels

THE JOURNAL WEEKEND PUZZLES Edited by Mike Shenk



Why Not? by Daniel Hamm

Across

- 1 Relish
- 6 "Princess of Power" of cartoons
- 11 Jewel box contents
- 15 Cheeky behavior
- 19 Soap-on— (bath product)
- 20 It takes a bow
- 21 Oatmeal cousin
- 22 Feel deep sorrow
- 23 Mixing tool used by haggis chefs?
- 25 Expo for dentists?
- 27 Songbird with a hooked bill
- 28 Oscar winner for "The Color of Money"
- 30 Shot deliverer
- 31 Do a Thanksgiving dinner job
- 34 Fromage ingredient
- 35 Twisting action
- 36 Olive or miniature umbrella, perhaps?
- 40 Mirthless
- 41 Cry of realization
- 42 Cry of revulsion
- 43 Without interruption
- 44 Daughter of Dick and Pat
- 46 List of candidates
- 49 Was dishonest
- 50 Kids' reward for not fighting?
- 54 Like Edward Gorey drawings
- 56 Academy founder
- 57 Proctor's call
- 58 Courtroom figure
- 59 Golf club used as a theater prop?
- 62 Dense marbles
- 65 Betrays amusement
- 66 Strong headwinds, nautically
- 67 Cover for an Omsk ear?
- 70 Proverber's pointer
- 72 Leave off the invitation list, say
- 73 Sarge's superior
- 74 Attempted to gain control of
- 78 Hunky park ranger?
- 81 Identity element
- 82 Compass
- 83 Soldier's duty
- 84 Cube or cone
- 85 Neckline shape
- 86 Saucer occupant
- 89 Delicacy
- 90 Sun-Maid, in the dried fruit aisle?
- 94 Like an effective resume
- 96 Odious
- 97 Game catcher
- 98 Butterfly, e.g.
- 99 Regained consciousness
- 101 Soprano Scotto
- 105 Expert at arresting?
- 107 Section of a buff buff's digestive tract?
- 110 Pass over
- 111 100-cent currency
- 112 Initiative
- 113 Think up
- 114 Atlas areas
- 115 Scorch
- 116 Wing
- 117 Paces in races
- 1 Filly
- 2 Keystone setting
- 3 Third-rate
- 4 Encouraging sign for investors
- 5 Eat like a bird
- 6 Magic show prop
- 7 Monarch letters
- 8 Burnett of CNN
- 9 Historic Manhattan ballroom
- 10 Hardly graceful
- 11 Coup —
- 12 Toolbar feature
- 13 Sellout letters
- 14 Be completely unimportant
- 15 Hotel room fixtures
- 16 National park near Bar Harbor
- 17 Tennessee battle site of 1862
- 18 Sister of Venus
- 19 It's about a mile from Harvard U.
- 20 Solitary sort
- 21 Cork country
- 22 Love, to Latin lovers
- 23 Addition column
- 24 Lucy's husband
- 25 Use a crowbar, in Cornwall
- 26 Celtic soothsayer
- 27 About
- 28 Future alumnae, quaintly
- 29 "Mother Courage and Her Children" playwright
- 30 It takes a bow
- 31 Cause of some chaotic weather
- 32 It's about a mile from Harvard U.
- 33 Steadily look
- 34 Transitional point
- 35 Activewear material
- 36 Eyeball
- 37 Tucker's "Rush Hour" co-star
- 38 Having drawing power?
- 39 It might be right on the tip of your tongue
- 40 Persona non —
- 41 Lions and Tigers and Bears
- 42 Richards and Romney
- 43 Keypad key
- 44 Drinking spree
- 45 Hollywood negotiators
- 46 Shuffleboard stick
- 47 Staple of advertising
- 48 Keypad key
- 49 Keypad key
- 50 Flooring piece

Down

- 10 Personna non —
- 11 Anthony Hopkins's "Thor" role
- 12 Quartet member
- 13 Drinking spree
- 14 Having drawing power?
- 15 It might be right on the tip of your tongue
- 16 Staple of advertising
- 17 Tennessee battle site of 1862
- 18 Sister of Venus
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- 42 Richards and Romney
- 43 Keypad key
- 44 Drinking spree
- 45 Hollywood negotiators
- 46 Shuffleboard stick
- 47 Staple of advertising
- 48 Keypad key
- 49 Keypad key
- 50 Flooring piece

Deadbeats by Patrick Berry

- Each Row and Column of this grid contains a series of answers placed end to end, clued in order of appearance. One answer in each Column contains one or two deadbeats: letters that don't show up in the grid entry, forcing it to become a new word. So if the answer to a Column clue was MOROSE, the grid entry might be MOOSE (with a deadbeat R) or MORE (with a deadbeat OS). When two deadbeats disappear from a word, they'll always be consecutive letters. The deadbeats in each Column will relocate to the corresponding shaded circle beneath the grid. When the puzzle is complete, the letters in the circles will provide yet more deadbeats.
- Rows**
- 1 ⚡ Buttonholes aggressively
 - 2 ⚡ Tagline of a fable
 - 3 ⚡ Breadwinner
 - 4 ⚡ Newspaper reviewer
 - 5 ⚡ Curriculum —
 - 6 ⚡ Most adventurous
 - 7 ⚡ Walks in hip boots, perhaps
 - 8 ⚡ Light on one's feet
 - 9 ⚡ What buttinskis do
 - 10 ⚡ You're not just pulling my leg?
- Columns**
- 1 ⚡ Flock's response
 - 2 ⚡ Bumps on a toad's skin
 - 3 ⚡ Misrepresent as genuine (2 wds.)
 - 4 ⚡ Musical conclusion
 - 5 ⚡ Antiquated (Hyph.)
 - 6 ⚡ Meant to be sung, as music
 - 7 ⚡ Nursery fixture
 - 8 ⚡ Food-related
 - 9 ⚡ Resident of el Infierno
- Deadbeats**
- 1 ⚡ Hurting the most
 - 2 ⚡ Trailer segments
 - 3 ⚡ Paper towel layer
 - 4 ⚡ Person in an aphorism about beauty
 - 5 ⚡ Be fully consistent, as a story (2 wds.)
 - 6 ⚡ Liner for a loafer
 - 7 ⚡ Volkswagen model named for a desert wind
 - 8 ⚡ Ian McKellen's title
 - 9 ⚡ Flies heavenward
 - 10 ⚡ Harried parent's command
 - 11 ⚡ Electron's path
 - 12 ⚡ Asian subcontinent
 - 13 ⚡ Momentarily lose conviction
 - 14 ⚡ Out on a limb?
 - 15 ⚡ The level this puzzle's deadbeats have sunk beneath?
- Acrostic**
- 1 ⚡ Hall's musical partner
 - 2 ⚡ Fashion mag since 1945
 - 3 ⚡ Food item whose name means "little donkey"
 - 4 ⚡ Homewreckers?
 - 5 ⚡ Otherwise
 - 6 ⚡ Analyst of voters' opinions
 - 7 ⚡ Land, to Lucullus
 - 8 ⚡ Legendary
 - 9 ⚡ It gets high from drinking? (2 wds.)
 - 10 ⚡ Recovered from a shipwreck
 - 11 ⚡ Baroque composition featuring a soloist
 - 12 ⚡ Trace the development of, as a word
 - 13 ⚡ Small valleys
 - 14 ⚡ Butler's beloved
 - 15 ⚡ When all's said and done (3 wds.)
 - 16 ⚡ Common pet name
 - 17 ⚡ Cavalryman's sword
 - 18 ⚡ Outdated term for the Orient (2 wds.)
 - 19 ⚡ Place for a name tag
 - 20 ⚡ Showing academic growth?
 - 21 ⚡ Worry
 - 22 ⚡ Match divisions
 - 23 ⚡ Cheaper-than-usual tires
- Get the solutions** to this week's Journal Weekend Puzzles in next Saturday's Wall Street Journal. Solve crosswords and acrostics online, get pointers on solving cryptic puzzles and discuss all of the puzzles online at WSJ.com/Puzzles.

REVIEW



'THE MIRROR OF SOVIET SOCIETY,' a cover for a 1928 edition of the magazine Red Field.

ICONS

When Art Joined The Revolution

A Chicago exhibition showcases artists' contributions to communism's 1917 rise to power in Russia, from posters to furniture to cookie boxes

BY SUSAN DELSON

THE REVOLUTION was not televised, but it's now in a museum. To mark the centenary of the 1917 Russian Revolution, the Art Institute of Chicago is looking at visual artists' contribution to the event—from posters and films to Bolshevik cookies and a cupboard designed to cope with a housing crunch by doubling as a table for 12 or more.

"Revolutsiia! Demonstratsiia! Soviet Art Put to the Test," which opens Sunday, plunges viewers into the tumultuous years that swept Vladimir Lenin and his Bolshevik comrades into power in what was called "10 days that shook the world."

"When you have a revolution, one truly worthy of the name," said exhibition curator Matthew Witkovsky, "the result, at least temporarily, is a society whose shape isn't known. It has to be created." With Russia's population of about 130 million largely illiterate in 1917, the revolutionaries had to carefully assess every aspect of daily life and to communicate abstract principles through concrete, practical examples—often through design and other arts.

Mr. Witkovsky and his colleagues have jammed more than 500 original pieces and roughly two dozen historical reproductions into a series of displays—in some cases, creating, for the first time, large-scale 3-D objects from sketches made in the 1920s.

The show's opening section, "Battleground," focuses on the revolution's early years and the civil war that raged until 1921 among the Bolsheviks, other socialist factions and counter-revolutionaries. Posters attest to propaganda's crucial role in turning the tide. Soon after, cultlike displays of photos, posters and other depictions of Lenin began to replace religious icons in public buildings and apartment houses. The show's "Lenin Wall" installation includes porcelain figures of the leader and an ink stand with one of his maxims: "Less political chatter."

"Revolutsiia! Demonstratsiia!" ("Revolution! Demonstration!") has nine other display spaces focusing on such themes as home, factory, press, exhibition and cinema. Many avant-garde artists shared the revolution's utopian ideals and rethought everything from art-school curricula to cigarette-box designs. In 1922, the artist Gustav Klutsis sketched a series of outsize multimedia kiosks, including one that combined an overhead film screen, orator's platform and newspaper and magazine racks—and for the press section, the Art Institute has created the first 3-D version, a structure 14 feet tall.

Similarly, the exhibition re-creates a prototype workers' club designed in 1925 by Aleksandr Rodchenko, complete with early Soviet magazines and books (for the factory sec-

tion) and the 1926 "Room for Constructive Art" (for the exhibition section). The 1926 "Room" was designed by El Lissitzky, a devotee of the constructivist movement, which saw art as a tool for social transformation. The room, which like its original shows works by artists like Dutch abstract pioneer Piet Mondrian and Paris-born Francis Picabia, is itself a work of art: Lined in thin vertical laths painted black on one side, white on the other and gray on the front edge, its walls shift in appearance as visitors move through the room.

Like the rest of the historic reproductions, the Rodchenko and Lissitzky rooms were commissioned by the Moscow-based V-A-C Foundation, which collaborated with the Art Institute in organizing the show. Established in 2009 by Russian businessman Leonid Mikhelson, the V-A-C Foundation has a new exhibition space in Venice, where several of the reproductions appeared this summer.

The texture of daily life comes through most vividly in the storefront and home sections. The new Soviet government was faced with rethinking and rebranding consumer goods to reinforce its revolutionary message. As re-created shop windows demonstrate, even the most cerebral artists rolled up their sleeves and got busy. Kazimir Malevich's starkly reductive abstractions were adapted to porcelain plates and coffee sets; Vladimir Tatlin, whose spiraling 1920 "Monument to the Third International" is an icon of early Soviet art, later designed a baby's drinking cup. Rodchenko designed packaging for Red Aviator cookies (with text by poet Vladimir Mayakovsky) and Our Industry caramels, among other brands. Their bold graphics draw attention to their revolutionary logos: a squadron of small aircraft on the cookie box, a sleek modern factory on the caramel wrappers.

In the home section, multifunction furniture attests to the acute housing shortages of the early Soviet era. The door on a re-created 1926/27 cupboard drops down, Murphy-bed style, to become a dining table for at least 12, and a re-created 1926 drafting table does similar double duty, with built-in slots to store its four folding chairs. Even a small bed was designed to fold into a table for two.

While cramped quarters partly prompted this domestic versatility, so did the need for a revolutionary society—and its furniture—to "remain flexible and adaptable while things are being figured out," said Mr. Witkovsky, who heads the museum's photography department. We tend to think of revolutions as taking place in public, he added, but for the Russian Revolution, "the relation of private to public space, and even private life to public life" was critical.

The revolution itself may be long gone, but the questions it posed about daily life, its structure and its meaning continue to reverberate 100 years later.

Bold graphics draw attention to revolutionary logos.

MASTERPIECE:

'DRACULA' (1897), BY BRAM STOKER

A STORY THAT WILL NEVER DIE

BY STEFAN BECK

WHEN APPRAISING Bram Stoker's "Dracula," which turns 120 this year, one can't ignore its long, penetrating cultural influence.

The film adaptations are too numerous to count. The Vampyre has been played not only by Max Schreck, Bela Lugosi, Christopher Lee, Klaus Kinski and Gary Oldman, but also by George Hamilton—who appears to take his ghastly repose, down through the centuries, in a tanning bed—Leslie Nielsen and, saints preserve us, Adam Sandler. There have been pornographic versions; derivative novels, comic books, and cartoons (memorably, "Count Duckula"); videogames, toys, Pez dispensers; a children's television puppet who needs no introduction; even a classic breakfast cereal, Count Chocula. And surely no small portion of the Great Pacific garbage patch is composed of plastic vampire teeth, produced and discarded by the millions each Halloween.

An awful lot of that cultural output is, like those fake fangs, garbage. So it is worth asking whether the novel that spawned it ought to be resurrected, or permanently staked to the bargain table.

Because Stoker's "Dracula" has been so overshadowed in the popular imagination by movies—many of which erase or combine some of its protagonists and omit large sections of its dialogue and action—one forgets just how finely wrought and affecting a novel it is in its own right. With the tenebrous beauty of its prose, and its turns life-affirming and despair-inducing themes, it possesses an essential gravity that all the films only F.W. Murnau's "Nosferatu" can hope to match. By all indications, Stoker's "Dracula" will never die.

From the young solicitor Jonathan Harker's first approach to Castle Dracula, through the Carpathian Mountains in Transylvania, the reader encounters Stoker as landscape painter: the "deep blue and purple in the shadows of the peaks," the "masses of weeping birch, their white stems shining like silver through the delicate green of the leaves," a forbidding moon "sailing through the black clouds...behind the jagged crest of a beetling, pine-clad rock." In small details, like the taste of paprika or the "snake-like vertebra" of a leiter-wagon, Stoker grounds us in a travelogue's actuality before bearing us onward to the fantastic.

Stoker's gift for indelible description is even more welcome when he turns it to the grim and grotesque. We find ourselves in a candlelit tomb in which "flowers hung lank and dead, their whites turning to rust and their greens to browns" and where "the spider and the beetle had resumed their accustomed dominance." We watch the Count recoil from a crucifix and a Communion wafer, wearing an "expression of hate and baffled malignity," his "waxen hue greenish-yellow by the contrast of his burning eyes...the red scar on the forehead showed on the pallid skin like a palpitating wound."

Were "Dracula" only an aesthetic experience, a promenade through a great hall hung with images of the fearsome and uncanny—beheaded corpses, sentient fog, baying wolves, a sea of rats, a lunatic eating flies—it would be a horripilating delight. Were it a mere detective story, a gothic noir in which our world-weary but sanguine hero, Professor Van Helsing, must lead his friends in a race against time and a superior foe, it would still deserve to be read with relish.

Yet it is both of those things and much else besides. As a tale of good versus evil, it dwells as thoughtfully on the former as it milks the latter for venom. "Dracula" is a celebration of friendship, cooperation, duty and sacrifice. The Count's blood-thirsty selfishness is held up by contrast as evil, yes, but also as infantile.

In its depiction of the battle between superstition and reason—a battle that never ceases, not even in the minds of men of science—"Dracula" says that nothing is less rational than to believe we grasp all things. "Do you not think," asks Van Helsing, "...that some people see things that others cannot?...Ah, it is the fault of our science that it wants to explain all; and if it explain not, then it says there is nothing to explain."

The mystery at the heart of "Dracula," the mystery that lends it its enduring power to hypnotize and frighten, is not whether vampires could exist. Nor, contra the fixation of those who see "Dracula" primarily as a challenge to Victorian mores, does its great mystery have anything to do with the ancient and untamable power of sexuality—female, vampire, or otherwise. No, the monster at the end of this book is Eternity. Stoker plays upon our vestigial stygiophobia, our fear of a fate worse than death and a hell beyond time, as skillfully as an old pipe organ. What music he makes! Hark, if ye dare.

Mr. Beck is a writer living in Hudson, N.Y.



RYAN INZANA

8 'Guerrilla Tacos' from the streets of Los Angeles
D5



OFF DUTY



4 ways Nike kept LeBron James happy when creating his shoe **D13**

EATING | DRINKING | STYLE | FASHION | DESIGN | DECORATING | ADVENTURE | TRAVEL | GEAR | GADGETS

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* * * *

THE WALL STREET JOURNAL.

Saturday/Sunday, October 28 - 29, 2017 | **D1**



101

Things to Do Before You Die (At Age 101)

- 1 Drive cross-country. Any country.
- 2 Run for local office. If it's not a good fit, you can always derail your self with a public scandal.
- 3 Pet a cheetah. An old, slow, unhungry one.
- 4 Rank your neighborhood bakeries. Taste everything they bake. You know, because you're thorough.
- 5 Investigate a family mystery. If you solve it, keep the answer to yourself.
- 6 Go to a flea market in Paris and buy something redolent of the 1920s. Celebrate by downing a Pernod. Don't gag.
- 7 Ask a friend to scare you thoroughly when you'll least expect it. Forgive the friend within five years.
- 8 Wear armor. Someday Nike will make armor.
- 9 Learn to cook a dish you can claim to be famous for. Give it a plausibly famous name, such as "Mussels Arrivederci." OK, something better than that.
- 10 Sing while lounging atop a grand piano, but stop short of writhing.
- 11 Quit a terrible job. If you get fired before you summon the courage to quit, silently thank your terrible boss.
- 12 Every town has an outdated law. Break one.
- 13 Rescue a horribly named dog (e.g. Oreo, Flower, Piddles) and compassionately rename it. Then, inevitably, start adding "y" to the name (Hucky, Betsy, Watsony), making it horrible again.
- 14 Drive down an entire street backward, even if it's a remote country lane.
- 15 Pick a book that you've lied about having read and read it. Unless it's "Ulysses" or "Middlemarch." Then you're exempt.
- 16 Sleep outside and not in a tent. Possibly in a hammock.
- 17 Eat camel hump at a souk in Fez. Try, unsuccessfully, to determine how many Weight Watchers points a serving of camel hump is.
- 18 Catch a dozen fireflies. Release.
- 19 Appreciate the gift of "never having done hot yoga." Some things cannot be unsmelled.
- 20 Attempt a cartwheel. To avoid injury, take care to avoid landing on your walker.
- 21 Emerge victorious from a battle of wills while milking a cow.

Please turn to page **D2**

[INSIDE]



'STRANGER' WITH CANDY
8 items that made the second season of 'Stranger Things' possible **D13**



PROPERTY WRIGHTS
4 Frank Lloyd Wright-designed homes, starting at \$195,000 **D9**



SKI JUMPERS
6 après-slope sweaters and where to be seen in them **D3**



MAKE A DATE WITH THESE DESTINATIONS
10 buzzy places to travel in 2018 **D7**

THE LISTS ISSUE

JUST TO-DO IT

Continued from page D1

22 Wear a large and interesting hat.

23 Since haters of pumpkin spice now rival its defenders in number, decide once and for all where you stand.

24 Redecorate your least favorite room. Preferably one in your own home.

25 Do something you're petrified of doing. See No. 56.

26 Teach a baby chimpanzee sign language. Take care not to teach him the word "insurrection."

27 Try Biologique Recherche P50—the 1970 version—and deliberate: Is it really the best skin care product of all time?

28 Bluff, successfully, during a negotiation.

29 Jump off a becalmed sailboat into the Aegean Sea. Diving is shadier.

30 With this Jonathan Franzen quote in mind, identify one of your recent insights: "When the event, the big change in your life, is simply an insight—isn't that a strange thing?"

31

Mentor someone, even if he or she didn't ask you to.

32 Buy a round for the entire bar—preferably on a mellow weeknight.

33 Move to a place with bragging rights. A lighthouse would do.

34 Discover Copenhagen by having what many (including dispensers of Michelin stars) say will be the best meal of your life at Geranium.

35 Tame a squirrel.

36 Cross the Atlantic Ocean in a ship. Become briefly, violently seasick so that, once you gain your sea legs, you can enjoy being



with a parrot on their shoulders, smiling broadly despite the fact that its claws are really digging into their flesh.

88 Record an iPhone video of yourself singing a love song and send it to your partner, even if you go off-tune. Cheesy suggestion: "Have I Told You Lately That I Love You?"

89 Go to a drive-in with homemade popcorn and watch a movie from the roof of a car. Even better with children.

90 Go see what all the fuss is about.

91 Sail a toy boat, available for rent, in New York's Central Park.

92 *Ride a horse around the Egyptian pyramids. Once around is plenty.*

93 Visit 101 countries. Congratulations, you're eligible to join the 1,400 members of the Travelers' Century Club.

94 Purge the word "semblance" from your vocabulary. Also: "unprecedented."

95 If at all possible, have a house built to your specifications, tower room and all.

96 Buy a leather jacket. Over the course of the next 20 years, break it in.

97 Look at the moon and consider that Virginia Woolf, Harry Houdini and Jesus all looked at the same moon.

98 Outwit a bully.

99 One summer, simply lift all the carpets off your floors so you feel like you're vacationing in a Caribbean bungalow. Of course, if you have wall-to-wall carpet, you'll really need to put your back into it.

100 Make peace with your ex.

101 Dance with Maasai warriors in Kenya. Failing that, dance with aggressive retirees in Connecticut.

Contributors: Jessica Coen, Terrance Flynn, Tim Gavin, James Hitchcock and Off Duty staff



36


ELIZABETH LOCKE
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68 *Experience both love and squalor, even if there is no Esme in your life.*

53 What message would you skywrite to a beloved? Whisper it to him or her instead.

54 Swim in a moat, as in Dodie Smith's 1948 novel "I Capture the Castle."

55 Make lists of things being done by people 20 years younger and 20 years older than you. Pick three from each and give them a shot.

56 Use a bidet.

57 Use a bidet correctly.

58 If you have a day to kill in downtown Detroit, experience at least two of the four floors of John K. King's used and rare bookstore. Engage the staff.

59 Write an impassioned letter to the editor. Get your facts straight.

60 Use a porch properly: to people-watch; to read; to drink gin and Bitter Lemon; to have a directionless conversation. A stoop will do in a pinch.

69 Stop by your lonely-seeming neighbor's place and say "hello."

70 Reintroduce yourself to the comfort that is corduroy.

71 Memorize at least one quotation. Our go-to comes from Katherine Mansfield (1888-1923), the New Zealand short-story writer: "Come, my unseen, my unknown, let us talk together."

72 Interview your mother to find out what her favorite recipe was as a child. Make it for her.

73 Ignore your abysmal record at matchmaking and try once again with those two people you just know would hit it off. If nothing else, you'll maintain your abysmal record at matchmaking.

74 Pour yourself a glass of Wild Turkey 101. As in 101 Proof.

75 Watch all eight hours and five minutes of Andy Warhol's movie

(3)

THE LISTS ISSUE: STYLE & FASHION

Sloped Shoulders

6 new aprés-ski sweaters—and the resort towns best-suited to their particular style



Cortina d'Ampezzo, Italy

After swerving your way down the Dolomites, this 1960s-esque Fair Isle sweater from **The Gigi** will evoke Marcello Mastroianni; imposing shades recommended. Sweater, \$316, matchesfashion.com

Gstaad, Switzerland

Competitively chic, **Gucci's** intarsia cardigan will get you noticed alongside George Clooney and Madonna, who frequent this A-list resort town. Sweater, \$4,200, gucci.com

Aspen, Colorado

Packed with posh shops, this town is no place for dull normcore style. More appropriately fashion-conscious: **Burberry's** six-patterns-in-one knit. Sweater, \$975, Burberry, 212-407-7100



Mad River Glen, Vermont

For a place so classic it doesn't even allow snowboarders (those pesky planks wreck the powder), bust out **Pendleton's** unabashedly retro shetland. Sweater, \$129, pendleton-usa.com



Jackson Hole, Wyoming

Polo Ralph Lauren's pullover suits this less image-obsessed spot: A techy lining keeps it toasty; a throwback logo will earn you high marks from the town's lifers. Sweater, \$495, ralphlauren.com



Tenjindaira, Japan

You'll fit right in with this argyle jumper from **Thom Browne**, whose tweaked preppy designs might just have more fans in Japan than in his native New York. Sweater, \$2,600, thombrowne.com

FAMOUS FACES

5 timepieces as renowned as their owners, from 'A Man and His Watch' by Matt Hranek (Artisan Books, Oct. 31)

Fred Astaire's
1929 Cartier Tank Cintrée



Ticker Tale Horse trainer Felix Leach Jr. received this timepiece from Mr. Astaire, a speedy hooper in his own right.



George Bamford's
Army vs. Navy 'Popeye' Rolex Yacht-Master



Ticker Tale Mr. Bamford, a 'Popeye' fan and watch customizer, gave the hands of his Rolex extra muscle.



Elvis Presley's
Corum
Buckingham
Reference 5971

Ticker Tale The crooner gifted this watch right off his wrist to his longtime bodyguard Richard Davis.



Franklin Delano Roosevelt's
Tiffany & Co. Yalta Conference Watch

Ticker Tale This was on FDR's wrist as he met Winston Churchill and Joseph Stalin at the Yalta Conference.



Andy Warhol's
Patek Philippe
Reference 2503

Ticker Tale Mr. Warhol wore but never wound this beauty, declaring, "I don't wear a Tank watch to tell the time."

A SHADOW OF ONE'S FORMER RALPH

10 fashion designers who got their start at the house of Ralph Lauren

Clare Waight Keller of Givenchy

Todd Snyder

Sid Mashburn

Vera Wang

Tory Burch

John Varvatos

Thom Browne

Ex J.Crew designer Frank Muytjens

Tim Coppens

Joseph Abboud

STUART WEITZMAN

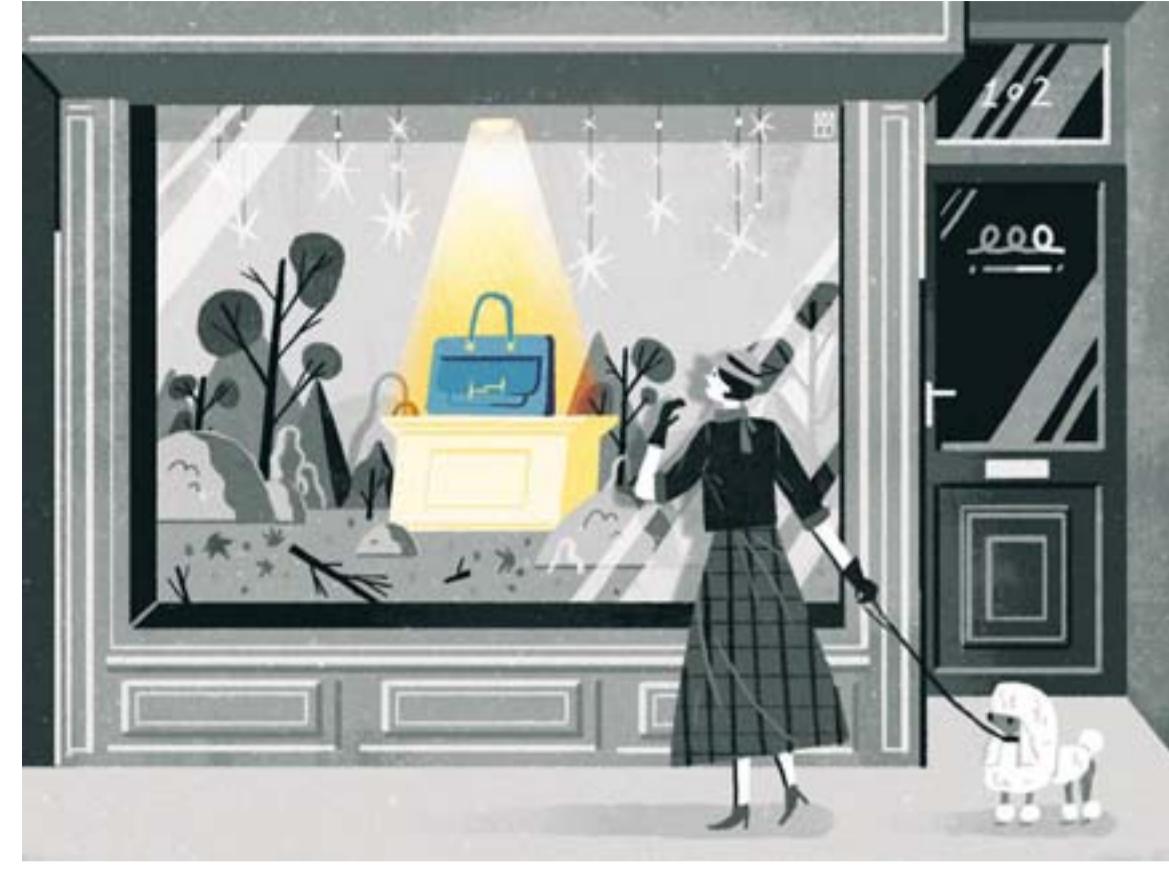
685 FIFTH AVENUE 625 MADISON AVENUE THE SHOPS AT COLUMBUS CIRCLE
WORLD TRADE CENTER 2151 BROADWAY 118 SPRING STREET STUARTWEITZMAN.COM

FASHION ONESIES

9 fall runway looks that showcase designers' mania for monochromatic style



THE LISTS ISSUE: STYLE & FASHION



From top: Prada Sweater, \$990, mytheresa.com; Simone Rocha Dress, \$2,222, net-a-porter.com; Saint Laurent Boots, \$995, matchesfashion.com

Old Souls, New Finds

6 vintage/resale experts pick out a fall 2017 must-have that they will wear and cherish—until they're ready to flip it

1 Kristen Dempsey

Brand Director at Heroine

New Find Simone Rocha embroidered dress

Reasoning "Simone Rocha has a specific vision, and she's executing that vision in her well-made collections. People often buy vintage because it lasts, and in 10 or 15 years, Simone Rocha's pieces will still have a lot of value. Pay attention to her beautiful textiles or to those that last—like wool or silk."

2 Rachel Zabar

Vintage Dealer

New Find Gucci tiger-print dress

Reasoning "Anything new from Gucci looks like vintage simply because it is already [inspired by vintage] Gucci. If you had a 1960s vintage Gucci piece, you would look like you're wearing modern

Gucci right now. When I saw the tiered, tiger-motif dress, I was freaking out! But even being so obsessed with it, I figured out when I could get my lowest price on the new dress and waited it out."

3 Marie Blanchet

Head of Vintage at Vestiaire Collective

New Find Saint Laurent red velvet boots

Reasoning "You pretty much have to buy your winter shoes in August—these sold out early. Anything from Saint Laurent is a good investment. He set the rules for how modern women dress, and we still play by those rules. At a pop-up shop at Merci [in Paris], we sold lots of vintage YSL wide-leg trousers—it was like selling baguettes, they went so fast!"

4 Bay Garnett

Stylist and Co-Author of 'The Cheap Date Guide to Style'

New Find Prada cashmere sweaters

Reasoning "Miuccia Prada's designs often look vintage even when they're new. I love their cashmere sweaters in bright colors; you're never going to find that quality in a thrift store. In general, I wouldn't buy a new silk shirt or a corduroy jacket—you can get either of those at a thrift store."

5 Rati Lavesque

Chief Merchant at TheRealReal

New Find The Row combat boots

Reasoning "Comfort is key these days, and these boots are comfortable. The Row has great basics like their wool panel skirts and trousers. Pants are all about the fit, so consider how you tailor them if

you plan to resell them—or someone may not be able to let the seams out to make them larger."

6 Katy Rodriguez

Co-Founder of Resurrection

New Find Dries Van Noten print dress

Reasoning "If I were buying something new, it would be from the same designers I buy in vintage: Dries Van Noten, Comme des Garçons and Yohji Yamamoto. Those designers have a consistent aesthetic that carries all the way through the years. Also, it matters less and less if things are old or new. Buyers don't follow the passé rule that 'vintage clothes must be 20 years or older.' They don't think about it at all."

—Edited from interviews by Lauren Ingram

VENIA TANG

NOT VERY BRIGHT

5 beauty brands' top-selling lip shades, surprisingly not red



SAINT LAURENT GETS AN F

5 scathing reviews and the iconic pieces that prompted them



this exercise in kitsch." (*Green fox-fur chubbies*)

5 The Los Angeles Times, 1977

"Several hundred pushed their way into the Hotel Crillon, hoping to watch him drop another bomb on the fashion world. Two hours later they were still waiting for the explosion that never happened." (*The Victorian blouse and the corset top*)

Source: *Fashion historian Catherine Örmen, author of the new book "All About Yves"* (Laurence King Publishing)

1 British Vogue, 1960

"Pale zombie faces...black endlessly." (*Black crocodile-embossed motorbike jacket with mink trim*)

2 The New York Times, 1966

"Yves Saint Laurent, a gifted and much copied designer, strains too hard to convince the world how much he is hand-in-hand and eye-to-eye with the very young." (*Le smoking suit*)

3 International Herald Tribune, 1971

"What a relief at last to write about a collection which is frankly,

definitely and completely hideous. I'd say it's suicidal." (*Printed-chiffon dresses worn with ankle-strap platform shoes*)

4 The Guardian, 1971

"His collection was a tour de force of bad taste...nothing could exceed the horror of



HIGH COMMAND

4 stylish combat boots, ranked by stature

6" Jace Boots \$825, robertclergerie.com

8" Fara Boots \$1,390, [The Row](http://TheRow.com), 212-755-2017

13" 1B99 Boots \$170, drmartens.com

18" Soul Boots \$2,475, [Valentino](http://Valentino.com), 212-355-5811



NO MORE MANIC MONDAYS

5 reasons this one dress will make your get-ready-for-work routine easier this winter

1 You'll stand out among the wan worker bees thanks to its brilliant color (it's the color of the season).

2 That off-center row of white buttonholes—and some deliberately absentee buttons—makes a modest silhouette stylishly quirky.

3 Its long sleeves: No need to drag along a chunky sweater.

4 But it's not too warm. Made of heavy silk, it will keep you cozy (not overheated) during your commute.

5 Belted? Unbelted? A fashion dilemma with no wrong answers.



Burberry Socks, \$120
Make a bank run in loafers and this pair of cozy, diamond-patterned foot-warmers. us.burberry.com



Chanel Headband, \$325
Break out the petty cash for a coquettish hair ribbon in black satin. [Chanel](http://Chanel.com), 212-355-5050



Coach Leather Cleaner, \$10
Effective, though not if you don't have the money to buy the \$995 matching leather bag. coach.com



Dior Scarf, \$200
Add up all the ways to tie it (on your wrist, neck, purse, cat) and it practically pays for itself. [Dior](http://Dior.com), 800-929-3467



Hermès Soaps, \$32 each
Fragrant citrus or rhubarb bars will enrich your bath time, if not your bottom line. hermes.com

THE LISTS ISSUE: EATING & DRINKING

Filled With L.A. Attitude

8 tacos from the new cookbook 'Guerilla Tacos: Recipes From the Streets of L.A.' (Ten Speed Press), by famed food-truck chef Wesley Avila with Richard Parks III—plotted on a matrix according to relative irreverence and degree of meatiness



Mushroom

While mushroom tacos are a classic veggie option, this recipe takes some liberties with tradition, introducing an enlivening pinch of curry powder, pan-fried halloumi cheese and a habanero salsa spiced with Aleppo pepper.

CLASSIC

VEGGIE

Fried Potato

Drenched in avocado-tomatillo salsa, these rolled and fried, potato-filled taquitos are Mr. Avila's homage to L.A. institution Cielito Lindo. "I love that place," he writes. "They still make my favorite taquito."



Roasted Pumpkin

Grilled to a char, succulent squash pairs with a fiery salsa of bird's beak chiles in this taco that riffs on a dish Mr. Avila had at Pazar Food Collective in Sydney. A very Cali salad of arugula and goat cheese with pear vinaigrette makes a refreshing garnish.



Sunchoke

Jerusalem artichokes simmered in milk and sautéed in butter mingle with fried Brussels sprout leaves in these tacos topped with a tart pomegranate salsa.

Creative

Carnitas

Mr. Avila's take on the traditional pork dish reflects his classical chops: "I don't make carnitas like my mom. I make it like Thomas Keller's duck confit with green salt." That last element, an herb salt, draws moisture from the pork for a tender result.



Swordfish

Brightened with tangerines and red frill mustard greens with Sherry vinaigrette, these grilled-swordfish tacos are what Mr. Avila calls "my version of California cuisine...just a Mediterranean-style seafood dish with nice ingredients."

MEATY



Crab and Spigarello

Served open-face, tostada-style, on a crisp-fried tortilla, this combo of sweet crab meat and spigarello—a southern-Italian cousin of broccoli that's become a SoCal go-to—comes with juicy sliced tomatoes and a chile-charged almond-tomatillo salsa reminiscent of Spanish romesco.



Pig Head With Lentils and Fried Quail Egg

Inspired by a dish at L'Auberge Carmel, a celebrated California cuisine destination of which Mr. Avila is an alum, this luxurious layered taco involving homemade headcheese is, in the chef's words, "a weekend project for a dinner party."

BAKED-GOOD MORNINGS

3 desserts you can and should eat for breakfast, from Stella Parks's 'BraveTart' (W.W. Norton), 2017's best baking book



1 Homemade Cinnamon Rolls

Ms. Parks's buttery, crowd-pleasing, from-scratch take on those tubes of dough peddled by Pillsbury has a killer cream-cheese frosting.



2 McDonald's®-Style Apple Turnovers

This reverse-engineered recipe respectfully borrows an innovation from the fast-food pie: a freeze-dried-apple powder that pushes the filling's fruity flavor over the top.



CLEAN-PLATE CLUB

4 ways of keeping leftovers out of landfills around the world

South Korea The nation's households are charged a monthly fee based on the weight of food waste they create, resulting in a 30% reduction of waste since 2013.

otherwise unwanted bread.

Italy In 2015, Italian chef Massimo Bottura enlisted other top toques to transform scraps from the Milan Expo into dishes to feed the needy at Refettorio Ambrosiano, an innovative soup kitchen. The Refettorio model has since spread to cities such as Rio de Janeiro, London and New York.

U.S. At Yoplait's factory in Murfreesboro, Tenn., anaerobic digesters turn acid whey, a by-product of yogurt production, into electricity that powers the plant, saving \$2.4 million a year in operating costs.

Source: "WASTED! The Story of Food Waste" (Zero Point Zero), in theaters and streaming on iTunes and Amazon now.

—Eleanore Park

A COWBOY WALKS INTO A CRAFT COCKTAIL BAR...



5 small-batch spirits from the western U.S., recommended by top barman Thad Vogler*

1 Leopold Bros. Maryland-Style Rye Whiskey

This delicate, floral whiskey out of Colorado uses an heirloom strain of rye from before Prohibition.

2 St. George Dry Rye Gin

This California gin swaps in rye for the neutral-spirit base.

3 Osocalis XO California

A blend of aged brandies made from Colombard, Chenin Blanc, Semillon and Pinot Noir. Made to drink neat but pretty great in an old-fashioned too.

PENNY DE LOS SANTOS/CINNAMON ROLLS; TURNOVERS, POP-TARTS/F. MARTIN RAVIN/THE WALL STREET JOURNAL (BOTTLES)

4 Marian Farms Farmhouse Curaçao

This certified-biodynamic bottling of the classic cordial is dry compared to mass-produced competitors and delicately aromatic.

5 Germain-Robin Brandy

Made from Cali grapes in old-world style, this brandy lends cocktails winelike complexity.

*author of 'By the Smoke and the Smell: My Search for the Rare and Sublime on the Spirits Trail' (Ten Speed Press) —E.P.



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THE LISTS ISSUE: EATING & DRINKING

BY LETTIE TEAGUE

IS THERE ANY beverage more word-worthy than wine? Do beer drinkers or cocktail connoisseurs have as large an arsenal of nouns and adjectives? While wine verbiage can certainly be excessive, even annoying, some words are actually quite useful. Here, 10 phrases you might hear bandied about, and what they really mean to wine drinkers.

1 'Lively acidity.'

A wine without acidity is a dull, flat drink. It's like Coke without the fizz. Acidity also acts to balance other elements of a wine, especially sweetness and tannins. While some wines have more acidity than others (e.g. Chablis, Muscadet), all well-made wines have a good amount of acidity, making them lively and refreshing to drink.

2 'A balanced wine.'

When a wine is "balanced" all of its parts are in harmony. Axel Heinz, winemaker of famed Super Tuscan Masseto and Ornellaia, describes a well-balanced wine as one in which "no single parameter stands out. It's not about the fruit, it's not about tannin," but the wine as a congenial whole.

3 'Great length.'

When a wine leaves a lasting impression it's said to have "length." A synonym for length is "persistence." Both words refer to texture and flavor that last on the tongue. Wine critic Robert M. Parker, Jr. liked to cite the time that a wine lasted in his mouth as a mark of its quality—in remarkably precise numerical amounts.

4 'Really minerally.'

Minerality is such a complex notion I devoted an entire column to it in 2013. Minerally wines are often made in soil containing a high proportion of actual stone (e.g. limestone), as in the case of Chablis, but can also be used merely descriptively, to frame a flavor or sensa-



SANNA MANDER

Oeno Philology

10 phrases commonly wielded by wine connoisseurs, decoded

tion as akin to, say, flint or marble. A professor of viticulture in California offered what has become my favorite definition for minerality: "an energetic buzz."

5 'On the nose.'

Oenophiles don't refer to a wine's

"smell" but its "nose," and every wine has one—for better or worse. The "nose" of a wine encompasses both aroma (primary scents of fruit and/or oak) and bouquet (secondary smells of earth or mushroom that develop over time). Someone particularly adept at discerning nu-

anced aromatics is noted as a "nose" in the world of wine (and perfume, too).

6 'A good palate.'

A palate is both the physical roof of the mouth and an ability to discern subtle qualities or glaring failures

of a wine. A drinker acquires a palate with time and practice. Those who are particularly gifted or naturally discerning are acknowledged as good palates.

7 'Elegant structure.'

Just as the collective components of a building are referred to as its "structure," fruit, alcohol, acidity and tannin make up a wine's structure. When these components work together especially well, a wine is praised as "well structured."

8 'Residual sugar.'

There are two types of wine sweetness. Residual sugar—grape sugars left in the wine once fermentation ceases—refers to the actual, measurable sweetness in wine. The second type, perceived sweetness, doesn't always correspond to the first. For instance, a wine may be technically sweet but not perceived as such because it possesses lots of acidity (as with German Riesling). Another wine may be lower in residual sugar but also in acidity, and so come across as sweet.

9 'High in tannin.'

There are also two kinds of tannins—grape tannins and oak tannins (from the barrels many wines are fermented and/or aged in)—both of which can grip the inside of a drinker's mouth with astringency. All wines, including white wines, have grape tannins, though some are more tannic than others. For example, Chardonnay has more tannin than Riesling, and Syrah has more tannin than Pinot Noir. New oak barrels impart a more tannic feeling to a wine than older oak barrels; French oak barrels have more tannin than American oak does.

10 'Goût de terroir.'

In one sense, terroir comprises the entire environment in which a wine is produced: the soil, the climate, the sun, even the slope of a hill. It is both a comprehensive and endlessly elusive term. As wine writer Stuart Pigott once said, when a winemaker speaks of his wine's *goût de terroir* (taste of terroir), "reach for your wallet."

SLING SOME HASHTAGS

3 highly Instagrammable dishes from Alison Roman's new cookbook 'Dining In' (Clarkson Potter)

1 Chicories With Anchovy Bread

Crumbs and Egg Yolk Two varieties of magenta-hued and delectably bitter radicchio anchor this feast for the social media feed as well as the palate. A drizzle of sunny egg yolk really makes the salad pop on the plate.

2 Sorbet in Grapefruit Cups So old-fashioned it looks fresh again, this dessert nods to one that wowed Ms. Roman as a child. Store-bought sorbet or sherbet—scooped into hollowed-out citrus—will impress your (Facebook) friends, too. Rock the rainbow flavor.

3 Clam Pasta With Chorizo and Walnuts

Beautifully striated clam-shells never fail to deliver visual drama. Tangled up in a heap of linguine and showered in parsley, they're a surefire "like" magnet.



POWER SERVE

5 ways to raise your cheese-plate ratings this holiday season

To enjoy cheese you need only a nice wedge of it. But in this season when we're so often required to lay on a spread, these items will take your cheese-serving set-up to new heights.



ALL THE RIGHT MOO

From left: Cheese Grotto; selections from the Cheesemonger Box; Bharbit Firenze Cheese Knife; Marcelli Formaggi Olive Wood Bread Board.



1 A Cave for Your Dwelling

This handsome countertop cheese cave provides a controlled climate to keep cheese in prime serving condition. For those who make cheese at home, it can double as an affinage system. Cheese Grotto, \$350, cheesegrotto.com

2 Mail-Order We Melt For

This monthly cheese subscription keeps your cheese board current with selections from around the world. Three half-pound wedges arrive each month. An upgrade includes expertly paired condiments. Cheesemonger Box, from \$75, cheesemongerbox.com

3 Blade Winner

Third-generation knife masters in Lombardy,

Italy, handcraft this knife meant for tackling large hunks of Parmiggiano Reggiano and other hard cheeses. Bharbit Firenze Knife, \$50, dibruno.com

4 Chairman of the Boards

Though billed as a bread board, this dappled plank of smooth, cinnamon-hued olive wood is just the right size for displaying an extravagant cheese selection. Olive Wood XL Bread Board, \$95, marcelliformaggi.com

5 Dairy to Explore

Become an expert on the cheeses you serve by visiting their birthplaces. Tours for turophiles range from a long weekend in Pennsylvania cheese country to 12 days in the Alps. Cheese Journeys, \$1,950-\$6,950, cheesejourneys.com

—Tia Keenan

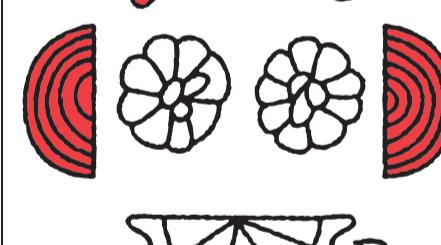
pot, heat a slick of oil until it shimmers. Add a halved lemon, halved onion and halved garlic head, cut-side down, and sear until deeply caramelized. Then add the beans and cover with a couple inches of water.

3 Use cilantro, mint and/or parsley

to bring brightness to the earthy beans. Tie them all into a bundle with kitchen twine and toss into the simmering pot.

4 Stir in a healthy glug of olive oil

after cooking, while the beans are cooling in their liquid. In much the same way we add layers to our clothing ensembles with the advent of winter, beans benefit from an extra layer of fat. —E.P.



SWEETEN THE POT

4 steps to boost your beans from basic comfort food to culinary coup

1 Buy high-quality heirloom beans

(at ranchogordo.com or elegantbeans.com). Even premium beans remain one of the most economical, not to mention nourishing, foods around.

Bypass pedestrian pinto in favor of varieties such as Vaqueiro, Scarlet Runner and Rio Zape.

2 Char the aromatics

to draw out depth and sweetness. In a heavy

buffet lunch, suburban London

WHEN BRITISH FOOD RULED

10 dishes that defined Britain and its dominions in different eras—from 'The Taste of Empire: How Britain's Quest for Food Shaped the Modern World' by Lizzie Collingham (Basic Books)

1545 Salt cod, Portsmouth, England	1640s Olio podrido ("rotten pot," Iberian beef stew), Drax plantation, Barbados	1698 Hare boiled in butter, Connaught, Ireland	1730s Maize mush and possum, Middleburg plantation, South Carolina	1811 Chhattu (unboiled corn-flour pudding) and currant chutney, Patna, Bihar, India	1874 Deviled mutton, Hawke's Bay, New Zealand	1901 Bean stew, bannock (skillet bread) and prune pie, Texada Island, British Columbia	1941 Bully beef (aka corned beef) and sweet potatoes, forward camp, North African desert	1993 Iguana curry, Mahica, Guyana	1996 Turkey curry buffet lunch, suburban London
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MICHAEL GRAYDON AND NIKOLE HERRIOTT ('DISHES'); F. MARTIN RAMIREZ ('CHEESE'); ILLUSTRATIONS (BEANS & EMPIRE) CHRISTOPHER DELRENZO

THE WALL STREET JOURNAL.

THE LISTS ISSUE: ADVENTURE & TRAVEL

Next Big Outings

The 10uzziest destinations to visit in 2018, whether you crave urbane Chinese cities or Midwestern gastronomy

BY CHRISTIAN L. WRIGHT

1 Faeroe Islands

Leave it to an obscure archipelago between Norway and Iceland to take on Google. Last year, camera-strapped livestock began streaming a "Sheep View 360" to let potential tourists see what they couldn't on Google Street View. While windy and remote, the 18 islands are not all woolly sorts and switchbacks. Of note for adventurous sophisticates: the native knitwear label Gudrun & Gudrun (gudrun-gudrun.com), the Ostrom design store and the Michelin-starred tasting menus at KOKS (koks.fo). SAS recently launched two-hour direct flights from Copenhagen.

2 Puebla, Mexico

A two-hour drive from Mexico City, this Spanish colonial city is finally emerging from the capital's shadow. The splashy new International Museum of the Baroque serves as one magnet (mib.puebla.gob.mx). The city's church- and palace-packed historic center—under furious repair after September's earthquake—is another. And two new high-end hotels, Rosewood Puebla (from \$250 a night, rosewoodhotels.com), and the Hotel Cartesiano (from \$300 a night, hotelcartesiano.com) are helping to reel in the luxury-minded.

3 Kuelap, Peru

Think of Kuelap's ruins as the Machu Picchu of the north. Ten thousand feet up in the Andes, not far from the Amazon, the 6th-century site was built by the Chachapoyas, known as the warriors of the

REMOTE NO MORE
Scandinavia's Faeroe Islands, now easily accessible from Copenhagen.



8 Montenegro In June, this tiny country bordering Croatia became the 29th member state of NATO. Other changes afoot: One & Only will open Portonovi, its first resort in Europe overlooking the unreasonably beautiful Boka Bay, in early 2019. Before then you can drop anchor at the Regent Porto Montenegro (from about \$218 a night, regenthotels.com) in a posh marina a 20-minute drive from the medieval town of Kotor.

9 Shanghai

Paris of the East now has a dedicated Michelin guide—30 starred restaurants—and is about to get its own Pompidou Center at the end of 2018. A hotel boom also seems to be upping the aesthetic ante in China's biggest city (pop. 24 million). You can stay at Waterhouse, the highly stylized renovation of an abandoned industrial building in the heart of South Bund (from about \$160 a night, waterhouseshanghai.com) or flee the city's tizzy at the new Aman-yangyun, a forest retreat partially formed out of 13 relocated Ming and Qing dynasty villas, a 45-minute drive from the city (from about \$1,040 a night, aman.com).

10 La Rioja, Spain

In Spain's foremost wine region, medieval hilltop villages play foil to modern architectural designs by Calatrava, Gehry and Hadid. Meanwhile, unexpected Scandinavian flair has infiltrated the gastro-bars of the capital, Logrono, and the guest rooms in newly opened places like Hotel Viura (from about \$135 a night, hotelviura.com).

4 Minneapolis

The twin city that gave the world Prince and Bob Dylan—and will host the Super Bowl on Sunday, Feb. 4—is now luring curious foodies. In 2017, Minneapolis claimed 13 James Beard Award semifinalists. When Gavin Kaysen, chef/owner of the wildly popular Spoon & Stable (in a converted 1906 barn) opened his

clouds. Once an arduous journey, it can now be reached in 20 minutes, thanks to a new 2½-mile-long cable-car ride that zips you through the staggering landscape. Tickets run about \$6, and the hotel Libertador Trujillo can serve as base camp (from \$95 a night, libertador.com.pe).

5 Dundee, Scotland

A coastal college town, Dundee has emerged as Scotland's coolest city (see the old public library turned underground club). In 2018, the V&A Museum of Design will debut as the centerpiece of a \$1.5 billion transformation of

modern bistro Bellecour last spring, he booked 1,000 reservations in the first 24 hours. Other notable names to drop: Thomas Kim, who left Los Angeles to establish the Rabbit Hole (eatdrinkrabbit.com), and Erik Anderson, who sharpened his knives at the Catbird Seat in Nashville and took over Minneapolis's Grande Cafe earlier this year (grandcafemn.com).

the faded riverfront. Designed by Japanese architect Kengo Kuma, the new V&A will celebrate the country's unsung design heritage—from jute to Minecraft (vandadundee.org).

6 Grenada

On the southern edge of the Caribbean hurricane belt—hit by only three storms in 50 years—it's flourishing while many of its neighbors rebuild. In the spring, Silver-sands resort will bring minimalist luxury to the island's southwestern tip, with 43 suites, nine villas and the region's longest pool ([silver-sandsgrenada.com/en](http://silversandsgrenada.com/en)).

7 Madagascar

Plants and wildlife that

are found nowhere else thrive in this African island nation, but discerning visitors have typically found the accommodations a bit of a bummer.

Tour operator Abercrombie & Kent advised travelers to pack patience. For big spenders, the wait is over. In June, the Time + Tide Miavana resort opened on Madagascar's private island of Nosy Ankao: 14 solar-powered villas, each with a pool and butler. Inclusive rates start at \$2,900 per person per night (timeandtideafrika.com). Potential visitors should be aware, however, of a recent outbreak of plague pneumonia throughout the country; check cdc.gov for updates.

STRIKING OILS

6 things you'll find at the Louvre Abu Dhabi, opening Nov. 11, that you won't find at the Paris original

1 A lot less nudity

Out of respect for conservative Muslim values, few works on display will show much flesh beyond the fig-leaved variety. Exceptions: the baby Jesus in

Giovanni Bellini's 15th-century "Madonna and Child," and a Phemba maternity figure from central Africa.

2 Certain Europeans

Leonardo da Vinci's "La Belle Ferronièr," a Vincent van Gogh self-portrait, Paul Gauguin's "Children Wrestling" and Édouard Manet's "The Gypsy" are all among pieces on loan for 10 years from 13 French museums.

3 A 7,500-pound metallic dome

Architect Jean Nouvel's a flying saucer-shaped roof, pierced with 7,850 geometric stars (pictured at left), weighs about the same as the Eiffel Tower.

4 Elbow room

Abu Dhabi has a population of 1.1 million and a nascent museum audience. The new Louvre's 260,000-square-foot exhibition space likely won't see the lines and chaos of the Louvre Paris, which receives 7.4 million visitors annually.

5 A sense of irony

One of the largest works is an installation by Ai Weiwei that questions globalization.

6 Earth's fastest roller coaster, when you tire of art

Formula Rossa, at Ferrari World, where F1-shaped cars shriek at 150 mph, is 20 minutes away by taxi.

—Susan Hack

HEEL, WHITE FANG!

9 odd ways to meet, greet and howl like the locals with Airbnb's new 'Experiences' service



1 Talk a wolf for a walk in Los Angeles, \$150

2 Pick and plant backyard vegetables in Toronto, \$20

3 Hula hoop in Chicago, \$28

4 Paint graffiti in Berlin, \$73

5 Do macramé in Seattle, \$90

6 Clean a canal in Amsterdam, \$31

7 Dress in drag in Mexico City, \$127

8 Attend a dinner party blindfolded in Barcelona, \$61

9 Weave cassette tapes into a cloth in Singapore, \$47

(Prices per person, for 2 to 3 hours, and, yes, that's a lot of hula hooping)

PLEASE PUT YOURSELF IN AN UPWARD POSITION

4 visionary projects that could change the way we travel—if they ever come to fruition

1 Flying Solo

When you think of Airbus, you probably think of jets. And airports. But the company also has lofty aspirations to operate within cities, judging from two new experimental projects known as CityAirbus and Vahana. Both will use electrically powered VTOL (vertical-takeoff-and-landing) aircraft to provide quick, quiet, self-flying transportation in and around urban

centers. Vahana's first test flights are scheduled for later this year and CityAirbus's for 2018.

2 Nest Guest

Imagine sleeping in a luxuriously appointed pod suspended high in the treetops of a forest in Borneo, Ecuador or California. Or walking across a suspended mesh "floor"

to join fellow guests for a communal meal, as birds fly below your feet. Living the Till, a low-impact, temporary hotel, conceived by architect Malcolm Berg of Miami-based firm EoA, takes its inspiration (and name) from the air plant Tillandsia. As for when the treetop hotel might take root, Mr. Berg said

there is no current plan in place, but it's doable now for about million dollars.

3 Jiffy Hop

New York to London in 29 minutes? To Shanghai in 39? To anywhere on Earth in less than an hour? Elon Musk floated that possibility recently, suggesting that many of us could see affordable, city-to-city rocket travel aboard SpaceX's reusable BFR (Big Falcon Rocket) within our life-

times. Forget the movies on demand: Accelerating to nearly 17,000 mph, going weightless, then returning to Earth in less time than it takes to watch a gripping episode of "Game of Thrones" will be entertainment enough.

4 Deep Sleep

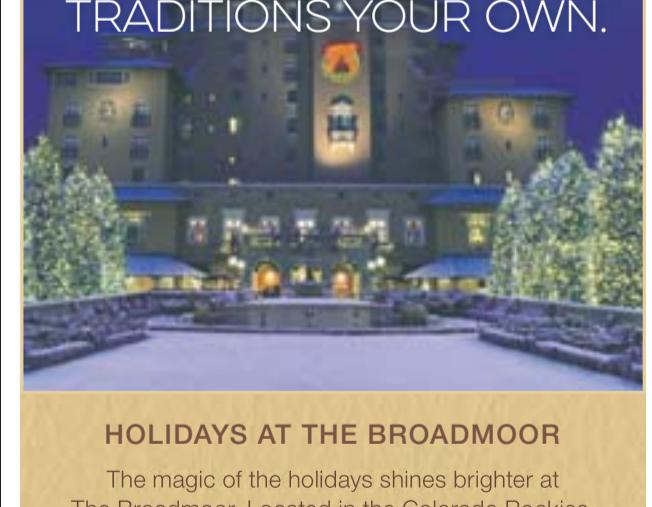
While some hotels boast epic views of skylines or mountain ranges from their rooms, the Floating Seahorses, in the United Arab Emirates, promises an aquatic alternative—picture windows with a fisheye view of reef-dwelling sea life. These semi-underwater luxury vessels are located within the Heart of Europe, part of the World, a collection of man-made islands grouped to represent the earth's continents and countries 2.5 miles off the coast of Dubai. The first of the Seahorses are projected to be completed in 2018 (thoe.com).

—Matthew Kronsberg

MOHAMED SOMJI © LOUVRE ABU DHABI (MUSEUM); ILLUSTRATION: AIRBUS (AIRPORT); ILLUSTRATION: THE BROADMOOR

UNCOMMON COMMUTE A rendering of one of Airbus's proposed vertical-takeoff-and-landing aircraft.

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THE LISTS ISSUE: ADVENTURE & TRAVEL



RYAN MESSIAH/THE WALL STREET JOURNAL

Valley Goals

5 weekend-worthy towns in the Hudson Valley, N.Y., and their ideal visitors.
(Dare to venture beyond Rhinebeck)

MARGOT DOUGHERTY

at Hudson Hil's Cafe on Main Street (hudsonhills.com).

1 Cold Spring | Hikers

On weekends you'll see troops of urban escapees marching from the Metro North train station, water bottles dangling from day-packs, to the Hudson Highlands State Park trailheads just outside this village. The easy-level Little Stony Point trail quickly ascends to a dramatic view of the Hudson and, down the road, the Cornish trail leads to the crumbling remains of a once-grand estate. One of the area's most popular day hikes, Breakneck Ridge, is just north and as the name suggests, not for the novice—or for procrastinators; it's closing for a year or so of maintenance on January 1. Fuel up with shirred eggs

2 Beacon | Art Buffs

The 2003 opening of Dia: Beacon—with its 240,000-square-foot gallery space devoted to contemporary art—was a game changer for America's former "Hat Making Capital." The revival continues, evident in the percolation of carefully considered shops and galleries along Main Street. Browse the cool clothes at Kaight (kaightshop.com), fine wood pieces at Wickham Solid Wood Furniture (wickham.com), the works of a dozen contemporary artists at the Beacon Artists Union (baugallery.com) and the mega-textural and equine paintings at Terreson: Beacon (terreson.com).

3 Tivoli | Poets and Scholars

The center of Tivoli, a hamlet in the town of Red Hook, is tiny, starting around the Lost Sock Launderette and ending a block later at Murray's (murraystivoli.com), an airy cafe set in a 19th-century brick church where you can imagine the lanky patrons in metallic-washed boots are talking about Kierkegaard—Bard College is 3 miles away. In the middle of the stretch, artists Brice and Helen Marden's 11-room Hotel Tivoli (hoteltivoli.org) stands sentinel, a colorfully appointed affair whose farm-to-table restaurant, the Corner, is the beating heart of the hamlet. The overall draw of Tivoli? Poetic beauty. Scenic trails

run through Tivoli Bays, a freshwater wetland, and a 10-minute drive south, Poets' Walk meanders through the former estates of the Astor and Delano families. Bard's Frank Gehry-designed performance center warrants a stop, followed by a stroll through the 1903 Italianate Blithewood Garden, also on the campus.

4 Kingston | Hipsters

The telltale signs are all there: restored Victorian homes next to less fortunate clapboard brethren, bars like the Stockade Tavern (stockadetavern.com) specializing in bespoke cocktails, and an influx of trendy shops. The first capital of New York, Kingston was torched by the Brits who proclaimed it "a nest of rebels"

in 1777. The independent spirit and a bit of grittiness persist in the historic Stockade District where Lovefield Vintage, a pristine clothing shop on Front Street (lovefieldvintage.com) sits next to Bluecashew Kitchen Homestead and its luxe-modern cooking and service pieces (bluecashewkitchen.com). O Positive, a nonprofit that organizes health care for artists in exchange for their work, started in Kingston, which explains the elaborate building murals.

5 Hudson | Nesters

Jennifer and Kim Arenskjold of Arenskjold Antiques (arenksjold.com) were pioneers on Warren Street, the nexus of the antique and vintage furni-

ture trade that made Hudson a bull's-eye for interior designers. Word spread. Begin shopping steps from the train station with the Riverfront Antiques and Design Center (hudsonraddc.com), a mix of old shutters and farmhouse tables, and work your way up Warren Street to high-end dealers like Regan & Smith (reganandsmith.com), Finch (finchhudson.com), Richard Kazarian and Neven + Neven Moderne (nevenmoderne.com). Les Indiennes Outlet is an Indian-fabric-lover paradise (lesindiennes.com) and Hawkins NY (hawkinsnewyork.com) offers a trove of home goods, linen sheets, blown glass vases and pink marble serving boards among them.

GET TO THE POINT ALREADY

5 new buildings around the world that stick out in a crowd



The Oculus, 2016
New York City
Santiago Calatrava's \$4 billion World Trade Center commuter-rail station has been described—or denounced—as a dove taking flight, a white elephant and a blatant boondoggle since it was unveiled last year. Even if you side with the critics, we dare you to stroll beneath its steel wings, look up through the 328-foot-long skylight and not be awed.

Parish Church El Señor de la Misericordia, 2016
Monterrey, Mexico
This structure, featuring a trio of concrete shards that echo the mountain range behind it, riffs on traditional ecclesiastical architecture with a prominent bell tower and stained-glass windows. Visitors enter the building via a trapezoid canopy; cross-shaped windows flood the space with natural light.

Sailing Tower, 2015
Aarhus, Denmark
Denmark's second city has way more than its fair share of radical contemporary architecture, including this sail-shaped observation tower by Danish studio Dorte Mandrup. Cantilevering over Aarhus's docklands (operational since the Vikings arrived in the 8th century), the origami-like steel tower grants 360-degree views of the city.

Philharmonic Hall, 2014
Szczecin, Poland
This symphony hall in northwest Poland replaced an auditorium destroyed in World War II. Thanks to its serrated roofline, it looks more like a hamlet of steeply-pitched, gabled houses than a single building, and its ribbed glass cladding lends it a ghostly appearance that contrasts with the surrounding urban sprawl.

Nanjing Wanjing Garden, 2014
Nanjing, China
A hymn to harmony and mysticism, this V-shaped chapel by Chinese firm AZL is composed of strips of wood that allow light to seep inside and make the structure glow like a lantern at night. The graphic interior is celestial white, while an aperture in the second roof layer creates a skylight, not unlike the Oculus's. —Kate Maxwell

COFFEE, TEA OR LOBSTER?

5 in-flight amenities that have gone the way of the paper ticket

- 1 **Bunk beds with curtains**, multiple airlines, 1930s-1950s
- 2 **Kangaroo tail soup and fresh lobster**, Qantas Airways, 1950s and 1960s, respectively
- 3 **Free Cuban cigars and Sevruga caviar**, British Airways Concorde, 1976-2000s

- 4 **Piano bars with electric Wurlitzer organs**, American Airlines, 1970s
- 5 **Pubs with a videogame console**, Continental Airlines, early 1980s —Barbara Peterson



SCRAM, STYLISHLY

5 ways to get lost for at least \$20,000 a person

Last month, bespoke tour operator Black Tomato launched its "Get Lost" service, offering "Amazing Race"-type adventures for travelers who want to disconnect and recharge in grand fashion. After clients choose a

type of landscape—polar, jungle, desert, mountain or coastal—Black Tomato takes over, planning a self-guided, high-action itinerary. You'll be dropped off in a remote locale with all necessities and clues to help you navigate the terrain—and a satellite phone just in case. Prices vary depending on "how lost you want to get," typically starting around \$20,000 per person for

five days. Here, some sample ways you might lose yourself:

- 1 **Camping in Namibia's Namib Desert** (pictured at left)
- 2 **Kayaking off Iceland's Troll Peninsula**
- 3 **Trekking across Chile's San Rafael Glacier**
- 4 **Bushwhacking through the jungles of Guyana**
- 5 **Riding a camel across China's Gobi desert**

TAKE THE SEE TRAIN

4 commuter routes, in top destinations, that offer million-dollar views for a mere token

1 Chicago By Elevated Rail

The elevated tracks encircling downtown Chicago offer a nearly bird's-eye perspective of the city—similar to New York's High Line, but these routes still carry trains. A \$2.25 spin on either the Brown or Purple Lines rattling around the Loop glimpses the Willis Tower, Millennium Park and LaSalle Street's skyscraper canyon before heading north over a glittering stretch of the Chicago River (transitchicago.com).

2 Venice by Vaporetto

Like

buses anywhere else,

the boat-buses in Venice

(pictured)—specifically Lines 1, 2

and A—get packed to the gills.

Unlike most buses, these vaporetti don't have to struggle

down some side street; they sail

a splendid course along the

Grand Canal. To grab a good

seat, board one stop before the

end of the route and stay aboard

as everyone else disembarks and

the vessel turns around; do this

at sunset for views of glowing

palazzi (actv.avimspa.it/en).

3 Hong Kong by Double-Decker Tram

Brought in by the

Brits a century ago, Hong Kong's

teetering double-decker trams carve a charmingly retro path through futuristic soaring towers. You needn't be choosy—any route between Kennedy Town terminus to the west and Shau Kei Wan terminus to the east rewards rubber-neckers. Elbow your way to the upstairs front row of the "ding ding," as the locals call the trams, to watch walls of neon slowly scrape by and clouds of pedestrians throb below (hktramways.com).

4 Medellín by Gondola The Medellín Metrocable system strings together this hilly Colombian city in a way that's nearly philanthropic: The network of gondolas hoists the farthest-flung residents hundreds of feet in the air over previously impermeable terrain toward opportunities in the city center. For the visitor it's a way to see the whole valley for about \$2, from cliff-clinging neighborhoods to the modernist monoliths of the Biblioteca de España. Line K goes to the library, and Lines J and L are just as scenic (www.metrodemedellin.gov.co).

—Ryan Haase

THE LISTS ISSUE: DESIGN & DECORATING

Plants That Go Bump in The Night

5 spooky species for creeping out your friends (or yourself) this Halloween

BY KATHRYN O'SHEA-EVANS

If you feel silly dressing in costume for Halloween but still get a kick out of the holiday, why not invest in some creepy greenery that's as anthropomorphic, carnivorous or eerie as anything Poe conjured? The fang-like Venus flytrap, indigenous to the bogs outside Wilmington, N.C., is only the start.

"There's a huge, diverse world of beauty, form and life that most of us never really see," said Byron Martin, whose grandfather founded Logee's, a Connecticut retail greenhouse that specializes in rare plants, in 1892.

Consider the sensitive plant (*Mimosa pudica*), an invasive weed native to tropical areas of Central and South America, that literally recoils when you touch it (and at night)—its delicate leaves folding in anxiously on themselves. "Our nervous system impulses are a very similar mechanism," said Bethany Stone, a professor at the University of Missouri who studied the plant's reaction to the recent solar eclipse. (Spoiler alert: They closed up during totality.)

Fascination with creepy plants is nothing new. Charles Darwin meticulously studied them for "Insectivorous Plants," his 1875 book. "The Victorians liked unusual plants; they weren't as straight and stuffy as we think," said Tracy Brindle, curator at the Mark Twain House & Museum in Connect-

icut, where a night-blooming cereus—a beguiling, nocturnal flower as seductive as any vampire—now grows in Twain's own glass-walled conservatory.

Here, five house plants that make frightfully fun companions or unnerving gifts.

1 Black-Bat Flower

"Black-cat flower" might be a more appropriate name for these blossoms (*Tacca chantrieri*). On either side of their orchid-like faces grow whisker-thin leaves called bracteoles that extend up to a foot long. The plant tends to bloom just before Halloween in keeping with its menacing mien. It also has a kinder, therapeutic side: Susan Moberly, a professor of pharmacology at UT Health Science Center in San Antonio, is developing an alternative chemotherapy from the plant, which has been used to treat illnesses in its native China.

"Almost every botanical garden has one—they're so cool and dramatic—but they can be hard to grow," Ms. Moberly said. Humidity, partial sun and fertilizer every two weeks helps.

2 Sensitive Plant

Nicknames for *Mimosa pudica* include "the shame plant" and "the touch-me-not," which tells you something of its disposition. "The movement may protect them from herbivores; it scares animals away," said Ms. Stone. Like all invasive species, it's easy to grow—keep it damp in a sunny locale and fertilize once in a while. Resist the



urge to provoke it too often, sapping its energy. If its recoil weren't disconcerting enough, the plant "may be able to signal to others—plant-to-plant communication," said Ms. Stone, "but more research is needed before we're sure."

3 Cape Sundew

Sundews (*Drosera capensis* and *intermedia*) look as amiable as daisies, but these relatives of the Venus flytrap are rather depraved: Their

gluey, dewy leaves snag insects while releasing enzymes like those we use to digest food. "Few plants resort to violence to make a living, but it helps them secure nutrients like nitrogen that's lacking in their soil," said Carter Butts, a professor who studies the plant's genomes at the University of California, Irvine. Sundews are a bit fussy about water (it must be mineral-free and distilled) but never about fertilizer: Outdoor

plants feed themselves, and "indoors, I use fish food, applied with tweezers," Mr. Butts said.

4 Corpse Flower

More than 25,000 people descended on the New York Botanical Garden in 2016 for the rare blooming of its Corpse Flower, but it's possible to have an *Amorphophallus titanum* all to yourself. Be warned: "It looks like something from science fiction,

and, yes, smells like a rotting corpse," said Julian Duval, president of the San Diego Botanic Garden. The site recently displayed two specimens in all their weird blooming glory, including the zombielike stench meant to attract carrion-eating beetles, its pollinators. Best for large homes (they can grow up to 250 pounds) and people who don't mind waiting for their morbid show: The plants bloom only every seven to 10 years.

5 Night-Blooming Cereus

Many plants fold up at night to save water, stave off herbivores or both, said Nolan Coburn Kane, an ecology professor at the University of Colorado, Boulder. Night-blooming cereus does the opposite, springing into flower only under cover of darkness, as bewitching as a succubus. In 1864, Mark Twain wrote about Night-blooming cereus (*Epiphyllum oxypetalum*) for the San Francisco Daily Morning Call: "It is very regular in its habits, and those habits are bad—it runs all night; that is to say, it comes out in full bloom in the evening, and punctually shuts itself up in the morning and sleeps all day." Bonus: This lazy house plant doesn't mind if you're lax, too—it prefers inconsistent sun and irregular watering.

A CURIOUSLY COLORFUL COUNTRY

The 10 best-selling Sherwin-Williams paint colors in two countries. Top row: America's drab favorites, ranked from left to right. Bottom row: Guess the nation. (Answer below.)



ANSWER: Canada



MASTER PLACES Above: F.B. Henderson House. Right: Paul and Helen Olfelt Residence.

IN YOUR OWN WRIGHT

4 Frank Lloyd Wright homes on the market, ranked by price

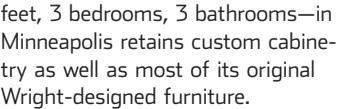
Foster House and Stable Unlike Wright's horizontal homes scattered throughout the Midwest, this 2,408-square-foot home in Chicago shows his admiration for Japanese architecture with multiple pitched roof lines. [realtor.com](#), \$195,000



Kier House Located in Glencoe, Ill., this 3-bedroom, 2.5-bathroom building—one of Wright's seven prairie-style homes—features a sculptural entrance, broad cantilevered roofs and a newly renovated kitchen. [estately.com](#), \$779,000



F.B. Henderson House This 5,500-square-foot, 1901 home in Elmhurst, Ill., boasts original stained-glass windows, two fireplaces, a library and a wine cellar. [estately.com](#), \$1,000,000



Paul and Helen Olfelt Residence One of the last projects designed by the architect before his death in 1959, this modernist, diamond-shaped home—2,647 square feet, 3 bedrooms, 3 bathrooms—in Minneapolis retains custom cabinetry as well as most of its original Wright-designed furniture.

[zillow.com](#), \$1,295,000

#LOVEMYGARAGE

The 10 rooms most shared on Instagram since 2010 via #design and #decor

Kitchen: 1,529,543 posts

Bedroom: 1,015,024

Living Room: 572,015

Bathroom: 535,364

Dining Room: 107,995

Patio/Deck: 62,127

Home Office: 25,489

Porch: 22,276

Foyer: 10,793

Garage: 4,410



HOUSEHOLD NAMES

20 quirky appellations given homes in the U.K.

Bent Pokers	Kumincye
Chaos	Leprechaun's Leap
Cobwebs	Monkey Puzzles
Creeping Snails	Motley Lot
Crime House	Mouse Trap
Crinkle Cottage	Nudgums
Crumbledown	Pawprints
Duck Down Cottage	Poggles
Handcuff House	Wood
Hell House	Shutocks
Kickatinalong Way	Bottom



Source: [housenameheritage.com](#)

THE LISTS ISSUE: DESIGN & DECORATING

Material Wealth

9 global textiles trending among decorating pros: Can you match the place of origin to the pattern, using our clues?

BY COURTNEY BARNS

1 England

Narrative textiles like this one feature folkloric woodland critters and other rural images associated with this green and pleasant land. 'Varx' Hand-Block Printed Cushion, about \$119, bonfieldblockprinters.com

2 India

Burberry and Valentino used the mirror work featured in these Shisha embroidery fabrics in their fall 2015 collections. The look hit London in the 1960s, as an element of haute-bohemian style. Vintage Shisha Pillow from Pat McGinn, \$650, 1stdibs.com

3 United States

These improvisations—named after Gee's Bend, the Alabama community from which most originated—use household remnants including corduroy and denim; many hang in museums. In 1965, creators of ones like this marched with Dr. Martin Luther King, Jr. Blocks and Strips, 1980, by Loretta Pettway, \$28,000, gregkucera.com

4 Japan

This cotton cloth gets its look when a paste of rice and bran that resists dye is pushed through painstakingly cut mulberry-paper stencils (often resembling chrysanthemums or abstracted birds). Length of Narumi Kongata: Multi-Stenciled Katazome, \$90, srithreads.com

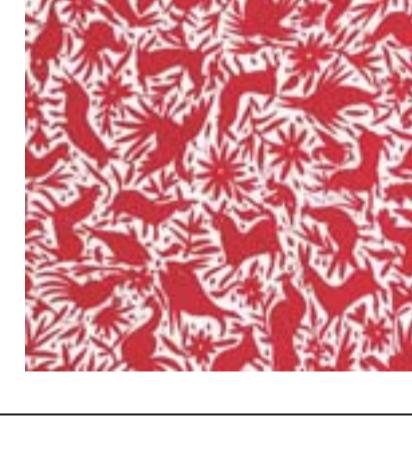
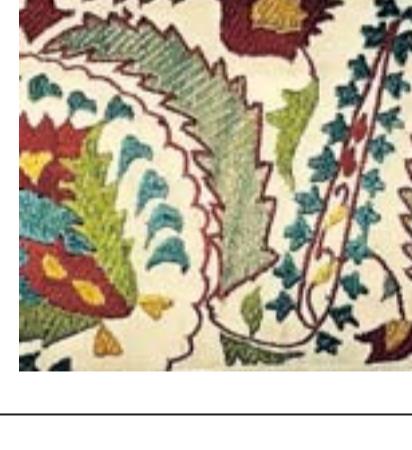
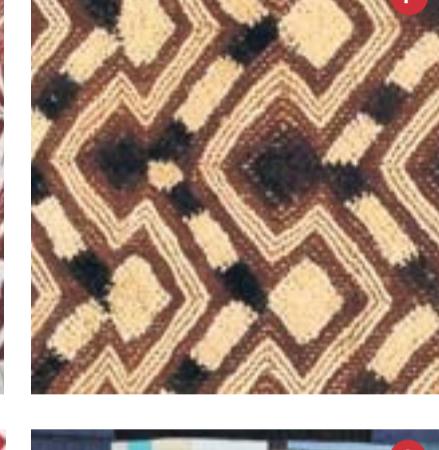
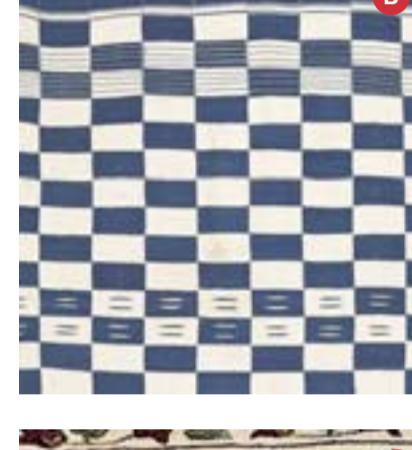
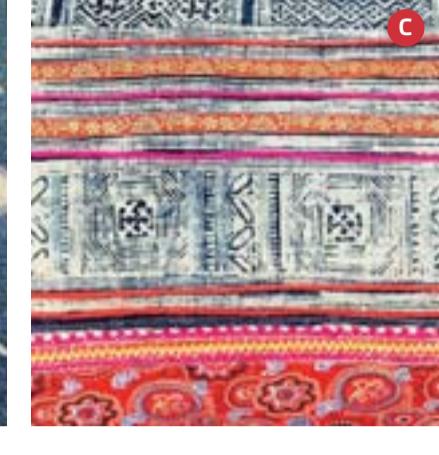
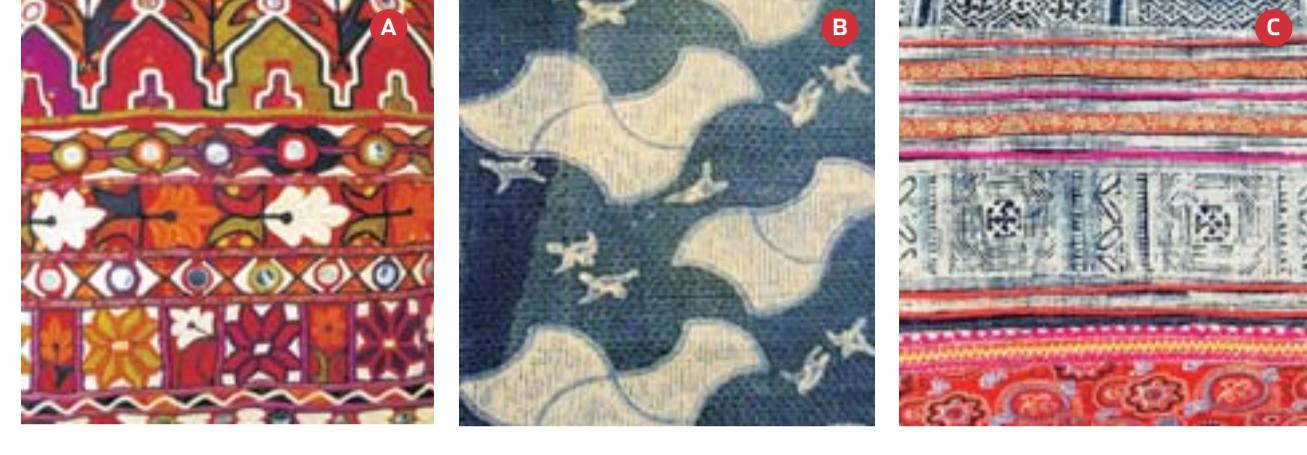
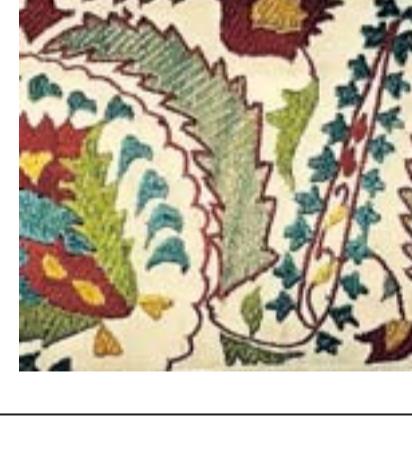
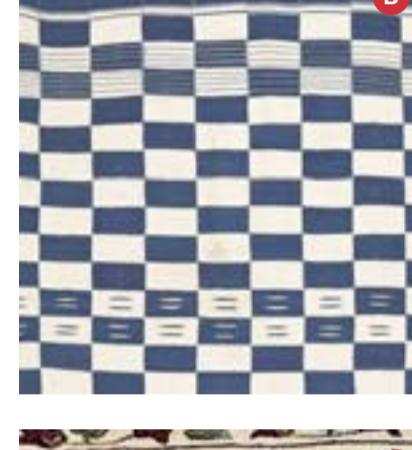
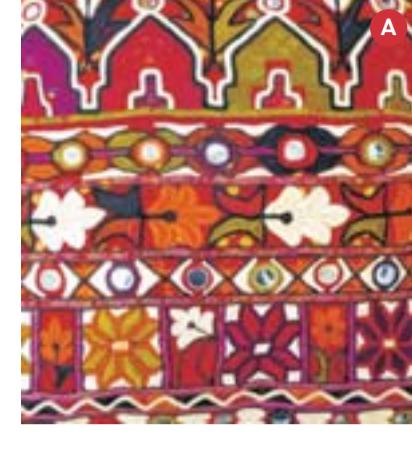
5 Uzbekistan

This example of the region's lustrous, silk-on-cotton embroidered coverlets exemplifies a tra-

ditional style that endured despite Soviet attempts to force makers to incorporate political motifs like the hammer-and-sickle. Pair of Suzani Pillows from Joseph Malekan, \$375, 1stdibs.com

6 Congo

Used for dance skirts and ceremonial fabrics, this kind of raffia features inventive geometric patterns embroidered into cloth then snipped to produce a plush velvet finish. Kuba Shoowa Mat, \$95, africanallure.com



HIDDEN FIGURES

4 drawings that conceal creatures in negative space, from 'Noma Bar: Graphic Story Telling' (Thames & Hudson)



Cover for Diplomat magazine, 'Deference' issue, 2012



'Look Out,' 2013



Cover for Diplomat magazine, 'Deference' issue, 2012



NOMA BAR (4)

WHEN DECORATING CLIENTS WON'T LET GO

7 interior-design pros and architects share how they worked around odd objects (inanimate and living) that their customers fixated on

"What is a designer to do when his client falls hard for a life-size Yves Klein-blue flocked-velvet gorilla sculpture? Embrace it and give it pride of place in a dazzling white Miami house. Throw in a giant orange sectional for good measure—and don't tell the husband."

—Brian Murphy, New York

"A prominent American novelist asked that we insert a 60-foot handgun range in his luxury condo development in an East Coast city not unfamiliar with gun violence. We managed to design it and get it approved, but as construction began, word leaked to the press and the client decided not to proceed."

—Dominic Kozerski, New York

"Clients purchased a monumental Botero art piece. Their West Village loft offered few walls and even fewer large enough, so the art now serves as a screen providing privacy between the master bath and neighboring buildings—a rather tongue in cheek placement, considering the sub-

ject is a rear view of a zaftig bathing nude."

—Phillip Thomas, New York

"A parrot occupied the living room where we were doing an installation. It swore repeatedly, sang opera loudly, mimicked radio commercials and, most disconcertingly, imitated the lady of the house's voice convincingly. For the cage, we looked to English antique dealers, but in the end, I had one created to fit our client's oversize bird."

—James Duncan, Key Biscayne, Fla.

"A client collected French antiques known as 'gobbi' statues: dwarfs wearing opera garb. I convinced the client that the most evocative place for them would be on the woodland path to the children's garden off to the side behind the hedge."

—M. Brian Tichenor, Los Angeles

"One client came in prepared with floor plans, a checkbook and a fuzzy picture of his most



MONKEY BUSINESS In Miami, Brian Murphy had to accommodate a beloved, giant blue gorilla

prized possession: a bed accesorized with clamps, straps and harnesses. To deflect from the bed's gadgets, we added designer sheets, a heavy comforter with three oversize pillows covering most of the headboard and

some abstract wall art."

—Vanessa Deleon, New York

"I had a couple who refused to part with a stuffed teddy bear that needed to be consulted on every design decision. I thought

the bear was a toy from one of the grandchildren, but the husband had given it to his wife during their courtship. Luckily, the bear only had opinions on the master bedroom."

—Jean Liu, Dallas



ASSET ALLOCATION: POUF EDITION

4 extravagant footrests and how many \$99 West Elm ones you could buy instead

Clockwise from above: Cotton Luster Velvet Pouf, \$99, westelm.com; Suomi Pallina Pouf, \$1,141, Missoni Home Showroom, 212-719-2338; Donut, \$2,810, morosousa.com; Les Necessaires d'Hermès Ottoman, \$10,900, hermes.com; Adam Pogue Carved Foot Ottoman, \$6,000, communedesign.com



x12 | \$1,141



x60 | \$6,000



x28 | \$2,810



x110 | \$10,900

THE LISTS ISSUE: GEAR & GADGETS

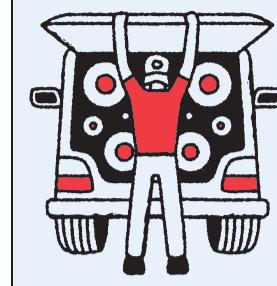


1 Wings

Where some would ask "why," others ask "how high?" Road cars started sprouting spoilers and rear wings in the 1970s, mostly for looks. But if they are tall enough, and broad enough, rear wings can greatly contribute to a car's stability and general awesomeness. I believe the APR GTC-300—a 67-inch-wide carbon-fiber scythe—fits the bill. **Difficulty:** Hard. \$1,701, aprperformance.com

2 Tug View Tow Hook and Camera Mount

Screws into the bumper-hook socket most cars have hidden and accommodates GoPro-style cameras. With it you can record your heroic canyon runs, or runs to the grocery store. **Difficulty:** Easy. \$190, sub-ispeed.com



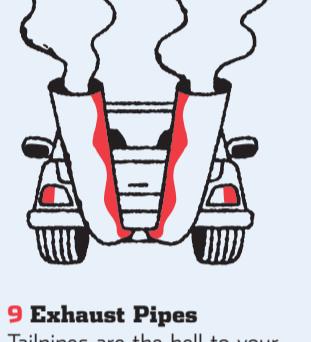
3 Subwoofer/Audio

Original-equipment audio components lack a certain *je ne sais quoi*, which is to say, ear-squashing power. In our Subaru WRX STI (pictured), aftermarket "upgrade" speakers from Kicker can be paired with replacement tweeters and subwoofers. But remember, better speakers deserve a more powerful audio head. You want it loud and clear. **Difficulty:** Moderate. \$195, kicker.com



4 Radiator Shroud with Tool Tray

This otherwise unexceptional piece of molded plastic improves airflow and cooling under the hood (by blocking off a region of bypass around the radiator)—and it gives under-hood tinkerers somewhere to put their tools. **Brill.** **Difficulty:** Easy. \$75, grimmspeed.com



5 Exhaust Pipes

Tailpipes are the bell to your car's trumpet. To make a purer, more radiant racket, you need some big ol' dual-quads with heat-anodized titanium tips, because, my God, we're not animals, are we? The HKS S4 Legamax Ti-1 Premium is an "axle-back" system consisting of a pair of cylindrical silencers (hah!) with dual outlets. You can go upstream further, replacing everything from the catalytic converter on down ("cat-back"). But an axle-back mod will only take a day, or two, with a floor jack and stands. **Difficulty:** Moderate. \$1,200, sub-ispeed.com

Garage Fever

9 car projects and easy auto tweaks to help you through the long winter nights

BY DAN NEIL

WINTER falls hard on motorheads. Car lovers typically pull their favorite machines into the barn at the first snow and won't drive them again until spring—in the mid-Atlantic states, usually November to April, or as we say around here, Homestead to Martinsville.

Perhaps you, or someone you know, is out in the garage right now, bored out of his mind, buffing an already mirror-polished bumper, brooding on the cruelty of salt trucks. They'll never take you, my precious.

But garage fever can be cured, though consumerism! Here's my list of fun, fairly easy modifications that just about anyone with a set of hand tools can make to a car. Some of these may not be your style, but each will bring you closer to your whip, and it to you.

8 Floor Kit

WeatherTech's extreme products aren't floormats so much as fitted rubber buckets, protecting the carpets completely from your wet-as-dogs snowboarding friends. **Difficulty:** Easiest. From \$30, weathertech.com

7 Pokémon Gearshift Knob

Gearshift knobs are personal. So why not personalize? Millennial hearts will thrill with nostalgia at this Pokémon ball gearshift. Pikachu! **Difficulty:** Easier. \$45, twistedshift-erz.com

5 Cold-Air Induction System

Cooler air is denser, and denser air makes more horsepower. These systems typically include a conical air filter and a length of aluminum tubing, piping in cooler air from the front of the engine bay. In some cars this means pulling air from a "cold-air box," insulated from the high temperatures under the hood. Ideal for our example Subie, a Perrin cold-air intake system is CARB compliant. **Difficulty:** Moderate. \$309, perrinperformance.com

6 Leather Key-Fob Protector

Smart keys aren't very smart-looking, are they? Lots of fine leather fob protectors are available, and they make a pretty infallible gift. This is a product so far unexplored by luxury goods makers, but inevitable; so I look forward to the first Hermès fob protector. **Difficulty:** Easy.

THE LOAD LESS TRAVELED

6 unlikely things that overachieving climbers have carried up a mountain

1 A \$10,000 Watch

Reportedly, when Kiwi Sir Edmund Hillary and Sherpa Tenzing Norgay became the first confirmed climbers to reach Mount Everest's summit (29,029 feet) in 1953, they were both wearing Rolex Oyster Perpetual prototypes, estimated to be worth ten-thousand dollars each. Rolex had sponsored the climb.

2 A Church Organ

In 1971, to raise money for charity, Scottish woodcutter Kenny Campbell lugged the 226-pound musical instrument up to the summit of Britain's highest mountain, Ben Nevis (4,413 feet), in Scotland.

3 An Espresso Maker

American socialite-turned-mountainaineer Sandy Hill famously packed an 8-inch-tall espresso percolator and an "ample supply" of Dean & DeLuca's Near East beans for her ascent up Mount Everest in 1996.

4 Brussels Sprouts

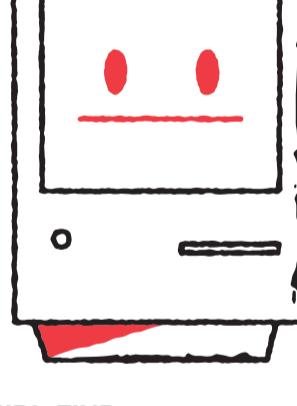
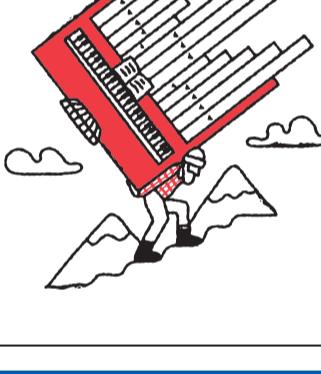
To raise money for charity in 2014, a Brit named Stuart Kettell spent four days pushing a Brussels sprout up Mount Snowdon in Wales (3,560 feet) with just his nose. He wore his way through 22 sprouts.

5 A Barbell

In 2015, Russian powerlifter Andrey Rodichev toted a 165-pound barbell up Mount Elbrus (18,510 feet), Europe's tallest peak, where it remains.

6 Dinner-Party Furniture

To host a dinner last December, former Noma chef James Sharman, along with four other chefs and eight porters, hauled 16 plastic chairs and three wooden tables to Mount Everest Base Camp (17,600 feet), working up quite an appetite.



web, creates lists, sets reminders, makes restaurant reservations
Created by: Microsoft; microsoft.com

6 Emma

Tasks: Recommends travel options to and from meetings
Created by: Snap Out Ltd.; emma.ai

7 Fin

Tasks: Assists with scheduling, scours the internet, orders snacks, nudges you to perform your own tasks

Created by: Fin Exploration Company; fin.com

8 Jibo

Tasks: Searches the web, snaps photos, shares facts
Created by: Jibo, Inc.; jibo.com

9 Sherpa

Tasks: Learns the various things you like and offers customized recommendations
Created by: Sherpa Europe S. L.; sherpa.eu



HIGH ON THE HOG

22 essentials George Clooney and Rande Gerber pack to take on the open road

Every year, Casamigos Tequila co-founders George Clooney and Rande Gerber take a days-long motorcycle trip together through such places as Spain, Mexico and the American West. Here, a list of gear they typically carry on their brozilla vacations.

Map

Bandanas

Jeans

Short sleeve t-shirts

Long sleeve t-shirts

Boots

Leather jackets

Leather gloves

Bug repellent

Sunglasses

Night-driving glasses

Full helmet

Half helmet

Extra spark plugs

Cash

Rain gear

Headphones

Phone for emergencies

Phone Chargers

Passports

Camera

Hunting knife

Panasonic



The Ultimate Gift for Him
ES-LV65-S
Available at

HEY, SIRI, FIND ME COPYCATS

9 digital assistants whose monikers rely on the vowel 'i' (as in Siri) or end in 'a' (as in Alexa)

1 Bixby

Tasks: Facilitates phone calls, manages to-dos, identifies landmarks
Created by: Samsung; samsung.com

2 Bravia

Tasks: Transcribes text, searches the web,

solves math problems
Created by: Brainasoft; brainasoft.com

3 Chris

Tasks: Messages, calls and emails while you're driving, assists with navigation
Created by: German Autolabs; hellochris.ai

4 Clara

Tasks: Schedules and confirms meetings
Created by: Clara Labs; claralabs.com

5 Cortana

Tasks: Searches the web,

Created by: Microsoft; microsoft.com

6 Emma

Tasks: Recommends travel options to and from meetings
Created by: Snap Out Ltd.; emma.ai

7 Fin

Tasks: Assists with scheduling, scours the internet, orders snacks, nudges you to perform your own tasks
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Tasks: Learns the various things you like and offers customized recommendations
Created by: Sherpa Europe S. L.; sherpa.eu

Broke 4 Shore

33.4 feet

Florida

Overbudget

34.3 feet

Massachusetts

Deep Ship

35 feet

Illinois

Float'n-a-Loan

36.8 feet

Georgia

Fueli\$H Money

38.2 feet

New York

Spent More Rent

44.8 feet

Missouri

Knot Cheap

57.1 feet

Louisiana

A Loan @ C

52.6 feet

New Jersey

College Fund

65 feet

Kentucky

Debtors Delight

68 feet

Georgia

Even Broker Now

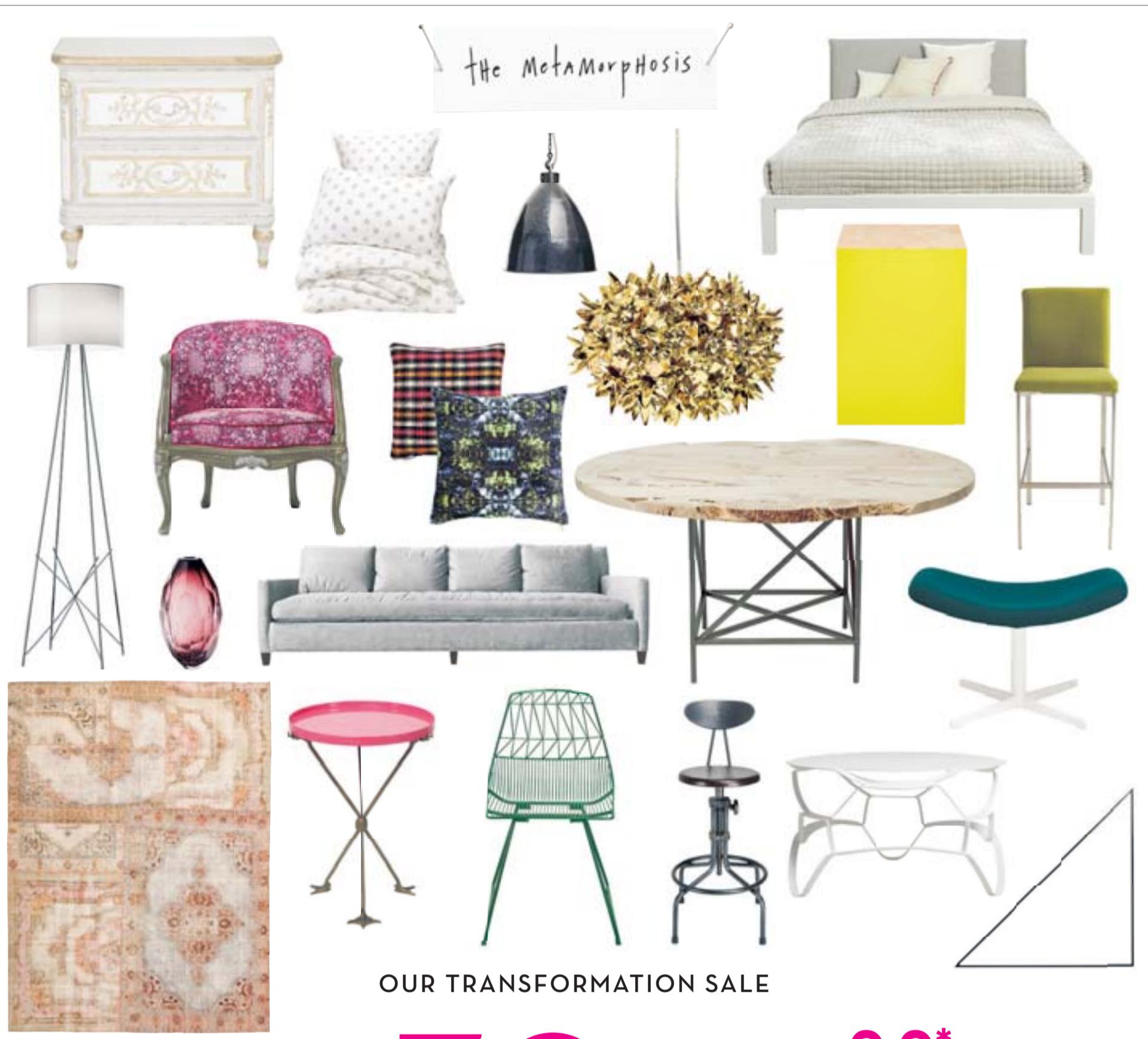
71 feet

Kentucky

Illiiquid

71.9 feet

Alaska



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THE LISTS ISSUE: GEAR & GADGETS

Strangely Ordinary

8 mundane things—from candy to underwear—the twin Duffer brothers used to make season two of Netflix's 'Stranger Things'



BY CHRIS KORNELIS

1 Google Docs

Matt Duffer (above left): The most important part of our writing process is outlining the script. Our desks are more or less next to each other. We put on our headphones and go into Google Docs on our iMacs and work on the story simultaneously, often without speaking. It's creepy when other people witness it. If Ross writes something I don't like, I'll delete it. If he writes it back in, I'll delete it again. Then we take off the headphones and have a conversation about it. Conversation is a polite word. Now, even when we're working with our other writers, we force them onto Google Docs and do the same thing. It's like trying to create a hive-mind.

2 Final Draft

MD: After outlining, we put the text into Final Draft, which is the industry-standard script-creating platform. That's where we hone the dialogue. It's hard to write dialogue in Google Docs, so you really do need Final Draft for that.

3 Movie Soundtracks

Ross Duffer (above right): Our knowledge of movie soundtracks is much more extensive than our actual knowledge of music music. We like Joy Division and whatnot, but that's not the kind of stuff we grew up loving.

MD: The first music I fell in love with was a cassette of Danny Elfman's "Batman Returns." To be honest, I didn't start listening to music outside of movie sound-



MARCUS MARRITT

tracks until halfway through college.

RD: When we wrote the "Dungeons & Dragons" scene in season one, I was listening to a lot of "E.T."—classic John Williams. No one can transport you better than John Williams.

MD: I can't listen to John Williams and write. I write to a lot of James Newton Howard soundtracks, like "The Sixth Sense" or "Signs" or "Unbreakable." Those soundtracks are very dear to me.

4 Headphones

RD: I'm pretty particular about my headphones. Right now I wear Ultrasones. I need the over-ear kind, and I don't want noise canceling. I don't just use them in the office. I'm usually dragging them around to sets as well.

MD: I've gone through a lot of headphones. I was using Sennheiser, but the wires kept busting. Now I have a pair from Audio-Technica, which are going really well. They feel good and sound good. Aestheti-

cally, they've got brown leather with a little bit of pink. They look cool.

RD: Whenever I'm on set, whoever's doing sound on the show always compliments my headphones. That's how I know they are quality.

MD: I think mine are, aesthetically, much cooler looking. His don't look very great.

5 Patagonia Capilene Thermal Weight Long-Underwear

RD: We're in Atlanta, and if you're

out at 5 a.m. filming in the winter...I don't want to be a baby, but it's pretty cold. Thermal underwear is a real lifesaver on set.

MD: That shit will save your life. If you get too cold, you literally can't think. Your body is frozen. How are you going to be making any decisions? This stuff actually changes your life.

6 iPad

MD: I would rather you watch "Stranger Things" on an iPad or a laptop or even your phone, than a TV, unless you make sure your TV color settings are correct. If you haven't calibrated the settings on your television, please just watch our show on an iPad.

RD: You can't go with the settings that TVs have when they come out of the box. The settings are incorrect. Fix the settings. And then the show looks f***king incredible.

7 Stuffed-Animal Monkeys

RD: Our production company is called Monkey Massacre because, growing up, we made movies about stuffed-animal monkeys that come to life and start murdering people. We made sure in season two that the monkeys made a cameo appearance. We had our parents ship them from North Carolina. We told our prop master she can't lose them or she's dead to us. She did not lose them. They made it to Atlanta and back to North Carolina, where they are now back safely in storage.

8 3 Musketeers Candy Bars

MD: We had an argument in the writers' room about whether 3 Musketeers are a good or bad candy bar, and we put that into the show in season two. I'm very pro 3 Musketeers. There are some people who incorrectly feel it's just nougat and there's nothing special about it. Nougat is delicious. That's my case for it. I like that it's pure and clean. I like the simplicity of it. Something like Snickers, there's so much shit going on in there.

RD: I also like 3 Musketeers. Big fan. Most of our writers were not.

CAN YOU DIGIT?

3 patents for finger toys that didn't achieve the success of the fidget spinner



1 For spinning Electric toy top device with finger supported charger. Simeon E. Tiefel and Webb T. Nelson, Aug. 10, 2004.



2 For fidgeting Flying finger toy. Magnus Henry Johnson, April 20, 2006.



3 For spinning and fidgeting Finger twirled toy with balancing mass. Mark Peterson, Sept. 29, 1981.

APPS GET REAL

4 ways augmented reality apps help solve common problems

With the release of Apple's new iOS 11 came ARKit, an augmented reality platform for developers. Meanwhile, Google launched a similar platform for Android called ARCore. What this means for everyday smartphone users: Augmented reality (AR) apps are the next big thing—and not just for playing games. Here, a few and what they can do.

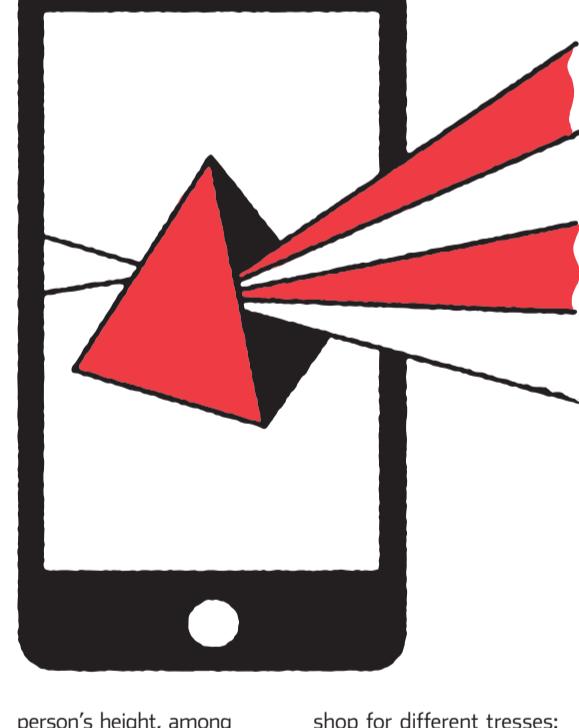
1 Find lost things

Neon will help locate your friends in a crowd: Point your phone at a group of people, and a neon marker will hover over the person you're looking for. **Find Your Car with AR** points the way back to where you parked.

Pixie connects to a small tracker that you affix to your wallet, passport, keys, remote, luggage, you name it; the app works with your phone's camera to illuminate the 3D area around your misplaced items.

2 Measure things

AR MeasureKit calculates lengths, distances and a



person's height, among other features. Both **Magicplan** and **PLNAR** let you create floor plans simply by using your phone's camera to gauge your space.

3 Shop for things

IKEA Place previews the consequences of décor purchases by putting 3D images of Ikea furniture into a picture of your home. Similarly, **Houzz Interior Design Ideas** lets you see products in your space. **Modiface** will even let you

shop for different tresses: Its hair color app applies a new 'do to your 3D picture.

4 Fix things

Let's say your toilet is leaking. If you and your landlord are both using **Vuforia Chalk**, you can share a real time picture of the situation and your landlord can annotate the image with circles, arrows or other markings to explain how to stop the problem. Knowing most landlords, however, this may still be a fantasy.

COURT OF APPROVAL

4 ways Nike senior basketball footwear designer Jason Petrie created a next-level sneaker—the new Nike LeBron 15—to satisfy its discerning namesake

1 The new Flyknit Battle material was specifically designed for Cleveland Cavaliers star LeBron James to lock him into his shoe yet help him move freely. To address his skepticism about its ability to hold up, Nike did extensive testing.



2 In consulting on the collar, the NBA star was adamant that Nike get it low and sculpted just so in order to hug the ankle.



3 To meet Mr. James's desire for an aggressive, modern vibe, Mr. Petrie went for a battle-ready chain-mail look.

4 The sneaker's propulsive air unit is a brand new combination of Air Max and Zoom Air technologies.

SHARPER IMAGES

7 writing tools used by creative people, as photographed for 'The Secret Life of The Pencil' (Laurence King Publishing) by Alex Hammond and Mike Tinney



Sir Anish Kapoor
Sculptor



Sir James Dyson
Inventor



Celia Birtwell
Textile designer



Stephen Fry
Actor and writer



William Boyd
Author

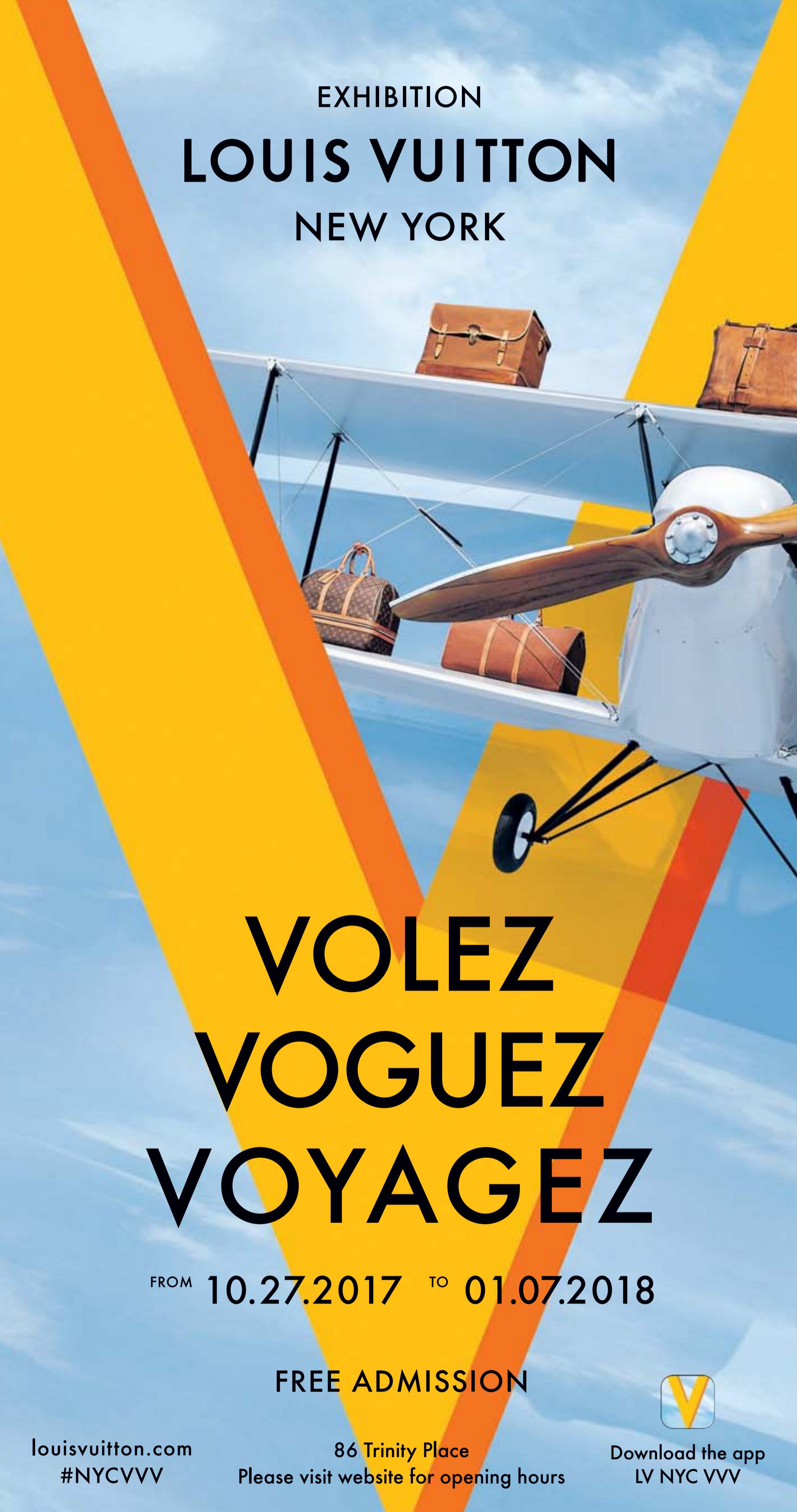


Bill Woodrow
Sculptor



Nick Park
Animator

EXHIBITION
LOUIS VUITTON
NEW YORK



A biplane is shown flying through a sky filled with large, overlapping geometric shapes in yellow, orange, and blue. The plane's propeller and engine are visible on the right side. Several Louis Vuitton travel bags are strapped to the top wing of the plane.

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