## THE WALL STREET JOURNAL.

## YouTube Created a Generation of Young Stars. Now They Are Getting Burned Out

**DOLAN TWINS AMONG** THE BIG NAMES TAKING A **BREAK FROM THE VIDEO** SITE, CITING THE DEMAND OF HAVING TO KEEP CREATING FRESH CONTENT

The latest trend among YouTube's hottest stars: feeling burned-out by the whole experience.

Having achieved success, some top influencers are deciding to disconnect from the video-sharing platform, worn down by what some say are the demands of YouTube's algorithm for fresh content to promote.

Last week, controversial You-Tube superstar PewDiePie, who was the first individual creator to hit 100 million subscribers, said in a video that he was taking a break-"I'm feeling very tired"-as did the comedy duo Ethan and Grayson Dolan in October. In their video, posted on YouTube, the Dolan twins said that after five years of posting to the platform every Tuesday, they needed to stop posting

mental health.

"We have a job where you can't just take off because there's the fear of becoming irrelevant," Grayson Dolan said. "I can't even go home to see my

The New Jersey natives started posting to YouTube when they were 14 as a passion project, and then moved to Los Angeles when it took off. Now 20 years old, they have accumulated more than 10 million subs-

Aunit of Alphabet Inc.'s Google, YouTube responded to their decision on Twitter: "We're proud of the Dolan twins. And all creators putting their wellbeing first."

Still, the exodus of top influencers is a potential issue for YouTube, which has flourished in part by cultivating an ecosystem of creators who produce endless hours of original content. Some influencers on other social networks, such as Facebook Inc. 's Instagram, experience burnout too, but YouTube as a video platform is unique because of the amount of time

every week to preserve their creators spend crafting their content. Alphabet doesn't report YouTube's financial results, but analysts estimate You-Tube brought in as much as \$15 billion in revenue last year.

Susan Wojcicki, chief executive of YouTube, addressed the topic of burnout in a letter to creators in late November. "We want to encourage you to take care of yourself and invest in recovery," she said.

YouTube also has posted a series of videos aimed at influencers to offer tips on how to balance all the work that goes into being an influencer. In one. licensed therapist and YouTube creator Kati Morton encourages YouTubers to find ways to take time off, even in the form of internet-free days.

A spokeswoman for YouTube said the company encourages its creators to make their videos in a healthy, sustainable way, and to know "if they need a break that their audience will be on YouTube when they return."

Yet YouTubers say they are afraid to take time off, out of fear it will hurt how their videos are highlighted on the site, which

PHOTO: RICH FURY/GETTY IMAGES FOR H&M Grayson Dolan, in ripped black jeans, and Ethan Dolan. The twins, who have more than 10 million subscribers on their YouTube channel, will stop posting every week to preserve their mental health.

uses an algorithm to determine which ones to recommend. While the algorithm is a mystery, many influencers say it rewards accounts that post frequently with more page views.

More views mean more money. YouTube places ads at the beginning and midway through videos, and pays the creators depending on how many times the ads are viewed. YouTube doesn't release how much money it pays, though creators say it varies, from a couple dollars to hundreds of dollars for every

SHALE DRILLERS MADE THE U.S. THE GLOBE'S TOP PRODUCER OF OIL AND NATURAL GAS, BUT THE BOOM IS SHOWING CRACKS AS THE DECADE ENDS

## A Decade in Which Fracking Rocked the Oil World

Ten years ago, the U.S. ranked third in global oil production, trailing Saudi Arabia and

A decade later, it leads the world in oil as well as natural-gas output, having more than doubled the amount of crude it pumps while raising gas production by roughly two-thirds, according to fede-

There is a simple reason for the surge: fracking. Horizontal drilling and hydraulic fracturing techniques spurred a historic U.S. production boom during the decade that has driven down consumer prices, buoyed the national economy and reshaped geopolitics.

Though some of these methods had existed for years, they were successfully applied to dense rock formations only about two decades ago as technologies improved, allowing companies to unlock vast amounts of oil and gas.

Drillers first targeted natural gas in the Barnett Shale of North Texas, and later unleashed a trove of the fuel in Appalachia. Further advances  $allowed\,them\,to\,release\,heavier$ oil molecules from shale formations. That led to a renaissance of one of America's most venerable oil fields, the Permian Basin of Texas and New Mexico.

A decade ago, drilling and fracking in tight rock formations such as shale produced less than one million barrels of oil a day in the U.S., according to data from the Energy Information Administration. Today that figure is roughly eight million barrels a day.

Before the surge in shale drilling, U.S. crude production had been steadily declining since the 1970s, leaving the country vulnerable to price shocks such

as after the 1973 Arab oil embargo. Now, the country is more insulated, thanks in large part to the shale boom. After Saudi Arabia shut down more than half of its oil production following a September attack on its oil facilities, U.S. benchmark oil prices briefly shot up but declined to pre-attack levels in about two weeks. Fracking also has limited the domestic effects of sanctions on countries such as Venezuela, which had long been one of the top suppliers of crude to

The shale boom, meanwhile, has supported a surge in overseas crude sales, allowing the country to become a net exporter of oil and refined products such as gasoline for the first time in decades.

"At the beginning of the decade, energy independence was still a joke for late-night television comedians,"

author Daniel Yergin, who is vice chairman at IHS Markit. "Turn around a decade later, and we're here."

Soaring U.S. oil production also helped create a global glut of crude that has forced the Organization of the Petroleum Exporting Countries and Russia to curb output to prop up prices, a dynamic that continued through the end of the decade.

Rapid U.S. natural-gas production, meanwhile, created a surplus of the cleaner-burning fuel and made it inexpensive. That led to a historic shift: Gas surpassed coal as the top source of U.S. electricity during the decade, the EIA says. The average price of gas for residential customers also has fallen by about 25%, adjusted for inflation, since 2009, EIA estimates show.

The added oil production changed the relationship between crude prices and the U.S. economy. Whereas higher oil prices were once an unequivocal drag on the country's economy, the impact is now more mixed. More-expensive crude still hurts consumers. but it is an economic boon to the country's revived oil-producing regions, partially offsetting the impacts.

"Oil prices go up-Texas wins, North Dakota wins, New Mexico, Oklahoma," says University of Chicago economist Ryan Kellogg.

But while the boom has had dramatic ramifications for markets and the economy, it has not in recent years delivered good returns for investors in shale companies, which have spent far more than they have made as they pursued rapid growth. Clear signs have been emerging of a slowdown, as shale companies pull back on spending in

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said the company processes more than 80 billion signals every day, such as dislikes, surveys and time well spent, that go into how it chooses which videos to recommend to users. YouTube doesn't take upload frequency or past video performance into account, although it does consider upload recency, she said.

YouTubers say they can tell what the algorithm prioritizes based on which videos do well and which tank.

For Casey Neistat, a 38-yearold filmmaker and YouTube star in Los Angeles, that meant realizing that uploading videos every day was the way to grow his subscribers. His first five years posting videos to YouTube, he posted sporadically. Some of his videos did well, but his subscriber growth was "anemic" until he started uploading daily, he said in a video in 2016.

Creators say YouTube's algorithm appears to push traffic to the most recent videos. Then when someone watches a video, the algorithm suggests other recent content from the same creator. This setup pushes YouTubers to post more videos to get traffic both to their new content and to keep their older posts in the mix.

"The longer you don't post, the lower your numbers dip. There is a direct correlation," said Lizzy Capri, who used to work for LinkedIn and now posts funny videos to YouTube such as the time she turned her yard into a petting zoo.

Aspokeswoman for YouTube said the company's product team analyzed data that showed channels on YouTube have more views after their creators return from time off than right before they left.

YouTubers face growing pressure in an increasingly crowded field where there is now more competition than ever for eyeballs. With the explosion of creators, there has been an accompanying feeling that if you don't work all the time, someone else will, said Mikey Murphy, who posted sketch comedy videos and video logs once a week for five years, starting in New Jersey when he was 14. "It wasn't like this when we started," Mr. Murphy said.

Online, Mr. Murphy typically appeared bubbly and upbeat. But right before his 20th birthday last year, he realized he had hit a breaking point. "Setting the camera on a tripod and being the most happy, hyper, awesome version of myself for an hour straight started to feel very unnatural," Mr. Murphy said.

"I started to dread everything that was YouTuberelated. It was a sinking feeling in my stomach," Mr. Murphy said. Now in Los Angeles, he is focusing more on writing and directing films, some for YouTube, and he is set to premiere a show on Snapchat Originals. He still posts to his YouTube channel but not as frequently, prioritizing videos that push his creativity.

YouTube is considering ways to tweak its product to alleviate creator burnout. Earlier this year, the company started rounding the subscriber counts that it displays to creators, to dissuade them from obsessing about the daily fluctuations in their numbers.

But despite YouTube's changes, Ms. Capri said it's still very apparent in her traffic reports that if she doesn't post frequently, her videos won't do as well. "If I took a month off, I'd see a huge drop," she said.

BYGEORGIA WELLS

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JESSICA LUTZ/REUTERS

A Chevron fracking site in the Permian Basin near Midland, Texas. The basin experienced a second life because of the fracking revolution.

response to fed-up investors and tightening access to capital.

thousand views. For a celebrity

YouTuber who receives half a

million views a month, that can

work out to millions of dollars

creating more original content

than ever, and young people

around the world aspire to be fa-

mous on the platform. Influen-

cer-marketing platform Captiv8

estimates there are now more

than 1.7 million YouTubers with

As a result, YouTubers are

a year.

Many companies have said they plan to reduce pumping in 2020. EQT Corp., the country's largest natural-gas producer, is among those planning to scale back next year under pressure from shareholders more interested in profits and healthy balance sheets than breakneck growth.

"There's still growing demand for natural gas. It's just that demand has not been growing as fast as we grew supply," EQT Chief Executive Toby Rice says. "We're responding to the owners of the business, investors."

Shale producers also have been grappling with mounting concern from some investors and government officials about their environmental footprint. Some 2020 Democratic presidential candidates have proposed to ban fracking altogether.

"Climate change and investors are the two big challenges," says Scott Sheffield, chief executive of Pioneer Natural Resources Co., one of the largest Permian producers.

BY REBECCA ELLIOTT
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MARY ANASTASIA O'GRADY
WRITES "THE AMERICAS," A WEEKLY
COLUMN ON POLITICS, ECONOMICS
AND BUSINESS IN LATIN AMERICA AND
CANADA THAT APPEARS EVERY
MONDAY IN THE JOURNAL

## Mexico's Energy Hari-Kari

Mexican President Andrés Manuel López Obrador makes no secret of his longing for the days when the state-owned oil monopoly, Petróleos Mexicanos, was a symbol of Mexican sovereignty. He seems to believe that with the right central planning, Pemex can return to the heady 1970s. To that end, he's doing what he can to close the Mexican energy market.

Witness a side letter on energy signed by Washington and Ottawa as part of the new U.S.-Mexico-Canada Agreement. In it the two parties recognize the importance of "the integration of North American energy markets based on market principles, including open trade and investment among the Parties to support North American energy."

Mexico didn't sign that letter. While the U.S. and Canada are developing a continental energy market—using private capital—to serve growing demand, Mexico is moving backward toward energy nationalism. It's one reason the outlook for Mexican growth is dismal.

Not that the USMCA is progress. President Trump, Mr. López Obrador, House Speaker Nancy Pelosi and AFL-CIO President Richard Trumka all endorse it as a replacement for the North American Free Trade Agreement. It is a protectionist success, no matter the spin from the captains of industry.

Union boss Mr. Trumka won wage controls in auto manufacturing and higher North American content rules that move the continent ever closer to a tradediverting customs union. U.S. Trade Representative Robert Lighthizer, a former lawyer for the U.S. steel industry, upped protection for his former clients.

The sausage making was ugly. But American corporations know the outcome could have been worse. The wealthy U.S. economy can absorb the costs of policy errors at the margin.

Underdeveloped Mexico is a different story. It needs fast growth if it hopes to move people out of poverty and it now needs to compensate for lost ground in the USMCA. The energy piece of this puzzle is crucial.

Mexico's progress over the past 25 years has been impressive. It has converted an economy dependent on oil exports into a powerful manufacturing hub, reducing its vulnerability to oil-price swings.

The top three categories for Mexican exports in 2018 were vehicles, car parts and computers, which together made up 60% of the value of Mexican exports. Crude-oil exports came in fourth place but generated less than 7% of the total.

Continuing this trend is important if Mr. López Obrador hopes to find the revenue he needs to deliver on his promises to help the poor. Oil exports are too small to generate necessary revenues. The real money is in expansion of the industrial base and its production of higher-value-added products.

Grabbing a larger slice of global manufacturing, including investment from China, requires abundant, low-price energy. This means exploiting Mexico's own resources and tapping into foreign resources, like plentiful U.S. natural gas.

The Pemex monopoly is too sluggish to exploit Mexico's significant oil resources. That's why the government of President Enrique Peña Nieto (2012-18) opened the industry to competition.

The government remains the owner of the subsoil, as in most other oil- and mineral-producing countries, including Canada. But those reforms allow firms to book proven reserves as assets and bid for service contracts and exploration and production concessions. In a paper published by Rice University's Baker Institute for Public Policy in September, University of Arizona legal scholar David Gantz noted that in the first round of bidding for exploration/exploitation blocs in 2015, low oil prices suppressed bidding. But "in January and March 2018, more than 70 different firms made over \$100 billion in new oil investment commitments."

This interest from private capital was precisely the response that modernizers had hoped to generate and was arguably only the beginning of a Mexican oil boom. Yet in November 2018, while he was still president-elect, AMLO announced a three-year moratorium on new bidding. He also forced the renegotiation of natural-gas pipeline contracts, even though the pipeline infrastructure is crucial for supplying Mexican electricity producers.

Pemex, which is carrying a debt burden of more than \$100 billion, is also a drain on public resources. According to Mr. Gantz, the president has provided the company "with \$1.3 billion in new tax breaks over six years, causing some observers to warn that the fragility of Pemex's economic situation could affect the federal government's ability to borrow more broadly."

Nationalists cheer the López Obrador reversion to Mexican autarky. But Mexico went down that road during the 71 years the Institutional Revolutionary Party ruled, and it led to poverty. Mr. López Obrador may be nostalgic for those days, but he has promised Mexicans a better future. He can't have it both ways.