

Can Facebook Fix Its Own Worst Bug?

Mark Zuckerberg now acknowledges the dangerous side of the social revolution he helped start. But is the most powerful tool for connection in human history capable of adapting to the world it created?

By FARHAD MANJOO APRIL 25, 2017

In early January, I went to see Mark Zuckerberg at MPK20, a concrete-and-steel building on the campus of Facebook's headquarters, which sits across a desolate highway from the marshy salt flats of Menlo Park, Calif. The Frank Gehry-designed building has a pristine nine-acre rooftop garden, yet much of the interior — a meandering open-plan hallway — appears unfinished. There are exposed air ducts and I-beams scribbled with contractors' marks. Many of the internal walls are unpainted plywood. The space looks less like the headquarters of one of the world's wealthiest companies and more like a Chipotle with standing desks. It's an aesthetic meant to reflect — and perhaps also inspire employee allegiance to — one of Facebook's founding ideologies: that things are never quite finished, that nothing is permanent, that you should always look for a chance to take an ax to your surroundings.

The mood in overwhelmingly liberal Silicon Valley at the time, days before Donald Trump's inauguration, was grim. But Zuckerberg, who had recently returned from his 700-acre estate on the Hawaiian island of Kauai, is preternaturally unable to look anything other than excited about the future. "Hey, guys!" he beamed, greeting me and Mike Isaac, a Times colleague who covers Facebook. Zuckerberg wore a short-sleeve gray T-shirt, jeans and sneakers, which is his Steve Jobsian daily uniform: Indoor Zuck.

Zuckerberg used to be a nervous speaker, but he has become much less so. He speaks quickly but often unloads full paragraphs of thought, and sometimes his arguments are so polished that they sound rehearsed, which happened often that morning. “2016 was an interesting year for us,” he said as the three of us, plus a P.R. executive, sat around a couple of couches in the glass-walled conference room where he conducts many of his meetings. (There are many perks to working at Facebook, but no one, not even Zuckerberg, has a private office.) It was an understatement and a nod to the obvious: Facebook, once a mere app on your phone, had become a global political and cultural force, and the full implications of that transformation had begun to come into view last year. “If you look at the history of Facebook, when we started off, there really wasn’t news as part of it,” Zuckerberg went on. But as Facebook grew and became a bigger part of how people learn about the world, the company had been slow to adjust to its new place in people’s lives. The events of 2016, he said, “set off a number of conversations that we’re still in the middle of.”

Nearly two billion people use Facebook every month, about 1.2 billion of them daily. The company, which Zuckerberg co-founded in his Harvard dorm room 13 years ago, has become the largest and most influential entity in the news business, commanding an audience greater than that of any American or European television news network, any newspaper or magazine in the Western world and any online news outlet. It is also the most powerful mobilizing force in politics, and it is fast replacing television as the most consequential entertainment medium. Just five years after its initial public offering, Facebook is one of the 10 highest market-capitalized public companies in the world.

As recently as a year ago, Zuckerberg might have proudly rattled off these facts as a testament to Facebook’s power. But over the course of 2016, Facebook’s gargantuan influence became its biggest liability. During the U.S. election, propagandists — some working for money, others for potentially state-sponsored lulz — used the service to turn fake stories into viral sensations, like the one about Pope Francis’ endorsing Trump (he hadn’t). And fake news was only part of a larger conundrum. With its huge reach, Facebook has begun to act as the great disseminator of the larger cloud of misinformation and half-truths swirling about the rest of media. It sucks up lies from cable news and Twitter, then precisely targets each lie to the partisan bubble most receptive to it.

After studying how people shared 1.25 million stories during the campaign, a team of researchers at M.I.T. and Harvard implicated Facebook and Twitter in the larger failure of media in 2016. The researchers found that social media created a right-wing echo chamber: a “media network anchored around Breitbart developed as a distinct and insulated media system, using social media as a backbone to transmit a hyperpartisan perspective to the world.” The findings partially echoed a long-held worry about social news: that people would use sites like Facebook to cocoon themselves into self-reinforcing bubbles of confirmatory ideas, to the detriment of civility and a shared factual basis from which to make collective, democratic decisions. A week and a half after the election, President Obama bemoaned “an age where there’s so much active misinformation and it’s packaged very well and it looks the same when you see it on a Facebook page or you turn on your television.”

After the election, Zuckerberg offered a few pat defenses of Facebook’s role. “I’m actually quite proud of the impact that we were able to have on civic discourse over all,” he said when we spoke in January. Misinformation on Facebook was not as big a problem as some believed it was, but Facebook nevertheless would do more to battle it, he pledged. Echo chambers were a concern, but if the source was people’s own confirmation bias, was it really Facebook’s problem to solve?

It was hard to tell how seriously Zuckerberg took the criticisms of his service and its increasingly paradoxical role in the world. He had spent much of his life building a magnificent machine to bring people together. By the most literal measures, he’d succeeded spectacularly, but what had that connection wrought? Across the globe, Facebook now seems to benefit actors who want to undermine the global vision at its foundation. Supporters of Trump and the European right-wing nationalists who aim to turn their nations inward and dissolve alliances, trolls sowing cross-border paranoia, even ISIS with its skillful social-media recruiting and propagandizing — all of them have sought in their own ways to split the Zuckerbergian world apart. And they are using his own machine to do it.

In Silicon Valley, current events tend to fade into the background. The Sept. 11 attacks, the Iraq war, the financial crisis and every recent presidential election occurred, for the tech industry, on some parallel but distant timeline divorced from the everyday business of digitizing the world. Then Donald Trump won. In the 17

years I've spent covering Silicon Valley, I've never seen anything shake the place like his victory. In the span of a few months, the Valley has been transformed from a politically disengaged company town into a center of anti-Trump resistance and fear. A week after the election, one start-up founder sent me a private message on Twitter: "I think it's worse than I thought," he wrote. "Originally I thought 18 months. I've cut that in half." Until what? "Apocalypse. End of the world."

Trump's campaign rhetoric felt particularly personal for an industry with a proud reliance upon immigrants. Stephen K. Bannon, Trump's campaign chief executive and now chief White House strategist, once suggested that there were too many South Asian chief executives in tech. More than 15 percent of Facebook's employees are in the United States on H-1B visas, a program that Trump has pledged to revamp. But the outcome also revealed the depth of the Valley's disconnection with much of the rest of the country. "I saw an election that was just different from the way I think," says Joshua Reeves, a Bay Area native who is a co-founder of Gusto, a human-resources software start-up. "I have this engineering brain that wants to go to this analytical, rational, nonemotional way of looking at things, and it was clear in this election that we're trending in a different direction, toward spirited populism."

Underneath it all was a nagging feeling of complicity. Trump had benefited from a media environment that is now shaped by Facebook — and, more to the point, shaped by a single Facebook feature, the same one to which the company owes its remarkable ascent to social-media hegemony: the computationally determined list of updates you see every time you open the app. The list has a formal name, News Feed. But most users are apt to think of it as Facebook itself.

If it's an exaggeration to say that News Feed has become the most influential source of information in the history of civilization, it is only slightly so. Facebook created News Feed in 2006 to solve a problem: In the social-media age, people suddenly had too many friends to keep up with. At the time, Facebook was just a collection of profiles, lacking any kind of central organization. To figure out what any of your connections were up to, you had to visit each of their profiles to see if anything had changed. News Feed fixed that. Every time you open Facebook, it hunts through the network, collecting every post from every connection — information that, for most Facebook users, would be too overwhelming to process themselves.

Then it weighs the merits of each post before presenting you with a feed sorted in order of importance: a hyperpersonalized front page designed just for you.

Scholars and critics have been warning of the solipsistic irresistibility of algorithmic news at least since 2001, when the constitutional-law professor Cass R. Sunstein warned, in his book “Republic.com,” of the urgent risks posed to democracy “by any situation in which thousands or perhaps millions or even tens of millions of people are mainly listening to louder echoes of their own voices.” (In 2008, I piled on with my own book, “True Enough: Learning to Live in a Post-Fact Society.”) In 2011, the digital activist and entrepreneur Eli Pariser, looking at similar issues, gave this phenomenon a memorable name in the title of his own book: “The Filter Bubble.”

Facebook says its own researchers have been studying the filter bubble since 2010. In 2015, they published an in-house study, which was criticized by independent researchers, concluding that Facebook’s effect on the diversity of people’s information diet was minimal. News Feed’s personalization algorithm did filter out some opposing views in your feed, the study claimed, but the bigger effect was users’ own choices. When News Feed did show people views contrary to their own, they tended not to click on the stories. For Zuckerberg, the finding let Facebook off the hook. “It’s a good-sounding theory, and I can get why people repeat it, but it’s not true,” he said on a call with analysts last summer.

Employees got the same message. “When Facebook cares about something, they spin up teams to address it, and Zuck will come out and talk about it all the time,” one former executive told me. “I have never heard of anything close to that on the filter bubble. I never sensed that this was a problem he wanted us to tackle. It was always positioned as an interesting intellectual question but not something that we’re going to go focus on.”

Then, last year, Facebook’s domination of the news became a story itself. In May, Gizmodo reported that some editors who had worked on Facebook’s Trending Topics section had been suppressing conservative points of view. To smooth things over, Zuckerberg convened a meeting of conservative media figures and eventually significantly reduced the role of human editors. Then in September, Facebook

deleted a post by a Norwegian writer that included the photojournalist Nick Ut's iconic photo of a naked 9-year-old girl, Phan Thi Kim Phuc, running in terror after a napalm attack during the Vietnam War, on the grounds that it ran afoul of Facebook's prohibition of child nudity.

Facebook, under criticism, reinstated the picture, but the photo incident stuck with Zuckerberg. He would bring it up unbidden to staff members and to reporters. It highlighted, for him, the difficulty of building a policy framework for what Facebook was trying to do. Zuckerberg wanted to become a global news distributor that is run by machines, rather than by humans who would try to look at every last bit of content and exercise considered judgment. "It's something I think we're still figuring out," he told me in January. "There's a lot more to do here than what we've done. And I think we're starting to realize this now as well."

It struck me as an unsatisfying answer, and it later became apparent that Zuckerberg seemed to feel the same way. On a Sunday morning about a month after the first meeting, I got a call from a Facebook spokesman. Zuckerberg wanted to chat again. Could Mike and I come back on Monday afternoon?

We met again in the same conference room. Same Zuck outfit, same P.R. executive. But the Zuckerberg who greeted us seemed markedly different. He was less certain in his pronouncements than he had been the month before, more expansive and questioning. Earlier that day, Zuckerberg's staff had sent me a draft of a 5,700-word manifesto that, I was told, he spent weeks writing. The document, "Building Global Community," argued that until now, Facebook's corporate goal had merely been to connect people. But that was just Step 1. According to the manifesto, Facebook's "next focus will be developing the social infrastructure for community — for supporting us, for keeping us safe, for informing us, for civic engagement, and for inclusion of all." If it was a nebulous crusade, it was also vast in its ambition.

The last manifesto that Zuckerberg wrote was in 2012, as part of Facebook's application to sell its stock to the public. It explained Facebook's philosophy — what he called "the hacker way" — and sketched an unorthodox path for the soon-to-be-public company. "Facebook was not originally created to be a company," he wrote. "It was built to accomplish a social mission: to make the world more open and

connected.”

What’s striking about that 2012 letter, read through the prism of 2017, is its certainty that a more “open and connected” world is by definition a better one. “When I started Facebook, the idea of connecting the world was not controversial,” Zuckerberg said now. “The default assumption was that the world was incrementally just moving in that direction. So I thought we can connect some people and do our part in helping move in that direction.” But now, he said, whether it was wise to connect the world was “actually a real question.”

Zuckerberg’s new manifesto never quite accepts blame for any of the global ills that have been laid at Facebook’s feet. Yet by the standards of a company release, it is remarkable for the way it concedes that the company’s chief goal — wiring the globe — is controversial. “There are questions about whether we can make a global community that works for everyone,” Zuckerberg writes, “and whether the path ahead is to connect more or reverse course.” He also confesses misgivings about Facebook’s role in the news. “Giving everyone a voice has historically been a very positive force for public discourse because it increases the diversity of ideas shared,” he writes. “But the past year has also shown it may fragment our shared sense of reality.”

At the time of our second interview, the manifesto was still only a draft, and I was surprised by how unsure Zuckerberg seemed about it in person. He had almost as many questions for us — about whether we understood what he was trying to say, how we thought it would land in the media — as we had for him. When I suggested that it might be perceived as an attack on Trump, he looked dismayed. He noted several times that he had been noodling over these ideas since long before November. A few weeks earlier, there was media speculation, fueled by a postelection tour of America by Zuckerberg and his wife, that he was laying the groundwork to run against Trump in 2020, and in this meeting he took pains to shoot down the rumors. When I asked if he had chatted with Obama about the former president’s critique of Facebook, Zuckerberg paused for several seconds, nearly to the point of awkwardness, before answering that he had.

Facebook’s spokespeople later called to stress that Obama was only one of many

people to whom he had spoken. In other words: Don't read this as a partisan anti-Trump manifesto. But if the company pursues the admittedly airy aims outlined in "Building Global Community," the changes will echo across media and politics, and some are bound to be considered partisan. The risks are especially clear for changes aimed at adding layers of journalistic ethics across News Feed, which could transform the public's perception of Facebook, not to mention shake the foundations of its business.

The Facebook app, and consequently News Feed, is run by one of Zuckerberg's most influential lieutenants, a 34-year-old named Chris Cox, the company's chief product officer. Ten years ago, Cox dropped out of a graduate program in computer science at Stanford to join Facebook. One of his first assignments was on the team that created News Feed. Since then, he has become an envoy to the media industry. Don Graham, the longtime publisher of The Washington Post who was for years a member of Facebook's board, told me that he felt Cox, among Facebook staff, "was at the 99.9th percentile of interest in news. He thought it was important to society, and he wanted Facebook to get it right."

For the typical user, Cox explained when I met him on a morning in October at MPK20, News Feed is computing the relative merits of about 2,000 potential posts in your network every time you open the app. In sorting these posts, Facebook does not optimize for any single metric: not clicks or reading time or likes. Instead, he said, "what you really want to get to is whether somebody, at the end of the day, would say, 'Hey, my experience today was meaningful.'" Personalizing News Feed, in other words, is a very big "math problem," incorporating countless metrics in extraordinarily complicated ways. Zuckerberg calls it "a modern A.I. problem."

Last summer, I sat in on two meetings in another glass-walled MPK20 conference room, in which News Feed's engineers, designers, user-research experts and managers debated several small alterations to how News Feed displays certain kinds of posts. The conversations were far from exciting — people in jeans on couches looking at PowerPoints, talking quietly about numbers — and yet I found them mesmerizing, a demonstration of the profound cultural differences between how news companies like The Times work and how Facebook does. The first surprise was how slowly things move, contrary to the freewheeling culture of "the hacker

way.” In one meeting, the team spent several minutes discussing the merits of bold text in a certain News Feed design. One blessing of making social software is that you can gauge any potential change to your product by seeing how your users react to it. That is also the curse: At Facebook, virtually every change to the app, no matter how small or obviously beneficial, is thoroughly tested on different segments of the audience before it’s rolled out to everyone.

The people who work on News Feed aren’t making decisions that turn on fuzzy human ideas like ethics, judgment, intuition or seniority. They are concerned only with quantifiable outcomes about people’s actions on the site. That data, at Facebook, is the only real truth. And it is a particular kind of truth: The News Feed team’s ultimate mission is to figure out what users want — what they find “meaningful,” to use Cox and Zuckerberg’s preferred term — and to give them more of that.

This ideal runs so deep that the people who make News Feed often have to put aside their own notions of what’s best. “One of the things we’ve all learned over the years is that our intuition can be wrong a fair amount of the time,” John Hegeman, the vice president of product management and a News Feed team member, told me. “There are things you don’t expect will happen. And we learn a lot from that process: Why didn’t that happen, and what might that mean?” But it is precisely this ideal that conflicts with attempts to wrangle the feed in the way press critics have called for. The whole purpose of editorial guidelines and ethics is often to suppress individual instincts in favor of some larger social goal. Facebook finds it very hard to suppress anything that its users’ actions say they want. In some cases, it has been easier for the company to seek out evidence that, in fact, users don’t want these things at all.

Facebook’s two-year-long battle against “clickbait” is a telling example. Early this decade, the internet’s headline writers discovered the power of stories that trick you into clicking on them, like those that teasingly withhold information from their headlines: “Dustin Hoffman Breaks Down Crying Explaining Something That Every Woman Sadly Already Experienced.” By the fall of 2013, clickbait had overrun News Feed. Upworthy, a progressive activism site co-founded by Pariser, the author of “The Filter Bubble,” that relied heavily on teasing headlines, was attracting 90

million readers a month to its feel-good viral posts.

If a human editor ran News Feed, she would look at the clickbait scourge and make simple, intuitive fixes: Turn down the Upworthy knob. But Facebook approaches the feed as an engineering project rather than an editorial one. When it makes alterations in the code that powers News Feed, it's often only because it has found some clear signal in its data that users are demanding the change. In this sense, clickbait was a riddle. In surveys, people kept telling Facebook that they hated teasing headlines. But if that was true, why were they clicking on them? Was there something Facebook's algorithm was missing, some signal that would show that despite the clicks, clickbait was really sickening users?

To answer these questions, Cox and his team hired survey panels of more than a thousand paid "professional raters" around the world who answer questions about how well News Feed is working. Starting in 2013, Facebook began adding first dozens and then hundreds and then thousands of data points that were meant to teach the artificial-intelligence system that runs News Feed how people were reacting to their feeds. Facebook noticed that people would sometimes click open a clickbaity story but spend very little time on it. In other cases, lots of people would click on a story but few would share or Like it. Headlines on stories that people seemed to reject often contained a set of signature phrases ("you'll never believe," "this one trick," etc.) or they came from a set of repeat-offender publishers.

The more such signals Facebook incorporated into the feed, the more clickbait began to drop out of the feed. Since its 2013 peak, Upworthy's traffic has declined; it now averages 17.5 million visitors a month. The site has since disavowed clickbait. "We sort of unleashed a monster," Peter Koechley, Upworthy's co-founder, told a conference in 2015. "Sorry for that."

Cox suggested that it was not exactly correct to say that Facebook, as a company, decided to fight clickbait. What actually happened was that Facebook found better ways to listen to users, who were themselves rejecting clickbait. "That comes out of good-quality panels and measurement systems, rather than an individual decision saying, 'Hey, I really want us to care about clickbait,'" he says.

This approach — looking for signs of user dissatisfaction — could curb stories

that constitute the most egregious examples of misinformation. Adam Mosseri, Facebook's vice president in charge of News Feed, says that Facebook has begun testing an algorithm change that would look at whether people share an article after reading it. If few of the people who click on a story decide to share it, that might suggest people feel misled by it and it would get lower billing in the feed.

But the solution to the broader misinformation dilemma — the pervasive climate of rumor, propaganda and conspiracy theories that Facebook has inadvertently incubated — may require something that Facebook has never done: ignoring the likes and dislikes of its users. Facebook believes the pope-endorses-Trump type of made-up news stories are only a tiny minority of pieces that appear in News Feed; they account for a fraction of 1 percent of the posts, according to Mosseri. The question the company faces now is whether the misinformation problem resembles clickbait at all, and whether its solutions will align as neatly with Facebook's worldview. Facebook's entire project, when it comes to news, rests on the assumption that people's individual preferences ultimately coincide with the public good, and that if it doesn't appear that way at first, you're not delving deeply enough into the data. By contrast, decades of social-science research shows that most of us simply prefer stuff that feels true to our worldview even if it isn't true at all and that the mining of all those preference signals is likely to lead us deeper into bubbles rather than out of them.

After the election, Margaret Sullivan, the Washington Post columnist and a former public editor of The Times, called on Facebook to hire an executive editor who would monitor News Feed with an eye to fact-checking, balance and editorial integrity. Jonah Peretti, the founder of BuzzFeed, told me that he wanted Facebook to use its data to create a kind of reputational score for online news, as well as explore ways of strengthening reporting through monetary partnerships.

“At some point, if they really want to address this, they have to say, ‘This is good information’ and ‘This is bad information,’” says Emily Bell, the director for the Tow Center for Digital Journalism at Columbia Journalism School. “They have to say, ‘These are the kinds of information sources that we want to privilege, and these others are not going to be banned from the platform, but they are not going to thrive.’ In other words, they have to create a hierarchy, and they’re going to have to

decide how they're going to transfer wealth into the publishing market.”

There aren't many technical reasons Facebook could not implement such plans. The hurdles are institutional and philosophical, and ultimately financial too. Late last year, Facebook outlined a modest effort to curb misinformation. News Feed would now carry warning labels: If a friend shares a viral story that has been flagged and shot down by one of Facebook's fact-checking partners (including Snopes and PolitiFact), you'll be cautioned that the piece has been “disputed.” But even that slight change has been met with fury on the right, with Breitbart and The Daily Caller fuming that Facebook had teamed up with liberal hacks motivated by partisanship. If Facebook were to take more significant action, like hiring human editors, creating a reputational system or paying journalists, the company would instantly become something it has long resisted: a media company rather than a neutral tech platform.

In many ways, the worry over how Facebook changes the news is really a manifestation of a grander problem with News Feed, which is simply dominance itself. News Feed's aggressive personalization wouldn't be much of an issue if it weren't crowding out every other source. “To some degree I feel like the Pottery Barn Rule applies,” says Pariser, the Upworthy chief executive. “They play a critical role in our information circulatory system, and so — lucky them — all of the problems therein are significantly on their shoulders.”

During our first meeting in January, I posed this question to Zuckerberg: “When you see various problems in the media, do you say to yourself, ‘I run Facebook, I can solve that?’ ”

“Um,” he started, and then paused, weighing his words as carefully as American presidents once did. “Not usually.” He argued that some of Facebook's critics' proposed fixes for news on the service, such as hiring editors, were impractical due to Facebook's scale and global diversity. Personalization, he said, remained a central tenet. “It really gets back to, like, what do people want at a deep level,” he said. “There's this oversimplified narrative that a company can get very successful by just scratching a very superficial itch, and I don't really think that's right over the long term.”

Yet by our second meeting, Zuckerberg's position seemed to have evolved. Facebook had by then announced plans for the Facebook Journalism Project, in which the company would collaborate with news companies on new products. Facebook also created a project to promote "news literacy" among its users, and it hired the former CNN news anchor Campbell Brown to manage the partnership between it and news companies. Zuckerberg's tone toward critics of Facebook's approach to news had also grown far more conciliatory. "I think it's really important to get to the core of the actual problem," he said. "I also really think that the core social thing that needs to happen is that a common understanding needs to exist. And misinformation I view as one of the things that can possibly erode common understanding. But sensationalism and polarization and other things, I actually think, are probably even stronger and more prolific effects. And we have to work on all these things. I think we need to listen to all the feedback on this."

Still, in both our conversation and his new manifesto, Zuckerberg remained preoccupied with the kind of problems that could be solved by the kind of hyperconnectivity he believed in, not the ones caused by it. "There's a social infrastructure that needs to get built for modern problems in order for humanity to get to the next level," he said. "Having more people oriented not just toward short-term things but toward building the long-term social infrastructure that needs to get built across all these things in order to enable people to come together is going to be a really important thing over the next decades." By way of example, he pointed to Safety Check, Facebook's system for letting people tell their friends that they've survived some kind of dangerous event, like a natural disaster or terrorist attack.

"We're getting to a point where the biggest opportunities I think in the world ... problems like preventing pandemics from spreading or ending terrorism, all these things, they require a level of coordination and connection that I don't think can only be solved by the current systems that we have," Zuckerberg told me. What's needed, he argues, is some global superstructure to advance humanity.

This is not an especially controversial idea; Zuckerberg is arguing for a kind of digital-era version of the global institution-building that the Western world engaged in after World War II. But because he is a chief executive and not an elected president, there is something frightening about his project. He is positioning

Facebook — and, considering that he commands absolute voting control of the company, he is positioning himself — as a critical enabler of the next generation of human society. A minor problem with his mission is that it drips with megalomania, albeit of a particularly sincere sort. With his wife, Priscilla Chan, Zuckerberg has pledged to give away nearly all of his wealth to a variety of charitable causes, including a long-term medical-research project to cure all disease. His desire to take on global social problems through digital connectivity, and specifically through Facebook, feels like part of the same impulse.

Yet Zuckerberg is often blasé about the messiness of the transition between the world we're in and the one he wants to create through software. Building new “social infrastructure” usually involves tearing older infrastructure down. If you manage the demolition poorly, you might undermine what comes next. In the case of the shattering media landscape, Zuckerberg seems finally to have at least noticed this problem and may yet come up with fixes for it. But in the meantime, Facebook rushes headlong into murky new areas, uncovering new dystopian possibilities at every turn.

A few months after I spoke with Zuckerberg, Facebook held its annual developer conference in San Jose, Calif. At last year's show, Zuckerberg introduced an expanded version of Facebook's live streaming service which had been promised to revolutionize how we communicate. In the year since, Live had generated iconic scenes of protest, but it was also used to broadcast a terrorist attack in Munich and at least one suicide. Hours before Zuckerberg's appearance at the conference, police announced that a Cleveland man who had killed a stranger and posted a video on Facebook had shot himself after a manhunt.

But as he took the stage in San Jose, Zuckerberg was ebullient. He started with a few dad jokes and threatened to read his long manifesto on stage. For a brief moment, there was a shift in tone: Statesman Zuck. “In all seriousness, this is an important time to work on building community,” he said. He offered Facebook's condolences to the victim in Cleveland; the incident, he said, reminded Facebook that “we have a lot more to do.”

Just as quickly, though, Zuckerberg then pivoted to Facebook's next marvel, a

system for digitally augmenting your pictures and videos. The technical term for this is “augmented reality.” The name bursts with dystopian possibilities — fake news on video rather than just text — but Zuckerberg never mentioned them. The statesman had left the stage; before us stood an engineer.

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