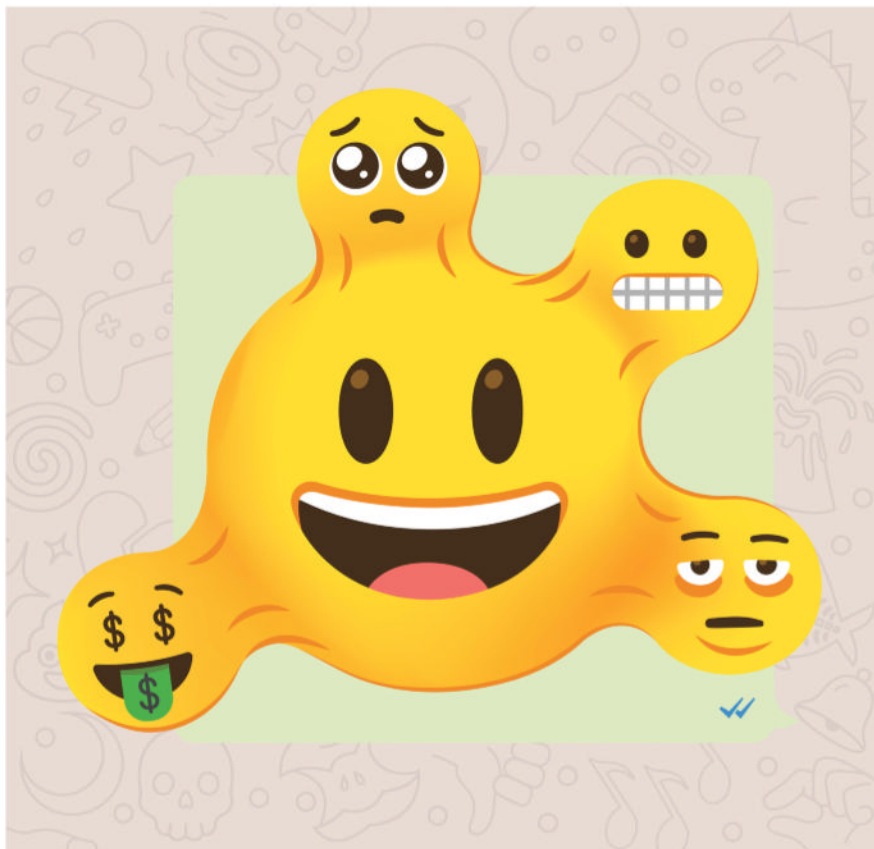


HEY THERE!

How WhatsApp took over the global conversation.

BY SAM KNIGHT

*The platform carries the feelings of three billion people—and unthinkable power.*

The first WhatsApps weren't WhatsApps. In the spring of 2009, Jan Koum, a thirty-three-year-old computer programmer, was trying to get people interested in a product he had developed for Apple's App Store, which had opened the previous summer. Koum tweaked his app's name every few days—from Status App to Smartphone Status to iPhone Status—so that it would appear among the newest releases. The idea was that the app would show people what their contacts were doing before they called or messaged them. Maybe they were available, or at the gym, or sleeping. Between five and ten thousand people downloaded Koum's app, but hardly anyone used it. They just called whomever they were going to call. Koum has a dry, somewhat

brooding sensibility. "The app had no usability or functionality that was useful," he said. He wondered what he was doing with his life.

That June, Apple enabled push notifications on iPhones. Now, when one of Koum's users updated his status, it was broadcast to all of his contacts who were also on the app. People began to share real-time information: they were going to a bar, or to a movie. During the summer, Koum worked with Igor Solomennikov, a coder based in Moscow, to add a messaging function. They used open-source software and enlisted some friends to test the system.

Koum was in his office, on the second floor of his house, in Santa Clara, in Silicon Valley, when he saw that it was working. "It registered itself, con-

nected, and messages started flowing between two people," he recalled. "I was, like, Holy shit, I just built a messenger for iPhone." WhatsApp became WhatsApp. "Almost everybody went from, like, Oh, this is useless to Oh, this is very useful," Koum said. The network came alive.

The first WhatsApp I sent to my wife, Polly, was a picture of some hills in Devon, in the southwest of England, taken from a graveyard outside a church. It was late June, 2014. I forwarded the image from a friend, who was at a wedding we were unable to attend, because our daughter Aggie had just been born, in London. The wedding had been threatened by rain. Now the weather had cleared.

WhatsApp was astonishing because it was basically free. (It had a one-dollar annual fee until 2016.) When I started using the app, texting an image on my British cellphone cost thirty-seven pence. WhatsApp also worked notably better than normal texting. I sent our friends at the wedding a picture of my wife, asleep with our six-day-old daughter, while I watched tennis on TV.

We had a new baby and were renovating our house. At first, we used WhatsApp mainly for images: of Aggie, of radiators, of floorboards. But gradually the app became our primary means of communication. In the past eleven years, Polly and I have exchanged some fifty-four thousand WhatsApps, amounting to about three hundred and eighty thousand words, which is longer than "The Brothers Karamazov."

[23/10/2018, 17:17:00] Sam: I shut Aggie's fingers in the car door

[23/10/2018, 17:17:01] Sam: Yup

[23/10/2018, 17:17:08] Sam: Pretty sure not broken

[23/10/2018, 17:17:17] Polly: Oh dear

My sister created a family WhatsApp group, for relatives on both sides of the Atlantic, on July 8, 2017. By then, I was using the app for work. British politics and, arguably, the British state are coordinated by WhatsApp. Ninety-two per cent of U.K. internet users are on the platform. Police officers banter on it. The National Health Service relies on it. On the afternoon of March 13, 2020—ten days before the U.K. entered

its first COVID lockdown—Dominic Cummings, a senior adviser to Prime Minister Boris Johnson, formed a five-man WhatsApp group that came to more or less run the country.

That fall, a reporter from the *Daily Mail* asked a government spokesperson, via WhatsApp, whether it was true that national policies were being conceived this way. The spokesperson WhatsApped Simon Case, the country's most senior civil servant, with a suggested response: "the PM does not make government decisions via WhatsApp." Case replied on WhatsApp less than a minute later: "Erm—is that true? I am not sure it is. I think we will have to ignore."

Koum grew up in a village outside Kyiv. He moved to California with his mother in the early nineties, when he was sixteen. His father, who worked in construction, stayed in Ukraine. "To instant-message my dad then would have been something," he told an interviewer. His mother had cancer, and she and Koum lived on welfare for a while. In high school, Koum read "TCP/IP Illustrated," by W. Richard Stevens, a six-hundred-page guide to the protocols of the internet. Then he read it again.

When WhatsApp was up and running, Koum was joined by Brian Acton, a former colleague at Yahoo, who became his co-founder. They wrote the software in Erlang, a programming language developed in the eighties by computer scientists at the Swedish telecom company Ericsson. The aim was for WhatsApp to work better than cell-phone text messaging—short-message service (S.M.S.)—which was taking off in the U.S., years after it had become popular in Europe and Japan. S.M.S. was lucrative for telecom companies, worth around a hundred billion dollars a year. But it was a mediocre product. You were limited to a hundred and sixty characters. Longer messages were broken up and sometimes delivered out of turn. Sending photos—especially to different brands of phones—was a gamble. Koum visited Europe often and understood how much people liked texting and how frequently the technology fell short. "You would have to call the person the next day and be, like, 'Hey, did you get my S.M.S.?' And half of the

time the answer would be no," Koum said. "The message was just dropped on the floor."

The idea with WhatsApp was that it would feel like you had used it before. The logo was a combination of the iPhone's dialer and messaging icons, against a vivid green that was just a shade or two darker than Apple's. "We wanted it to look good next to the native phone," Anton Borzov, WhatsApp's first designer, explained. Borzov ran a small studio, called Tokyo, in the Ukrainian city of Dnipro. From the outset, Koum and Acton paid attention to populations in emerging markets. They hired Portuguese, Bahasa Indonesian, and Spanish speakers, to make local-language versions of the app for Brazil, Indonesia, and Mexico.

They built WhatsApp not just for iPhones but also for the BlackBerrys and Windows phones and Nokias that were common in Africa and South Asia. Engineers and designers assigned to WhatsApp's various versions had to use those devices for their personal communication, to be alert to glitches and problems on the network. Chris Peiffer, the company's first full-time U.S. employee, recalls being issued a bright-pink Nokia that was popular among Indonesian teen-agers. "We just really prided ourselves on: No, we're going to make this work," he said. "The messages are going to get through."

Koum loathed surveillance, which he grew up with in the U.S.S.R., and advertising, which he grew up mostly without. He kept a pair of walkie-talkies on his desk, to remind him of the simplicity of what he was trying to create, alongside a note written by Acton: "No ads! No games! No gimmicks!" When Koum thought of a person's online connections, he pictured his grandfather, in Ukraine, leafing through his address book. "That's the most intimate social network," he said. "And it's already there on your phone." WhatsApp had no avatars or PINs or passwords. Your online identity was yourself. During 2011, the number of users rose from ten million to a hundred million. New Year's Eve was the busiest day of the year, as a rolling wave of midnights—through Jakarta and Delhi and Rio—hit the servers. In the spring of 2014, when the app had five hundred million users and a

staff of about fifty, Koum and Acton agreed to sell WhatsApp to Facebook, for nineteen billion dollars. Koum signed the paperwork against the wall of the social-services office in Mountain View.

In the fall of 1914, Bronisław Malinowski, a young Polish ethnographer, began to study island communities off the coast of Papua New Guinea. "Imagine yourself suddenly set down surrounded by all your gear, alone on a tropical beach close to a native village, while the launch or dinghy which has brought you sails away," he wrote in the opening pages of "Argonauts of the Western Pacific," an early classic of social anthropology, published in 1922. Malinowski intended to explain "the imponderabilia of actual life" on islands. Central among the imponderabilia of "Argonauts" was the kula, a circular form of trade—of necklaces and armbands, made from shells—that took place among the Trobriand Islands.

Malinowski spent a lot of time thinking about language. In an essay from 1923, he observed that much of what people say—whether on the Trobriand Islands or in European drawing rooms—was devoid of any obvious meaning. Saying "Ah, here you are!" in Kraków was the same as saying "Whenst comest thou?" on Kiriwina, the largest of the Trobriands. It was about conveying sociability, rather than thoughts or ideas. Malinowski called this "phatic communion," and he believed that it was essential to human society. It expressed "the fundamental tendency which makes the mere presence of others a necessity for man."

WhatsApp is phatic before it is anything else. It is an architecture of presence. It winks with life, informing you who is online and when they were last seen. Tiny bundles of data—relayed on the app's servers through sockets, or continuous connections—tell you that your best friend is typing. Koum introduced "read receipts," to show that texts were being sent and seen. At first, he imagined miniature icons that would represent a message's odyssey through the network—showing servers and hard drives—but Borzov suggested something simpler: one check mark to show that WhatsApp had received your message and two to show that it had been delivered. When the message was

opened, the check marks turned blue.

Blue check marks have saved some lives (WhatsApp is often the platform of choice for disaster responders) and tested many relationships. Whether to respond to a message that someone knows you have read with a heart, a thumbs-up, or a crying-face emoji is a modern-day imponderable, although I'm pretty sure that Malinowski would have taken a hard line on the subject. (In phatic conversation, he notes, "taciturnity means not only unfriendliness but directly a bad character.") WhatsApp's settings allow you to opt out of read receipts and seeing when your friends were last online, but that goes against the convivial spirit of the app. "I find it annoying," Koum told me. I turned my check marks off years ago.

Being able to say something without saying anything makes WhatsApp extremely popular among both Finns, who are comfortable with silence, and Brazilians, who overshare. "We are not too talkative and social," Sakari Taipale, a social scientist at the University of Jyväskylä, in central Finland, told me. "I think that WhatsApp is serving that very well, because you don't need to be outgoing." Every once in a while, Taipale's wife shares a photograph with him and their grownup children in their family WhatsApp group—normally of a happy memory—but no one feels any pressure to reply. "It's just enough that we have seen the thing," Taipale said. "We all recall it at the same time. I think that's a kind of communion."

Linguists enjoy studying WhatsApp for the ways that it mimics—and reconfigures—conversations in real life. Like all forms of texting, it can be asynchronous or very synchronous indeed. Utterance chunking (when you send a blast of short messages without waiting for a reply) is generally considered more emotionally engaging than a smoothly punctuated paragraph. In 2019, Katharina König, a lecturer in German linguistics at the University of Münster, observed that WhatsApp conversations were more fluid and less chronological in form than those on S.M.S. People like to establish whether a contact is

online and open to a directionless chat before unleashing the chunks.

Some people are better at texting than talking. Others leave voice notes that are forty-five minutes long. Some WhatsApp exchanges, especially chunky ones, can give rise to misunderstandings that would not occur in spoken conversation. Will Cathcart has been the head of WhatsApp since 2019. When his wife was pregnant, they texted about what to name their daughter. They settled on a name only to discover, after their child was born, that they disagreed on how to say Naomi. "It took us a while to figure out what had happened," Cathcart said.

Sociologists who study WhatsApp family groups sometimes call them W.F.G.s. In 2023, Galit Alkobi and Natalia Khvorostianov, of the Ben-Gurion University of the Negev, published a study of Israeli W.F.G.s and suggested that there were three archetypal roles in these groups: kin-keepers, who are committed to online family life; flickerers, who are seemingly indifferent; and silent warm experts, who are problem solvers. We all know who we are. Alkobi conducted forty-three interviews with family members about their W.F.G.s and found that groups encompassing three generations showed extremely similar traits: problematic-discourse avoidance, an exaggerated writing style (exuberant celebrations, morose commiserations), and routine ejections. Alkobi compared removing a problematic relative—or removing one-

self—from the W.F.G. to someone slamming a door during an argument. "Like when I was a teen-ager and my father wouldn't get me something," Alkobi said. "I will slam the door and not talk with him one hour, two hours, three hours."

Removing (and readmitting) loved ones from a W.F.G. is a social ritual that

now transcends most cultures. In 2021, Gabriel Pereira, a graduate student at Monash University Malaysia, encountered the memorable case of the Palmilla family, whose chat, "Global Family v2," was formed after the administrator of "Palmilla Gang Gang"—the previous version—removed everybody from the group except himself. Richard Karanja, a journalist and an I.T. entrepreneur in

Kenya, told me that, in his W.F.G. of some sixty relatives, people get suspended for either bad behavior or when the rest of the family is planning to be nice to them in some way. The outcast must guess their fate. "We usually give them a cold shoulder for the time being," Karanja explained. "We do not leak out the reason for the removal."

Studies have shown that WhatsApp users are more likely to express both happiness and sadness on the platform than on other, more public-facing apps, like X or Instagram. The only downside of the intimacy of human presence is confronting the reality that the other person is not present after all. In 2019, researchers reported that Syrian refugees in the Netherlands spent up to three hours a day on WhatsApp, video-calling and chatting with family members caught up in war and violence at home. Perceived as constantly available, thanks to stable Dutch internet service, the refugees described a state of connected helplessness. "For me it's really difficult to get all that information," one interviewee said. "I'm here and they are there. But I have no option, I have to listen."

The entanglement of WhatsApp in everyday feeling makes it an inviting place for theorizing about the human condition. Behavioral scientists have posited that Fijians might be more likely than Indians to experience loneliness on WhatsApp, because they come from a more collectivist culture, which makes the distinction between digital and lived relationships more acute. One day, I called an old friend, who is the most efficacious WhatsApper I know, and she described a particular feeling that can overtake her on the weekend, when the rest of her family is busy and she unexpectedly has a moment to herself. She should read a book or take a walk, but she checks WhatsApp instead. "WhatsApp is the promise of something else," she said. She can gauge how low she is feeling by how much she wants to find a warm message lying there, unread.

Inus digim'Rina grew up on Kiriwina, in the Trobriand Islands, and later became the head of the anthropology department at the University of Papua New Guinea. He first studied the work of Malinowski as a student, in the eighties. When we spoke recently, through



a faint connection on WhatsApp, digim'Rina said that Malinowski's principal observations about concepts of exchange on the islands have held up pretty well over time.

It was evening in Port Moresby, where digim'Rina lives. He is in his sixties now, and tries to get back to Kiriwina every year. He explained that his main way of keeping in touch with life on the Trobriand Islands was through a pair of WhatsApp groups: one related to local politics, which had about three hundred members, and another that was purely social, and much larger. (WhatsApp groups are limited to a thousand and twenty-four people.)

Phatic communion was alive in the place of its discovery. digim'Rina said that it was customary, in Trobriand WhatsApp culture, to enter a chat with the words "I miss you" or "It's been a long, long while" if you lived away from the islands. People liked rude jokes, as they always have. "I'm sure Malinowski didn't miss that," digim'Rina said. He enjoyed the politics group because it had a sense of focus, but the purely social chatter on WhatsApp was, to be honest, phatic all the way down. "It's everywhere, anything, whatever," digim'Rina said. "I can't see the value of sitting there, let's say wasting my time, just trying to know what each and every one is talking about."

WhatsApp delivers a hundred billion messages a day, around the same number as there are stars in the Milky Way. The platform has more than three billion active users each month—pretty much the same number as Facebook, more than YouTube, and roughly twice as many as Apple's iMessage. If you exclude China, where WhatsApp is banned, the app serves approximately half the human population older than fourteen. About three-quarters of WhatsApp users are on Android devices, with the rest on iPhones—which more or less reflects the global smartphone market. One reason that WhatsApp has traditionally lagged in the U.S. is because of the unusual dominance of iPhones. But that is changing. Last year, the U.S. was one of the app's fastest-growing markets, with the number of monthly users exceeding a hundred million for the first time.

For a couple of years after the Facebook acquisition, WhatsApp kept its



"Cuffs? I don't know who you are with cuffs."

own offices and leadership. In the spring of 2016, Acton and Koum introduced end-to-end encryption, which meant that messages and calls were readable only by their recipients. Just a few months later, however, the app disclosed that customers' phone numbers, device information, and data about their usage would now be available to the wider "Facebook family of companies." Acton left soon afterward. Later, he urged his social-media followers to #deletefacebook, and helped grow Signal, a privacy-focused messaging app. (WhatsApp and Signal use the same encryption protocol, but Signal does not collect as much metadata.) In 2018, Koum announced that he was retiring to collect air-cooled Porsches.

If WhatsApp stops working, the guy who has to fix it is Dick Brouwer, a tall Dutchman with a master's in aerospace engineering, who works out of Building 23 at Meta's headquarters, in Menlo Park. "It's kind of a weird idea," Brouwer told me. "If something goes wrong somewhere in the world, at the end of the line, they'll call me." Brouwer grew up in Wassenaar, a coastal suburb near The Hague, where he dreamed of becoming an animator at Pixar. He thinks of WhatsApp as a very large collection

of very small pipes, and that his team's job is to keep as many of them as clear as possible at all times. "Stuff needs to flow," Brouwer said. "If there's a hiccup, there's a problem, things are piling up on one side. We don't want them to start overflowing."

The numbers that Brouwer checks constantly are how many users are on the platform at a given moment—typically seven hundred million to almost a billion—and the flow of messages on the servers, which hovers between one and two million per second. "It's an astonishingly stable metric," Brouwer said. "A lot needs to happen for that to actually change." The busiest minutes in WhatsApp's history occurred at the end of the World Cup final, in Qatar, in December, 2022. Because it wasn't New Year's Eve, Brouwer and his team weren't really prepared. They sat at their laptops in the Bay Area, watching the messages spike to twenty-five million per second. The pipes flowed. "The big success here was that we didn't do anything," he said.

During other emergencies—when power fails on the Iberian Peninsula, as it did last April, or Russia threatens to block the app, which it did in the fall—Brouwer and a small team he calls the

Graybeards use Erlang to rewrite WhatsApp's code while it is still running, to redirect traffic, or to modify how the app is working in specific places. If the network is getting overwhelmed, they can reroute messages through specific data centers or disable features, like the auto-downloading of images. Making changes on the fly is known as a hot reload. "We try not to do that often, because it's very dangerous," Brouwer said.

There are fewer than a hundred engineers on WhatsApp's infrastructure team. They wield godlike powers over human communication, but they spend most of their time solving problems that the rest of us do not register. In 2024, Brouwer and his team implemented a way to send large files, like images or videos, separately from their smaller encryption keys. If I text my wife, who is upstairs, a picture of a note on our fridge, my photo will, most likely, bounce off a relay station in Birmingham or on the edge of London, while its encryption key will zip off to Odense, in Denmark, and then back, before the parts are reunited into a double check mark in our bedroom, thirty feet away. "Things will feel more snappy then," Brouwer said.

The problem underpinning every problem at WhatsApp is the sheer capaciousness of the system. Running on practically every type of phone, in practically every corner of the world, means that it is hard to know whom you are optimizing for. If you improve one aspect of WhatsApp for some users—sharpen the picture quality, say—then you are likely to degrade it for others. WhatsApp groups may feel less snappy in the Trobriand Islands.

"Almost every discussion we have internally, it's all about: What are the trade-offs?" Brouwer said. WhatsApp already forces its users to upgrade their app every three months. The network must move as one. I asked Brouwer if there was any practical reason why the whole world couldn't be on WhatsApp. He considered the question for a moment. "No," he replied. "Nothing fundamental. The challenges just add up."

The economics of WhatsApp have been mysterious for years. A 2023 study calculated that American users would not give up the app for less than thirty dollars a month (the figure was

much more in some countries), which gave it a notional consumer value of twenty-five to thirty billion dollars a year. But WhatsApp generates only a fraction of that, from "Click to WhatsApp" links and from a business version of the service, which launched in 2018. In Meta's most recent earnings update, this past fall, WhatsApp's non-advertising income was included under "Other Revenue": a footling total of some six hundred and ninety million dollars for the preceding quarter. Meta's ad revenue for the same period was almost seventy times greater.

In 2020, the Federal Trade Commission sued Meta, accusing the company of building a monopoly in social networking through its acquisitions of Instagram and WhatsApp. (Meta won the case last year.) The F.T.C. asked Sinan Aral, a professor of management at M.I.T., to study Meta's monetization of WhatsApp so far. "It was very slow to do that, maybe deliberately," Aral told me. "I would consider it close to a failure."

But Aral also believes that this is about to change. "You will see the WhatsApp-monetization spigot get turned on like you have not seen before, in the near future," he said. In a voice note, Cathcart, the head of WhatsApp, told me that more and more businesses are paying for access to WhatsApp—to reach customers and sell them things—because users want them there. "We hear from a lot of people in countries where WhatsApp is particularly popular that messaging a business can be the easiest way to get something done," he said. "If you're trying to book an appointment or get an update on an order or order food from your favorite local restaurant, then it's certainly better than e-mail. It's better than calling and waiting on hold. You don't need a separate app." When I met Koum at a hotel in London, he had just ordered room service on WhatsApp. "I was just, like, Holy fucking shit," he said. "That's great."

In Delhi, you can buy your subway ticket to the airport and check in for your flight on WhatsApp. In Brazil, L'Oréal makes more than twenty percent of its online direct-to-consumer sales through what is known as "conversational commerce" over the app. Internet sales for beauty products in Brazil

first spiked during the pandemic, but customers complained that it was a soulless experience. "They felt it was lonely," Alan Spector, the chief digital and marketing officer at L'Oréal Brazil, told me.

There's an app for that. In Brazil, L'Oréal's virtual beauty assistants, known as E.B.A.s, are able to contact customers through website links to WhatsApp, via social-media ads, and, with shoppers' consent, by dropping directly into their chats. Spector talked about a recent Mother's Day campaign by Lancôme. "The E.B.A. starts asking, you know, 'Tell me about your mom,'" Spector said. "Many times it can be a psychological conversation, you know, like a real emotional conversation, and it will eventually lead to conversion." Spector told me that, when customers abandon an item in their shopping cart, WhatsApp is six times more effective than e-mail at persuading people to complete their purchases. "That's where we're really able to solve the doubt," he said. In 2026, L'Oréal plans to introduce Beauty Genius, a fully A.I.-powered sales agent, on WhatsApp.

In the summer of 2025, after ten years of promising not to, WhatsApp introduced ads to the platform. As of now, they live in the Updates tab. In 2023, WhatsApp had launched Channels in the same tab, to allow brands and celebrities to broadcast information, much as they would on Facebook or Instagram. (Mark Zuckerberg has twelve million followers on WhatsApp.) Cathcart described a user's journey into the more commercial zone of WhatsApp—to see what Shakira has been up to, to post their Status (more or less the same as a Story on Instagram), and to browse ads—as one of "progressive disclosure." It is an "ability to kind of go into the app as far as you want to," Cathcart added. "But you don't have to." Brouwer also leads WhatsApp's growth team. He articulated the app's emerging identity as "the place for people I care most about, but also then the place for *information* I care most about. This is much more nascent. But that's kind of the idea." He wasn't entirely convincing.

In a recent book about WhatsApp, Amelia Johns, Ariadna Matamoros-Fernández, and Emma Baulch—digital-media scholars who were based in Australia and Malaysia—argued that the app had evolved from a platform that

served individuals to one that was increasingly oriented toward the needs of businesses and paying users. “It’s very hard for it to continue to be viewed as a simple messaging app,” Johns told me, “even though it is convenient for WhatsApp to promote it in that way.”

The app also functions as a major gateway to Meta’s A.I. projects. The company’s chatbot, powered by its large language model, Llama, first appeared as a glowing, multicolored ring in my conversations about a year ago. Alice Newton-Rex, WhatsApp’s head of product, said that people were engaging with Meta AI on WhatsApp more avidly than on any of the company’s other platforms. (She uses it to figure out what to cook for her kids.) “The way that you interact with A.I. these days is a chat,” she said. “It’s so intuitive.” Brouwer said that it was only a matter of time before A.I. chatbots joined WhatsApp groups. “A lot of my conversations day-to-day are now within A.I.,” he said. “These worlds are going to combine at some point.”

In the mid-nineteen-twenties, at the same time that Malinowski was sharing his findings from the Trobriand Islands, a handful of scientists were speculating about the next stage of human evolution and the rise of a global consciousness. Pierre Teilhard de Chardin, a French paleontologist and a Jesuit priest, described an emerging “noosphere,” derived from the Greek word for “mind.” Teilhard imagined a “mechanized envelope” of humans and machines that would soon circle the Earth and create new thoughts and emotions. “No one can deny that a network (a world network) of economic and psychic affiliations is being woven at ever increasing speed which envelops and constantly penetrates more deeply within each of us,” Teilhard wrote, in 1947. “With every day that passes it becomes a little more impossible for us to act or think otherwise than collectively.”

I once asked Brouwer if he ever thought about WhatsApp as a vehicle for global consciousness. “It’s a pertinent question,” he replied. “We talk about it a lot. We think about it. I don’t think anybody has the answer, other than this is something that is happening. So how do we play into it as the world’s largest app?” Inevitably, there are trade-offs to be negotiated. Privacy

and simplicity don’t necessarily square with generative A.I. and the desires of corporations to converse, genially, with an audience of three billion people. “If you don’t have those constraints, life becomes a lot easier,” Brouwer joked. (Your WhatsApp chats with Meta AI are not end-to-end encrypted.) Brouwer observed that some societies are already much further along in their WhatsApp progression than others. “There’s countries that just run on WhatsApp. Everything is done on WhatsApp. It feels a lot closer there,” he said. “I think the leap is actually not that far.”

In places like Kenya, Nigeria, and Argentina, WhatsApp is sometimes described as a “technology of life.” Mobile-phone providers often offer the app for a few cents a day, making it some users’ only connection with the internet. In these markets, WhatsApp resembles Asian super-apps—like WeChat, in China, or KakaoTalk, in South Korea—where it is possible to order groceries, hail a ride, and chat with your bank. In India, Brazil, Mexico, and Indonesia,

you can send money on WhatsApp.

One afternoon, I reached Amber Sinha, a digital-rights lawyer and advocate, at his apartment outside Delhi. In 2011, when Sinha was in college, he was found unconscious in his dormitory. When he woke up in the hospital, he couldn’t remember anything from the previous year. Sinha never learned the reason for his brain injury, but he was able to reconstitute many of his memories by reading his voluminous instant-message archives. (He wasn’t on WhatsApp yet.) Wading through his messages, he learned about WikiLeaks and that he had been through a messy breakup.

“It was illuminating,” Sinha recalled. “I was simultaneously relieved but also—with every kind of every incremental thing that I was able to piece together about my life—disturbed by how much of it I lived on those platforms.” On the day that we spoke, Sinha had reported a problem with his air-conditioner, received a delivery, wished his sister a happy birthday, and been notified about the cost of repairs to the elevator in his



“I’m bored.”

building, all on WhatsApp. He was keeping his check marks on, in order to communicate with real-estate agents, who were helping him move, and his location was being tracked to allow delivery drivers to find him. “I don’t think this is something that one can necessarily say was even planned by the platform. It has just taken on a life of its own,” Sinha said. “This is what people use. This is what you are forced to use.”

In 2017 and 2018, Sinha traced fifty-four cases of mob violence in India—mainly following spurious reports of child abductions—that had been catalyzed by WhatsApp groups. In 2024, he studied the role of digital technology in ten elections across the world. WhatsApp was often the most prominent platform. In the past decade, India, Brazil, South Africa, and Malaysia have all experienced their first “WhatsApp election,” as politicians and their associates have used the platform’s extraordinary reach to gain influence among voters. The “I.T. cell” of the B.J.P., the ruling party of India’s Prime Minister, Narendra Modi, is generally reckoned to be the most formidable WhatsApp political operation on the planet. Before the B.J.P.’s narrow election victory in 2024, Srishti Jaswal, an investigative reporter, travelled to Mandi, a city in Himachal Pradesh, in the north, and found a network of more than four hundred B.J.P.-affiliated WhatsApp groups in operation—something like one for every seventy-five people in the town.

“From your heart to your fingers, blood travels,” Jaswal told me. “Similarly, from top to bottom, these B.J.P. I.T.-cell WhatsApp groups travel.” According to one estimate, B.J.P. administrators run some five million WhatsApp groups—down to the level of each of India’s roughly one million polling stations. Information can be spread across the network in a little more than ten minutes. In Mandi, Jaswal found that the most inflammatory political content was often shared in groups that had no ostensible political purpose. They were meant to organize volunteers to clean up a town, or to discuss women’s issues, but were administered by B.J.P. supporters, who did not advertise their affiliation. “That tends to have a far more intimate effect on people,” Jaswal explained. “Where people

would see that, you know, it’s coming from one of us.”

In India, WhatsApp’s penetration into politics, commerce, and human relations means that it is now almost impossible to contemplate its absence. “As a platform of communication, I think it is equivalent to the old telephone network,” Paresh Lal, a lawyer in Delhi, told me. “But in the hands of one company, and not as a shared, common resource with multiple watchdogs over it. It has immense power and is problematic. Deeply problematic.” In 2021, Lal worked for WhatsApp as its sole grievance officer in India, responsible for the concerns of its hundreds of millions of users there. Lal had signed an N.D.A. and did not discuss his time at Meta. But he resigned from the role after six months. “Would you not agree with me that no one person or company should have control over this?” he said. In response, a spokesperson for Meta described WhatsApp as “one of the most scrutinized apps in the world.” He continued, “The old telephone networks were much less secure and stored a lot of user information, which increased their power until another alternative came along.”

A few years ago, Ben Backx was reading “Everybody Lies: Big Data, New Data, and What the Internet Can Tell Us About Who We Really Are,” by Seth Stephens-Davidowitz, an American data scientist. Backx, a British technologist who worked at a bank in Singapore, found himself thinking about his conversations on WhatsApp. “It’s almost like the last honest place on the internet,” he told me.

When Backx moved to Singapore, in 2013, receiving an invite to join a WhatsApp group for expats proved to be a moment of acceptance. WhatsApp functioned as an all-purpose back channel at work. If you met someone online, moving the conversation to WhatsApp was promising. If Backx’s digital personality resided anywhere, it was in his WhatsApp histories, which he could download in moments. “It’s just that eureka moment,” he said. “It’s there.”

Backx built an app, which he called Mimoto, to analyze every WhatsApp that he had sent or received. It didn’t evaluate pictures or videos, but every-

thing else was reviewed by an algorithm: speed of response; length; levels of encouragement, sympathy, or curiosity; whether you are starting the conversation or finishing it. “Do you laugh? Do you apologize? Is there a compliment?” Backx said. “I’ve completely gone over the top with it.” Backx used Mimoto to study the dynamics of almost every relationship in his chats—with his wife, his boss, his friends, his W.F.G. There was banality and truth in the data: Backx’s wife asked more questions than he had realized; his father’s natural gregariousness didn’t translate online. More than anything, Backx was confronted by the minute, ongoing narration of his life. Every argument, every celebration, every missed school pickup was inscribed. “I think a lot of people don’t realize that, essentially, their WhatsApp history—across all their chats—is the diary they didn’t know they’d been writing,” he said.

After we spoke, I downloaded Mimoto and ran my WhatsApp history with Polly through its algorithm. There were positive findings: Polly and I text very equally. And chastening ones: her texts are more encouraging than mine; we spend more time talking about me than about her. Mimoto also looks for urgency and emotion, identifying the highest-scoring exchanges in your archive. (My highest-scoring chats with my sister involved driving directions and being late.) From my WhatsApps with Polly, the co-written Dostoyevsky novel of our relationship, Backx’s algorithm correctly picked out its most stressful days: the weekend of May 9, 2020, when Polly was in the hospital, having given birth to our twin sons, during the pandemic. I was under lockdown at home, with our two young daughters, unable to visit. The girls and I took a care package—banana bread and some herbs that the kids had picked from our garden—and stood in the deserted, spring-lit street below the hospital.

[10/05/2020, 11:17:31] Sam: Someone coming down for your package...

[10/05/2020, 11:20:40] Polly: I am in situ

[10/05/2020, 11:21:43] Sam: We are coming round.

[10/05/2020, 11:21:46] Sam: Cross road?

[10/05/2020, 11:22:12] Polly: Are you on tower street

[10/05/2020, 11:22:18] Polly: I can see you! Look up! ♦