

LAST!
HOVERBOARD
AT WORKS

E 31

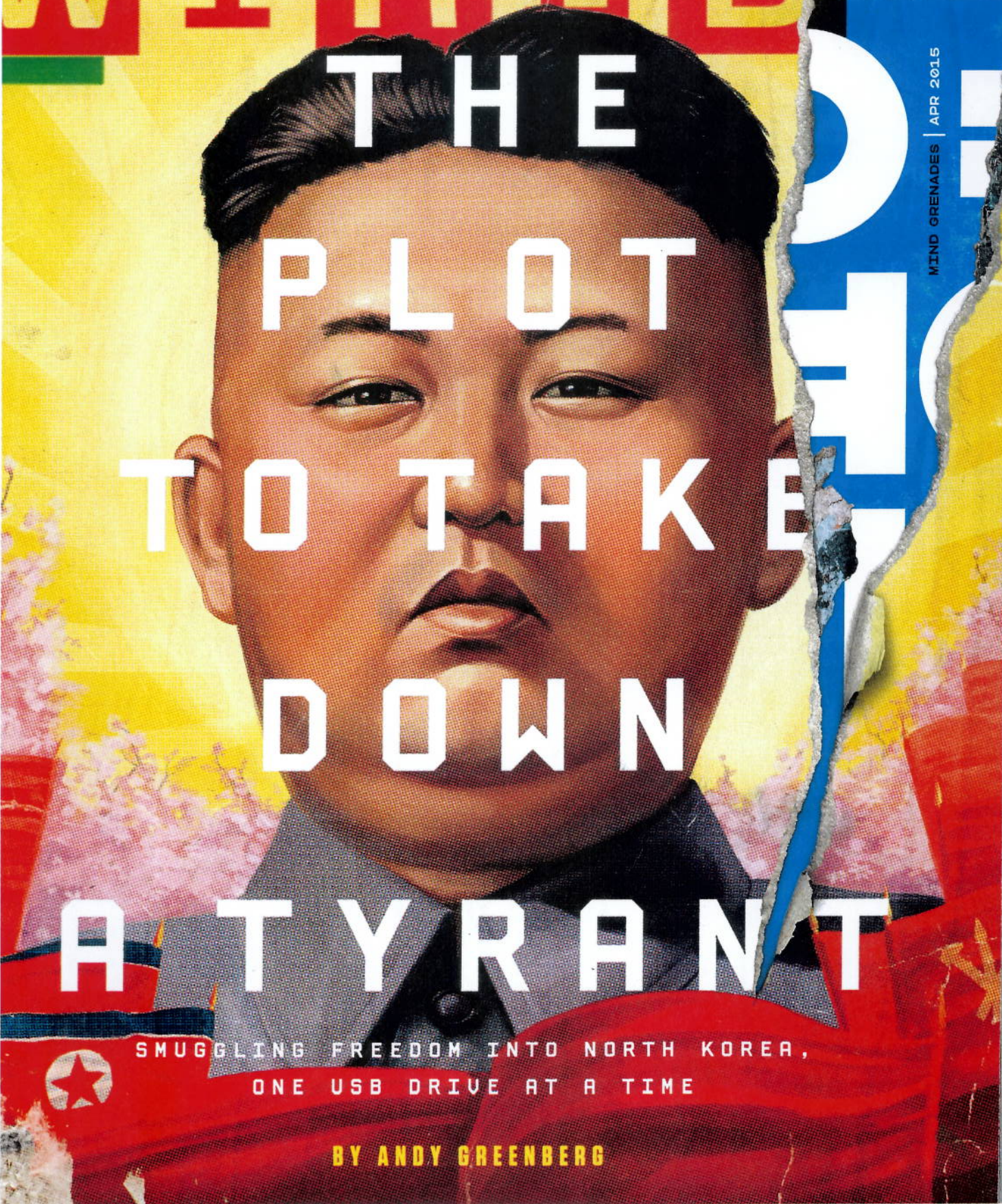
STOP IGNORING
WOMEN
SCIENTISTS

PAGE 47

ENGINEERING
THE WORLD'S
TASTIEST BEER

PAGE 78

WIRED



THE
PLOT
TO TAKE
DOWN
A TYRANT

MIND GRENADES | APR 2015

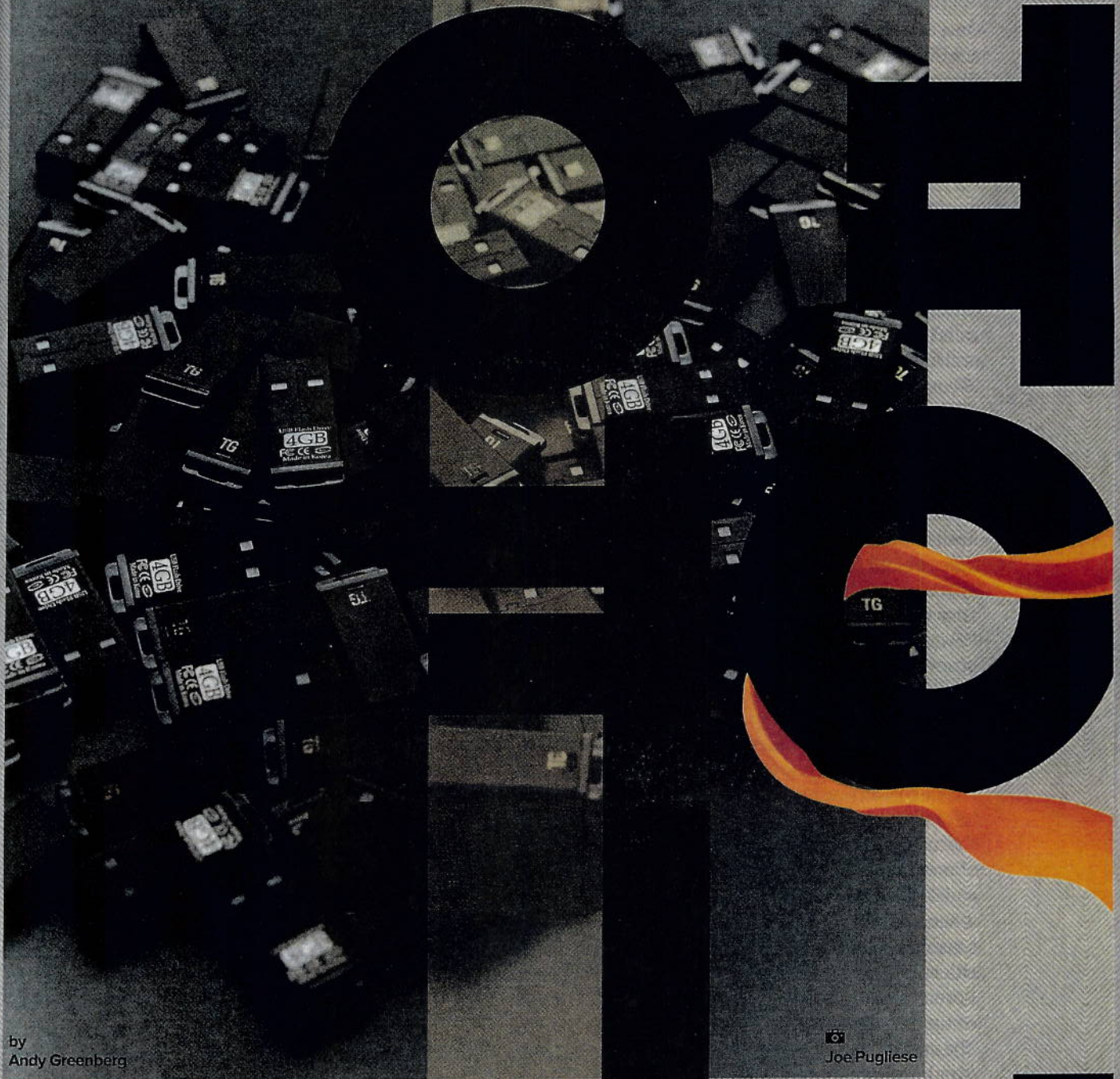
SMUGGLING FREEDOM INTO NORTH KOREA,
ONE USB DRIVE AT A TIME

BY ANDY GREENBERG




Flash Mob

Go underground with the dissidents trying to overthrow Kim Jong-un, one USB stick at a time.



by
Andy Greenberg

 Joe Pugliese



On a cloudy, moonless night somewhere in northeastern China, three men creep through a stand of Japanese Clethra trees. They carry no flashlights, and the sky is so dark that they hear the sound of the rushing Tumen River before they see it: They've arrived at the North Korean border. ¶ Earlier in the evening at a nearby restaurant, they treated the local Chinese police chief and head of the border patrol to a blowout feast of more than 20 dishes, climaxing with a southern China delicacy—a carp deep-fried and served alive, its mouth and gills still moving. Following an after-meal session of pricey Chunghwa cigarettes and shots of Moutai liquor, the officials made phone calls telling subordinates to abandon their posts for several hours. After dozens of these bribe dinners, they had become routine, practically a tradition among friends; by now the smugglers even had their own key to the rusty bike lock securing the border area's barbed wire fence. ¶ Two hours later the trio's leader, a middle-aged North Korean defector named Jung Kwang-il, steps into the tall weeds of the riverbank. He pulls out a cheap laser pointer and flashes it across the water. Then he waits for a response: If he sees an X slashed through the air by a laser on the opposite bank, the operation will be called off. Instead, he's answered with a red circle painted through the darkness. ¶ Soon after, a compact man dressed in only a hoodie and boxer shorts wades out of the waist-high water and onto the riverbank where Jung and his companions stand. Jung arranged the meeting earlier in the day using coded language over walkie-talkies. The men embrace and speak softly for a minute about each other's health, the price of North Korean mushrooms, and Jung's mother, whom he'd left behind in the North 10 years ago. Then Jung hands the man a tightly wrapped plastic bag containing a trove of precious black-market data: 200 Sandisk USB drives and 300 micro SD cards, each packed with 16 gigabytes of videos like *Lucy*, *Son of God*, *22 Jump Street*, and entire seasons of South Korean reality television shows, comedies, and soap operas. To bribe the guards on the North Korean side, Jung has included in the bag an HP laptop computer, cigarettes, liquor, and close to \$1,000 in cash. ¶ The man in the hoodie slings the bag of digital contraband over his shoulder. Then he says good-bye and disappears back into the world's deepest black hole of information.

ANDY GREENBERG (@a_greenberg) is a senior writer at WIRED.

T

THAT SMUGGLING MISSION was planned and executed last September by the North Korea Strategy Center and its 46-year-old founder, Kang Chol-hwan. Over the past few years, Kang's organization has become the largest in a movement of political groups who routinely smuggle data into North Korea. NKSC alone annually injects around 3,000 USB drives filled with foreign movies, music, and ebooks. Kang's goal, as wildly optimistic as it may sound, is nothing less than the overthrow of the North Korean government. He believes that the

Kim dynasty's three-generation stranglehold on the North Korean people—and its draconian restriction on almost any information about the world beyond its borders—will ultimately be broken not by drone strikes or caravans of Humvees but by a gradual, guerrilla invasion of thumb drives filled with bootleg episodes of *Friends* and Judd Apatow comedies.

Kang likens the USB sticks to the red pill from *The Matrix*: a mind-altering treatment that has the power to shatter a world of illusions. "When North Koreans watch *Desperate Housewives*, they see that Americans aren't all war-loving imperialists," Kang says. "They're just people having affairs or whatever. They see the leisure, the freedom. They realize that this isn't the enemy; it's what they want for themselves. It cancels out everything they've been told. And when that happens, it starts a revolution in their mind."

I first meet Kang in a conference room of his office on the ninth floor of a Seoul high-rise. Outside, a bored plainclothes policeman keeps watch, part of a 24/7 security detail provided by the South Korean government after Kang appeared on a top-10 list of North Korean defector assassination targets. Kang answers my questions in a soft voice and maintains a look of calm bemusement. But several NKSC staffers later tell me that his quiet demeanor masks a deep, lifelong anger directed at North Korea's dictatorship, which held him and his entire family in a prison camp for 10 years of his childhood. ("Compared to some defectors I've met, he's a little more pissed off," one staffer confides.)

It doesn't take a decade in a gulag to see that North Korea needs a revolution. Since the Korean Peninsula split at the end of World War II, seven decades of disastrous financial decisions, isolationist economics, and sociopathic military threats against the rest of the world have turned the country into what Georgetown Asian studies professor and former National Security Council adviser Victor Cha calls simply "the worst place on earth." Its recent history is a litany of disaster: Despite having a stronger economy and better infrastructure than South Korea in 1945, its GDP is now a fortieth the size of its southern neighbor. Only 16 percent of households have adequate access to food, according to a 2012 study by the World Food Program, stunting growth in 28 percent of the population. In some areas of the country, up to 40 percent of children under 5 are affected. The effects are mental as well as physical. A 2008 study by the National Intelligence Council found that a quarter of North Korean military conscripts are disqualified for cognitive disabilities.

The totalitarian government inherited by its 32-year-old leader, Kim Jong-un, punishes any real political resistance with death. And the regime's most powerful tool for control remains its grip on North Korean minds. The state propaganda system indoctrinates its 25 million citizens from birth, insisting that the Kim family is infallible and that the country enjoys a superior standard of living. In a ranking of 197 countries' press freedom by research group Freedom House, North Korea places last. It sees any attempt to introduce competing ideas, even the possession of a radio capable of accessing foreign frequencies, as a threat to its power; these infractions are punishable by exile to one of its prison camps, which hold as many as 200,000 people, according to Amnesty

International. "The Kim regime needs its ideology," Cha says. Without it, he argues, North Korea would face the same threats as every dictatorship, such as an internal coup or a popular revolt. "If they get to the point where all they can do is point guns at people, they'll know their system has failed."

A growing movement of North Korean defector activist groups, including Kang's NKSC and others, like North Korea Intellectuals Solidarity and Fighters for a Free North Korea, views that reliance on ideological control as a weakness: Outside data is now penetrating North Korea's borders more than ever before. One group has stashed USB drives in Chinese cargo trucks. Another has passed them over from tourist boats that meet with fishermen mid-river. An NKSC operative showed me a video in which he crawls under a border fence, walks into the Tumen River, and throws two tires to the opposite bank. Each one was filled with South Korean Choco Pies, Chinese cigarettes, and USB sticks loaded with movies like *Snowpiercer*, *The Lives of Others*, and Charlie Chaplin's *The Great Dictator*.

Even *The Interview*—the Kim Jong-un assassination comedy that the North Korean government tried to keep from being released by using threats, intimidation, and (according to the FBI) a devastating hacking operation against Sony Pictures—has made its way into the country. Chinese traders' trucks carried 20 copies of the film across the border the day after Christmas, just two days after its online release. "What I do is what Kim Jong-un fears most," says Jung, the smuggler, who shows me videos and pictures of his missions while seated in the lobby of a hospital in Bucheon, South Korea. Jung, wearing a military-style cap and pajamas, is taking a break from rehabilitation therapy for knee injuries he sustained while being tortured in a North Korean prison

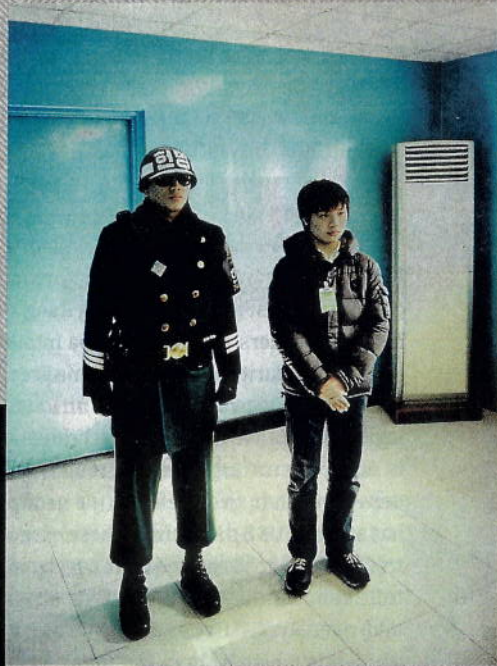
15 years ago. "For every USB drive I send across, there are perhaps 100 North Koreans who begin to question why they live this way. Why they've been put in a jar."

Each activist group has its own tactics: Fighters for a Free North Korea loads up

Previous spread:
Former North Korean official Kim Heungkwang used to search homes for illegal media; now he smuggles it into the country on flash drives.

Left:
Kang Cholhwan, leader of the dissident group NKSC, with a popular video player called a *notel*.

**"DESPERATE
HOUSEWIVES
SHOWS NORTH
KOREANS THAT
AMERICANS
AREN'T ALL
IMPERIALISTS."**



Since the Korean War ended in 1953, the North and South have been separated by a heavily guarded demilitarized zone (2, 5, 8, 9)—the world's starkest border between technological haves and have-nots.

A tourist poses with a guard (1) in the Joint Security Area of the DMZ in Panmunjom.

1

After defecting, Kim Heungkwang (3) founded North Korea Intellectuals Solidarity.

2



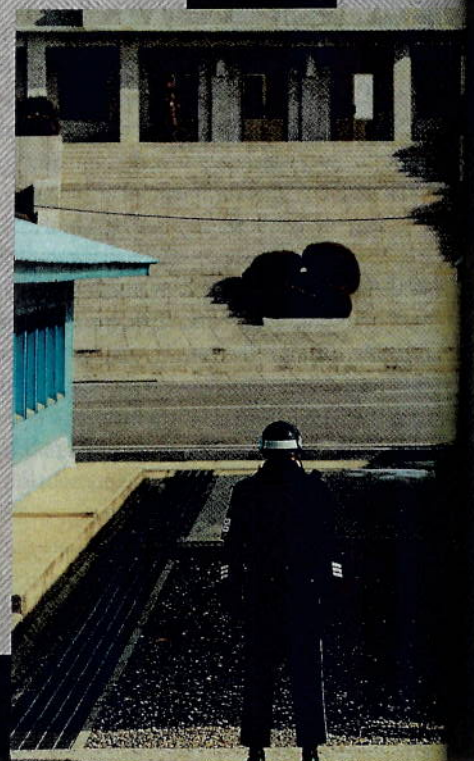
4



5



3



070



35-foot balloons that float into the country and rain down pamphlets, US dollar bills, and USB drives full of political materials. North Korea Intellectuals Solidarity smuggles in USBs filled with short documentaries about the outside world created by the group's founder, a former North Korean computer scientist who used to help the government confiscate illicit media.

Kang's NKSC, with its pop cultural offerings, capitalizes on North Korea's flowering black markets. The group's smugglers inside the country are motivated by profit as much as politics: A USB stick loaded with contraband films sells for more than a month's food budget for most middle-class North Korean families. A pack of hundreds represents a small fortune. "In North Korea a USB drive is like gold," one NKSC smuggler tells me.

For Kang, that makes each of those coveted flash drives a self-propelled weapon in a free-market information insurgency. "Right now, perhaps 30 percent of the population in North Korea knows about the outside world," Kang says. "If you reach 50 percent, that's enough people to start making demands, to start making changes."

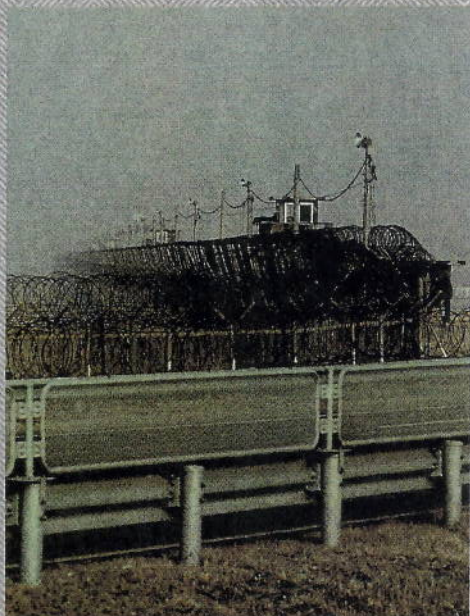
And if that enlightened audience reaches 80 percent? Or 90 percent? Kang leans forward. "Then there's no way the North Korean government, in its current form, could continue to exist."



Jung Kwang-il (4) became a data smuggler after escaping to the South.

NKSC founder Kang (6) and his family spent 10 years in a North Korean gulag.

Jung, the smuggler, and Kang meet in the NKSC office in Seoul (7).



K

KANG CHOL-HWAN was 9 years old when his grandfather, a high-level government official and ethnic Korean immigrant from Japan, suddenly disappeared. It was the summer of 1977, and within a few weeks, soldiers came for the rest of his family, summarily stating that Kang's grandfather had been convicted of "high treason" but giving no details. The entire three-generation family would immediately be sent to a reeducation camp. The government confiscated the family's house and nearly all its possessions, though the soldiers took pity on the tearful Kang and allowed him to carry out an aquarium of his favorite tropical fish.

Soon after the family's arrival at the Yodok concentration camp in the country's northeastern mountains, the fish floated dead in their tank.





**"IN NORTH
KOREA, THEY
TAUGHT US
THAT YOU
DIE FOR THE
REGIME."**

The family would spend the next decade in one of Kim Il-sung's most notorious gulags.

Kang's daily life alternated between school—rote memorization of communist propaganda—and slave labor in the camp's cornfields, lumberyards, and gold mines. For a time, Kang's work detail included burying the corpses of prisoners who died daily from starvation or perished in mine cave-ins and dynamite accidents.

Children who disobeyed even slightly were beaten. Adult transgressors spent days, or even months, in the sweatbox, a tiny windowless shack in which victims could only crouch on hands and knees. Sometimes prisoners, including Kang, would be required to witness executions. Once he and other inmates were ordered to stone the hanging corpses of would-be escapees. "The skin on the victims' faces eventually came undone and nothing remained of their clothing but a few bloody shreds," Kang would later describe it. "I had the strange feeling of being swallowed up in a world where the earth and sky had changed places."

As the years passed, Kang became a resourceful survivor. He learned to eat wild salamanders in a single swallow and catch rats with a lasso he designed out of wire. Their meat sustained him and several family members on the verge of starvation through winters at subzero temperatures.

When Kang was 18, the guards announced one day without preamble that his family would be released as a demonstration of leader Kim Il-sung's generosity. Except Kang's grandfather—he had been assigned to a different camp, his treason still unexplained. Kang never saw him again.

In his postprison life as a deliveryman in the western county of Pyungung, Kang harbored few illusions about the corruption of the North Korean regime. But it wasn't until around three years later that he accessed the information that crystallized his contempt. It came from a pirate radio.

A friend gave Kang two radio receivers. Kang paid a bribe to avoid registering one with police, and he learned how to disassemble its case and remove the filament that hardwired it to official regime frequencies. He and his closest confidants would huddle under a blanket—to muffle the sound from eavesdroppers—and listen to Voice of America, Christian stations, and the South's Korean Broadcasting System. "At first I didn't believe it," he says. "Then I started to believe but felt guilty for listening. Eventually, I couldn't stop."

Under their blanket, they relearned all of North Korea's history, including the fact that the North, not the South, had started the Korean War. Begin-



and soap operas, like *We Got Married*, to counter the North's propaganda by showing the abundance of wealth and freedom in the South.

Northern Exposure

Movies, TV shows, documentaries, news. Smugglers sneak them all into the Democratic People's Republic of Korea to meet the demand for information and entertainment. Here's a sampling of contraband material that permeates the border.
—Julia Greenberg

TV SHOWS AND MOVIES
To show citizens what life is like outside the Hermit Kingdom, the North Korea Strategy Center smuggles American films and TV shows, including hits like *The Hunger Games*, *22 Jump Street*, *Desperate Housewives*, and *Friends*, across the border. A North Korean fan favorite? *Scandal*.

POP CULTURE FROM THE SOUTH
The NKSC also sends over South Korean comedies, dramas,

POLITICAL PAMPHLETS
Fighters for a Free North Korea drops hundreds of thousands of waterproof political leaflets to draw attention to the injustices of the Kim dynasty's rule. "Let us fight until the day we die for freedom," one states.

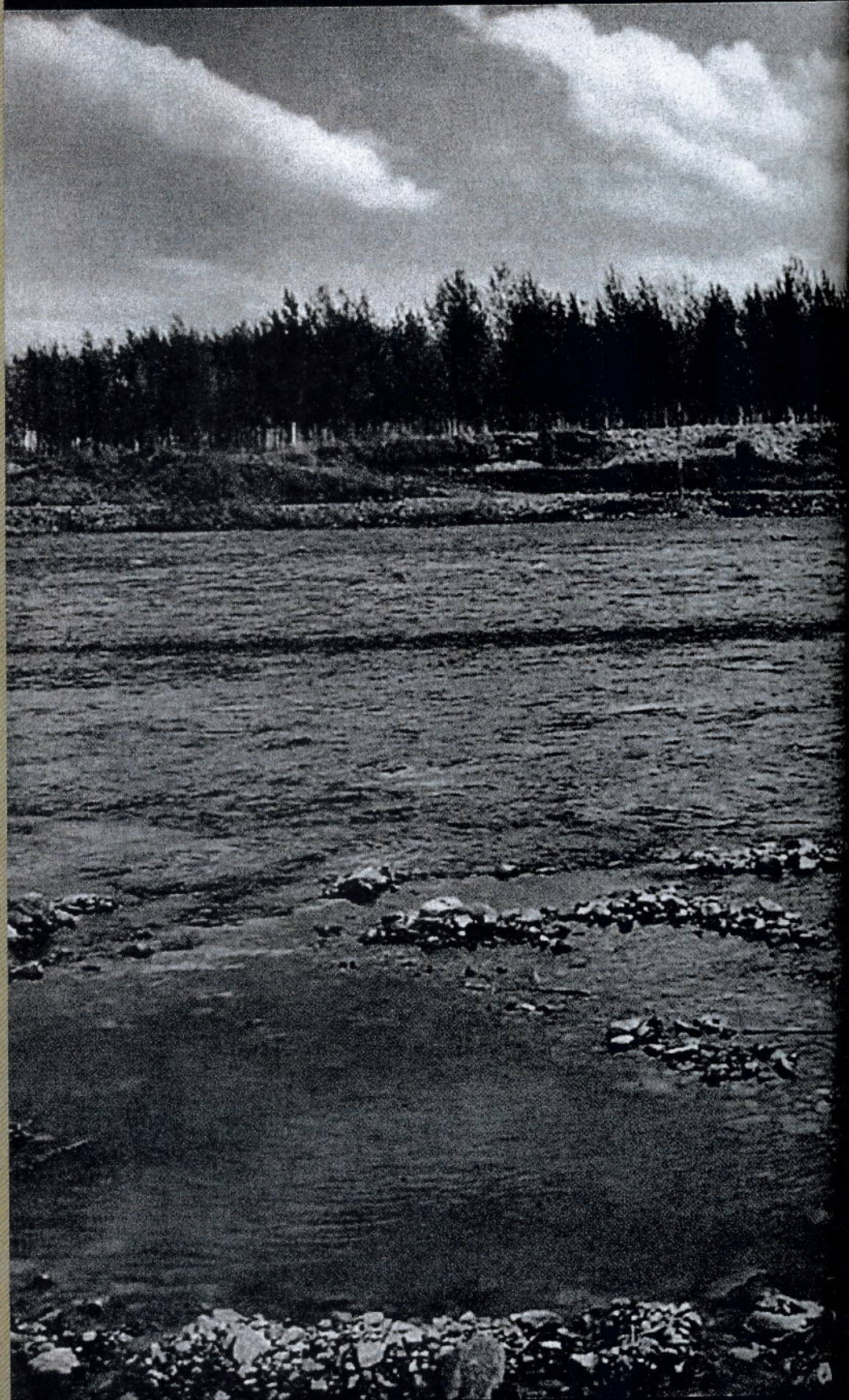
SOBER-MINDED DOCUMENTARIES
Kim Heungkwang, a defector who founded North Korea Intellectuals Solidarity, creates and stars in short documentaries to educate North Koreans on democracy, the Internet, and life outside the DPRK.

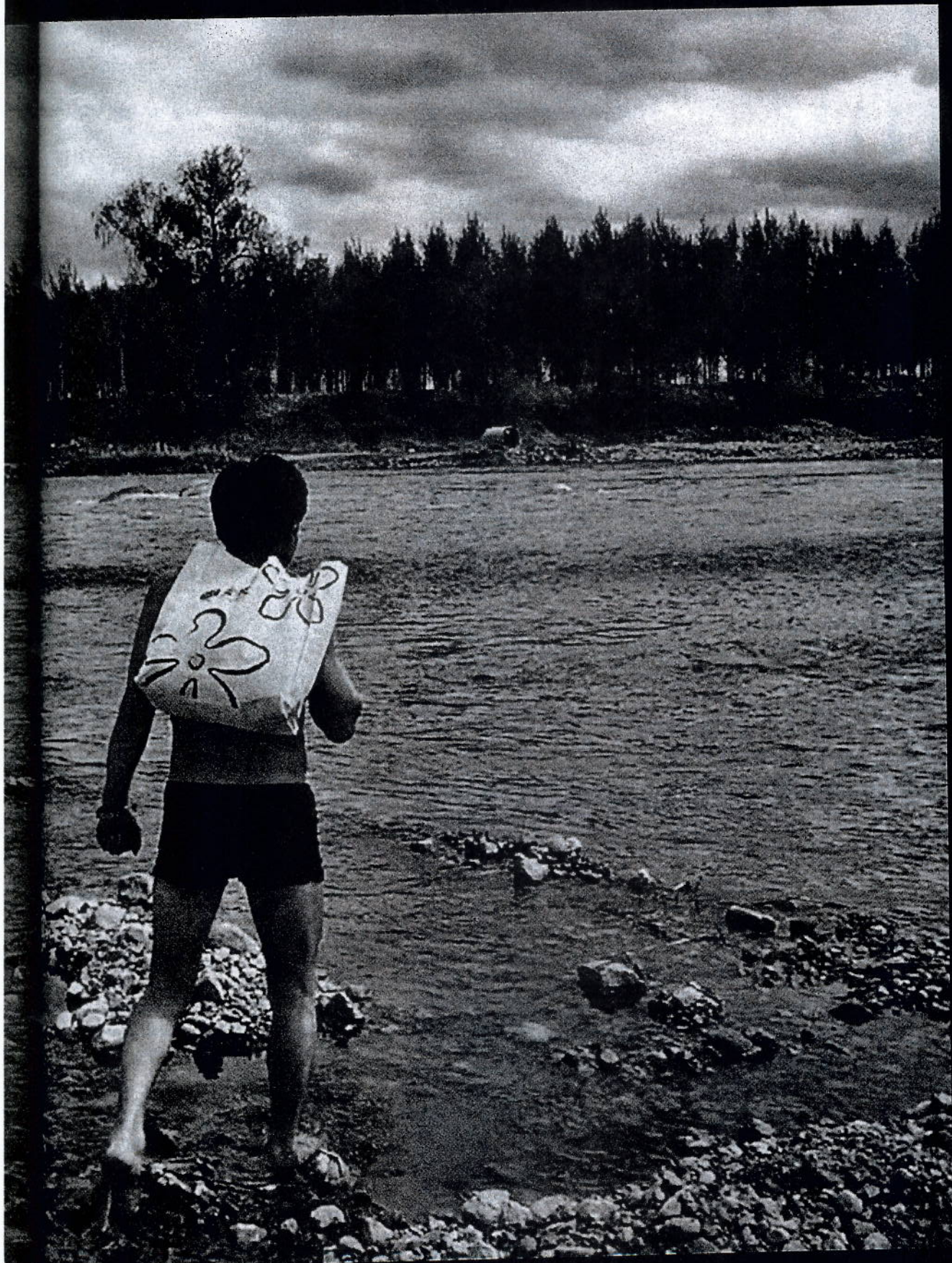
FACTS ABOUT THE WORLD
Educational material, Wikipedia-like explainers, and ebooks like *Rising Age* are slipped onto thumb drives by many groups.



—
Watching an illegal copy of *Titanic* as a girl in North Korea made defector activist Yeonmi Park ask questions about freedom and the outside world.
—

—
A rare photo of a North Korean smuggler, carrying a bag of illegal USB drives, on the Chinese side of the Tumen River as he prepares to cross back to his homeland. Activist Jung Kwang-il captured this image in May 2013.
—







How to Smuggle Friends Into North Korea

The Hermit Kingdom may have outlawed digital contraband like Western movies and TV shows, but information activists have found plenty of ways to get data into the country. —J.G.

TRUCKS
Stash USB sticks and SD cards in Chinese cargo trucks that legally haul supplies across the Chinese/North Korean border.

TIRES
Crawl under a border fence, walk into the Tumen River, and throw tires strapped with packages of USB drives toward the opposite bank. Hope that a lucky passerby picks up the digital loot and sells or shares it.

BALLOONS
Launch balloons with a timer and chemical fuse set to release political pamphlets, dollars, and USB drives once they're over the border.

BOATS
Pass material from tourist boats to North Korean fishermen who are sympathetic to the cause, disguising the transaction as an innocent purchase of the day's catch.

HANDOFFS
Arrange a meetup via walkie-talkie on the banks of the Tumen River. Bribe border guards on both sides liberally. The smuggler wades or swims across to grab the goods.

BUCKETS
Throw a rock tied to the end of a rope across the river. Smugglers on the opposite side then reel in a plastic-wrapped bucket of contraband.



ning in 1989, they followed the breakdown of Soviet Eastern Europe and the execution of Romanian dictator Nicolae Ceaușescu, a close friend of Kim Il-sung. They heard the music of Simon and Garfunkel and Michael Jackson, even learning the lyrics and softly singing along. "Listening to the radio gave us the words we needed to express our dissatisfaction," Kang would later write. "Every program, each new discovery, helped us tear a little freer from the enveloping web of deception."

Soon a contact in the local government warned him: One of his companions had told the police about Kang's secret radio sessions. He was under surveillance and faced potential arrest and reassignment to a labor camp. Posing as a businessman, he bribed border guards on the Yalu River and escaped to Dalian, China, and finally to Seoul.

After his escape Kang wrote a memoir, *The Aquariums of Pyongyang*, originally published in French in 2000 and a year later translated into English. It was a revelation: the most detailed account yet of life in North Korea's gulags. Kang was asked to speak around the world, touring Ivy League schools and European conferences. President George W. Bush invited him to visit the White House, where they discussed his homeland's growing human rights crisis. "It was always just a statistic—hundreds of thousands of people in labor camps," says Georgetown's Cha, who advised Bush on North Korea. "But Kang's book put a name and a face and a story to these abuses."

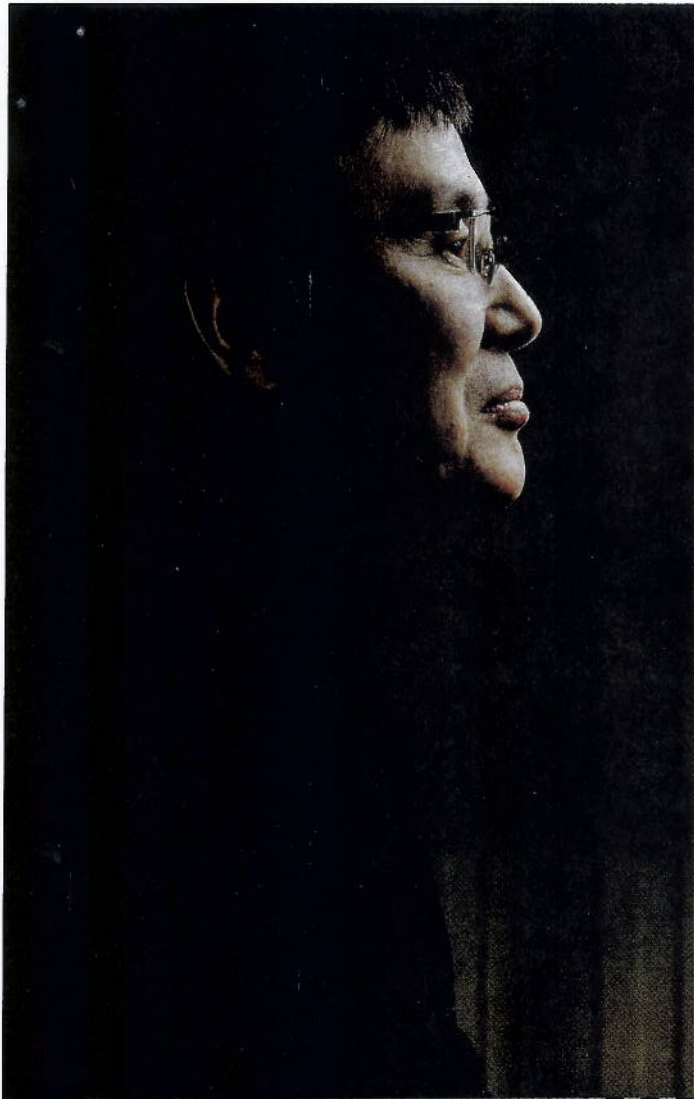
Back in South Korea, Kang's story had no such impact. President Kim Dae-jung had won a Nobel Prize for the South's so-called Sunshine Policy of compromise with the North to reestablish diplomatic ties. Kang's story was seen as unfashionably antagonistic to the Kim regime and largely ignored.

By 2005, Kang had given up hope that South Korea or the rest of the world would act against the North Korean government. Change, he decided, would have to come from within, through the same life-altering education he had received from his illegal radio. He flipped his strategy: Instead of working to tell the world about the horrors of North Korea, he would work to tell North Koreans about the world.

That year, a Christian radio station donated 5,000 portable windup radios to Kang's newly formed organization. Through defector contacts in China, he smuggled them into houses along North Korea's Tumen River border. "Guards come to these houses to rest and buy cigarettes," Kang explains. "We would give them these little radios too. So all of these bored kids, during their patrols, could listen to foreign radio broadcasts at night."

With funding from private donors and governments it declines to name, NKSC has since grown to 15 paid staffers, including independent operators along the Chinese border, each with their own contacts in North Korea. Kang hopes to soon expand smuggling operations to 10,000 USB drives a year.

He's also looking at ways the American tech community could advance NKSC's mission. The group is working with the Wikimedia Foundation to put a North Korean-dialect version of Wikipedia on every flash drive it smuggles over. And in conjunction with the Human Rights Foundation, it's been talking to Silicon Valley types about building new tools—everything from a small concealable satellite dish to steganographic videogames that hide illegal data. (The activists have considered delivering USBs with miniature drones, but that option remains impractically expensive.)



—
Smuggler Jung still gets rehabilitation therapy for injuries suffered while being tortured in a North Korean prison.
—

But as his group gains momentum, Kang faces a personal dilemma: Several of his family members remain inside North Korea, including his younger sister, Mi-ho. Despite canvassing his contacts there and filing a special request through the United Nations for information about Mi-ho's whereabouts, Kang hasn't been able to find her. She may even have been reimprisoned, says Choi Yoon-cheol, NKSC's second-most-senior staffer. "Mr. Kang knows that the more active he is, the closer he gets to his vision, the more his family will suffer," Choi says. "It must be incredibly difficult to know that what you're doing can hurt the people you love."

When I first ask Kang about his sister, he denies any connection between her safety and his work. Perhaps in an effort to protect her, he argues that the two are now estranged.

Besides, he coldly insists, his own family is no longer the issue. "This is a government that doesn't deserve to survive," he says. "If someone has to destroy it, I'll gladly be the one."

Y

YEONMI PARK'S FAMILY paid around 3,000 North Korean won for a pack of DVDs that contained a bootleg of *Titanic*. In the early 2000s, she remembers, that was the cost of several pounds of rice in her home city of Hyesan—a significant sacrifice in a starving country. But of all the tween girls who became obsessed with the star-crossed romance of Jack and Rose, Park was one of the very few who saw it as downright revolutionary. "In North Korea they had taught us that you die for the regime. In this movie it was like, whoa, he's dying for a girl he loves," she says. "I thought, how can anyone make this and not be killed?"

Titanic was hardly Park's only foreign-video experience. Her mother had sold DVDs; some of Park's earliest memories are of waking to the grunts and shouts of her father watching American WWF wrestling. Park loved *Cinderella*, *Snow White*, and *Pretty Woman*. The family would put its tapes and discs in a plastic bag and bury it beneath a potted plant to hide it from the police.

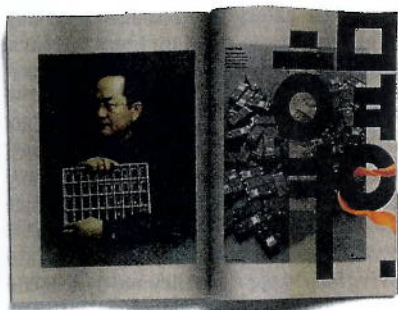
But of all those illegal encounters with foreign culture, *Titanic* was somehow the film that made Park ask herself questions about freedom and the outside world. "It made me feel like something was off with our system," she says in fluent English, which she perfected by watching the entire run of *Friends* dozens of times.

Park escaped from North Korea in 2007. Now a 21-year-old activist based in Seoul, she's part of what's known in Korea as the

jangmadang sedae: the black-market generation. During a famine in the North in the mid-1990s, the Kim regime began to tolerate illegal trade because it was the only option to feed a starving

[CONTINUED ON PAGE 106]

"WHAT I DO IS WHAT KIM JONG-UN FEARS MOST," SAYS JUNG, THE SMUGGLER.



Flash Mob

CONTINUED FROM PAGE 77

population. Since then, black-market commerce has been nearly impossible to stamp out. And some of the hottest commodities—particularly for young people who don't even remember a North Korea before that underground trade existed—have been foreign music and movies, along with the Chinese-made gadgets to play them.

A 2010 study by the US Broadcasting Board of Governors found that 74 percent of North Koreans have access to a TV and 46 percent can access a DVD player. Park says that nearly all of her friends in Hyesan had seen a foreign film or TV show. As a result, her generation is the first to have to square the Kim regime's propaganda with a keyhole view of the outside world. A group called Liberty in North Korea, which works with young defector refugees, finds that many no longer believe in central tenets of North Korea's political ideology, such as the country's superior standard of living or the godlike powers of the Kim family. Even the regime is letting that second illusion slide, admitting that Kim Jong-un has health issues—hardly the norm for heavenly beings.

Thanks to the flourishing black market, the jangmadang generation's technology has advanced well beyond radios and DVDs. Despite North Korea's near-complete lack of Internet access, there are close to 3.5 million PCs in the country and 5 million tablets, according to North Korea Intellectuals Solidarity. But perhaps the most important piece of hardware in North Korea today is what's known as a *notel*—a small, portable video player sold for \$60 to \$100 and capable of handling multiple formats. It has a screen, a rechargeable battery to deal with frequent blackouts, and crucially, USB and SD card ports. In a surprise move in December, the North Korean government legalized the devices, perhaps as part of a bid to modernize its propaganda machine, according to Seoul-based news outlet Daily NK. The result is millions of ready customers for the USB sticks smuggled across the Chinese border.

In one of North Korea's bustling markets, a buyer might quietly ask for something “fun,” meaning foreign, or “from the village below,” referring to South Korea. The seller may lead

him or her to a private place, often someone's home, before turning over the goods. The foreign data is then consumed on a notel among small, discreet groups of mostly young people, friends who enter into an unspoken pact of breaking the law together so that no one can rat out anyone else.

The Kim regime has responded by cracking down. In late 2013 the government reportedly executed 80 people across seven cities in a single day, many for trafficking in illegal media. In February last year, the Worker's Party of Korea held its largest-ever conference of propagandists. Kim Jong-un himself delivered an address calling for the party to “take the initiative in launching operations to make the imperialist moves for ideological and cultural infiltration end in smoke” and to set up “mosquito nets with two or three layers to prevent capitalist ideology, which the enemy is persistently attempting to spread, from infiltrating across our border.”

But stamping out illegal media in North Korea has become an intractable problem for the government, according to Sokeel Park, director of research and strategy for Liberty in North Korea. He compares it to the stubborn demand for illegal drugs in the US. “You could call it Kim Jong-un's War on Information,” he says. “But just like a war on drugs—you can try to slow it down, increase the risks, increase the punishments, put more people in prison. The bribe costs will go up, but it's still going to happen.”

BY HIS THIRD YEAR working for Kim Jong-il's thought police, Kim Heung-kwang says he could almost sense the presence of illegal data.

Going door-to-door with the task force assigned to search out digital contraband in citizens' homes, he remembers finding forbidden DVDs and players hidden under beds and in books with pages cut away to create hidden compartments. On one occasion he caught a group of video watchers who had, in a panic, hidden together under a blanket in a closet. Early on he found that when he knocked on doors, the guilty watchers would hurriedly hide their DVDs. So he learned to turn off the power to the entire building before making his house calls, trapping discs in their players. “I felt they were watching rotten, capitalist material and ruining the *juche* mentality,” Kim says, referring to the North Korean communist ideology. The short, bespectacled man, sitting in his austere Seoul office, smiles wearily and crosses his legs with a professorial air. “I felt justified to send these criminals away.”

The DVD owners would cry and plead. They'd beg on their knees and pull on the sleeves of his uniform, claiming they had just found the offending media lying in the street. Sometimes he accepted bribes and turned a blind eye. (“You could feel the outside of the envelope between your fingers and tell whether it was a lot of money,” he

remembers.) But most of the data criminals he caught, he reported. Many were sentenced to months or years in prison camps.

Kim had earned membership in the all-powerful Communist Party through years of work helping to create North Korea's own computers, including the Paektusan mini-computer, named for the mountain where Kim Jong-il was said to have been born. As a computer science professor at Hamhung University, he had even taught students who would go on to work for North Korea's cyberwarfare brigade, Unit 121—the group suspected of the Sony breach—in the basics of networking and operation systems.

After black markets began to spread, Kim was reassigned in 2000 to a military division that went door-to-door to search for contraband media. “I loved it,” he says. “I had the power to go into homes and take these materials and no one could even question me.”

One of the perks of Kim's position, of course, was nearly infinite access to the media he confiscated. He began to watch the contraband films and TV shows and even loaned out his collection to friends, who rewarded him with gifts like alcohol and meat.

In 2002, Kim was given a PC, part of what he describes as a secret aid shipment from South Korea. Its hard drive had been wiped. But using forensic recovery software, Kim was able to reassemble its deleted contents. They included 400 files: films, TV shows, and, most important to his intellectual sensibilities, ebooks. “You can't imagine how excited I was,” he says. “I had hit a gold mine.”

These were what finally transformed Kim's thinking. He remembers reading a Dale Carnegie self-help book and Alvin Toffler's *The Third Wave*. But most influential was a history book about Middle Eastern dictators, including the stories of Saddam Hussein and Muammar Gaddafi, all friends of the Kim regime. “Reading about the crimes happening in these countries, I began to realize that those crimes were happening in my country too,” Kim says. “That was the starting point of the logic shifting in my brain. I began to understand the nature of dictatorship.”

Even then, Kim continued busting viewers of the same foreign media he now regularly watched. “I sent a lot of people away, but the karma soon came back to me,” he says.

In 2003 he was arrested and taken to a detention center; he'd been ratted out by one of the comrades with whom he'd shared his secret store. He says the police tortured him for a week, forcing him to write hundreds of pages of confession under hot lights and preventing him from sleeping by jabbing his forehead with a needle. When they found that he had only distributed materials to a few friends, he was given a “lenient” sentence: a year at a reeducation farm 40 miles outside Hamhung. “I grew to literally hate the land itself,” he says. “I couldn't understand why watching a few foreign films should cost me a year of my life.”

After the year of drudgery, Kim was released and managed to bribe a border guard to help him escape across the Tumen. He made his way from China to Seoul, where he set up North Korea Intellectuals Solidarity.

Kim's strategy is much like Kang's with NKSC, using Chinese traders and smuggler contacts. But Kim has only a handful of full-time staffers. Instead of asking his North Korean contacts to wade across the Tumen, he describes throwing a rock tied to the end of a rope across the river. Smugglers on the other side, he says, use it to pull across a plastic-wrapped bucket of USB drives. (He's also experimenting with a three-man water balloon slingshot that can catapult contraband hundreds of feet past guards.)

Unlike the pop cultural programming proffered by Kang's group, the content on Kim's drives includes mostly short educational documentaries created by and starring Kim himself. He explains to North Koreans what democracy is, for instance, or simply shows them what a bookstore or the Internet looks like. "When a North Korean watches an action movie with a chase scene in a grocery store, they want to slow it down to see what's on the shelves," he says. "I show them what they want to see—what I wanted to see when I was there."

Kim has also developed what he calls stealth USB drives, designed to avoid detection. To any casual observer, the drive seems empty. But its contents reappear with a simple trigger, the details of which Kim asked that I not publicize. Not even the buyer would necessarily know that the USB contained illegal educational materials, he says. Instead, the files would simply materialize one day, a spontaneous gift Kim hopes will be as life-changing as the hard drive whose wondrous contents he once discovered.

Kim denies that his work today is repentance for past sins as a member of Kim Jong-il's data gestapo. He describes the zealot of those years as almost a different person. But when I ask if he still feels guilt for the lives he wrecked, his polite academic's smile finally cracks. He massages his temples with one hand.

Once, he says, he found a collection of foreign DVDs in the home of a single mother and her two middle-school-aged sons. He could tell by the teen-oriented content that they belonged to the kids. The mother insisted the DVDs were hers, sacrificing herself for her children. Kim says he was inclined to let her go, but a hard-line colleague insisted she be reported, condemning her to a prison camp.

"I wanted to forgive her," Kim says. He pauses. "I still think about that family sometimes."

ON A FRIDAY NIGHT in an NKSC conference room, a young North Korean defector who has asked me to call her Yae-un is watching a copy of the teen comedy *Superbad*. She would later explain to me that she "had never seen

a movie on that scale of filthiness before," and she doesn't hide her reaction; she spends most of the 113-minute barrage of adolescent sexual angst and dick jokes covering her face with the backs of her hands, as if to cool off her burning cheeks.

The movie was supposed to be screened for one of the defector focus groups that NKSC assembles to learn how North Koreans react to different types of media, the better to smuggle in the materials with the most impact. But on this occasion, all the North Koreans but Yae-un are busy or have canceled at the last minute. So, like some kind of *Clockwork Orange* parody, the focus group has been reduced to one North Korean, watched by me, an NKSC staffer, and volunteers as she reacts to Jonah Hill and Michael Cera trying very hard to get laid.

When the movie finishes, Yae-un starts by listing the most astonishing elements from a North Korean perspective: the frank sex talk, constant genitalia references, underage drinking, cops crashing their car, teenage McLovin shooting a gun. All would be seen as indescribably alien, she says. "Even watching it now, I find it vulgar and shocking," she says. "If I were still in North Korea, it would blow my mind."

So maybe NKSC should skip this one, suggests Rocky Kim, the staffer who organized the screening. "Maybe a documentary would be better?" he asks.

Not at all. "I would vote to send it," Yae-un says without hesitation. "It will blow their minds, but it's not like they'll actually explode. They'll recover."

Predicting North Koreans' reactions to foreign media isn't easy. *The Interview*, for all the furor it elicited from the Kim regime, got an equally negative reaction from North Koreans who saw it on the other side of the border. The smuggler Jung Kwang-il says contacts he spoke to in the country were offended by its low production values and mockery of North Korean culture. "They thought it was poorly made on purpose to mock North Korea, but I explained it was just a bad movie," he says. "They prefer *The Hunger Games*."

Other high-profile tactics by the North Korean free-information movement have backfired in their own ways: A balloon launch by Fighters for a Free North Korea in October prompted the North Korean military to fire antiaircraft machine guns over a border village. Some of its balloons, meanwhile, end up stuck in the mountains, blown out to sea, or even back in South Korea. The pamphlets they include, according to some activists, criticize the regime too directly and are dismissed by North Koreans as just another form of propaganda.

NKSC is more cautious about its content. Ultimately the group decided that *Superbad* was too risqué for the North; so much for dick jokes defeating dictators.

But there's a question that persisted throughout my conversations with the groups: How does North Korea get from an information revolution to an actual people-in-the-streets-and-toppled-statues *revolution*?

I pose that question to Kang Chol-hwan while we sit in his office one freezing, snowy afternoon, my last day in Korea. He admits there's not a simple answer, but he offers a few scenarios he considers plausible: The government, for instance, could sense the disconnect between its propaganda and the people's foreign-media education and launch its own reforms, the kind of gradual opening that took place in Russia and China. Or a disillusioned populace could begin defecting en masse, forcing a border control crisis. Or some spark, like the self-immolation of Tunisian street vendor Mohammed Bouazizi, could coalesce disillusioned North Koreans into their own Arab Spring, a full-scale grassroots uprising.

But then Kang surprises me by admitting that all those scenarios are unlikely: The Kim regime is too blind and stubborn to initiate its own reforms, he says, and its totalitarian grip may be too tight for a bottom-up revolution. He puts his highest hopes instead in another scenario: that NKSC's foreign heresy could penetrate the government and military's middle ranks and even their elite, eroding the ideology of the Communist Party itself and fracturing Kim Jong-un's power base from within.

A minute later, however, Kang suddenly flips back to his earlier optimism: He predicts that, thanks in part to his information strategy, North Korea's dictatorship will end within a decade. "They're already cracking," he says. "In less than 10 years, I'll be able to freely go in and out."

That nakedly idealistic statement, beyond its tinge of wishful thinking, seems to reveal something new about how Kang sees his goal. In spite of all his childhood horrors, he wants to transform North Korea not simply into a nation that will let his countrymen go free, but one that will let him back in: He wants to go home again. And whether his smuggling tactics succeed or fail, he'll continue to send his USB thumb drives into North Korea, like offerings to a mute idol, because it's the best plan he's got. "I have no direct power against the North Korean government," he admits unprompted, his face blank.

Outside the window, it's getting dark and the snow is still falling. A polar vortex has pushed Siberian air southward, bringing winter winds down the Korean Peninsula earlier than most years. And as cold as it is in Seoul, it's far colder 150 miles north, in the prison camps where Kang spent his childhood and where his sister may still be today. "This is the best way—the only way for me—to open North Korea," Kang finally says. "Every day until then is a delay to seeing my family again." ■