## A Small World After All?

The Internet has changed many things, but not the insular habits of mind that keep the world from becoming truly connected.

## BY ETHAN ZUCKERMAN

When the Cold War ended, the work of America's intelligence analysts suddenly became vastly more difficult. In the past, they had known who the nation's main adversaries were and what bits of information they needed to acquire about them: the number of SS-9 missiles Moscow could deploy, for example, or the number of warheads each missile could carry. The U.S. intelligence community had been in search of secrets—facts that exist but are hidden by one government from another. After the Soviet Union's collapse, as Bruce Berkowitz and Allan Goodman observe in *Best Truth: Intelligence in the Information Age* (2002), it found a new role thrust upon it: the untangling of mysteries.

Computer security expert Susan Landau identifies the 1979 Islamic Revolution in Iran as one of the first indicators that the intelligence community needed to shift its focus from secrets to mysteries. On its surface, Iran was a strong, stable ally of the United States, an "island of stability" in the region, according to President Jimmy Carter. The rapid ouster of the shah and a referendum that turned a monarchy into a theocracy led by a formerly exiled religious scholar left governments around the world shocked and baffled.

The Islamic Revolution was a surprise because it had taken root in mosques and homes, not palaces or

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barracks. The calls to resist the shah weren't broadcast on state media but transmitted via handmade leaflets and audiocassettes of speeches by Ayatollah Khomeini. In their book analyzing the events of 1979, Small Media, Big Revolution (1994), Annabelle Sreberny and Ali Mohammad, who both participated in the Iranian revolution, emphasize the role of two types of technology: tools that let people obtain access to information from outside Iran, and tools that let people spread and share that information on a local scale. Connections to the outside world (direct-dial long-distance phone lines, cassettes of sermons sent through the mail, broadcasts on the BBC World Service) and tools that amplified those connections (home cassette recorders, photocopying machines) helped build a movement more potent than governments and armies had anticipated.

As we enter an age of increased global connection, we are also entering an age of increasing participation. The billions of people worldwide who access the Internet via computers and mobile phones have access to information far beyond their borders, and the opportunity to contribute their own insights and opinions. It should be no surprise that we are experiencing a concomitant rise in mystery that parallels the increases in connection.

The mysteries brought to the fore in a connected age extend well beyond the realm of political power. Bad subprime loans in the United States lead to the failure of an investment bank; this, in turn, depresses interbank



It wasn't secrecy that kept the world from anticipating the revolution that was brewing in Tunisia in 2009 but a failure to see the pieces of the puzzle for what they were. A year later, protestors defied a curfew in Tunis to remember those killed in their country's struggle for freedom.

lending, pushing Iceland's heavily leveraged economy into collapse and consequently leaving British consumers infuriated at the disappearance of their deposits from Icelandic banks that had offered high interest rates on savings accounts. An American businessman on a flight to Singapore takes ill, and epidemiologists find themselves tracing the SARS epidemic in cities from Toronto to Manila, eventually discovering a disease that originated with civet cats and was passed to humans because civets are sold as food in southern China. Not all mysteries are tragedies—the path of a musical style from Miami clubs through dance parties in the favelas of Rio to the hit singles of British—Sri Lankan singer M.I.A. is at least as unexpected and convoluted.

Uncovering secrets might require counting missile silos in satellite images or debriefing double agents. To understand our connected world, we need different skills. Landau suggests that "solving mysteries requires deep, often unconventional thinking, and a full picture of the world around the mystery."

The unexpected outbreak of the Arab Spring, a mys-

tery that's still unfolding, suggests that we may not be getting this full picture, or the deep, unconventional thinking we need. Had you asked an expert on the Middle East what changes were likely to take place in 2011, almost none would have predicted the Arab Spring, and none would have chosen Tunisia as the flashpoint for the movement. Zine el Abidine Ben Ali had ruled the North African nation virtually unchallenged since 1987, and had co-opted, jailed, or exiled anyone likely to challenge his authority. When vegetable seller Mohamed Bouazizi set himself on fire, there was no reason to expect his family's protests against government corruption to spread beyond the village of Sidi Bouzid. After all, the combination of military cordons, violence against protesters, a sycophantic domestic press, and a ban on international news media had, in the past, ensured that dissent remained local.

Not this time. Video of protests in Sidi Bouzid, shot on mobile phones and uploaded to Facebook, reached Tunisian dissidents in Europe. They indexed and translated the footage and packaged it for distribution

on sympathetic networks such as al-Jazeera. Widely watched in Tunisia, al-Jazeera alerted citizens in Tunis and Sfax to protests taking place in another corner of their country, which in effect served as an invitation to participate. As Ben Ali's regime trembled and fell, images of the protests spread throughout the region, inspiring similar outpourings in more than a dozen countries and the overthrow of two additional regimes.

While the impact of Tunisia's revolution is now appreciated, the protests that led to Ben Ali's ouster were invisible in much of the world. *The New York Times* first mentioned Mohamed Bouazizi and Sidi Bouzid in print on January 15, 2011, the day after Ben Ali fled. The U.S. intelligence apparatus was no more prescient. Senator Dianne Feinstein (D.-Calif.), who chairs

the Senate Intelligence Committee, wondered to reporters, "Was someone looking at what was going on the Internet?"

A central paradox of this connected age is that while it's easier than ever to share information and perspectives from dif-

ferent parts of the world, we may be encountering a narrower picture of the world than we did in less connected days. During the Vietnam War, television reporting from the frontlines involved transporting exposed film from Southeast Asia by air, then developing and editing it in the United States before broadcasting it days later. Now, an unfolding crisis such as the Japanese tsunami or Haitian earthquake can be reported in real time via satellite. Despite these lowered barriers, today's American television news features less than half as many international stories as were broadcast in the 1970s.

The pace of print media reporting has accelerated sharply, with newspapers moving to a "digital first" strategy, publishing fresh information online as news breaks. While papers publish many more stories than they did 40 years ago (online and offline), Britain's four major dailies publish on average 45 percent fewer international stories than they did in 1979.

Why worry about what's covered in newspapers and television when it's possible to read firsthand accounts

from Syria or Sierra Leone? Research suggests that we rarely read such accounts. My studies of online news consumption show that 95 percent of the news consumed by American Internet users is published in the United States. By this metric, the United States is less parochial than many other nations, which consume even less news published in other countries. This locality effect crosses into social media as well. A recent study of Twitter, a tool used by 400 million people around the world, showed that we're far more likely to follow people who are physically close to us than to follow someone outside our home country's borders, or even a few states or provinces away. Thirty-nine percent of the relationships on Twitter involve someone following the tweets of a person in the same metropolitan area. In the Twitter

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hotbed of São Paulo, Brazil, more than 78 percent of the relationships are local. So much for the death of distance.

As we start to understand how people actually use the Internet, the cyberutopian hopes of a borderless, postnational planet can look as naive as most past predictions that new technologies would transform societies. In 1912, radio pioneer Guglielmo Marconi declared, "The coming of the wireless era will make war impossible, because it will make war ridiculous." Two years later a ridiculous war began, ultimately killing nine million Europeans.

While it's easy to be dismissive of today's Marconis—the pundits, experts, and enthusiasts who saw a rise in Internet connection leading to a rise in international understanding—that's too simple and too cynical a response. Increased digital connection does not automatically lead to increased understanding. At the same time, there's never been a tool as powerful as the Internet for building new ties (and maintaining existing ones) across distant borders.

The challenge for anyone who wants to decipher

the mysteries of a connected age is to understand how the Internet does, and does not, connect us. Only then can we find ways to make online connection more common and more powerful.

There are at least three ways we discover new information online. Each of these methods has shortcomings in terms of giving us a broad, global picture of the world. Search engines, while incredibly powerful, are only as good as the queries we put to them. They are designed for information retrieval, not for discovery. If you had been able to ask Google in 1979 how many SS-9 missiles the Soviets possessed, you might have received a plausible answer, but you wouldn't have been told you should be asking about cassette recorders in Iran instead. Search engines tell us what we want to know, but they can't tell us what we might need to know.

Social media such as Facebook or Twitter might tell you to pay attention to cassette recordings in Iran, but only if your friends include Iranians. Social media are a powerful discovery engine, but what you're discovering is what your friends know. If you're lucky enough to have a diverse, knowledgeable set of friends online, they may lead you in unexpected directions. But birds of a feather flock together, both online and offline, and your friends are more likely to help you discover the unexpected in your hometown than in another land.

The most powerful discovery engines online may be curated publications such as *The New York Times* or *The Guardian*. Editors of these publications are driven by a mission to provide their audiences with the broad picture of the world they need in order to be effective citizens, consumers, and businesspeople. But professional curators have their inevitable biases and blind spots. Much as we know to search for the news we think will affect our lives, editors deploy reporting resources toward parts of the world with strategic and economic significance. When mysteries unfold in corners of the world we're used to ignoring, such as Tunisia, curators are often left struggling to catch up.

The limits of online information sources are a challenge both for us and for the people building the next generation of online tools. If we rigorously examine the media we're encountering online, looking for topics and places we hear little about, we may be able to change our behavior, adding different and dissenting views to our social networks, seeking out new sources

of news. But this task would be vastly easier if the architects of Internet tools took up the cause of helping to broaden worldviews. Facebook already notices that you've failed to "friend" a high school classmate and tries to connect you. It could look for strangers in Africa or India who share your interests and broker an introduction. Google tracks every search you undertake so it can more effectively target ads to you. It could also use that information to help you discover compelling content about topics you've never explored, adding a serendipity engine to its formidable search function.

Why aren't engineers racing to build the new tools that will help unravel the mysteries of a connected world? They may be waiting for indicators that we want them and are ready to use them.

In 2004, journalist Rebecca MacKinnon and I founded Global Voices, an international news network designed to amplify and spread ideas and perspectives published online in the developing world. Our 800 correspondents translate and summarize content from the blogs of Russian activists protesting election fraud and Nigerian Facebook users discussing the latest hot Nollywood film. The project has won awards and recognition, but it's had only modest success building an audience. When a news story receives global attention, as Iran's Green Movement protests did in 2009, readership spikes. But our indepth coverage of the protests in Sidi Bouzid went largely unnoticed until Ben Ali's government fell. We continue to report on coups in Madagascar and culture in Malaysia regardless of the audience these stories generate. But to convince Facebook to broker global connections or encourage The Huffington Post to cover global stories, people need to demand a broader view.

As Pankaj Ghemawat of Barcelona's IESE Business School reminds us in *World 3.0* (2011), we're not at the endpoint of globalization, but somewhere near the starting line. The age of connection is just beginning. Many people still view the world as dominated by secrets: How close is Iran to building a nuclear bomb? How can Western companies crack the Chinese market? Where are undiscovered reserves of oil? It's at least as possible that the questions that will dominate the next century are the ones we don't yet know to ask. Those who will thrive in a connected world are those who learn to see broadly and to solve the mysteries that emerge.