ADDING TO THE FOREIGN POLICY TOOLKIT: USING NORTH KOREAN DEFECTOR-RUN INFORMATION COLLECTION NETWORKS TO MONITOR AND INFLUENCE CONDITIONS INSIDE NORTH KOREA

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Question and Introduction

Can North Korean defector-run information collection systems, located in South Korea and currently using Chinese cellphone networks to collect reports from inside the North, be used to accurately monitor and influence events inside North Korea? By examining the defector-run systems in detail, this paper will illustrate how ad hoc networks of North Korean citizens and defectors harnessed rudimentary cellular technology and, on a miniscule budget, managed to achieve what was once thought nearly impossible: human intelligence collection from inside North Korea.

After a detailed examination of the history and methods of the collection system, five case studies will test the accuracy and timeliness of their reports. By testing defector reporting against that from the United Nations (UN), outside governments, and official North Korean media, the case studies will seek to determine whether the defector networks are merely an interesting concept, or have become a trustworthy source of verifiable information on conditions and developments inside North Korea.

After the case studies, the idea of taking the cellphone networks a step further, from simply getting reports out of North Korea, to using the technology to allow North Koreans to both access outside information and privately communicate with one another, free of state control and observation, will be examined. A look at the unique vulnerabilities of the North Korean regime, with its strict controls on information leaving, entering, and being shared among its populace, will highlight the dangers and usefulness of expanding the defectors’ collection systems into information access and sharing networks.

Finally, the paper will close by developing a foreign policy tool built around the weakness of authoritarian rulers to the free spread of information, the failures of previous U.S. policy tools to achieve American aims regarding North Korea, and the technical capabilities of information sharing through cellphone networks. By pairing the
authoritarian characteristics of the North Korean regime with the technology and financial resources available to the U.S. (or South Korea), this new policy will offer an alternative to previously unsuccessful U.S. policies.

Information Collection Inside North Korea

Few targets have been as challenging to collection information from as North Korea, the “world’s most secretive state,”1 “the world’s toughest intelligence target,”2 a “black box,”3 “history’s most successful controller of information,”4 the "black hole"5 of intelligence collection. However, satellites can still fly over the North, signals still escape for interception, overhead imagery can still be collected – the focus of these comments is less on technical collection methods than on the inability to obtain timely, accurate information from people living and working inside North Korea. In the vernacular of the intelligence community, the U.S. can collect IMINT (imagery intelligence), SIGINT (signals intelligence), and even MASINT (measurement and signature intelligence), but has little access to HUMINT (human intelligence).

In stark contrast to the quotes above, however, is a recent one from Sisa Journal, South Korea’s leading newsmagazine, announcing that the day of near real-time reporting of

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2 IBID.
3 Senate testimony by Kurt Campbell, the Assistant Secretary of State for East Asian and Pacific Affairs. IBID.
events in North Korea had finally dawned. What the magazine highlighted (along with a similar English-language story in the April 2011 *Atlantic*) is a new information collection system run by North Korean defectors living in South Korea. This new system appears to finally address the collection gap by adding the human intelligence reporting so long missing from coverage of North Korea.

The new collection method ironically became possible thanks in large part to the North’s ally, China, and the Chinese cellular telephone network, which bleeds a few miles across the border into North Korea. The system works by having someone with contacts in the North, usually a recent defector now based in the South, send a smuggled cellphone to family members or friends still living in the North. The contact inside the North then builds a network of personal connections, starting with their own friends and family members, but eventually growing to include members of the North’s government and military – additions to the network that are facilitated by outside cash in exchange for inside information. These networks inside the North largely operate the old fashioned way, through face-to-face conversations. Information collected in the North is then relayed to the South, using the Chinese cellular system, at pre-arranged dates and times when the network head in the South calls their contact in the North.

The technical requirement that limits calls to within a few miles of the border and Chinese cellphone towers means that informants in the North must either live in the border

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region, have official permission to travel to the area, or have enough funding to bribe their way into and out of the ‘call zone’. Additional funding and updated equipment from the South passes through this border region and into the North using merchants or smugglers, either Chinese or North Korean, who possess the requisite permissions (or money for bribes) required to cross the border and travel within the North.

The defectors employ a variety of methods, both technical and otherwise, to mitigate risk. Collection networks are kept limited and divided into small cells to help avoid infiltration and minimize risk to the entire group should someone get caught by Chinese or North Korean security services. Other security measures include always having the informants inside the North work with the same “reporter” in the South – a reporter who is almost always a recent defector, who only handles five to six informants in the North, and who gets to know the informants well enough to develop their own private methods of sensing danger. The calls are normally made at prearranged times, though if the informant in the North has something important or urgent, they will call their contact in the South, then hang up. After which, the person in the South will call back the informant using a prearranged system.

The cellphones, additional “security cards”\(^9\) (likely encryption cards of some sort, but few details are available) to help the phones avoid North Korean surveillance, and all communications (phone, text, data) charges are handled by the organizations in the South. Payments for reports are also made to the informants in the North, depending on the importance, accuracy, and timeliness of the information. The informants then pass along payments to their respective networks.

The system’s main limitation is technical – since the phones normally supplied to the informants are Chinese, they are only effective within a few miles of the Chinese border (the

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maximum range depending, like all cellphone signals, on elevation, weather conditions, etc.). Once past the range where Chinese signals bleed into the North, the phones can still be used to record video and take pictures, but cannot contact the outside world.

The other important limitation is danger. While the networks take steps to mitigate risk, as outlined above, they must still limit their reporting and take exceptional measures to avoid detection by the North’s security forces. The North reportedly uses “mobile detection units” armed with modern detection equipment imported from Germany to search for cellphone signals coming from inside the country and accessing the Chinese network. If detected, the mobile units attempt to triangulate the signal and find the person(s) making the call – and the North has made very clear the severity of punishment that awaits anyone found contacting the outside world using cellphones. In March 2010, the North issued a public warning against the defectors and their organizations, calling them, in the always memorable vernacular of the North, “unpardonable human scum” and vowing “stern justice” when they were caught. In April 2010, a report emerged of the North sending a small force just across the Yalu River into China to kidnap a correspondent working for Free North Korea Radio (one of the better known defector organizations), bringing him back to the North. The victim, a 50-year-old South Korean citizen who had previously defected from the North to the South, has not been heard from since. Other reports, of the death

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penalty\textsuperscript{14} and public executions for those found using cellphones to talk to South Korea,\textsuperscript{15} have also emerged. The North’s government has also increased its monitoring of those with family in the South,\textsuperscript{16} and has reportedly ordered border guards to “shoot to kill”\textsuperscript{17} anyone attempting to defect to China. All of these measures are designed to preserve the North’s control of information leaving the country and make the work of the defectors and their informants exceedingly dangerous. Despite the threats and danger however, the reports continue to make their way across the border and into the South.

To help avoid these repercussions, the informants employ several tactics, in addition to the general risk-minimization measures outlined above, to avoid detection while placing or receiving calls. Informants will often hike several miles into the mountains before using their phones. In the mountains or not, fear of detection limits most calls to less than five minutes, with informants completely shutting down the phone, not just allowing it to slip into sleep mode, immediately after the call is finished.\textsuperscript{18} The latest, and most expensive, method to overcome not just the danger of cellphone-signal tracking equipment, but also the geographic limitations of the Chinese network signal, is the use of satellite phones. While cellphone signals from China only reach a few miles into the North, generally running in a line along the Tumen and Amnok (Yalu) rivers, including

\begin{itemize}
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the cities of Sinuiju, Hyesan, Hoeryong, and Musan, satellite phones extend coverage to the entire country.

Getting phones into the capital, Pyongyang, has enabled the networks to cover important stories, as will be seen in the case studies below, with increased accuracy and timeliness. The use of satellite phones reportedly began two years ago, but their use has been sparing to date for two reasons: cost and lack of indoor connectivity. The phones themselves cost approximately $1000 per unit, and connection costs are five times that of phones using the Chinese network. Second, the phones work poorly indoors, forcing people to make their calls surreptitiously from outdoors – no easy feat in a large city like Pyongyang. So, while satellite phones have opened up the entire country to immediate reporting, their cost and technical limitations have so far prevented widespread adoption of this method. For the immediate future, Chinese cellphones look to carry the bulk of information traffic, with satellite phones used for only the most important and time sensitive reports.

Completely separate from the Chinese network and satellite phones, the North actually has a domestic cellphone network, one funded and built entirely by an Egyptian company, Orascom Telecom. The service, called Koryolink (Koryo is the name of an ancient Korean

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21 IBID.
22 IBID.
23 IBID.
kingdom and serves as the source of the English word 'Korea') started in December 2008 and now has over 300,000 users in 10 North Korean cities.\textsuperscript{25}

For the defectors’ information collection purposes however, the domestic network offers little benefit. The network is only domestic, Koreans using the service are forbidden from calling overseas and are even blocked from calling foreigners living in the North and using the same network, plus all communications are subject to eavesdropping by regime security services\textsuperscript{26} – which take cellphone security very seriously in the wake a rumored 2004 assassination attempt on Kim Jong-il, reportedly controlled via cellphone. That attempt led to a four-year outright ban on cellphones in the North, which only ended in late 2008 and early 2009.\textsuperscript{27} A more-limited cellphone ban, on rental phones for foreigners, went into effect in January 2011, likely due to concerns over news spreading of popular uprisings in the Middle East and North Africa.\textsuperscript{28} Therefore, for defector purposes, the easily monitored, restricted-access domestic system offers even less utility than the geographically-limited Chinese network or the cost-prohibitive satellite phones.

If the North Koreans can monitor and restrict access to the domestic cellphone system, can they block, censor, or track the defector networks’ communications on the Chinese system? In the approximately three-year period since the defector reporting began to attract widespread attention, there have been no reports of the North engaging in outright blocking of the Chinese cellular network. So far, the North appears to have balanced the

escape of information against the danger of angering its main benefactor by interfering with Chinese cellphone signals, especially in the large Chinese border-city of Dandong.

Aside from the report about the North’s importation of German equipment capable of detecting cellphone signals\textsuperscript{29} and the report about the use of mobile detection units attempting to triangulate and capture illicit cellphone users,\textsuperscript{30} there is little reporting, in English or Korean, about Northern efforts to use technical means to block or restrict access to the Chinese cellphone signal. This doesn’t mean the North lacks the will or the technical capability, as demonstrated by an attack aimed at blocking South Korean access to the global positioning system (GPS) in early March 2011,\textsuperscript{31} plus July 2009 and March 2011 distributed denial of service (DDoS) attacks on South Korean websites.\textsuperscript{32} The reason why the North has been unable, or unwilling, to block the cellphone signals used by the defector organizations outright, despite simultaneously engaging in tracking, capture, and arrest operations, plus vociferous anti-defector propaganda campaigns, remains a subject open to interpretation and future research.

**Case Studies**

The section above provided details and background on how the defector-based information collection networks operate. Next, we return to the central question of the paper, whether North Korean defector-run information collection systems can be used to


accurately monitor events inside North Korea. In this section, we test the defector networks using five case studies: three involving human diseases, one involving a livestock disease, and one focusing on the North's late-2009 currency revaluation. The advantage of testing the reporting by using disease outbreaks, plus the well-known currency reform, is that they provide a rare opportunity to independently verify the defector's information.

Verification measures for the disease case studies are the strongest, since North Korea, as a member of the United Nations, has chosen to be a member of the UN’s World Health Organisation (WHO), the Food and Agriculture Organization of the United Nations (FAO), and the World Organisation for Animal Health (commonly known by its French acronym, OIE). All of these organizations are viewed as internationally accepted arbiters of the existence and severity of disease outbreaks, as this paper will view them. The North’s late-2009 currency reevaluation was widely covered in the international media and deemed factual by both the South Korean government and a North Korean press outlet in Japan – not as strong as UN verification, but previously judged reliable by North Korean researchers in the U.S. and South Korea, as it will be judged here.

The case studies will use reporting from three well-known North Korean defector-run websites: DailyNK, Goodfriends, and Free North Korea Radio.33 This is by no means an exhaustive list of defector organizations or websites – future researchers will find at least a handful of similar organizations. The goal of this research is not to compile a definitive list or examine all relevant defector-run websites. Instead, it is to examine the output of three major sites to measure their ability to collect timely, accurate information from inside North Korea. These three organizations were selected based on their comparatively frequent website updates and breadth of information, not as part of a value judgment on their relative merits compared to similar websites.

33 The websites for the organizations are: http://www.dailynk.com/, http://www.goodfriends.or.kr/, and http://www.fnkradio.com/.
The websites themselves have slightly different backgrounds. *DailyNK*, founded in 2004, "was created by activists from the Network for North Korean Democracy and Human Rights. As the world’s first dedicated North Korean online news site, The Daily NK reports in real time on changes happening in North Korean society and the situation for North Korean refugees through its exclusive overseas network."\(^{34}\)

*Goodfriends* was originally founded by a South Korean Buddhist organization in 1996 to donate food to starving North Koreans. It began reporting on conditions in the North in 1999 by interviewing North Korean defectors in China. It then launched, first a monthly (2004), then a weekly (2006), online update of conditions inside the North, while aiding and advocating for North Korean refugees in China and South Korea.\(^{35}\)

*Free North Korea Radio*, winner of the 2009 Asia Democracy Human Rights Award and a 2008 Reporters Without Borders award, was founded in 2003 and launched its website in 2004.\(^{36}\) Identifying itself as a member of the “NK People’s Liberation Front”, this is the most overtly political of the three organizations.

All three of the groups make their dislike of the North Korean regime evident, both on their websites and in their public advocacy. While they support the North Korean people in general, these organizations should in no way be mistaken for pro-Pyongyang mouthpieces. Their anti-North, pro-regime-change stance should be factored into all reporting – bad news is far more likely to make their websites than is good. The case studies below have attempted to take this perspective into account by incorporating events that can be verified by trusted outside sources.

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\(^{34}\) Han Ki–Hong, "President’s Message*. DailyNK, [no date provided].

\(^{35}\) [No author provided]. "The Path We Have Traveled*. Goodfriends, [no date provided].
Translation by author.

\(^{36}\) "Introduction*. Free North Korea Radio, [no date provided].
While DailyNK and Goodfriends both have websites with information in English, the Korean sections of their sites are far larger and more up-to-date. Therefore, the bulk of the reporting examined in the case studies will be from the Korean language sections of the websites. The author of this paper is an experienced Korean-English translator and will provide all translations.

Human Diseases

One of the main functions of the WHO (World Health Organisation) is to provide identification and tracking of disease outbreaks worldwide. This mission is accomplished through the Global Outbreak Alert and Response Network, a WHO organization tasked with, “the rapid identification, confirmation and response to outbreaks of international importance.”37 While membership is voluntary, the North has been a member since 1973, with a “full WHO country office” comprising four international and five national members established in Pyongyang in 2001.38 It is this WHO office in Pyongyang that attempts to verify and track disease outbreaks in North Korea for the UN and international community. This paper will use WHO reporting as the arbiter of disease outbreak and spread in North Korea. Defector reporting will be measured in terms of timeliness and accuracy by comparing it with that of the WHO.

Next, we turn to the main diseases under examination: swine flu (also referred to as 2009-H1N1 influenza or pandemic (H1N1) 2009 virus),39 malaria,40 and tuberculosis (TB).41

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39 “This is an influenza virus that had never been identified as a cause of infections in people before the current H1N1 pandemic [which makes it useful for our case study]. Genetic analyses of this virus have shown that it originated from animal influenza viruses and is unrelated to the human seasonal H1N1 viruses that have been in general circulation among people since 1977. [...] After early outbreaks in North America in April 2009 the new influenza virus spread rapidly around the world. By the time the WHO declared a pandemic in June 2009, a total of 74 countries and territories had reported laboratory confirmed infections. To date, most countries in the world have confirmed infections from the new virus.” World Health Organisation. “What is the pandemic (H1N1) 2009
Both malaria and TB have existed for decades throughout the Korean peninsula; what will be under examination here are the numbers, locations, and severity of the outbreaks, as reported by the defector organizations compared to the WHO baseline.

Unlike malaria and TB, the recent outbreak of swine flu offers a rare opportunity for binary disease tracking: does the disease exist in a country, or not? If it exists, were the defector organizations the first to accurately report it? Two affirmative answers here would help establish the credibility of the defector reporting, which is why swine flu becomes our first case study.

40 "Malaria is caused by a parasite called Plasmodium, which is transmitted via the bites of infected mosquitoes. In the human body, the parasites multiply in the liver, and then infect red blood cells. Symptoms of malaria include fever, headache, and vomiting, and usually appear between 10 and 15 days after the mosquito bite. If not treated, malaria can quickly become life threatening by disrupting the blood supply to vital organs. In many parts of the world, the parasites have developed resistance to a number of malaria medicines. Key interventions to control malaria include: prompt and effective treatment with artemisinin-based combination therapies; use of insecticidal nets by people at risk; and indoor residual spraying with insecticide to control the vector mosquitoes." World Health Organisation. “Malaria”. <http://www.who.int/topics/malaria/en/>. Accessed 8 December 2010.

41 “Tuberculosis (TB) is a contagious lung disease that spreads through the air. When people with the disease cough, sneeze, talk or spit, they propel TB germs, known as bacilli, into the air. Only a small number of the bacilli need to be inhaled to cause an infection. However, not all people infected with TB bacilli will become sick. The immune system either kills the germs, or "wallks off" the TB bacilli where they can lie dormant for years. Failure of the immune system to control infection with TB bacilli leads to active disease, when TB bacilli multiply and cause damage in the body. Left untreated, each person with infectious TB will spread the germs to about 10 to 15 people every year.” World Health Organisation. “What is TB? How does it spread?”. March 2009.


MDR-TB and XDR-TB: “One in three people in the world is infected with dormant TB germs (i.e. TB bacteria). TB can usually be treated with a course of four standard, or first-line, anti-TB drugs. If these drugs are misused or mismanaged, multidrug-resistant TB (MDR-TB) can develop. MDR-TB takes longer to treat with second-line drugs, which are more expensive and have more side effects. XDR-TB can develop when these second-line drugs are also misused or mismanaged and therefore also become ineffective. Because XDR-TB is resistant to first- and second-line drugs, treatment options are seriously limited.” World Health Organisation. “XDR-TB Extensively drug-resistant tuberculosis”. <http://www.who.int/tb/challenges/xdr/en/index.html>. Accessed 8 December 2010.
Though swine flu arrived in South Korea in April 2009 (confirmed by the WHO on 2 May 2009)\(^{42}\) and much of the rest of the world over the following summer, there were no reports of the disease in North Korea until 3 December, when *Goodfriends*, one of the North Korean defector organizations, issued a report of an outbreak in the North Korean city of Sinuiju.\(^{43}\) *Goodfriends* followed the initial report with a series of reports on 7 December containing additional information: the first case of the disease in the North had been in Sinuiju in early November, that the disease was spreading nationwide and had reached Pyongyang, that deaths had been reported, that the most severely affected were the young (under age 23), and that in response to the outbreak, the North Korean government had ordered schools closed nationwide, blocked road and rail connections to the city of Sinuiju, and closed the Sinuiju border crossing with China.\(^{44}\)

It wasn’t until 9 December, six days after *Goodfriends’* initial report and two days after its more-detailed follow-up reporting, that the North officially declared it had the disease, in an announcement by the Korea Central News Agency\(^{45}\) (the North Korean government’s official news agency) and in a report to the WHO.\(^{46}\) The KCNA announcement reported: outbreaks in Sinuiju and Pyongyang, plus other areas of the country, that quarantine


measures had been put into place (the term used did not specify whether the quarantine was for individuals or geographic areas), and that all schools in the country had been ordered to begin their winter vacations early, on 7 December. A later North Korean report to the WHO stated that all those infected with the disease were children ranging in age from 11 to 14 years.

The accuracy of the defector reporting is striking. It correctly identified the existence of the outbreak, the locations of the outbreak, the general age of the victims, the school closure response, and, depending on the unclear use of the term quarantine, may have correctly identified the border closure and/or the sealing off of transportation links to the city of Sinuiju. While it is hard to establish a causal relationship between the defector reporting and the North’s decision to confirm the outbreak to the WHO, it is clear that the defector network made the first accurate announcement of the swine flu pandemic reaching North Korea. This case provides clear proof of concept for the effectiveness, reliability, and trustworthiness of the defector collection networks.

The cases for tuberculosis and malaria are much less definitive. Both diseases have existed for decades throughout the Korean peninsula, with South Korea reporting the highest prevalence of TB in the Organisation for Economic Co-operation and Development (OECD), thereby making the type of binary clarity (it exists or doesn’t exist) achieved in the swine flu example difficult to achieve. The timing with the swine flu case was also beneficial – it started in late 2009, when the defector networks were up and running, whereas TB and malaria long predate the Internet.

For tuberculosis, only three reports specifically mentioning TB in the North were found in the 2008-2010 period under investigation. An 18 February 2010 report said that, as of 22 January, there were 47,000 cases of the disease nationwide in the North, with more awaiting diagnosis, and deaths in the country were rising due to a combination of food shortages, influenza, and tuberculosis.49 A report from 3 November 2010 had 9-10 people dying from the disease everyday in the city of Hamhung and stated that “drug-resistant” forms (XDR TB or MDR TB not specified) of the disease had become a worse problem than general TB, due to shortages of food and medicine.50

The most interesting report, and the only one not from Goodfriends, was an article published by DailyNK on 20 April 2009 that reported “high levels” of tuberculosis (in addition to hepatitis) at the military unit in charge of guarding North Korea’s Yongbyon nuclear facility.51 According to the article, the tuberculosis ward at the local hospital, “is always filled to capacity,” which has led to the evacuation of “countless” soldiers to a different, tuberculosis-focused hospital for treatment.

While the defectors’ TB reports are interesting, and provide a glimpse inside the North, using them to understand disease morbidity and public health in North Korea is problematic. The reports offer little geographic dispersion, few hard numbers, and no method for independent verification. At best, the TB reports from the North can be used for a general understanding of the disease’s existence and trends of severity, but more granular WHO verification, from the same locations during roughly the same time periods, is required before the reporting can be considered definitive.

The case for malaria is even less useful, with zero defector reports on the disease in the North in 2008, 2009, or 2010. During this time period, reporting would have been especially useful to determine the effect, on the North Korean side of the border, of the suspension of malaria aid from the South.

This brief examination of defector-based human disease reporting provides three conclusions:

1. The only defector organization with consistent human disease reporting during the three-year time period under investigation was Goodfriends. Of the other organizations, DailyNK provided only one report, on tuberculosis, and Free North Korea Radio provided zero reports on human disease outbreaks.

2. In the case of Goodfriends, defector reporting was accurate, timely, and effective in reporting the outbreak of swine flu in North Korea.

3. Reporting on TB and malaria was so limited, in amount, scope, specificity, and WHO verifiability, as to be unusable to gain an accurate assessment of the extent and severity of these diseases in the North.

Livestock Diseases

The next case study moves from human diseases to a more obscure disease: FMD (foot-and-mouth disease).\(^{52}\) While FMD cannot affect humans medically, it can decimate a country's livestock sector in a matter of weeks, making it one of the most feared and heavily monitored diseases in the world. On 7 February 2011, North Korea officially notified the Food and Agriculture Organization of the United Nations (FAO), which passed along the

information to the World Organisation for Animal Health (OIE),\textsuperscript{53} that the North was experiencing a nationwide outbreak of FMD\textsuperscript{54} and that it had officially requested aid from the FAO.\textsuperscript{55} An outbreak of FMD is crucial agriculture news anywhere in the world, but in a country with a food crisis as severe as that in the North, the outbreak becomes even more important. Livestock infected with FMD must be destroyed to prevent further spread of the disease, quickly decreasing the amount of food and protein available for human consumption. However, despite the nationwide outbreak of such an important disease, the defector organizations provided no reporting whatsoever on the outbreak prior to the OIE report.

The section of the OIE report most useful for our purposes are the dates the disease was confirmed domestically, compared to when it was finally reported to the outside world. According to its report to the OIE, the first FMD outbreak in the North was confirmed in Pyongyang on 25 December 2010. The outbreak was further confirmed (using more-advanced, time-consuming testing) at the National Laboratory in Pyongyang on 16 January. However, the first report of the North’s FMD outbreak to the outside world was not made until the following month, on 7 February. This means over six weeks passed from the date of the first confirmation, on 25 December, to the date it was first reported to the OIE, on 7 February. During this time, according to the North’s official submission to the OIE, the disease spread rapidly throughout the country, with 48 confirmed outbreaks recorded in six different provinces affecting nearly 11,000 livestock.

\textsuperscript{53} As the WHO is generally considered the arbiter of international disease outbreaks in humans, the OIE is the internationally recognized judge of international disease outbreaks in animals.


Where were the defector networks? Despite knowledge of the outbreak in Pyongyang, plus whatever suspicions were emerging among farmers and veterinarians in other regions, not one defector report during this time period mentioned an FMD outbreak. In what would seem to be a case tailor-made for the defector networks: a confirmed disease outbreak affecting thousands of people, nationwide dispersal, a six-week gap between confirmation of the disease in Pyongyang and the North’s official announcement, none of the defector organizations made a single report alerting the outside world to the outbreak.

Why were the defector organizations unable to discover and get this information out of the North? A lack of contacts among farmers and ranchers? Inability to reach into Pyongyang, the epicenter of the outbreak? A lack of concern, interest, or knowledge of livestock diseases? A definitive explanation awaits future research. However, for our purposes, the failure of the defectors to discover and/or report the information is a key finding. A unique opportunity to demonstrate the viability of the defector organizations to report information from the North was missed, undermining the overall credibility of this collection system.

Currency Reform

The final case study, and the one arguably most important to those monitoring North Korean economics and stability, examines the North’s late-2009 currency reform. On 30 November 2009, South Korean media first reported\(^\text{56}\) that a currency reform was taking

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place in North Korea, with a Reuters report\textsuperscript{57} the following day taking the story
international. The source for both stories was a series of five website postings\textsuperscript{58} on the
currency reform by the defector website \textit{DailyNK}. Between 5:06pm and 6:46pm that day,
starting with two postings by a correspondent located in China, then concluding with three
postings by reporters in the South, \textit{DailyNK} announced that multiple sources inside the
North confirmed a currency reform had started that morning at 11am in Pyongyang. Thus,
within six hours of the start of the reform in North Korea, the information had leaked out
and was making headlines in South Korea.

The currency reforms were confirmed by a pro-North organization of Koreans in Japan
(that often serves as an international press outlet for Pyongyang) on 4 December.\textsuperscript{59} The
South Korean Ministry of Unification also declared on 4 December that it believed the
currency reform had occurred.\textsuperscript{60} In the days following the initial report of the reform, the
defector organizations, both \textit{DailyNK} and \textit{Goodfriends}, continued to provide details on the
reforms from inside the North. However, no information on the reform has emerged that
predates the \textit{DailyNK}'s initial reporting.

<http://query.nytimes.com/gst/fullpage.html?res=9805E0DF1138F932A35751C1A96F9C8B63> 
<http://www.dailynk.com/korean/read.php?cataId=nk04500&num=78890>,
<http://www.dailynk.com/korean/read.php?cataId=nk00100&num=78892>,
<http://www.dailynk.com/korean/read.php?cataId=nk00100&num=78895>,
The currency reform offers a second proof of concept for the defector reporting networks. This time *DailyNK* provided the initial reporting of the event, followed five days later by confirmations from a North Korean mouthpiece and the South Korean government. The binary nature of this event – it happened, or it didn’t; either the defector sources were the first to report it, or they weren’t, clearly demonstrates the accuracy and timeliness of the defector reporting.

The success demonstrated here with the currency reform, combined with the success shown above in the case of swine flu, highlights the capabilities and possible rewards of harnessing the defector networks to provide timely, accurate human intelligence from inside North Korea. An additional critical point on the currency reform reporting is that the initial reports all came in by satellite phone. The information was apparently judged important enough to employ the more expensive reporting option, raising the intriguing question of what increased funding for the defector organizations might mean for future reporting.

Overall, of the five cases examined here, two provided no information whatsoever: malaria and FMD. This represents a clear failure of the defector networks to provide the “accurate, timely information” being examined here. Why this failure occurred, whether due to a lack of contacts, interest, capability, or something else, is an area for future research. One case, TB, provided a middle ground. While there was some information provided on the disease in the North, including one very interesting report on the severity of the disease among troops guarding the North’s Yongbyon nuclear facility, the overall reporting lacked detail and a method for verifying accuracy.

The defector organizations verifiably succeeded in two other studies: swine flu and the currency reform. This success provides an intriguing proof of concept for the ability of the defector organizations to effectively report accurate, timely information from inside North
Korea. In the case of the currency reform, which affected nearly everyone in North Korea, the availability of information would seem higher than in any of the other cases, perhaps a contributor to the success of this test case. The entry of a new strain of influenza however, would seem somewhat esoteric and may provide a more interesting example of the defectors’ ability to collect less conventional information from inside the North.

North Korea and the Danger of ‘Information Cascades’

The primary policy goal of the North Korean regime is perpetuating the Kim family’s sixty-year reign over the northern half of the Korean peninsula.\(^6\) Kim Il-sung took over the North, with help from the Soviet Union and Mao’s Chinese forces, shortly after the end of World War II. Despite the disaster of the Korean War, which required massive Chinese aid to stave off a UN victory and preserve the northern part of the Korean peninsula for communism, Kim managed to remain in control not only throughout the war, but until his death in 1994. Upon the elder Kim’s death, his son, Kim Jong-il, took over, per the plan of the Kim family. More recently, in 2010, Kim Jong-il’s son, Kim Jong-eun, appears to have become the designated heir.

During their decades in power, the Kim family has proven to be tough, resilient leaders, outlasting 11 U.S. presidents, surviving the collapse of the Soviet Bloc and much of their own economy, successfully preserving regime control through hot and cold wars with the U.S. and the United Nations – all while developing nuclear weapons and attracting billions of

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\(^6\) “The abiding strategic concern of the North Korean leadership is regime survival, which is defined as the maintenance of power in the hands of Kim Jong-il, [...]” Pollack, Jonathan D.. “The Strategic Futures and Military Capabilities of the Two Koreas”. Strategic Asia, 2005-06, pgs. 143-144. Also, see page 171 of the same document, “Pyongyang’s defining priority is to legitimate the leadership’s claims to unchallenged power, to organize its military power to support the resuscitation of the economic system [e.g. trade tensions for payoffs], and to deter overt threats to the future of the system.”
dollars in aid from enemy states. A regime often dismissed as crazy, dysfunctional, and in its death throes has proven time and again to be none of the above.

North Korea’s governing philosophy, Juche (also called Kim Il-sungism), is focused on self-reliance – indeed, the literal English translation of the term is self-reliance,\(^62\) meaning at its very heart, the regime most values not peaceful relations and development, but independence and a lack of entanglements. One of the chief methods by which the regime and Kim family preserve their power is not development, or the provision of goods and services to the public. Rather, it is the deliberate provocation of international tensions,\(^63\) dangers that can then be harnessed to demonstrate a populace-unifying external threat.

Once this tension has built, the North can make an offer capable of cooling tensions, but only in return for foreign aid, which will then be used to demonstrate the regime’s power, diplomatic prowess, and international importance to a domestic audience traditionally isolated from nearly all countervailing opinion.

While North Korea imports oil and other items (mainly from China) and exports a variety of goods from both the extractive and manufacturing industries (including missiles and related technology), the amounts are small relative to the overall economy.\(^64\) Instead, since the collapse of the Soviet Bloc, North Korea has effectively monetized military


“The organizing principle of the North Korean economy is the ideology of Juche, or national self-reliance.... The result has been the development of the world’s most autarkic economy, with an international trade share (exports plus imports) of approximately 12% of GDP, well below the 50-55% observed in South Korea and a fraction of the even larger share that North Korea would exhibit were it a ‘normal’ country.” Marcus Noland, *Avoiding the Apocalypse: The Future of the Two Koreas*, pg. 61.

\(^63\)“Provocations and international condemnation serve to heighten the sense of external threat, thereby strengthening internal solidarity among the North Korean people [...].” Snyder, Scott. “What’s Driving Pyongyang?”. *The Oriental Economist*, July 2009.

\(^64\)“The organizing principle of the North Korean economy is the ideology of Juche, or national self-reliance.... The result has been the development of the world’s most autarkic economy, with an international trade share (exports plus imports) of approximately 12% of GDP, well below the 50-55% observed in South Korea and a fraction of the even larger share that North Korea would exhibit were it a ‘normal’ country.” Noland, Marcus. “Avoiding the Apocalypse: The Future of the Two Koreas”. *Institute for International Economics*, June 2000, pg. 61.
expenditures by engaging in international tension building, smuggling, and outright acts of war (e.g. the sinking of the South Korean warship, Cheonan). The North then exchanges a reduction in these activities for international aid, only to repeat the process (occasionally, even the same act)\(^{65}\) in the time, manner, and method of its choosing.\(^{66}\) Perhaps the best summation of the North's goals and strategy comes from a scholar at the U.S. Naval War College, "Kim Jong-il seeks to keep the outside world at bay, the military leadership loyal, the populace compliant, China on edge, and South Korea and Japan at risk"\(^{67}\) [the last three conditions to enhance the North's ability to extract concessions and aid].

The North, in essence, collects rents from the international community in exchange for temporary reductions in both tensions and threats to the global and regional commons. These rents can be quite substantial: since 1995, South Korea has provided the North with hundreds of millions of dollars in aid\(^{68}\) and the U.S. has provided over a billion dollars in aid\(^{69}\) – all for a regime with which both countries still remain technically in a state of war.

The regime is able to walk this fine line of collecting rents from manufacturing tensions, yet convincing the domestic populace that the problems are engendered by the threat of outside forces, due to the leadership’s strict limits on outside information entering the country. In essence, the Kim family's, “extraordinary propaganda machine and extremely tight control over the flow of information from foreign sources that might call the official


worldview into question,” has become one of the main foundations of the family’s tight grip on power.

The author witnessed this “tight control” firsthand in Pyongyang, where, even in an international hotel isolated on an island and off-limits to all but licensed tour guides and vetted hotel staff, no more than the two official state channels were ever available on TV. All phone calls outside the hotel had to be placed by walking into the hotel’s central switchboard office, any attempts to leave the hotel compound unescorted were blocked, and interaction with anyone not approved by the officially assigned guides was forbidden.

Personal experience in China, early-90s Russia, Iran, Khmer Rouge embattled Cambodia, and other supposed exemplars of information control provide no comparison to the North’s stunning level of control – a view echoed by others, who have called North Korea the most successful practitioner of national-level information control in history. 

Not only are personal contacts with foreigners visiting the country strictly controlled, the North outlaws TVs and radios with tuners capable of receiving any channel other than official state media, prohibits international aid organizations from entering certain areas of the country or assigning Korean-speaking staff to the country, and forbids all but a handful of Kim’s inner circle and select members of the Foreign Ministry from accessing the

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Internet. This set of controls helps make North Korea, "probably the most repressive regime extant, scoring at the absolute bottom on all standard measures with respect to regime type, political and civil liberties, and human rights."\(^{75}\)

Much to Pyongyang's discomfort, however, the times, as witnessed and promoted by the work of the defector organizations, are beginning to change. Where once Pyongyang could control information leaving the country and available to outsiders, now, thanks to cellphone technology in the skilled hands of the defector organizations, the North's monopoly on information leaving the country is fast eroding.

Similar holes are also developing in the wall blocking outside information from reaching the populace. "Kim Jong Il is losing the propaganda war inside North Korea, with more than half the population now listening to foreign news, grass-roots cynicism undercutting state myths and discontent rising even among elites."\(^{76}\) The North's leadership rightly fears, "that opening the sluice gates to external influence would undermine its grip on power."\(^{77}\)

The Kim family, as noted above, is not incompetent or crazy, it is fully aware that the entry of outside information threatens their control in a way perhaps unmatched by any other authoritarian regime.\(^{78}\) Indeed, it is difficult to overstate the threat posed by outside

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\(^{77}\) Pollack, Jonathan D., "The Strategic Futures and Military Capabilities of the Two Koreas". *Strategic Asia*, 2005-06, pg. 143.

\(^{78}\) The "slow but steady dissemination of information across North Korea's borders already challenge[s] the North Korean leadership's ability to completely control the population." Pritchard, Charles L. and Tilelli, John H. Jr., "U.S. Policy Toward the Korean Peninsula". *Council on Foreign Relations*, 2010, pg. 19.
information to the belief system of a populace that has been effectively walled off from competing narratives for generations.79

If they ever had any doubts, the Kim family learned from Eastern Europe the dangers of outside information penetrating their populace; a message reinforced by recent events in Tunisia, Egypt, and Libya. "Public sentiment can turn against apparently unshakeable dictatorships with amazing velocity, as small oppositions swell into overwhelming majorities. Individuals may harbor very adverse views of the regime, but engage in 'preference falsification,' and similarly lack information on the true attitudes of others. As a result, they are effectively constrained to silence by threats of coercion. Once groups start to reveal their disaffection, others can be emboldened to do the same. Such 'information cascades' help explain sharp political turning points, such as the collapse of the communist regimes of Eastern Europe."80

Ironically, by attempting to wall off its citizenry from the outside world for so long, over 60 years, the North, like other authoritarian regimes, has created an internal weakness that leaves it susceptible to such information cascades. Its reliance on message control and the prevention of competing narratives from reaching its populace leaves the government vulnerable to the same alternative storylines, non-vetted information, and outside communication that has helped topple dictatorships from Tunisia to Eastern Europe.81

This North Korean weakness, combined with the demonstrated censorship-piercing capabilities of the defector organizations, creates a unique new opportunity for U.S.

79 “The availability of alternative sources of information undermines the heroic image of a workers’ paradise and threatens to unleash the information cascade that can be so destabilizing to authoritarian rule.” Haggard, Stephan and Noland, Marcus. “Political Attitudes under Repression - Evidence from North Korean Refugees” (http://www.eastwestcenter.org/fileadmin/stored/pdfs/pswp021.pdf), pg. 21, accessed 17 April 2010.
80 Haggard and Noland, pgs. 1-2.
81 With outside information undermining the regime’s public support, the regime “cannot be sustained for long, because what the masses are taught [...] is coming increasingly into conflict with what they know to be true.” Myers, The Cleanest Race: How North Koreans See Themselves--And Why It Matters, pg. 18.
policymakers. By combining the vulnerabilities of authoritarian rulers with the technical capabilities of cellphones, the U.S. can create a new system for pushing outside information into closed societies, gaining a powerful new tool for influencing not only the North, but any authoritarian regime. The technical details, implementation strategy, gain in bargaining leverage, and other aspects of the proposed policy tool are examined below.

A History of Policy Failures

In a broad sense, the U.S. and allied countries have been searching for policies to compel or induce changes in provocative North Korean behavior since the late 1940s. To date, the policies attempted include incentives, waiting for China to 'do something', threats of military action, economic sanctions, unilateral engagement, plus a grab bag of other ideas. Nuclear tests, human rights violations, the recent sinking of a South Korean warship, violations of UN sanctions, exports of missiles and nuclear technology, support for terrorism ... the litany of provocations illustrate not only, "the failure of two decades of U.S. and international diplomatic efforts to block North Korea's nuclear development, as well as North Korea's seeming imperviousness to international pressure and sanctions," 82 but also the need, perhaps apparent even to “Sunshine Policy” unilateral engagement advocates in South Korea, for a new policy. We briefly examine three options below, before discussing the new information tool outlined above in greater detail.

Military Response

While sinking a naval vessel is an act of war (as the North did to a South Korean warship in spring 2010), nuclear tests destabilizing, sanctions defiance often illegal, and human rights violations repugnant, responding militarily with an invasion to topple the North Korean regime would, to use a Korean idiom, make the belly button bigger than the belly.

82 Pritchard, Tilelli Jr., Snyder, et al., U.S. Policy Toward the Korean Peninsula, pg. 6.
The response would be out of proportion to the crime, kill untold numbers of civilians, threaten the South Korean economy, and risk devastating the entire Korean peninsula. With neither U.S. nor South Korean public opinion likely to agree to this option, it becomes as untenable as it is unwise.

A smaller-scale military strike, perhaps a bombing attack on North Korean nuclear facilities, offers a less drastic option, but what happens when the strike is finished? "Preemptive military strikes on North Korea’s nuclear facilities for counterproliferation purposes are likely to be indistinguishable to the Pyongyang regime from the initiation of a general war." While such a strike might set back the North’s nuclear program and assuage some public frustration over the North’s provocations, the North has hardly been reticent about engaging in its own military provocations. The likely Northern response would be an additional strike of its own, thus returning the international situation to the status quo, with the U.S. and South Korea forced to react to Northern provocations. The only difference would be the added problem of a Northern government strengthened by the propaganda use it would have made of the previous attack.

With little likelihood the U.S. or South Korean public would accept an outright invasion of the North, or that a smaller-scale military strike would achieve more than temporary, limited success, the military option appears unlikely, ineffective, and with any gains confined to the shortest of terms. Other options hold greater promise and feasibility.

Diplomacy

With the military option either too serious or too unproductive, diplomacy offers a less risky alternative, though with a similar likelihood for success. First, the North is technically at war with the United Nations and has been since 1950. A resolution from the Security

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Council, especially at a UN headed by a South Korean citizen, would mean little to the North. It may even help by furthering the ‘us against the world’ ideology so beloved of the North’s rulers.\textsuperscript{85}

Previous attempts at diplomacy with the North, including the 1991 Joint Declaration on the Denuclearization of the Korean Peninsula\textsuperscript{86} and the 1994 Agreed Framework, have unraveled in a cloud of mutual accusation and blame.\textsuperscript{87} Later, during the Kim Dae-jung and Roh Mu-hyun administrations in South Korea (1998-2008), the South attempted a “Sunshine Policy” of unconditional engagement with the North. While it brought Kim Dae-jung a Nobel Peace Prize and saw the initiation of several joint development projects in the North, the same period also saw the first North Korean nuclear test, among other tension-building measures initiated by the North.

Aside from the U.S. and South Korea, getting China onboard for tougher diplomatic repercussions, or even economic sanctions, might prove helpful to regional stability and U.S. interests. However, if two nuclear tests, the shelling of a South Korean island, and the sinking of a South Korean naval vessel have not motivated China to seriously sanction the North, either diplomatically or economically, what will? Clearly, there needs to be a more effective answer.

Sanctions

The South created a ‘poison carrot’ with the establishment of the Kaesong industrial complex in the North in 2004.\textsuperscript{88} By withdrawing funding and support for the complex, the South could quickly damage the North’s economy by depriving it of millions of dollars in

\textsuperscript{85} “Kim Jong-il seeks to keep the outside world at bay, the military leadership loyal, the populace compliant, China on edge, and South Korea and Japan at risk.” IBID.
\textsuperscript{86} Litwak, pg. 250.
\textsuperscript{87} Litwak, pg. 118.
\textsuperscript{88} Begun in 2004, South Korean investment in developing the Kaesong industrial complex funnels millions of dollars per year into the North. Moon Ihlwan. \textit{Bridging the Korean Economic Divide}, Businessweek, 7 March 2006. This flow of hard currency has created a “poison carrot” – an initially welcome incentive that can become a long-term catalyst of societal change. Litwak, pg. 102.
much needed income. While painful however, the loss would not be insurmountable.\textsuperscript{89} Plus, halting operations at the complex is a one-time event – what remains to punish the next provocation?

A policy designed to further isolate and sanction the North has been in place since the inauguration of the current leadership in South Korea in 2008, when the incoming Lee administration suspended the Sunshine Policy and halted most aid shipments and development projects in the North (with the exception of the Kaesong industrial complex). North Korea's May 2009 nuclear test provides some indication of the success achieved by this re-application of stringent South Korean sanctions.

Aside from their demonstrated lack of ability to achieve U.S. goals on the peninsula, sanctions and diplomatic pressure may actually do more to help North Korea than harm it. "By reinforcing its isolation, continuation of a comprehensive sanctions regime against North Korea may ironically strengthen the regime's capacity to maintain political control."\textsuperscript{90}

Again, the economic sanctions policy option appears unlikely to achieve U.S. goals regarding North Korea. While a halt in operations at the Kaesong industrial complex would hurt the North, as would Chinese participation in a strengthened sanctioning regime, neither option appears likely, or, in the case of Kaesong, capable of providing more than short-term punishment. Though less risky, and possibly more effective in the short-term than the military and diplomacy options, additional sanctions offer little hope of altering the long-term status quo on the Korean peninsula.

Information War

"North Korea is lucky in that it has not been subjected to any concerted attempt to take advantage of its severe economic crisis in order to bring down the regime. None of the countries involved have made a serious attempt to promote dissent within the DPRK."\(^91\)

It is time for that to change. A policy promoting, or at least threatening to promote, dissent within North Korea holds the greatest likelihood of limiting future North Korean provocations and achieving U.S. goals on the Korean peninsula. The key to this option is targeting the information control so valued by the North. “Expanding the exposure of individual North Koreans to the outside world may eventually result in internally driven regime transformation, a result that the United States and North Korea’s neighbors would welcome and support.”\(^92\)

While Chinese and Russian support for regime change in North Korea is hardly a given, outside information is now regularly entering North Korea and this does not bode well for the regime.\(^93\) Though the North has taken “whatever measures necessary to ensure that information from the South was closed off to its population,”\(^94\) outside information is continuing to breech North Korean defenses and find its way into the hands, computers, and VCRs of the North Korean populace. These changes make the North so angry that, for example, in 2008 it threatened to “reduce Seoul to rubble”\(^95\) over nothing more than leaflets floated into the North by South Korean NGOs.

Infiltrating thousands more phones into the North, to average citizens and Pyongyang elites alike, combined with building the border and satellite infrastructure to support this

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\(^93\) Lankov, pg. 330.
\(^95\) Ibid, pg. 4.
new network, would allow the U.S. to empower\(^96\) the North’s populace in a way that effectively targets a key pillar of regime control and threatens the regime in a method and manner it would find compelling – in essence, a ‘cyber mobilization’\(^97\) to force a readjustment of the North’s strategic and cooperation calculus. Of the four policies outlined here, the information campaign holds the greatest promise for achieving U.S. aims on the peninsula. It does not replace the other options, it simply adds an additional tool better targeted at one of the main weaknesses of the North Korean regime – its reliance on information control.

**Current U.S. Policy Implications**

In a speech in 2010, Secretary of State Clinton defined three types of freedoms for the Internet age: the freedom to access information, the freedom to produce information, and the freedom to converse with one another.\(^98\) In her speech, Secretary Clinton also highlighted the UN’s Universal Declaration on Human Rights, which defines three types of information freedom, “[…] all people have the right ‘to seek, receive and impart information and ideas through any media and regardless of frontiers.’”\(^99\)

An information campaign similar to the one outlined above, including the use of defector reporting to obtain information from inside the North, meets both Secretary Clinton’s and the UN’s ideas regarding the importance of the production, sharing, and right of access to information. The case studies above examined the production (or

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\(^97\) Here meaning a, “...mass networked mobilization that emerges from cyber-space with a direct impact on physical reality.” Cronin, Audrey Kurth. *Cyber-Mobilization: The New Levee en Masse*, Parameters, Summer 2006.


“impartation”, under the UN’s rubric) of information by citizens of North Korea for use by those outside the country and clearly demonstrated the utility of this leg of the tripod.

The next section will examine the other two legs of the tripod: access to outside information for North Korea’s citizens and allowing North Koreans to converse with one-another free of government censorship. A fuller understanding of all three elements, especially as they relate to North Korea, will allow for both more effective policy design and a policy more inline with previously stated U.S. and UN goals.

The U.S. and South Korea have been attempting to push outside information into North Korea for decades, mainly through radio broadcasts, large loudspeakers mounted on the South’s side of the border, and leaflet campaigns using balloons to carry messages from the South into the North. Indeed, leaflet campaigns provide a rare example of the North upholding an international agreement in the face of repeated violations by the other party: in 2004, the North and South signed an agreement banning propaganda campaigns against each other. However, South Korean courts later ruled that free speech rights prohibit the South’s government from preventing its citizens, mainly church groups and defector organizations, from launching leaflets into the North. These information campaigns regularly anger Pyongyang, which has called them a “despicable psychological smear campaign,” among the other complaints outlined above, and leave the South in clear violation of the agreement between the two countries. Undeterred by Northern threats and occasional pressure from their own government, the Southern groups continue to demand information access for North Korean citizens by regularly launching balloons carrying leaflets into the North. Just as regularly, the North issues threats to the South about a


101 IBID.

military response to the “treacherous deed and a wanton challenge” of the balloon and leaflet campaigns.

These types of information campaigns focus solely on circumventing regime censorship by providing access to outside information. The limitation of this approach is that it is one-way, focused only on pushing outside information into a country, yet allowing little communication among those inside, or between those inside and outside the country. In addition to these limitations, one-way campaigns of this instrumentalist type, whether radio and TV broadcasts, loudspeakers, or leaflets, have been tried since the 1960s and, despite decades of effort and expense, have shown little ability to further U.S. or South Korean goals.

A recent essay in Foreign Affairs examines information campaigns and finds the instrumental view, with its sole focus on pushing outside information into a country, “almost certainly wrong.” The reason this approach is “wrong,” as amply illustrated by decades of failed information campaigns against North Korea, is because, “It overestimates the value of broadcast media while underestimating the value of media that allow citizens to communicate privately among themselves. It overestimates the value of access to information, particularly information hosted by the West, while underestimating the value of tools for local coordination.”

It is not just information from “the West”, as the Foreign Affairs piece over-narrowly defines it; the approach involves any information from outside the country designed to promote societal and/or regime change within a country. “South Korea broadcast anti-North propaganda messages from 1962 until 2004, usually consisting of current Korean pop

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105 IBID.
music, news and appeals to North Korean soldiers to defect to the South.”

This approach obviously did not achieve societal and regime change in the North, despite over four decades of effort and expense. As argued in the essay, and aptly demonstrated by propaganda campaigns across the North-South border, just supplying information to the other side is insufficient to achieve regime change – the target populace also needs the ability to privately share and discuss the new information.

The third leg of the tripod, the free and uncensored sharing of information, the “freedom to converse” in Secretary Clinton’s parlance, may turn out to be the most important. The current efforts to get information out of the North, as exemplified by the defector networks, or push information into the North, as exemplified by decades of broadcasts and leafleting, may be further enabled and enhanced by the third element: allowing local citizens the ability to safely and effectively converse. Whether these conversations are face-to-face, via postings on websites, through cellphone calls, or by text messaging, the key is less about access to information, “than access to conversation.”

Enabling the third leg of the tripod requires a safe, secure, effective means of communication among the North Korean populace. Instead of loudspeaker broadcasts, leaflets, radios, and other one-way information tools, or using cellphones mainly to get information out of the country, introducing “safe” cellphones into the mainstream North Korean populace would allow for greater access to free conversation among North Korean citizens and simultaneously empower all three elements of the tripod. Rather than simply pushing information into the North, infiltrating cellphones capable of accessing secure connections would open a new front in the information war by allowing North Koreans to discuss information privately and freely. From Eastern Europe to the color revolutions of

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Central Asia and the more recent uprisings in North Africa and the Middle East, the North’s leadership knows the threat that information cascades pose to closed societies and is earnestly focused on preventing the infection from reaching its populace. It is this knowledge and concern of the threat that makes an information campaign such a useful tool for use in bargaining with the North’s leadership. Simply announcing initial development of such a system would provide much needed leverage for U.S. negotiators with the North.

The infiltration of large numbers of cellphones into the North would also require the development of a technical infrastructure to allow the phones to function, especially in areas away from the Chinese border. Fortunately, the North’s border with the South allows for the construction of additional cellphone towers capable of reaching into the southernmost portions of the North, a distance that would not include Pyongyang, but would include Kaesong and other areas (and military units) close to the North-South border. Satellite phones, or cellphones modified with more powerful antennas to work at a greater range, would be required to reach the elites living in Pyongyang. However, given the South’s technical sophistication, and the relative backwardness of the North’s technology, the ability to link most of the North’s populace to an outside cellular network is a surmountable obstacle, especially when applying the greater resources available to state-level actors.

An example of the greater resources available to state-level actors is the U.S. military, which has the option to “force connectivity on a country against its ruler’s wishes. [...] The U.S. military has no shortage of devices — many of them classified — that could restore connectivity to a restive populace cut off from the outside world by its rulers.”109 One method to accomplish this mission involves, “the Commando Solo, the Air Force’s airborne broadcasting center. A revamped cargo plane, the Commando Solo beams out psychological

operations in AM and FM for radio, and UHF and VHF for TV [...]. If it flies over a bandwidth-denied area, suddenly your Wi-Fi bars will go back up to full strength.”

Devices capable of reactivating a cellular network can also be affixed to drones, creating “cell towers in the sky.”

Using a plane, either a Commando Solo or a drone, in such a manner would be analogous to U-2 and other intelligence collection flights over the North, actions that Pyongyang regularly denounces. While the intelligence collection flights take place at an altitude that the North’s air defenses have yet to penetrate, such an altitude may be unavailable to the Commando Solo or similar aircraft. To mitigate danger to the flight crew and mission, flights in South Korean airspace along the border with the North would provide the least risk, while still allowing coverage of Pyongyang. Flights in international airspace along the North’s maritime borders would extend the range even further, but with greater risk.

A second method to force open a country to outside communication is to, “just give people Thuraya satellite phones,’ [...]. The cheapish phones hunt down signals from space hardware.” While the brand of phone may differ from the Thuraya, infiltrating large numbers of satellite phones into the North would provide for additional coverage, and at a price more affordable to state-level actors like the U.S. or South Korean governments than the donation-funded defector organizations.

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This method also brings problems, however. Satellite phones normally have a wide, powerful, omnidirectional signal to more easily detect and connect with distant satellites. This same feature, however, makes them easier to detect by security services with triangulation equipment – keeping in mind that the call itself is illegal in the North, so authorities don’t need to eavesdrop on the actual conversation; they simply need to find the source of the signal.

While adding a directional antenna could alter the omnidirectional nature of the satellite phone’s signal, making it less susceptible to detection by North Korean security services, this creates other problems. The user would need to know the location of the satellite(s) in order to properly aim the antenna and gain a connection. While possible on a limited scale, this requirement would likely mitigate the usefulness of the method for those lacking training on how to acquire a signal – meaning simply infiltrating the phones and hoping people figure out how to use them holds little promise.

Additionally, since satellite phones could only be used when callers believe the timing and location is safe, calls between two people in the North become much more problematic. To enable a person-to-person satellite call inside the North, both users would need to establish satellite connections at the same time. While hardly impossible, security and technical considerations, including the previously mentioned need to place the call from outdoors or near a window, likely preclude this method from gaining widespread popularity. While messages could easily be left and returned, or acted upon, the limitations of a satellite system mean it alone cannot foster the conversation required to enable Secretary Clinton’s “freedom to converse.”

By combining the ability of the U.S. military to “force connectivity” by (re)activating cellphone and Wi-Fi networks using airplanes and drones, the ability of the U.S. and South Korea to construct powerful, sophisticated cellphone towers along the South's border with
the North, the proven ability of defectors to harness the Chinese network, and the ability of satellite phones to reach deep inside the country, the technical challenges of implementing and maintaining a rudimentary, phone-based communication system in the North can be met. Despite what are likely to be strenuous objections by the North’s leadership, it is technically feasible for U.S. policymakers to provide a basic, phone-based communications system (including voice, text, and data) to the North Korean populace.

The goal of this paper and policy proposal is not to provoke the North, though that will almost certainly be a side effect. Rather, the goal is to provide the U.S. and its allies with an effective tool and bargaining chip for use in confronting Northern provocations – the type of capability that has been missing from the U.S. foreign policy toolkit for too long. The simple announcement of such a system, without even initiating funding or implementation, would provide the U.S. with additional leverage for use in negotiations with the North.

The defectors and their networks have demonstrated the capability of cellphone-based collection systems to penetrate the North’s information blockade. The success and threat of these networks, combined with the information-aided collapse of regimes from Ceausescu’s Romania to Mubarak’s Egypt, have instilled in the North Korean leadership a healthy respect for, if not an outright fear of, the dangers posed by the free flow of information. By targeting this weakness with the threat or implementation of a system capable of breaching the North’s information controls, the U.S. will gain a valuable new foreign policy tool finally capable of monitoring and influencing events in North Korea – a tool unmatched by 60 years of incentives, waiting for China to ‘do something’, threats of military action, economic sanctions, unconditional engagement, plus a grab bag of other ideas.
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