Hack and Frack
North Korea
How Information Campaigns can Liberate the Hermit Kingdom

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Jieun Baek is currently a research fellow at Harvard Kennedy School’s Belfer Center for Science and International Affairs. Jieun graduated from the Harvard Kennedy School’s Masters in Public Policy program in May, 2014 where she was an International and Global Affairs student fellow of Professor Graham Allison. Her masters capstone research paper (Policy Analysis Exercise) won the Kennedy School Carr Center’s Best Human Rights PAE Award. The PAE was titled: “The Syrian Refugee Crisis in Lebanon: Analysis of Opportunities and Challenges for the UNHCR’s Engagement with Local Civil Society.” She co-led a trek for 24 classmates to North Korea in August, 2013.

Before pursuing her masters, Jieun worked at Google headquarters for several years in sales and managed a portfolio on information access projects for North Korean defectors. She received her bachelor’s degree in Government at Harvard College, where she founded a group called Harvard Undergraduates for Human Rights in North Korea. She is a Los Angeles native and keeps a blog at www.jieunbaek.com.

She is a consultant for North Korea Intellectuals Solidarity (NKIS), a Seoul-based NGO directed by a former North Korean computer science professor. NKIS sends information into North Korea in the form of stealth USBs. Her forthcoming book on information access in North Korea will be published by Yale University Press in spring 2016.

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INTRODUCTION

The “North Korea Problem” – including the nuclear weapons threat, egregious human rights violations, a stunted population due to chronic malnutrition—seems too intractable for any government or even the UN to solve. Consequently, as long as North Korea’s status quo is somewhat maintained, Kim Jong Un’s neighbors and the leaders of the free world remain begrudgingly satisfied.

Recent events such as North Korea’s hacking into Sony and the South Korean government’s computer systems shed light on the country’s hacking abilities. This underscores the fact that North Korea is collecting more offensive capabilities. Track 1, Track 1.5, and Track 2 diplomacy ought to continue, along with targeted sanctions that aim to squeeze certain revenue streams into Kim Jong Un’s coffers. But these decades-old measures alone are not going to create much damage to Kim’s regime. Despite China’s growing displeasure with Kim’s government, a collapsed North Korea is the worst among bad options for China. North Korea will leverage this fact and continue to lean on its biggest trade partner—however annoyed China may be—for the foreseeable future.

To date, the United States’ primary strategy for pursuing a denuclearized North Korea have been to politically pressure North Korea to behave, and pressure others to enforce multilateral sanctions and isolate the regime. Traditional Western diplomatic campaigns have so far failed to generate much impact on the intransigent state. But the fracking revolution in the energy field could point the way to a new and successful strategy. Hydraulic fracturing, or “fracking,” combines advanced technology and clever tactics to liberate large reserves of oil and gas within rocks previously beyond the reach of man. To force North Korea to reappraise its own interests, the U.S. must mobilize an analogous mix of knowledge, innovation, and radical techniques to “frack” North Korea with pressurized bursts of foreign information and democratic ideas.

It’s time to add a new strategy to the policy mix towards North Korea. By employing the magic in NSA’s box, debriefing of North Korean defectors including growing numbers of high-level officials, and what has become an increasingly porous border with China that sees tens of thousands of North Koreans and Chinese doing business, the US can sponsor information campaigns to create and sustain pressures for North Korea to reevaluate its foreign and domestic interests and priorities.
EXECUTIVE SUMMARY

This paper will make a case for the U.S. government to pursue three strategies if its operational objective is to force North Korea to reappraise its own interests. Individual self-determination and access to information—two properties the Kim regime fears most for its citizens to possess—are the short-term goals for North Koreans. This objective and two goals do not necessarily equate to regime change.

Even at its best, information fracking does not portend rapid changes in North Korea. But it does offer the best prospect for creating conditions for the government to consider incremental political changes. The more informed its citizens are, the less North Korea’s political leadership will be able to simply eliminate all the “bad seeds” in society by relegating alleged criminals and their relatives to political prison camps or worse. Otherwise, there will be no one left to rule over. Success of information hacking requires enlisting a broad range of stakeholders as part of its three-pronged strategy:

1. Strengthen covert operations to hack into North Korea’s information channels and support internal dissidents.
2. Increase funding for NGOs in the U.S. and South Korea to transmit outside media into North Korea and provide business skills to North Koreans.
3. Bolster training for North Korean defectors, the primary liaisons between North Korea and the outside world, in journalism, IT, and social media.

Each effort complements the other two; all must be pursued in concert.
INSTRUCTIVE ANALOGY

Most people remember the U.S. containment strategy towards the Soviet Union, but forget the element of undermining the Soviet regime. The U.S. dual strategy toward the Soviet Union during the Cold War combined a policy of containment and undermining the regime by sponsoring informational and ideological programs targeting citizens, aiming to cultivate internal dissent.

To advocate for U.S.-sponsored covert strategies to undermine the Soviet agenda in addition to the existing U.S. containment strategy toward the USSR, George Kennan wrote in Article X that, “the United States has in its power to increase enormously the strains under which Soviet policy must operate, to force upon the Kremlin a far greater degree of moderation and circumspection than it has had to observe in recent years, and in this way to promote tendencies which must eventually find their outlet in either the breakup or the gradual mellowing of Soviet power.”

The strategy for undermining the Soviets began with the proposition that the Soviet regime was predicated on attacking two fundamentally unrealistic goals: (1) Soviets could sustain citizens’ commitment to believing that communism was superior to other forms of governance, and (2) Soviets could maintain a centrally commanded economy. Ultimately, the Soviet Union failed at both.

Through declassified CIA documents, we know that the CIA sponsored covert actions to support media and information activities that aimed to create and sustain pressures for liberalization and internally cultivated changes within the Soviet Union.1 The two-fold goals were to frustrate the Soviet Union’s ambitions to expand through military means, and to hollow out believers of the regime's communist principles. Tactics that the U.S. supported for undermining the Soviet Union included broadcasting information into Eastern Europe through Radio Free Europe and Radio Liberty Committee (RLC). RLC composed of three major programs: (1) a radio station, (2) book publications and distribution for Soviet citizens, and (3) an Institute for the Study of the USSR.

The CIA also supported anti-Soviet émigrés in their informational campaigns to convince residents in the USSR to reject the regime's teachings in order to support the U.S.’ policies in the USSR. To achieve this, the CIA used “networks of several hundred foreign

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1 NSC 5502/1, “Statement on U.S. Policy Toward Russian Anti-Soviet Political Activities,” January 31, 1955
individuals...who provide[d] intelligence for the CIA and at times attempted to influence foreign opinion through the use of covert propaganda.” Soviets dissenters’ tactics included engagement with samizdat activity and listening to foreign radio programs. The USG concluded that anti-Soviet émigrés made a special contribution to the U.S.’ informational campaigns because the émigrés were able to speak to their social networks inside the Soviet Union with special familiarity. U.S. support for informational and ideological efforts was essential in the dissenters’ struggle against the oppressive Soviet regime.

The proposed strategies toward North Korea, coupled with the current U.S. strategy of North Korea’s denuclearization and non-proliferation, fit within the framework that the U.S. used towards the Soviet Union.

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STRATEGY #1:
COVERT OPERATIONS TO HACK INTO NORTH KOREA’S INFORMATION CHANNELS AND SUPPORT INTERNAL DISSIDENTS

Tactic A: Collaborate with dissidents and their contacts inside Pyongyang to infiltrate the regime’s propaganda machines

Hacking into North Korea’s official channels to communicate subversive messages to its citizens could be an effective way to reach millions of people. This method, coupled with civil society organizations’ efforts to disseminate information inside North Korea, will cover more regions inside the country. Providing civilians access to basic information about global and domestic affairs should be considered a basic necessity in this digital age.

1. Hack into the state's newspaper and create slightly different versions of the Rodong Sin-mun.

2. Hack into their domestic cellular network and send out text messages to the 2.4 million KoryoLink cell phone users on a particular National Holiday with Western content (Note: the state sends out a text message to all official cellphone users daily).

3. Infiltrate Kwang-Myong, the state’s intranet, with Western content.

4. Content to distribute inside North Korea could include domestic facts about North Korea, such as: the regime’s illicit activities for revenue, budget activities, facts about national inequality, and descriptions of people’s lifestyles in Pyongyang as compared to those outside the capital. (The broken public distribution system does not reach far past the political and economic elite of Pyongyang, and it would behoove North Korean citizens to know not only about the outside world, but also of the reality inside their own country.)

Tactic B: Cultivate and empower subtle actions of self-determination

The key to creating domestic pressure on the North Korean regime will be to develop a “critical mass” of people who will refuse to cooperate with the government’s oppressive measures, despite expected punishment. A “North Korean Spring” or “Pyongyang Square” demonstrations are unlikely to take place any time soon. However, quietly turning citizens away from their government’s propaganda machine by opening their minds to the rest of the world will encourage self-determination.
1. Spread stories by word-of-mouth that emphasize the power of ordinary citizens to engage in resistance activities against the state. A story could underline the persistence of 2 million ordinary Koreans who participated in the 1,500 independence movement demonstrations against Japanese colonists in the 1920s.³

2. Spread jokes about the leaders and the state; spread protest songs with catchy South Korean pop music melodies. As Srjda Popovich, a Serbian democracy activist, stated, “humor melts fear” and activists cannot underestimate the power of humor or “laugh-tivism.” The power of undermining the deification of the Kim family cannot be underestimated.


4. Circulate censored materials and stories of past instances of resistance, assassination attempts, and protests; tailor content to targeted readership.

5. Increase funding for NGOs that currently train and fund associations in North Korea that build horizontal social relationships centered on non-political issues; these social relationships can be later primed for dissent.⁴

³ “Once the general concept of non-cooperation is grasped, people will be able to understand the relevance of future calls to practice noncooperation with the dictatorship. They will also be able on their own to improvise a myriad of specific forms of noncooperation in new situations.” (Gene Sharp)

⁴ One poignant example is 14th century Liu-Ji’s “Monkey-Master” fable, where oppressed monkeys realize that they do not have to obey their ruthless master, and upon enlightenment, they abandon their master who eventually dies without their support. The lesson is: “Some men in the world rule their people by tricks and not by righteous principles. Aren’t they just like the monkey master? They are not aware of their muddle-headedness. As soon as their people become enlightened, their tricks no longer work.”

⁴ The North Korea Network for North Korea Democracy and Human Rights is a Seoul-based NGO that strives to promote human rights and democracy in North Korea. NKNet was founded in 1999 by former supporters of North Korean socialism, most prominently Young-Hwan Kim. I interviewed Mr. Kim on January 27, 2013. (http://en.nknet.org/)
**Strategy #2:**  
**Fund NGOs based in the U.S. and South Korea to transmit outside media into North Korea and provide business skills to North Koreans**

**Tactic A: Strengthen NGO capabilities to disseminate information into North Korea**

*The North Korean government no longer holds a monopoly over information dissemination among its citizens due to outside efforts to transmit media into North Korea. Many organizations that send media into North Korea, especially those that are run by defectors, maintain secret networks of North Koreans still living inside the country. Gaining access to such extant human networks is essential because they have necessary levels of trust built into these networks, which enables North Koreans to become willing receivers of foreign information.*

1. Increase funding for Broadcasting Board of Governors’ programs that currently broadcast into North Korea (includes Radio Free Asia and Voice of America).

2. Support organizations that target military personnel, intellectuals, and political elite with tailored foreign information and selective incentives (e.g. jobs in South Korea, payment for defection). It is critical to enhance these organizations’ efforts that target soldiers, officers, and academics to make them vulnerable to “democratic subversion.”

3. Fund organizations that disseminate foreign information in North Korea. Investment can support projects such as the following:
   
   - Increase the number of films, e-magazines, e-books, and e-learning textbooks entering the country via stealth USBs, DVDs, and micro SD chips.
   
   - Create and spread the use of shadow Internet, a technology that will allow people to secretly use Internet that is not controlled by the government.
   
   - Send self-propelled, solar-powered smart balloons that can drop relief goods and leaflets.
   
   - Engage innovative distribution technologies like non-military drones, satellite, and radios.
**Tactic B: Strengthen black markets and provide business skills to North Korean citizens**

For over two decades, North Korean civilians have been increasingly dependent on black markets for food and other basic necessities, and to access foreign information. Defectors who formerly worked for the regime state that up to 70% of additional income for private citizens stems from the black market economy. This marketplace for food also serves as a marketplace for information exchange and dissemination, which makes it a prime vulnerability point for the regime.

4. Given that traditional household gender roles are changing and women are becoming economically empowered, we can take advantage of women’s newfound social power by targeting them with business and entrepreneurship skills. Through private enterprise ventures, women can increasingly engage with black market activities where information is exchanged.5

5. Amplify nascent efforts that target workers in Kaesong industrial region, Rajin-Sonbong region, and Sinuiju development areas with both formal and informal entrepreneurship and IT workshops.6

6. Establish and fund ‘convenience shops’ in areas where North Koreans are working in China that sell CDs, basic IT training materials, and foreign content at discounted prices.

7. Fund side-businesses at existing ‘information centers’ in major regional transportation hubs and wholesale markets to fuel both formal and informal market activity.

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5 There are a few NGOs that train North Korean defectors in business, finance, and economics. They asked to be anonymous in this report.

6 These special economic zones have a dearth of students with advanced degrees, so teaching English and IT training has not been common thus far. The majority of workers are low-skilled laborers who NGO programs can target with basic English and skills training.
STRATEGY #3: 
TRAIN NORTH KOREAN DEFECTORS, THE PRIMARY LIAISONS BETWEEN NORTH KOREA AND THE OUTSIDE WORLD, IN JOURNALISM, IT, AND SOCIAL MEDIA

Tactic A: Provide journalism, IT, and social media training to young defectors

Saving North Korean refugees not only advances human rights; it bolsters national security. Refugees are North Korea’s Achilles’ heel because they undermine the country’s most prized asset for maintaining its power: secrecy. 2012 was the first year since 2005 when fewer than 2,000 North Korean defectors entered South Korea. Defectors explain this record low number of refugees by the significantly increased security measures at border regions to prevent North Koreans from escaping. By investing in this unique human capital, we can provide their networks of people who remain in the country with information that can be used to weaken the regime.

1. Provide journalism, interviewing, writing, videotaping, and social media training to defectors in order to ensure that information leaked from the North is presented to the outside world in a timely and precise manner. This information can continue to fuel NGO and political activities to pressure North Korea to change. Furthermore, such journalistic training could allow North Korean journalists to circulate much desired accurate domestic information to fellow citizens inside the country.

2. Provide IT training to younger North Korean defectors (under 40 years old) so that they can communicate effectively with other online dissidents and North Korean citizens, and strengthen nascent political movements in North Korea.

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7 The South Korean government’s Ministry of Unification states the following number of North Korean defectors who entered South Korea since 2005: 2005 (1,382); 2006 (2,026), 2007 (2,553); 2008 (2,804); 2009 (2,914); 2010 (2,401); 2011 (2,706); 2012 (1,509).

8 74% of North Korean defectors living in South Korea are under the age of 40. Given that the South Korean government provides college scholarships for North Korean defectors until the age of 35, most people who are older than 35 years old are preoccupied with making a living and are anecdotally less interested in learning about technology for purposes of changing North Korean society. Therefore, targeting younger North Koreans with training will be a better use of resources, rather than targeting all North Korean defectors with training resources.
Conclusion:

These policy recommendations are not ground-breaking. In fact, they would be considered quite ordinary if the target country were any country other than North Korea. Access to information for a 24 million-strong population in this digital age of instant communication and information-sharing should be considered an obvious provision. This is especially the case since South Korea’s population has 1.1 cell phone per capita and a 92% internet penetration rate.

Multilateral negotiations for North Korea’s denuclearization are stalled. North Korea has dexterously evaded sanctions. Policies to further isolate this rogue player have not made the leadership want to play well with others. The world no longer flinches when North Korea tests missiles, and does not deny the high probability of a fourth nuclear test.

It is time to test a new policy towards North Korea. If implemented, the three recommended strategies could successfully create unprecedented tension inside North Korea and force the Kim regime to re-evaluate its domestic and foreign priorities. Hopefully, this could lead to a brighter future for North Korea and peace for its neighbors in Northeast Asia.
APPENDIX I:
CITATIONS AND INTERVIEWS

Some interviews omitted to protect subjects’ identities.


Bosworth, Stephen (United States diplomat; former US ambassador to South Korea, former Special Envoy for North Korea Policy). Personal interviews throughout 2013-2015.

Fahy, Dr. Sandra (Sejong Society Post-Doctoral Fellow). Personal interview. 6 Jan. 2013.

Green, Christopher (Editor of DailyNK.com and Ph.D Candidate at Cambridge University). Personal interview. 3 Jan. 2013.\(^9\)


Kim, Heung Kwang (Former Computer Science Professor at Ham-Heung University of Communism; Founder/CEO of North Korea Intellectual Solidarity in Seoul). Personal interview. 16 Jan. 2013 and 25 Jan. 2013. Many interviews thereafter.\(^10\)

Kim, Young-Hwan (Former spy for North Korea; Founder of Network for North Korean Democracy and Human Rights). Personal interview. 27 Jan. 2013.

Mr. Hyun (Former construction worker and soldier in North Korea; current furniture designer in Seoul); Personal interview. 15 May 2012

Mr. Kang (Former student in North Korea; current employee of Network for North Korean Democracy and Human Rights) Personal interview. 15 May 2012.

Mr. Kim (Former researcher at a state lab to increase the life of Kim Il-Sung and Kim Jong-Il; current employee of South Korea Ministry of Unification). Personal interview. 15 May 2012.

Mr. Park (Former military student in North Korea; current veterinary student in South Korea). Personal interview. 15 May 2012.

Mr. Shim (Former student in North Korea; current student in South Korea). Personal interview. 15 May 2012.

Mrs. Choi (Former director of large technology factory in North Korea; current founder of North Korean female defectors service center in Seoul); Personal interview. 15 May 2012.

\(^9\) DailyNK.com is one of the most credible daily online news source about North Korea; DailyNK.com mainly employs North Korean defectors, and is based in Seoul.

\(^10\) North Korea Intellectual Solidarity (NKIS) is a South Korea-based NGO founded by North Korean defector Kim Heung Kwang. This organization comprises 350 North Korean defectors who were formerly elite, and targets North Korean intelligentsia with liberal content through stealth technologies.
Ms. Jang (Former military officer in North Korea; current student in Seoul). Personal interview. 15 May 2012.


Raqib, Jamila (Director of Albert Einstein Institute). Personal interview. 24 Jan. 2013.

Sharp, Dr. Gene (Founder of Albert Einstein Institute; leading thinker of non-violent resistance). Personal interview. 24 Jan. 2013.

Thorson, Dr. Stuart (Professor at Syracuse University; Director of Syracuse-Kim Chaek University program). Personal interview. 22 Jan. 2013.

Figure 2: I met this young girl who called me “Comrade” during my trip to North Korea in August 2013 after having studied the country for 9 years. She asked me numerous questions about my life in the United States. This was a very beautiful and haunting moment for me because I, a US-born citizen with grandparents from North Korea, could have easily been born in North Korea like this little girl, and have led a tremendously different life.
Appendix II: Demographic Information on North Korean Defectors in South Korea

(Source: Republic of Korea’s Ministry of Unification)

Gender breakdown of North Korean defectors in South Korea
(as of 2012)
Age Groups of North Korean defectors in South Korea
(as of 2012)
Jobs of North Korean defectors in South Korea (as of 2012)
Highest Education Level of North Korean defectors in South Korea
(as of 2012)