



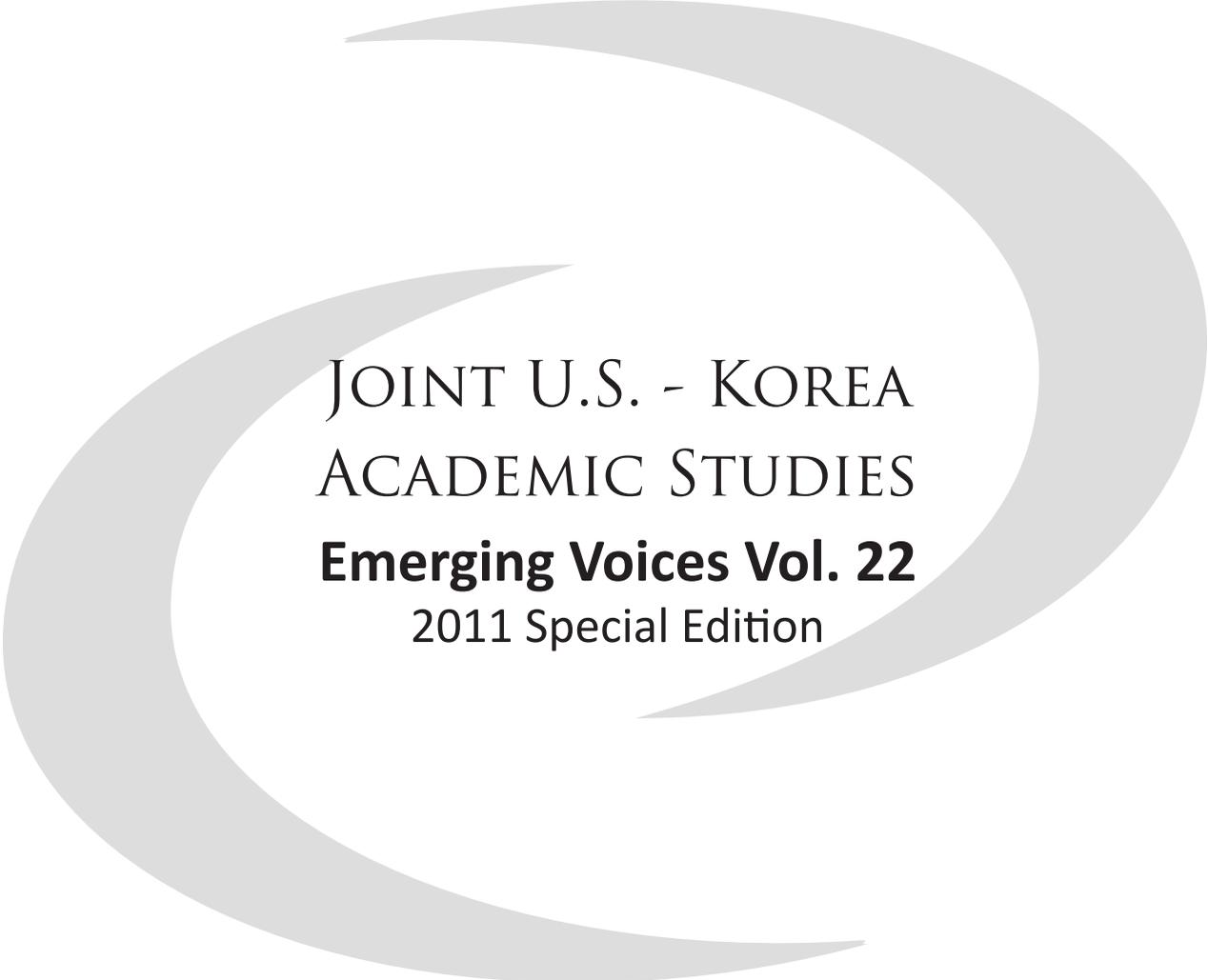
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NEW TRENDS IN
NORTH KOREA

North Koreans Have Cell Phones

Why cell phones won't lead to revolution
and how they strengthen the regime.

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INTRODUCTION

Until the recent passing of Kim Jong-il, the world thought of North Korea as a Stalinist, Hermit Kingdom run by a crazy, nuclear weapon-building, grey jumpsuit-wearing dictator known as the Dear Leader. Yet, against a narrative of repression, torture, and brinkmanship, North Korea has dramatically expanded its mobile telecommunication infrastructure over the last three years. Most scholars agree that cell phones increase individuality while providing an opportunity for dissent. From the 2001 “text-message revolution” in the Philippines to the more recent role of cell-phones during the Jasmine Revolutions in the Middle East, mobile telecommunication has supported political upheaval and the overthrow of governments.

If North Korea must control information from the outside world in order to maintain regime control, then why allow cell phones? This paper will argue that North Korea sought cell phones for a combination of reasons: to demonstrate economic growth to the elite and merchant classes; to add one more layer of social control; and to possibly provide the military with backup communications. DPRK policymaking is not homogenous and often appears schizophrenic. If North Korean assumptions about cell phones turn out to be wrong, they will find a convenient excuse to ban them as they did in 2005. For the time being, the United States should take advantage of the increased telecommunications infrastructure by modifying its intelligence collection efforts, updating its ‘state collapse’ contingency plans, and closely monitoring the use and misuse of cell phones in North Korea.

This paper will begin with examining several competing hypotheses about why North Korea introduced cell phones. A second section will discuss the history of telecommunications within North Korea. A third section will examine the roles that cell phones play within society and will discuss their potential impact on North Korean culture. A fourth section suggests that cell phones will be easily monitored and enhance social control. Fifth, I will conclude with my policy recommendations based on the analysis provided and my argument for why North Korea introduced cell phones.

WHY NOW? COMPETING HYPOTHESES ABOUT CELL PHONE INTRODUCTION IN THE DPRK

Answers to why North Korea introduced cell phones reflect North Korean scholars’ underlying beliefs about the nature of regime. The first group of scholars comprises of engagement optimists. They answer the question by using cell phones as one more sign that North Korea, if given a chance, desires to open to the outside world. The second group of scholars, mostly a group of “imminent collapse” and desperation theorists, suggest that North Korea simply accepted the de facto breakdown in the information barrier and ex post facto, allowed cell phones in the same way they tolerated markets that they could not control. The final argument represents a combination of the regime optimists and pessimists that suggest that North Korea is seeking foreign direct investment and economic growth. Their reasons reflect their biases, but for this diverse group, cell phones represent a means of demonstrating the regime’s economic ability while abetting economic development.



Seeking to open up to the outside world

Many scholars, especially in the early 2000s, argued that North Korea wanted to open up to the outside world. Years of hostile U.S. and Republic of Korea (ROK) policies rebuffed North Korean overtures and prevented them from liberalizing. Bruce Cumings, the prolific University of Chicago scholar, argues that North Korea will abandon their hostile policy once the United States recognizes their peaceful intent.¹ Bush's placement of North Korea on the Axis of Evil and subsequent invasion of Iraq forced North Korea to respond by pursuing nonconventional strategies, such as nuclear weapons, cyber war, and special operations forces.² They responded in order to deter the United States from implementing OPLAN 5027 – a plan that calls for the invasion of North Korea.³

Other authors such as David Kang and Marcus Noland point to the growing amounts of intra-Korean trade and other reforms that suggest that North Korea sincerely wants to open up to the outside world. Kang documents North Korean statements embracing reform, their legal changes that encourage direct investment, and the economic changes that brought in Chinese, South Korean, and other foreign companies.⁴ Noland argues that North Korean reforms are mostly due to necessity rather than fundamental ideological change.⁵ By recognizing the need for reform, the North Koreans are promoting regime survival.⁶

While many of the reforms and economic engagements ended following North Korea's first nuclear test in 2006, cell phones appear to be an easy investment that demonstrates goodwill to the international community. The initial market for cell phone users comprised of NGO workers, diplomats and foreign business employees.⁷ After rebuffed by its most logical economic partner, South Korea, the DPRK could be engaging with other friendly countries, such as Egypt and China. In this way, North Korea will open up on its own terms, with or without the cooperation of its southern neighbor.

This entire line of reasoning now appears anachronistic. After the sinking of the South Korean Navy corvette, the Cheonan, the artillery bombardment of Yeonpyeong Island, and repeated cyber and GPS attacks, North Korea appears to be hostile regardless of South Korean or American actions. Even if these scholars were correct several years ago, North Korea and the international situation has changed. First, North Korea could be waiting out the conservative President Lee Myung-bak who walked away from ten years of unconditional engagement of previous administrations.⁸ Also, North Korea could be operating by its own internal logic of succession – they must keep the tensions high in order to keep various factions in check.⁹ Even if opening up is a long-term goal, short-term concerns appear to trump any concerted effort to encourage engagement, rather than extract economic and financial concessions at every turn.¹⁰

No choice but to retroactively support the status quo

Another group of scholars argue that North Korea is either on the verge of collapse or at least has lost significant ability to control its own population. Either due to incompetence or corruption, markets, cell phones, and DVDs became de facto legal.¹¹ Occasionally, North Korea rounds up traders and users of foreign

products to remind communities who is truly in charge.¹² However, North Korea never regained the level of control that it had pre-famine.

While academics such as Nicholas Eberstadt confidently predicted North Korea's collapse in the 1990s, some modern Pyongyang tea leave readers suggest possible scenarios – most with regime change as the ultimate end.¹³ Others academics, like Victor Cha, emphasize the opacity of the regime and therefore temper their predictions about North Korea's long-term future.¹⁴ Noland presents a range of possibilities depending on input factors such as the extent of U.S. and international sanctions against North Korea.¹⁵ Needless to say, none are optimistic about the long-term viability of North Korea sans major economic and political reform.

B.R. Myers presents an alternative view with a similar conclusion to other desperation theorists. He argues that despite the massive social unrest and exposure to the outside world following near-state collapse in the late 1990s, North Koreans did not reject their government due to their strong ideological beliefs.¹⁶ North Korea had recognized that they could not compete with South Korea, but differentiated themselves from their southern brethren through ideological purity. After the failure of the information cordon, they could no longer claim that South Korea had a worse economy than the DPRK, but they could continue to claim that South Korea was nothing but a “Yankee colony,” thereby establishing their nationalistic and moralistic superiority.¹⁷

However, the DPRK propaganda strategy has failed in recent years as the regime has promised explicit economic goods – an outcome that they objectively cannot meet. The introduction of cell phones for Myers then would not be a problem, per se, as the information cordon already broke down. In any case, North Koreans keep the faith on nationalist rather than economic grounds. Nevertheless, the introduction of the cell phone, as will be discussed in following sections, invariably becomes an economic good and in this case, a good that cannot compete with their northern or southern “inferiors.”

The problem with the desperation hypothesis is that North Korea truly experienced hardship during the mid-1990s and has actually regained much of its control since then. Their smooth handling of Kim Jung-il's death reflects strong organizational planning and execution. In any event, economic hardship may be an actual strategy of the regime as it tries to prevent rising expectations which are correlated to revolution.¹⁸ Furthermore, North Korea still bans all other cell phones, especially Chinese ones near the northern border.¹⁹ Introducing cell phones then would represent regime strength, not weakness.

“It's the economy, stupid”

Some scholars argue that North Korea simply seeks foreign direct investment for a variety of economic and political purposes. Cell phones only represent one more policy in that direction. Since South Korea cut off aid in 2006, North Korea has sought the help of China and other friendly nations. DPRK propaganda argued that North Korea had become a strong nation ideologically under Juche and socialism, and after the 2006 nuclear test, DPRK had become a strong nation militarily as well.²⁰ The last step to becoming a “strong and prosperous nation” meant that North Korea had to improve its economy. Cell phones are a means to demonstrate wealth and facilitate hard currency-making activities to this end.



While North Korea sought economic engagement (or extortions) during the Kim Dae-Jung and Roh Mu-Hyun administrations, they have sought more economic goods from China as their relationship with President Lee deteriorated. China initially supported stronger economic ties with North Korea in order to extract more resources and gain more leverage over North Korea's policies. Instead, they became hostages to North Korea's instability.²¹ China, unwilling to risk instigating DPRK state collapse, separated their policy of economic support from their overall policy toward North Korea.²²

North Korea has progressively eased restrictions on Chinese businesses and investment.²³ In the 2007 New Year's Editorial, Kim Jung-il outlined a new direction for North Korea. After gaining ideological power through socialism and improving military power through nuclear deterrence, the North Korean people should reap the rewards of the "military-first policy" by becoming a prosperous nation by 2012. This date coincided with the 100th birthday of Kim il-Sung, the 70th birthday of Kim Jong-il, and the 30th birthday of Kim Jong-Un.²⁴ As a triply important holiday, North Korea must provide more gifts than normal during the spring of 2012.²⁵

In order to meet their new national goal, the North Koreans promised a variety of specific economic goods. North Korea promised 100,000 new apartments in Pyongyang.²⁶ Other promises included to "generate 7.76 million kilowatts of electricity a year, produce 33 million metric tons of metal, 13 million metric tons of coal and 7 million metric tons of food, and move 72 million metric tons of freight."²⁷ North Korea first held a "150-day battle," reminiscent of the 1978 100-day and 1988 200-day battles, in June 2009, in order to mobilize the entire nation to achieve its explicit economic goals. After apparently not obtaining these goals, they commenced with another 100-day battle later that fall.²⁸

With an appreciation of the widening gap between North Korean propaganda and actual economic outcome, introducing cell phones appears even more rational. "Mobiles also carry significant symbolic power, representing modernity, prosperity, and individuality."²⁹ Migrants in China spend months of salary in order to own one and poor Africans fashion model cell phones out of wood in order to imitate the rich.³⁰ With the breakdown of the information cordon between North Korea and the outside world, the average North Korean most likely knows that even poor Chinese have cell phones. By allowing cell phones, North Korea can demonstrate its prosperity.

Beyond constructing the appearance of individual wealth, cell phones create dramatic impacts on economic growth, and even more so in developing countries like North Korea.³¹ Cell phones decrease the amount of time used in conducting business and reduce transportation costs.³² In other developing countries, people use mobile communication for health services, microloans, weather forecasts, crop prices, and customer referrals.³³ Cell phones may not provide immediate economic benefits to North Korea by 2012. However, depending on the extent that North Koreans are able to freely use their phones, they will be a gift that keeps on giving to their economy.

Based off the current strategic environment that North Korea faces, this argument is persuasive in that it does not necessarily rule out other causes for North Korea's cell phone decision. Instead, it clearly places the impetus on economic grounds. However, the argument does not provide insight into why North Korea chose to introduce cell phones rather than other economic goods, especially when telecommunication provides individuals a tool many revolutions have used successfully to bring about regime change. Furthermore, the economic investment argument does not explain why the regime has allowed over 800,000 subscribers to have access to the cell phone system, when it had been limited only to elite bureaucrats in the past.

Which theory is right?

Each of these schools of thought presents arguments that are not necessarily mutually exclusive. North Korea likely allowed cell phones for a variety of reasons; however, the economic arguments appear particularly convincing and parsimonious. Yet, all the arguments fail to take into account the role that cell phones play within a society, how they may change North Korean culture, and what the North Korean leaders will likely do to avoid any sort of change that would threaten their regime.

CELL PHONES: A BRIEF NORTH KOREAN HISTORY

Mobile communications, initially for strict military purposes, were introduced in a North Korean Free Economic Zone (FEZ) in 2002. After first pursuing a joint venture with Samsung and LG for a CDMA based system, North Korea chose Loxley Pacific to implement a GSM-based system.³⁴ However, in May 2004, North Korea announced that it had banned cell phones and began confiscating devices.

In 2008, on a world tour of the three cell-phone free countries – Cuba, Burma, and the DPRK – the Egyptian conglomerate Orascom struck a deal to provide a 3G service for the entire country.³⁵ By the time of this writing in December 2011, Orascom's network boasts over 809,000 users. Nevertheless, North Korea still severely restricts the use of cheap Chinese phones and confiscates other foreigners' phones upon entry.

History of North Korean telecommunications

Until recently, "the primary aim of telecommunication development in North Korea [was] to provide a vertical communication link between superiors and subordinates for the central management of state affairs."³⁶ North Korean telecommunications are controlled by the Korean Post and Telecommunication Corporation (KPTC). North Korea's 1.1 million landlines are mostly connected to government office buildings with less than 10% dedicated to households.³⁷ After trying to extend landlines to every residence, North Korea reacted to concerns over "information leakages" and ultimately disconnected many of the lines.³⁸ While the military, major cities, and the capital have the advantage of automatic switching and fiber optic lines, areas outside of the corridors of power severely lack telecommunication quantity and quality.³⁹

Historically, North Korea limited telecommunication connectivity to foreign governments and to the FEZ. In 1995, North Korea extended fiber optics to the



Rajin-Sonbong FEZ.⁴⁰ Loxley Pacific, a Thai company, in a joint deal with the KPTC, planned to invest \$28 million in order to develop the communications infrastructure.⁴¹ North Korea has a fixed line service with Beijing and Moscow.⁴² North Korea also works with the INTERSPUTNIK system to communicate with Eastern Europe, as well as operates satellite connections to communicate to the United States, Europe, and Japan.⁴³ Finally, they established lines between North and South Korea following the rapprochement of the “Sunshine Policy.”⁴⁴

Introduction of cell phones and their ban

Cell phones faced numerous domestic and foreign barriers. Loxley Pacific initially introduced cell phones to the Rajin-Sonbong FEZ in 2002.⁴⁵ Lancelot Holdings, a Hong Kong based operator, had introduced limited service in Nampo and Pyongyang in 1998.⁴⁶ Initially rebuffed a few years prior, South Korea eagerly sought to provide North Korea with CDMA cell phones during the open-ended engagement of the “Sunshine Policy.”⁴⁷ However, the United States blocked the technology transfer as Qualcomm, the American patent owner of that generation of CDMA, fell under export control law.⁴⁸ The United States wanted North Korea to adopt GSM technology instead because CDMA was “more amenable to encryption.”⁴⁹ Thus, North Korea chose Loxley Pacific’s GSM for nationwide use.

While North Korea hoped to have a ‘great leap forward’ by promoting information technology, their political system ultimately prevented attainment of such goals.⁵⁰ By the end of 2003, there were an estimated 20,000 cell phone users throughout North Korea.⁵¹ Journalists reported that cell signals in Pyongyang were strong and that the use of cell phones among the North Koreans was ubiquitous.⁵² As Loxley Pacific hoped to develop the service to reach its physical capacity – 400,000 customers in Pyongyang alone without expansion – North Korea, in May 2004, abruptly banned cell phones across the country and begin confiscating the devices.⁵³

The likely reason that North Korea unexpectedly banned cell phones is the expansion of pre-paid devices along the Chinese border, but the regime used the pretext of a train explosion to justify the imposition. In 2003, Chinese mobile operators began aggressively building towers along the North Korean border in order to serve Chinese businessmen and North Korean citizens alike. With the notable increase in illegal pre-paid cell phone use outside of the control of Pyongyang, the regime reacted:

The regime repeatedly reverses field when its insecurity and instinct for control trumps development, as illustrated by the country’s multiple false starts in establishing its cellular phone network, the single most frequently identified problem in doing business in North Korea in a recent survey of Chinese businesses operating there.⁵⁴

Yet, publicly the ban followed a massive train explosion that barely missed Kim Jong-Il’s private train. The international media billed the “Ryongchon disaster” as a cell-phone detonated assassination attempt which justified North Korea’s cell phone ban.⁵⁵ While intelligence agencies generally believe the ammonium-nitrate explosion was an accident, the cell phone ban stayed in place.⁵⁶

Reintroduction with Orascom

Orascom is an Egyptian conglomerate founded by Onsi Sawiris in 1950. His three sons run the three main divisions: Orascom Telecommunications, Orascom Construction, and Orascom Hotels and Development.⁵⁷ Following a \$115 million deal with Orascom Construction to refurbish the Sangwon Cement Plant in 2007, North Korea agreed to a deal for Orascom to finish the iconic 105-story Ryugyong Hotel in Pyongyang, better known in the media as the Orwellian “Ministry of Truth” or the “Hotel of Doom.”⁵⁸

Orascom Telecommunications CEO Naguib Sawiris, known for making money in difficult business climates such as Africa and Iraq, went on a hunt for new high-risk, high-reward opportunities.⁵⁹ After failing to get beyond introductory talks in Cuba and Burma, Sawiris penned a \$400 million deal with North Korea to provide 3G service covering 95% of North Korean citizens. In exchange, Sawiris received a four year exclusive lease and 25-year license.⁶⁰ In April 2008, Pyongyang announced that the cell phone ban would be lifted.

In January 2011, Kim Jong-il personally hosted Sawiris in Pyongyang. North Korea’s relationship with Egypt had been cemented by years of arms deals: training for Egyptian pilots, construction of a missile factory, and the use of the Cairo-based North Korean embassy for regional arms sales.⁶¹ Even the idea of Egyptian hereditary succession, now defunct, possibly came from Kim Jong-il.⁶² The bilateral relationship between North Korea and Egypt may change after the Arab Spring, but the deal with Orascom represents long-time cultural and business ties to North Korea. Furthermore, part of the cement deal included using North Korean workers in Arab countries – potential poker chips in the event that North Korea harms Orascom’s investment by banning cell phones again.⁶³

Current status of cell phone use

When cell phones were first introduced in 2009, the options for cell phones were extremely limited. Recently, new versions have been introduced, including cheap Chinese versions and more expensive phones. Users get 200 free minutes plus 20 free text messages. Service can be extended with scratch cards.⁶⁴ All cell phone users add minutes to their phone by purchasing pre-paid cards. These cards range from 140 KPW to 1400 KPW and can be found at 42 stores in Pyongyang as well as 8 other regional stores. North Koreans must report their names when they buy the cards as a means of controlling how many minutes they buy and use. Orascom plans to progressively increase the number of stores in order to increase sales.⁶⁵

Orascom provides a variety of telecommunications services to cell phone users. While previous networks only provided voice service, Orascom now provides SMS, MMS, and video calls. Orascom also boasts that it provides 3G data internet service as well. It is currently unclear how many North Koreans have access to the internet through their phones. The service network consists of at least 370 base stations in Pyongyang and extends to 14 other large cities and 78 smaller cities. Augmenting this service is coverage over 22 highways. Orascom boasts coverage of 93% of the North Korean population.



While the network may cover almost all North Koreans, the government limits who users can call. Currently, foreigners can call China, but are unable to call most other countries. North Korean users have more restricted networks. They can contact their family and work related contacts. However, it seems that communication is limited geographically as well. How North Korea determines these limitations remains unclear.

CELL PHONES: INFLUENCING NORTH KOREA

The elite, the military, foreigners and the new rich are the primary consumers of cell phones in North Korea. Cell phones usually adapt to the local culture and customs of a given society and will probably be used in novel ways within North Korea as well. Nevertheless, the primary function of cell phones will stay the same and those uses will probably, in turn, change the way individuals live, work, and play. While only reaching under a million customers today, expansion of cell phone service has the potential to dramatically change North Korean society.

How will people use cell phones?

Before examining who will use the phones, it is important to understand how cell phones are used. Theories of technical determinism, social determinism, affordance, and domestication provide a framework for understanding how any new technology is incorporated into the daily lives of users. Cell phones are communication tools, information tools, and also say something about who the user is.

Technical determinism suggests that technology can “form and mold society.”⁶⁶ However, this view ignores the social context in which a technology arose. For example, cell phones were initially created for the vehicles of rich New Yorkers. On the other hand, social determinism suggests that technologies are constantly recast and reinvented by consumers for unique, socially-constructed uses.⁶⁷ However, this view cannot be taken to the extremes – cell phones still only have a range of limited functions that could be reasonably performed.

Affordance tries to take the middle road between technical and social determinism.⁶⁸ How a user perceives an object affords them the possible ways that they will use it. For a cell phone, this would be based on the physical characteristics, such as MP3 player and GPS, and its software capabilities, such as internet browsing, SMS, and email. This approach demonstrates the interaction between the physical and the social aspects as it interplays the age, gender, culture, and experience of the user with the functions of the technology itself. However, affordance is tautological by essentially saying that a cell phone will be used as a cell phone.⁶⁹

Domestication also combines technical and social determinism's insights while avoiding the shallowness of affordance.⁷⁰ This view takes the perspective of a user in their evolving relationship with an object as they negotiate the technology and learn how to incorporate it into their lives.⁷¹ The nature of the cell phone itself will change from the time a North Korean buys a cell phone, while she learns how to operate the phone, and until she develops and learns the social customs of cell phone use.

Cell phones are communication devices that are incorporated into daily lives to augment human interaction, land lines, and asynchronous discourse like letter mail.⁷² As North Korea has relatively few land lines, communications between collective, public, and private networks had typically been conducted in person.⁷³ Most people will use cell phones as they use all communication: to chat, to gossip, to socialize, for business contacts, and to keep in touch with family. Organizing co-presence, or coordinating the last 50 feet, may be less of a concern in North Korea until cell phone density increases. SMS, or text messages, will also help relay political messages that reinforce other forms of domestic propaganda.

Cell phones will provide the same function as telegraphs and telephones did when they were first introduced: they will provide information. Like every other country, news, weather, sports, politics, gossip, health care, and personal advice will be supplied through North Korean cell phones. While the content may be formatted in a structured manner that reflects the North Korean political ideology, SMS, MMS, and voice features will provide a multitude of means for delivering information to North Koreans who are otherwise unable to gain information outside their own neighborhood and especially not outside the country. Restrictions on communication to within the user's province may limit the amount of information, but will still be significantly more information than provided today.⁷⁴

Beyond being a communication and information device, cell phones become highly personalized objects that reflect the character of the owner.⁷⁵ In South Korea, phones have amulets with beads or dolls attached to the end. In the United States, teens put rhinestone stickers on the outside. In the Philippines, many middle aged women wear decorated cell phones as necklaces. As an extension of a North Korean's personality, cell phones will function in the same way – possibly even being decorated with pictures of the Great Leader, Kim il-Sung. Screen displays, ringtones and button sounds are all customizable. Travelers



to North Korea have reported hearing ringtones of pop songs, the national anthem, and military marches.⁷⁶ Even if the phone is shared within a household or neighborhood, users' personalities determine how the phone is displayed and used.

Who uses cell phones?

This section hypothesizes who will use cell phones as the price decreases and service expands. While interviews with frequent travelers have provided some anecdotal confirmation of these hypotheses, the difficulty in determining who uses cell phones will persist in the otherwise closed society of North Korea. In order for the cell phone ban to be overturned, the North Korean elite and military, always worried about security threats, probably had to be placated. Hence the party and military elite are probably the primary cell phone benefactors and users. After the elite and the military, foreigners are probably the next largest segment able to afford cell phones. Finally, the *nouveau riche* is probably the final class to be targeted.

The military

In line with a military-first policy, the military will use the phones for professional and personal purposes. Like every other sector of society, each military unit has specific agriculture-related targets to achieve throughout the year.⁷⁷ The military-first policy also pushed the military more into the management of economic affairs such as large-scale construction projects. In order to pay for their operations, the military also must earn foreign currency through the sale of wood, agricultural products, and minerals to China.⁷⁸ Cell phones will be used to facilitate and coordinate all of these activities, especially among higher ranking officers who can afford cell phones.

Most military communications equipment is antiquated and not connected to the PSTN, or the national switchboard.⁷⁹ Without this connection, military radios can only work on local networks. At the personal level, soldiers who are deployed to remote areas such as islands and mountaintops will be able to communicate with their families throughout the year. While there are no reported instances of this occurring yet, in other poor countries, a single individual in a village may own a cell phone and rent it out. If this practice flourished, it would expand the number of people who could use cell phones despite their expense.

Beyond the economic and personal reasons, cell phones will augment the current military communications network. "North Korea's military command, control, and communications system consists of extensive hardened wartime command facilities, supported by redundant communication systems, which are believed to be largely separate from systems supporting other sectors."⁸⁰ Cell phones, as an updated telecommunication system, could provide added resiliency to the already redundant communications network, and allow easy contact with civilian authorities during peacetime crises such as the 2007 East Coast floods.⁸¹ As the network expands, it would not be surprising for senior military officers to have dedicated cell phones for military purposes.

The elite

Government bureaucrats and party functionaries uphold the Kim regime and will, therefore, be another group targeted for cell phone subscription. Additionally, the elite have the financial ability to pay for cell phones as the initial subscription fee costs nearly \$1000, the phone \$400, and incoming and outgoing calls are separate charges.⁸² Phones are also status symbols, used as jewelry in some countries, and highly individualized. Therefore, the elite who live under relatively more scrutiny, may value cell phones for their ability to express themselves within the confines of a closed system. They may also use cell phones to take financial advantage of their social position by using them for work or business.⁸³

Foreigners

The expatriate community forms a large portion of potential cell phone users in that they are generally under physical surveillance already, thus posing less of a risk to the North Korean regime. Foreign NGO workers, businesspersons, tourists, and diplomats have their foreign cell phones routinely confiscated upon entry into the country and returned upon exit.⁸⁴ Recently, North Korea has even prevented foreigners to rent cell phones to limit information leaks about the Arab Spring.⁸⁵ In the future, this group will probably expand as North Korea continues to promote foreign-owned resource extraction as a means to earn hard currency.

New rich

Many of the new rich have owned or used illegal Chinese cell phones in lieu of legal communications. As the North Korean Ministry of People's Security uses cell phone direction finding devices to locate and arrest illegal cell phone users, many of the traders will prefer the expensive, legal variety.⁸⁶ This would ease their insecurity by reducing the number of ways that the new rich can run afoul of the law.⁸⁷ Furthermore, as a sign of prosperity, the new rich will use them to elevate their social status closer to the old, moneyed elite.

How do cell phones change individuals and cultures?

Cell phones revolutionize timekeeping to the point that time matters less. Time has been used for centuries as means of coordinating social, family, and industrial life.⁸⁸ By working on parallel planes, we can meet our friends and measure our production against others. Cell phones allow for micro-coordination and softening of schedules by providing direct contact with each other. Micro-coordination improves the efficiency of planning meetings by increasing the timing and location flexibility of the meeting as each party can adjust their plans midcourse, and iterate the adjustments until both parties meet.

Communication also becomes more individualized. In the past, people called locations, hoping that the intended party was home, engaged in appropriate social discourse with the first person to answer, and after a "here is so-and-so," finally got to talk to the intended person.⁸⁹ With cell phones, each person is given a number and every location is in play from bathrooms, to classrooms, and to movie theaters. The phone call is directed at them individually.



The changes on individuals' behavior in co-present communication ultimately transform social interaction at many levels. Social rituals that define social cohesion will have to transcend the "here and now" of face-to-face communications.⁹⁰ In some ways it will trump co-present communication and in some ways augment co-present communication.⁹¹ While those with cell phones may talk to their known associates more often, they may have fewer acquaintances.⁹² Social rituals are also mediated; therefore cell phones will enhance these relationships. Friends can exchange gossip and officemates can exchange jokes and thereby deepen pre-existing, internal cohesion.⁹³

For North Koreans, the strict timing of days may become more relaxed as more own cell phones. The introduction of cell phones on a large scale into North Korean society invariably raises questions about the ultimate effect. Will mandatory activities, like political studies and group propaganda viewing, be negotiated or remain above the new concept of social coordination? With the new social rituals, will the hierarchy of Korean language change? With mediated social rituals, will relationships between close individuals, such as those within a family, deepen at the expense of public and collective relationships? Will the direct link to individuals rather than places undermine social and institutional order? Finally, will cell phones essentially become an "umbilical cord" that entrenches social relations by keeping the Korean man at the office and the Korean woman at home with the children?

CELL PHONES: PERFECTING THE PANOPTICON

One of the strongest arguments for cell phones is that they strengthen social movements and have historically assisted them in the overthrow of undemocratic governments. This same argument is also the one most cited for why North Korea would never introduce such a revolutionary – in both meanings of the term – device. North Korean authorities had to be confident enough in their surveillance capabilities that they could prevent any sort of socially deviant behavior. Not only are cell phones controllable, but as they break down public/private spaces, they betray users' private thoughts on a public network more often than landline phones.⁹⁴ Unlike landline phones, they are associated to individuals and traceable using cell-phone tower triangulation or GPS.⁹⁵ Cell phones perfect North Korean tools of social control rather than risk social disharmony.

Can cell phones change the government?

After the Arab Spring, the casual observer would argue that cell phones and Internet social media played a significant role in regime change. North Korea, very similar to China, swiftly reacted to the news of the Jasmine Revolutions by limiting travel and information about the region.

North Korea need not worry about the impact of Egypt in the short-term. The Egyptian revolution occurred because of many unique factors that North Korea lacks. In the Arab world, cell phone ownership rates among the 15 to 29 year old age bracket rose over 79% between 2010 and 2011.⁹⁶ While public places in Arab countries are highly regulated and controlled, their private places remain relatively unmonitored.⁹⁷ As the phone helps micro-coordination for social interaction, the same functions can be used for political coordination.⁹⁸ Hyper-coordination moves micro-coordination

beyond the function to a truly social purpose that builds bonds.⁹⁹ While authoritarian regimes, like North Korea, can control public gatherings, it will be difficult to control the long-term impact of deep ties among like-minded individuals.

North Korea should prepare for the long-term implications of mobile communications. Cell phones support mobilization and social change in a variety of ways. During critical political events, mass mobilization can create revolution as it did during the 2001 Philippine election or the 2002 South Korean election.¹⁰⁰ Unlike these countries and the more recent Arab examples, North Korea has no official or unofficial opposition. Hyper-coordination strengthens pre-existing bonds, but does not create new organizations or new connections. Therefore, the revolutionary advantage cell phones play elsewhere will unlikely contribute to social unrest in North Korea.

The role of surveillance

Even if cell phones could support mobilization, North Korea already has one of the most pervasive surveillance networks in the world. In 1997, 300,000 police were divided among the regular police under the Ministry of Public Security and the secret police under the Ministry of State Security. Agents arrest people for the smallest public offense and routinely wiretap phone conversations and open mail.¹⁰¹ With a technology as potentially socially disruptive as cell phones, it would be a safe guess that the Ministries of Public and State Security¹⁰² are working overtime to root out subversive behavior. More importantly, among students – the most likely group to instigate rebellion – the police even persuaded them to spy on each other and then divide up the students to assist in controlling the smaller groups.¹⁰³

Instead of being an increased risk for the regime, cell phones provide novel opportunities to expand the amount of surveillance and social control that already exist. First, as a mobile, individualized, device, people use cell phones as if they are in a personal face-to-face conversation. For example, users privatize public spaces by covering their mouths to create ‘virtual’ phone booths.¹⁰⁴ The gossip and intimate chatter of previously private, face-to-face discussions will be easily monitored. Even if every conversation is not recorded, the subscriber service data of who called whom when and where will be stored, assisting the police in investigating subversive behavior.¹⁰⁵ The location data generated from cell phone tower triangulation or from GPS will also provide security officials with additional means of controlling the behavior of North Koreans.¹⁰⁶

POLICY RECOMMENDATIONS

The introduction of a new technology in North Korea with great potential for social change, if not political change, requires that the U.S. policymaking community react in a constructive way. The intelligence community should add cell phone-based metrics to their routine monitoring of social unrest in North Korea. They should also proactively seek out opportunities for expanded collection in both signals and human intelligence. With expanded technical capabilities, the planners at the Pentagon should incorporate the existence of cell phones into operational plans, especially in the event of state collapse. Finally, the international community should use North Korea’s recent efforts to expand mobile communications as a conduit of engagement.



Expand intelligence collection

While the U.S. intelligence community is not forthcoming about their 3G cell phone data collection capabilities, GSM appears to be easier to collect. With the standard in Iraq being GSM, insurgents have learned the U.S. capability of tracking their conversations and movements.¹⁰⁷ If the United States blocked the transfer of CDMA technology – now antiquated – on the grounds that it allowed stronger encryption, it can be assumed that North Korea's 3G standard probably has even better encryption. Currently, U.S. law enforcement agencies have means to intercept 3G data.¹⁰⁸ If the North Korean network has not already been compromised, the intelligence community should dedicate resources to effectively collect and analyze North Korean cell phone communications.

Additionally, with the expansion of the Chinese cell phone network near North Korea, the U.S. government should redirect human intelligence resources to build DPRK-based contacts with cell phones. Whether they are businesspersons, NGO workers, or illegal traders, the information gathered could be a bonanza for the intelligence and policymaking communities. North Koreans are already communicating to their relatives and friends in South Korea.¹⁰⁹ This informal network of intelligence assets should be exploited.

Prepare for contingency scenarios

The United States and South Korea needs to incorporate cell phones into their national security contingency planning. OPLAN 5027 and 5028 provides plans for reinforcing South Korea in the event of a major attack.¹¹⁰ OPLAN 5029 gives guidance for U.S. and ROK forces in the event of sudden change, such as regime collapse. In both scenarios, maintaining the cell phone networks will assist Combined Forces Command leaders in their operations.

Between tactical and psychological operations, cell phone networks will provide U.S./ROK planners with numerous opportunities to influence individual North Koreans before or during a crisis. First, maintaining SIGINT collection on cell phones will help identify friendly and enemy forces during conflict or state collapse. Second, the United States would be able to communicate to the elite and military via the cell phone network and encourage them to defect. During the Gaza War, the Israeli Defense Forces telephoned Gazan civilians, pretending to be sympathetic Egyptians or Syrians, to warn them about operations in order to prevent casualties.¹¹¹ U.S./ROK policymakers should update their plans to reflect the potential advantages that cell phones offer.

Cell phone engagement

The North Korean nuclear crisis continues to dominate bilateral and multilateral negotiations between the United States and the DPRK. Opportunities for engagement are limited to non-official, track II diplomacy. Cell phones provide an opportunity for international organizations and academic institutions focused on telecommunications and information technology to engage their North Korean peers in a non-competitive method.¹¹² These relationships could build trust between both parties. More importantly, these relationships could provide important information about North Korean telecommunications strategy, protocol, and infrastructure.

CONCLUSION

This paper set out to understand why North Korea introduced cell phones, despite the technology's known potential in aiding social unrest. Some scholars would argue that North Korea simply wanted to slowly open up to the outside world. Others argue that North Korea had to retroactively legitimize an ongoing practice. In reality, North Korea probably introduced cell phones in order to advance the economy through information technology and provide the party and military elite with a visible sign of economic progress. Not only are cell phones easy to integrate into the extensive surveillance network, they also provide unique opportunities for enhancing social control. U.S. policymakers should recognize the value of cell phones in intelligence collection and military operations by incorporating their existence into current intelligence and contingency plans.

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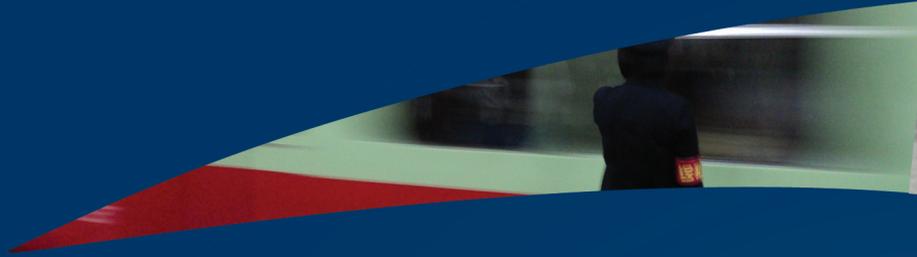
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