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'The Korean Peninsula in 2032'

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The Korean Peninsula in 2032

On 17 November, 2012, the British Association for Korean Studies hosted an unusual conference examining the social, cultural and political prospects for the Korean peninsula within two decades' time under the theme of 'Korea's Place in the World: Now and Twenty Years Hence'. This was a broad ranging symposium composed of three panels – Session 1 'The Challenges of the Future'; Session 2, 'The Future and the Environment, North and South'; and Session 3, 'The Future, Culture and Technology'. In Session 1, the invited Guest Speaker, Prof. Glen Kuecker of De Pauw University, USA discussed the challenges facing South Korea as a result of significant industrial and technological change, by focussing on the 'environmental new city', New Songdo City. Hyeonju Son of the University of Hawai'i at Manoa focussed on various scenarios for South Korea's future based on rapid changes in technology. The second session focussed more specifically on environmental issues, Robert Winstanley-Chesters taking a distinctive look at how North Korea's way of handling environmental issues might enable its economy to grow, while Young-hae Chi considered the various environmental issues facing both North and South Korea. In the third session, Hyun-Gwi Park looked at how changing South Korean attitudes towards immigration and multiculturalism would have an impact on the society of twenty years hence. Bum Chul Shin and Il Han Bae took a highly focussed look at how mobile telephony has begun to change the socio-political scene in the DPRK, and presented us with four scenarios showing the impact this technology may have on the political future of the North. Five of these papers are presented in Volume 15 – the articles by Park, Kuecker, Winstanley-Chesters, Chi, and Shin and Bae. A sixth paper has been added. By Christopher Green and Steven Denney, the paper uses developmental theory to examine scenarios for the political future of North Korea. These papers not only discuss issues within their own text, they speak to each other and challenge each other. Young-hae Chi speaks of 'gazing into the crystal ball', and indeed any attempt to discern the future can be seen to be something like that. However, using different historical, sociological, economic and political approaches, each of these authors attempts to give some idea of what the Korean peninsula – and the two states on it, might be like in two decades' time. One point each of the authors seems to agree with, in different ways, is that changing technology is going to challenge any government's ability to cope with rapidly altering social conditions. On the future of North Korea, the authors seem to have views varying from deep pessimism to cautious hope. In this case, Winstanley-Chesters sees more hope, and Christopher Green and Steven Denney seem to be the least sanguine.

The 'Multicultural Family' and the Politics of Selective Inclusion in South Korea

Hyun-Gwi Park

Abstract

This paper discusses the rationale and the specific circumstances related to the introduction and development of multiculturalism in South Korea from the mid-2000s. It will explicate the confusion and the debates which have arisen around the proliferation of discourses on multiculturalism in South Korea. In doing so, this article highlights the centrality of the family in the implementation of the policy of multiculturalism based on various welfare measures established in 2008. The South Korean version of welfare multiculturalism raises some important questions concerning the politics of exclusion and inclusion. I argue that multicultural policy in South Korea is based on individuals within the family structure, rather than on the individuals themselves. This article will explore the implications of this family-based multiculturalism and will examine how this has influenced its development and implementation.

Key words: Multiculturalism, Multicultural Family, Welfare State, Marriage Migration, Multicultural *Han'guk*.

The 'Multicultural Family' and the Politics of Selective Inclusion in South Korea

Introduction

The modernisation process in East Asia tends to be understood in terms of the introduction of certain norms, ideas, and institutions from the West, and how these have combined with indigenous notions and cultural norms. In this process of Westernisation, various debates and controversies have arisen around those newly introduced notions. For example, concepts such as democracy, civil society, nationhood, citizenship, and human rights have been debated in the process of their implementation in East Asia. Such debates have usually revolved around whether those Western concepts are completely alien, new and external to the society in which they are being introduced and implemented, or whether there already exist equivalent and internal notions within the society concerned. Perhaps the most famous example was the debate between Li Kwan Yew and Kim Dae-Jung on the possibility of Asian democracy, which appeared on the pages of Foreign Affairs in 1994.² The former Singaporean Prime Minister, Li Kwan Yew, denied the possibility of Western-style democracy in Asia; instead, he advocated East Asian culture and praised the Asian tradition of family-centred social life. On the contrary, Kim Dae Jung claimed that a strong democratic tradition already existed in Asian culture, which meant that it would be possible to realise democracy without necessarily contradicting East Asian tradition.

This brings the debate back to the question of whether or not democracy can be considered a universal notion, and this involves the question of the relationship between universalism and particularism. In other words, Western notions such as democracy, civil society, and human rights have been given the status of universal concepts and what matters is whether such universal values are compatible with the culture of a particular society or not.

Following on from the process of political democratisation, a debate on multiculturalism arose in South Korea in the 2000s that appears to repeat the relationship between universalism and particularism, which had been seen in the discussion of democracy. However, it did not follow exactly the same formulation. The most remarkable difference is that culture itself has become the central issue in constructing the discourse of multiculturalism, rather than being viewed as a dependent factor. The conceptual predicament inherent in any discussion of multiculturalism lies in the fact that multiculturalism is premised on the idea that every culture is unique and different, and that these cultural differences must be respected and maintained, rather than integrated into the dominant culture.³

In South Korea, the confusion which has arisen around multiculturalism comes from the perception that South Korea is a mono-ethnic nation that has maintained a mono-culture (although this is condemned as 'pure blood ideology' or 'mono-ethnic nationalism' by the promoters of multiculturalism). According to this perception,

foreign nationals currently residing in South Korea are not deemed to have formed significant ethnic groups, and so the plurality of cultures which forms the basis for the implementation of multiculturalism does not exist. One interesting response to such a seemingly predicated condition for multiculturalism was the cultivation of multicultures (*tamunhwa*)⁴ based on families. Thus, multiculturalism has come to be articulated in South Korea through families, rather than through ethnic communities or individuals, and this particular aspect makes the South Korean case quite different from the experience of multiculturalism in Western societies.

In this paper, I will provide a brief overview of the background to the emergence of multiculturalism in South Korea and will then proceed to discuss how multiculturalism has been adapted from Western models and used differently in South Korea, highlighting the legislation of some welfare measures for multicultural families.

The Emergence of Multicultural Governance: Why Multicultural Families?

Regardless of one's opinions about the meaning of multiculturalism and how it can be put into practice, it is impossible to deny that the population of foreign nationals has been increasing in South Korea. It is also widely accepted that this trend is unlikely to be reversed in the future. This demographic change provides a solid basis for the argument that multiculturalism is the inevitable route for South Korea to take in dealing with its foreign immigrants.

Demographic statistics in terms of nationality first became available in 2009 when the Ministry of Public Administration and Security conducted a survey based on data from the registration of foreign nationals and family relationship registrations. According to these statistics and other sources, the number of foreign nationals has been increasing year by year, and had exceeded the symbolically significant level of one million in 2007. The figure for 2010 provided by the Ministry of Justice shows that the total number of foreign nationals was 1.25 million, comprising 2.48 per cent of the whole population. In addition to these foreign national migrants, the total number of migrants from foreign countries was estimated at 1.49 million, including those who had adopted Korean nationality (about 100,000), marriage migrants' children (about 122,000) and North Korean refugees (about 20,000). However, there are slight differences in the numbers of 'foreigners', depending on which the Ministry provides the data and on how the category of 'foreigners' is defined in the survey. Thus, the Ministry of Public Administration and Security devised the notion of 'foreign residents' [의국인주민, oegug-in chumin].

While the large number proves the significant presence of foreign nationals, the details and the heterogeneous composition of these foreign nationals raises profound questions about the meaning of multiculturalism. For example, foreign nationals are divided into various categories, such as foreign professionals, students, labourers, and female marriage migrants. This diverse composition is the main source of the tension and confusion which surrounds public discourses on multiculturalism in South Korea. For example, it is doubtful whether the framework of multiculturalism is adequate to account for overseas Koreans from China [Chosŏn-jok] and the former Soviet Union

[Koryŏ saram], as they are generally considered to be too similar to South Koreans to be viewed as a different cultural group.⁷

In addition to changes in demographic composition, the rise of multiculturalism as a social norm has led to the requirement for the South Korean Government to meet international standards on human rights in their treatment of foreign nationals and for NGOs to recognise and seek to improve the basic rights of guest workers and marriage migrants. These social movements have taken various approaches in addressing social issues connected with the working and living conditions of foreign nationals, protesting against discrimination and prejudice endorsed and neglected by the Government, but sometimes these movements had been working in collaboration with the Government, in particular, during the Rho Moo-hyun administration (2003-7). Indeed, the word 'multi-culture' [tamunhwa] is a term which South Korean NGOs adopted as a central tenet in tackling legal and social problems in the treatment of foreign nationals.⁸ However, in terms of policy and the pursuit of multiculturalism at the state level, the watershed years for the development of multiculturalism were 2006 and 2008.

In 2006, when Hines Ward, a Korean-American football hero born to a Korean mother and an African-American father, visited South Korea, his visit kindled public interest in multicultural issues, especially towards mixed-race children. Coinciding with the visit of Hines Ward, early engagement with multiculturalism during the later period of the Roh government should also be viewed against the background of an explicit and outspoken racism in the post-Korean War period in South Korea towards mixed-blood children (*honhyŏr-a*), who were the result of sexual relations between Korean women and American GIs. The legal status of such children was complicated by the fact that the newly founded Syngman Rhee (Yi Sŭngman, 1875-1965) government, basing its policy on patriarchal kinship laws, did not grant citizenship to mixed-blood children if their biological fathers were not citizens of the Republic of Korea, while the US Government denied citizenship to those children who moved to America as their citizenship laws were more concerned with the biological mother's citizenship.

Therefore, civil movements to promote the rights of foreign nationals and to rectify vernacular racism towards mixed-blood children both preceded along the current of the 'South Korean version of multiculturalism' [Han'guk-chŏk tamunhwa chuŭi] and the resulting legislation in 2008 which recognised families as a legal entity which were composed of Korean and non-Korean parents and their children.

However, bringing multicultural families into the focus of governmental policies dealing with problems raised by foreign nationals only came about after consultation with various academic groups and special committees in the late period of the Roh government. As a first step, the Roh government focused on the mixed-blood offspring of Korean and other nationals, and children born in Korea who were adopted overseas so that the state could do something for these children such as obtaining South Korean citizenship or enabling less restricted entrance to South Korea. Indeed, perhaps thanks to the activity of the Government and NGOs in South Korea, *honhyŏr-a*, the Korean term for mixed-blood, has now become a taboo word not only in the public sphere but also in general society. Instead, the word for 'multi-

culture' [tamunhwa] has become the standard way to refer to the children born from racially mixed couples. However, even if the racist connotation has been expunged with the change of the wording, it is hardly possible to conclude that the term 'multiculture' has become neutral. As I shall go on to discuss, the introduction of multiculturalism and the expansion and development of multicultural policies in South Korea has begun to create a new social category and a new form of stigmatisation.

In a wider context, the emergence of the multiculturalist agenda has been in response to the recommendations of international organisations overseeing standards for various human rights issues, including the status of migrants in South Korea. ¹¹ In 2006, the Government organised a special committee directly under the Presidential Committee of the Northeast Asian Period to investigate and produce special reports on policy direction concerning foreign nationals. During this speculative phase regarding issues touching on multiculturalism, the Government initially did not regard multiculturalism as the key agenda, but instead took a wide-ranging approach addressing issues associated with various groups of foreign nationals including marriage migrants, guest workers, and overseas Koreans, as shown by the reports from academic researchers. ¹² Based on the commissioned research and consultations, the Government introduced the 'Law on the Status of Foreign Nationals' in 2006, the 'Law on the Support for Multicultural Families' in 2007, and amended the 'Law on the Employment of Foreign Nationals' in 2007 which allowed overseas Koreans to work for five years as visitors.

The question then arises of how and why families have become the central focus of Government policies for multiculturalism in South Korea? South Korean researchers working on the issue of multiculturalism tend to conclude that multiculturalist policies focusing on families are the result of compromises on two levels. Firstly, at the level of policy-making in the bureaucratic system, several ministries - such as the Ministries of Justice, Foreign Affairs and Trade, Gender Equality and Family, Education, Public Administration and Security, and Health and Welfare - are involved in the regulations and policies concerning foreign nationals with a focus on families. In contrast, issues concerning guest workers tend to be restricted to fewer ministries. Thus, focussing on multicultural families is helpful in the sense that it engages with more ministries. Therefore, South Korean researchers consider that multicultural policy is partly the result of a compromise among the competing bureaucratic organisations seeking to take the initiative in the burgeoning multicultural agenda. ¹³

Secondly, family-centred multiculturalist policies were designed to avert the risk of potential complaints from the general public, which might have arisen if individual migrant workers had been seen as receiving special treatment and benefits from multicultural policies. In this context, the predicated position of marriage migrant women is emphasised in the rhetoric of family-centred multiculturalism, drawing on the demographic crisis in the population due to the low birth rate. Thus, the women who come to South Korea for the purpose of marriage are considered to carry the dual images of both saviours and victims. On the one hand, they are viewed as filling the gap in the marriage market by becoming partners of men who find it hard to obtain a co-national spouse. An interesting aspect of the migration of these women to South

Korea is that these marriages are often encouraged and systematically arranged by the state, especially by local authorities in rural areas. ¹⁴ In these areas, where the majority of the population is made up of elderly people and their bachelor sons who are unable to attract contemporary South Korean women as marriage partners, marriage migrants are viewed as saviours of a crumbling rural life, who also help to prop up the declining birth rate. The decreasing population in rural areas and the lack of young women willing to become wives and carers in rural families symbolises the crisis of the whole nation struggling with its low reproduction rate.

This image of marriage migrant women as saviours is combined with an appreciation of their vulnerable position in an alien country. Even before coming to South Korea, important social issues associated with the marriage process have been highlighted in the media such as the hasty process of meeting, dating, engagement, and the wedding (all of this may take place in the space of just a few days), and it reminds people of the practice of 'buying brides' from poor countries. Furthermore, after coming to South Korea as brides, domestic violence and abuse by in-laws and husbands has become a social issue inviting public intervention. More directly related to the multicultural agenda, language barriers and the lack of cultural knowledge are viewed as problems which must be addressed by multiculturalist policies for these women in order to help them to settle in and raise their children.

Lastly and most importantly, marriage migrant women are the only migrant group legally allowed to settle permanently in South Korea. Other guest workers are only allowed to reside temporarily for a maximum period of up to 4 years and 10 months, which prevents them from fulfilling the necessary requirement of 5 years' lawful residency for permanent settlement. The institutionalisation of multiculturalism enables the government to intervene in domestic life, giving a helping hand to marriage migrant women to enable them to perform their roles as wives and mothers, in which they would conventionally have been helped and supervised by their own mothers and mothers-in-law. However, the implication of the governance on cultural difference by the law and institutionalised welfare policies extends beyond the domain of multicultural families, and it can be viewed as a process for the expansion of the neo-liberal welfare state in South Korea.

As Song has argued, the South Korean state selects the beneficiaries of state welfare according to the criteria of 'worthiness' and this criteria can create social segregation, which seems to be the case for multicultural welfare policies. ¹⁷ In this context, the criteria for the worthiness for state welfare benefits is justified by the state in connection with the ideology for the reproduction of the family. Without regard to whether the beneficiaries of the state welfare were single mothers or breadwinning men in unemployment, 'the normative family ideology' is mobilised as the reason for state support or neglect, in effect enabling the state to evade public demands for wider and more universal forms of welfare policies. ¹⁸ This South Korean neo-liberal governance based on the family ideology described by Song is replicated in the policy making of the multiculturalist agenda. ¹⁹

The Inherent Limits of Family-centred Multiculturalism in South Korea

Paradoxically, as the policies outlined above began to be implemented, the circumstantial rationale that motivated the Government to promote family-centred multiculturalism has worked in such a way as to reveal its inherent limitations. In this section, I will examine some critiques which highlight the limitations of the current South Korean version of family-centred multiculturalism and I will further argue that these limitations may provide the actors concerned with multiculturalism with a social field which is still undefined and flexible and which can be shaped by the actors' practices and other socio-cultural contexts in the future.

The most common critique of the current form of South Korean multiculturalism points out its patriarchal aspects in defining the legal status of the marriage migrant women, who have to be persons attached to their spouse within the family structure. There are interlinked laws, creating different legal persons, which sometimes create contradictions between the laws. For example, the notion of a marriage migrant is introduced in the 'Act on the Treatment of Foreigners in Korea', and is then utilised in the 'Multicultural Family Support Act', so that a 'multicultural family' is defined as a 'family composed of a Korean national from birth and a marriage migrant [결혼이민자, kyŏrhon iminja]'. While naturalised marriage migrants are still included in the category of marriage migrants in the 'Multicultural Family Support Act', the 'Act on the Treatment of Foreigners in Korea' presents some contradictions, as it considers marriage migrants as 'foreigners', despite their naturalisation. This reveals the inherent prejudice of the policy makers and presents the discrepancy between legal and socio-cultural citizenship.

As I have shown in the previous section, the right of residence for marriage migrant women is not granted on an individual basis until naturalisation, but is defined in relationship to their spouse or offspring, thus placing these women in a vulnerable position. Some matters regarding the residency rights of marriage migrants are dealt with by more than one single law or regulation, thereby causing some confusion both in concept and practice. In other words, there is a categorical discrepancy concerning the legal status of persons in multicultural policies as defined by the relevant legislation and rules.

Secondly, family-centred multicultural policies are oriented towards integration and incorporation, rather than endeavouring to foster and maintain the migrants' cultural differences. This tendency has become prevalent following the wide-scale opening of Multicultural Family Support Centres in local areas and the introduction of various kinds of programmes at local centres. The programmes provided in the local support centres usually focus on the marriage migrants' successful adaptation and integration into South Korean society, highlighting their caring roles as wives and mothers. For example, marriage migrant women learn the Korean language, have Korean cooking lessons, and receive guidance on raising children and supporting them at school. Local centres are run by civil organisations commissioned by the local administrations and they are monitored within the administrational hierarchy, as the contract is temporary and is renewed based on monitoring and evaluation. In the same way as there is competition among bureaucrats in the central government to make an impact and secure resources around the multiculturalist agenda, local administrations also compete with each other for funding from the central government. Therefore,

local centres are urged to take into account Government policies, which are designed to integrate and incorporate marriage migrants into South Korean society.

Thirdly, a concern over the risk of stigmatisation is emerging as the multiculturalist policies develop and expand, especially in regard to the children of 'multicultural families'. Since marriage migrants began to come to South Korea, the number of children born to marriage migrants has been increasing, and now many of these children have reached school age. According to the latest survey by the Ministry of Public Administration and Security, it is reported that there were 168,583 children from marriages between Korean nationals and marriage migrants in 2012.²⁴ As I discussed earlier, multiculturalism is a good agenda for Government departments and administrations to engage with, and the children from multicultural family are no exception to this. The Ministry of Education has joined the multiculturalist whirl and has provided policy guidelines for teachers and educational administrators. These guidelines are aimed not only at children from multicultural families, but at all children. Such multicultural education usually involves a change of curriculum so that teaching and learning is more sensitive towards racially different children. The most famous educational episode was the change of reference to peach colour, which used to be called 'skin colour' [sal saek]. In the early 2000s, civil activists working for the rights of migrant workers ran a campaign to change the name of peach colour from sal saek to 'apricot colour' [salgu saek], as it gives the skin colour of ethnic Koreans universal status. The campaign succeeded, leading the National Human Rights Commission of the Republic of Korea to order the Korean Agency for Technology and Standards to change the name of the colour in question. This campaign shows that the multiculturalism promoted by civil activists was a counter-concept in an effort to rectify racist prejudice.

However, there has been a subtle shift in educational direction since the legislation of the 'Multicultural Family Support Act'. As shown in the change of the term used to refer to skin colour, before the state took the initiative in the multicultural agenda, the focus was placed on the moral education and enlightenment of school children. Some of the curriculum for multicultural education tends to victimise multicultural families and to make them 'the other', and also special support for children from multicultural families tends to reinforce their otherness. Furthermore, the expansion of state-led multiculturalism created social spaces, in particular in cyber space, where xenophobic discourses and anti-migration campaigns are proliferating, opposing the Government's multicultural policies.

Becoming Multicultural Han'gug-in and the Agency of Marriage Migrants

The inherent limits of multiculturalism in South Korea, which I examined in the previous section, have led many scholars and civil rights activists to make critiques of state-led multiculturalism. Scholars who advocate multicultural ideals denounce South Korean multiculturalism as nothing other than an assimilation policy, which does not recognise the rights of minorities. They point out that state-led multiculturalism is completely different from the purported ideals of multiculturalism - the achievement of justice and the prevention of discrimination based on cultural differences, and the respect for and fostering of cultural differences as proposed by theorists of recognition-based multiculturalism.

The anthropologist Verena Stockle noted in her study of European society that culture can be mobilised as a guise for racist discourse. She observed that Europeans who used to say, 'We can't live together with migrants due to our racial difference', changed their racist narrative by replacing 'racial difference' with 'cultural difference' in the emergence of multiculturalism. She referred to this argument which attributes cultural difference to human nature as 'cultural fundamentalism'. Her insight is crucial in the sense that multiculturalism may be viewed as being in a continuum with racism, despite the fact that the focus has shifted from natural and biological human traits to arguments based on national belonging and shared cultural distinctiveness in justifying exclusion and discrimination.

Similarly, Han Kyung Koo has argued that 'many advocates of multiculturalism in Korea are nationalists who view multiculturalism as a survival strategy for the nationstate'. 29 He points out the illusion policy makers hold in regards to their understanding of the constructed opposition between the 'ethnic homogeneity' of Korea and multiculturalism; he claims that they are 'engaging the wrong enemy', as Koreans traditionally did not discriminate against outsiders or strangers based on 'blood', but on 'culture'. Through an historical overview of the treatment of the Chinese, the Jurchens, and the Japanese, he traces the criteria for the acceptance of or discrimination against aliens and immigrants during the pre-modern period (the Koryŏ and Chosŏn eras – 918-1910). According to his study, the criteria lay in the notion of 'intention to be civilised' or of cultural adaptation, which was based on the very 'sense of cultural distinctiveness and superiority' of the Korean nation.³⁰ In other words, prejudice and discrimination towards alien people derived from the very notion of civilisation, rather than blood-based ethnic homogeneity. Therefore, Han locates contemporary state-led multiculturalism in South Korea in a continuum with the civilisation-based discrimination and prejudice embedded in traditional Korean society, and questions the conventional understanding which tends to view ethnic homogeneity as the main obstacle to multiculturalism.³¹

Therefore, multiculturalism may be viewed as fundamentally parochial in nature, as indicated by references to the 'American way of life', 'British way of life', 'Canadian way of life', 'Australian way of life', etc.; it allows for diversity, but only within limits set by the national way of life. Indeed, Sŭngwan Han, drawing on the work of Will Kymlicka and Keith Banting, has suggested that liberal nationalism and multiculturalism may not be mutually exclusive, but may be complementary in a benign sense.³² Indeed, South Korea may be considered to be on the verge of creating the 'Korean way of life' in a multicultural sense and the contents of this expansive notion of 'Korea' or *Han'guk* (South Korea) is not necessarily an ethnic notion. Although I have discussed the limits, the selective nature of multicultural policies, and the contradictions among the laws related to multiculturalism, it is hard to deny that multiculturalism has provided marriage migrant women with a new social field where social actors engage with the multicultural agenda, albeit not always in the way that the state initially intended. As Kim Minjung has shown in her research on the lives of families formed by international marriage, not only marriage migrants but also their children regard themselves as Han'gug-in and this perception and their practices are already changing the ethnic notion of *Han'gug-in* - expanding it to become a more culturally inclusive notion, based on legal citizenship.³³ They live as various

Han'gug-in within families, and this is why state-led multiculturalism based on families is so effective in South Korea, despite its inherent limits and the criticisms which have been leveled against it.

Endnotes

¹ William A. Callahan, 'Comparing the Discourse of Popular Politics in Korea and China: From Civil Society to Social Movements', pp. 278.

He rightly points out that the question is not whether there are 'authentic' concepts such as civil society in East Asia, 'but how different groups are using this [kind of] concept ... in very political ways'.

² See Kim, Dae Jung. 1994. 'Is Culture Destiny? The Myth of Asia's Anti-Democratic Values'. See also Lee, Kuan Yew, 'Culture Is Destiny: A Conversation with Lee Kuan Yew'.

The household registration law was abolished and changed to a law concerning family relationships in 2007, with the amendment taking effect from 2008. With the change in the law, women were allowed to pass on their surnames to their children, whereas this had been prohibited under the old law. The change also denoted that the legal unity for family relationship was now the individual, whereas previously the

³ Ernesto Laclau, 'Universalism, Particularism, and the Question of Identity.'

⁴ Though the transliteration of the Korean word, 'multi-culture' (*tamunhwa*), can be confused with another Korean word 'other culture' (*ta'munhwa*), I use the McCune-Reischauer transliteration system for coherence in the transliteration used in this paper.

⁵ Kim, Sŏnghoe, 'Han'gug-ŭi imin·tamunhwa t'onghap chŏngch'aek hyŏnhwanggwa munje-jŏm', [The Status and Problems of the Unified Policy of Korean Immigrant Multiculturalism], p. 18.

⁶ Ibid. p. 19. This cites the Policy Plan for Foreign Nationals by the Ministry of Justice.

⁷ I will not discuss the position of these overseas Koreans from the former socialist bloc in this paper.

⁸ Kim, Chŏngsŏn, 'Simin'gwŏn ŏpnŭn pokchi chŏngch'aeg-ŭrosŏ 'Han'guk-sik' tamunhwajuŭi-e taehan pip'an-jŏk koch'al' [Critical Research on the Non-citizenship Welfare Policy of Korean-style Multiculturalism], pp. 216-220.

⁹ Chŏn, Kyŏngsu, et.al., Introduction to *Honhyŏr-esŏ Tamunhwaro*.

¹⁰ Park, Bongsoo. 'Intimate Encounters, Racial Frontiers: Stateless GI Babies in South Korea and the United States, 1953-1965', pp. 29-32.

household represented by the male head was viewed as the only meaningful legal entity in kinship law. However, well before this amendment, in 1997 there was a small change in the naturalisation law which allowed children of Korean mothers with fathers of foreign origin to be registered as dependents of the mother. See Kwak, Paehŭi. 'Pumo Yanggye hyŏlt'ong chu'ŭi-nŭn yeoe-ga anin wŏnch'ik' [Bilateral Succession is not an Exception, but a Principle].

- ¹¹ The most relevant international policy guideline for the multicultural agenda in South Korea is the Declaration of Cultural Rights and Diversity by UNESCO in 2005.
- ¹² Two reports which came out from this commissioned work. See Kim, Hye-soon, et al., *Tongbuk A 'tamunhwa' sidae Han' guk sahoe-ŭi pyŏnhwa-wa t'onghap* [Change and Integration in Korean Society in the Era of Northeast Asian Multiculturalism]. See also Kim, Hye-soon, et al, *Han' guk-chŏk tamunhwajuŭi-ŭi iron-hwa* [The Theory of a Korean-style Multiculturalism].
- See Kim, Chŏng-sŏn, 'Simin'gwŏn ŏpnŭn pokchi chŏngch'aeg-ŭrosŏ 'Han'guk-sik' tamunhwajuŭi-e taehan pip'an-jŏk koch'al' [Critical Research on the Non-citizenship Welfare Policy of Korean-style Multiculturalism]. See also Hwang, Chŏngmi, 'Kajok-kwa kukkyŏng Han'guk tamunhwa chŏngch'aeg-ŭi chŏn'gae-gwa chŏng-e nat'anan kajok ajenda koch'al' [Boundaries and the Family Research on the Family Agenda Arising from the Development and Affection of the Policy of Korean Multiculturalism].
- ¹⁴ Kim, Chŏng-sŏn, op.cit.; Caren Freeman, 'Introduction' and Chapter 6 to *Making and Faking Kinship: Marriage and Labor Migration Between China and South Korea*.
- This is a popular perception of marriage migrant women in South Korea. For a critical review of this perception, see Sŏ, Tŏkhŭi, 'Han'guk tamunhwa yŏn'gu-ŭi t'ŭkching-gwa han'gye: kukche kyŏrhon-i chuyŏ-sŏng, kŭrigo kŭ chanyŏ-e kwanhan chilchŏk yŏn'gur-ŭl chungsim-ŭro' [The Limitations and Characteristics of Research on Korean Multiculturalism: With Special Emphasis on Qualitative Research on the Children (of Multicultural Families)], pp. 5–32.
- ¹⁶ Some male guest workers get married to local Korean women and settle in South Korea permanently, changing their status from migrant workers to marriage migrants. However, the number of these men is much smaller than the women who come to South Korea in order to get married.
- ¹⁷ Song, Jesook, 'Family Breakdown and Invisible Homeless Women: Neoliberal Governance During the Asian Debt Crisis in South Korea, 1997-2001', pp. 49-50.
- ¹⁸ For example, 'Social service tailored to life cycles for multicultural family support' is a programme run by the Ministry of Gender Equality and the Family and this policy wording ('tailored to life cycles'), which was initially used for multicultural family support, has been used as a representative catchphrase during the election campaign

of President Park Geun-hye in 2012. Whether this pilot welfare programme, initially aimed at multicultural families, will remain a selective and limited one or become the basis for the expansion of a wider and more general welfare programme seems to be highly dependent on the route the Park government chooses to take and the level of engagement by the civil sector with this issue.

¹⁹ Song, op. cit., pp. 47-51.

With the amendment of the nationality law in 1997, the regulation concerning patrilineal descent for naturalisation changed to a cognatic one. Reflecting this change, the Multicultural Family Support Act is written with gender-neutral terms. However, given that marriage migrants are almost all women, the use of gender-neutral terms does not change the patriarchal aspect in the naturalization process for women. The number of marriage migrants among 'foreign residents [외국인주민]' was 220,687 in 2012 and nearly 90 per cent of these marriage migrants were women. See Ministry of Public Administration and Security, 2012 nyŏn chibang chach'i tanch'e oegug-in hyŏnhwang chosa kyŏlkwa [2012 Survey Report of the Condition of Foreigners in Regional Municipal Entities].

Hwang Chŏngmi discusses the ambiguity of the notion of 'marriage migrants', citing Seol et al. (2009) in her paper 'Kajok-kwa kukkyŏng', pp. 155-156. She points out that there is a discrepancy concerning the notion of 'marriage migrants', depending on the laws applied. For example, marriage migrants are foreign nationals according to the 'Basic Law on the Treatment of Foreign Nationals in Korea', but naturalised marriage migrants are also considered to be 'marriage migrants'. Thus, this discrepancy in the definition of marriage migrants was addressed by including natutralised persons into the category of marriage migrants in the 'Multicultural Family Support Act'.

²² Ibid, p. 156.

²³ In 2011, there were 210 Multicultural Family Support Centres operating in South Korea, according to Kim, Chŏngsŏn, op. cit., p. 233.

²⁴ Ministry of Public Administration and Security, op. cit. Even if these children are Korean nationals from birth according to the Nationality Law, the Ministry of Public Administration and Security views these children as belonging to 'foreign residents'.

Seol, Dong-hoon et. al., *Tamunhwa kajog-ŭi chungjanggi chŏnmang mit taech'aek yŏn'gu: Tamunhwa kajog-ŭi changnae in'gu ch'ugye mit sahoe kyŏngje-jŏk hyogwa punsŏg-ŭl chungsim-ŭro* [Research on Medium and Long-term Prospects of the Multicultural Family and Counter Measures: With a Special Emphasis on the Economic Benefits and the Prospective Population Estimates of the Multicultural Family].

²⁶ O, Kyŏngsŏk, 'Ŏttŏn tamunhwa chuŭi in'ga?: tamunhwa sahoe nonŭi-e kwanhan

pip'an-chŏk chomang' [What Multiculturalism is it? Critical Perspectives on the Theory of a Multicultural Society], pp. 21-56.

- Nancy Fraser, 'From Redistribution to Recognition? Dilemmas of Justice in a 'Post-Socialist' Age', pp. 68–93.
- ²⁸ Verena Stolcke, 'Talking Culture: New Boundaries, New Rhetoric of Exclusion in Europe', pp. 1-24.
- Han, Kyung-Koo, 'The Archaeology of the Ethnically Homogeneous Nation-State and Multiculturalism in Korea', p. 11.
 Ibid, p. 16.
- ³¹ Ibid, pp. 25-28.
- Han, Sŭngwan (2009), and Kymlicka and Banting (2006) critically examine the claim that multicultural policies eroded the welfare state and argue that there is no evidence for such a claim, taking examples from several countries. In doing so, they highlight the more inclusive effect of multicultural policies.
- Kim, Minjung, 'Kukche kyŏrhon kajok-kwa chanyŏ-ŭi sŏngjang: yŏrŏ chongnyu-ŭi Han'gugin-i kajog-ŭro saragagi' [Various Korean Families: International Marriage Families and the Development of Their Children], pp. 60, 85.

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South Korea's New Songdo City: From Neo-liberal Globalisation to the Twenty-first Century Green Economy

Glen David Kuecker

This essay explores the Republic of Korea's transition from the embrace of neo-liberal globalisation to a commitment toward building a twenty-first century green economy. It explores South Korea's place within twenty-first century global challenges, the importance of twenty-first century urbanisation for understanding those challenges, the conceptualization and building of New Songdo City, and a critical analysis of the New Songdo City project. It argues that New Songdo City represents a precursor to the green economy commitment, and is a hybrid of South Korea's embrace of globalisation and an attempt at building a sustainable and resilient city. The essay shows that New Songdo City's hybridity resulted in its becoming an exclusive boutique city that rejects the right to the city, and raises questions about equity and equality as we contend with the challenges of the twenty-first century.

Key words: New Sangdo City, Eco-city, Green Economy, Globalization, Climate Change.

South Korea's New Songdo City: From Neo-liberal Globalisation to the Twenty-first Century Green Economy

Entering the Twenty-first Century

In August 2008, President Lee Myung-bak used the opportunity of the sixtieth anniversary of the founding of the Republic of Korea to announce that the country would start the transition to a low-carbon, green growth future that would be at the centre of economic policy to 2050. This measure was followed by the January 2009 Presidential announcement of the 'Green New Deal', a US\$38.5 billion investment in major infrastructure projects, such as the Four Major Rivers Restoration Project. July 2009, the Government unveiled its National Strategy for Green Growth up to 2050, which focussed on mitigating climate change. The Government also implemented a five-year plan to guide implementation of the green economy. Praising South Korea, a United Nations Environment Programme report states the green economy vision 'represents a major attempt to fundamentally transform the country's growth paradigm from 'quantitative growth' to low-carbon, 'qualitative growth". The bold policy initiative positions South Korea as a global leader in confronting the major challenges of the twenty-first century. It also marks an important moment of transition from the global community's recent embrace of neoliberal globalisation to creating the green economy of the future.

South Korea's green economy commitment can be viewed as part of an arc of deep change within the nation's recent history. Within a 50-year period, South Korea first made the successful leap to a modern, industrialised economy, to an International Monetary Fund-directed programme of structural adjustment and integration into neoliberal globalization, to a radically different paradigm, the twenty-first century's green South Korea's pace of change at the start of the twenty-first century has quickened, especially as mounting global crises have created both risks and opportunities for policy action. Within two decades, South Korea had shifted national focus from building Free Economic Zones (FEZs) to experiments with green policies, before making the green economy commitment. This essay explores South Korea's transition by considering South Korea's place within twenty-first century global challenges, the importance of urbanisation for understanding those challenges, the conceptualisation and building of New Songdo City, and a critical analysis of the New Songdo City project. It argues that New Songdo City represents a precursor to the green economy commitment, and is a hybrid of South Korea's embrace of globalisation and an attempt at building a sustainable and resilient city. shows that New Songdo City's hybridity resulted in its becoming an exclusive boutique city that rejects the right to the city, and raises questions about equity and equality as we contend with the challenges of the twenty-first century.

South Korea and the Perfect Storm

Social science considerations of South Korea's place in the world tend to remain rooted within a globalisation studies paradigm. It constructs South Korea as a successful nation, one that has made the transition to being an important nation within the international system. Globalisation, from this perspective, has benefitted South Korea, a conclusion that suggests South Korea has a bright future, especially as a leader within the cutting-edge sectors of globalisation, such as electronics and biotechnology. The globalisation paradigm also leads scholars to emphasize cultural issues, especially the vexing questions about the essentialness of Korean identity.

Globalisation, however, is largely a symptom, although a very important one, within a much larger and far more important process, one that this essay defines from a complexity perspective. This process is system collapse. Looking to the decades ahead, South Korea will join the rest of humanity in facing a 'perfect storm' of unprecedented challenges that are large scale, exceedingly complex, interconnected and are all happening at the same time. These challenges include: mitigating the impacts of climate change; transitioning to post-hydrocarbon energy, production and food systems; easing food insecurity by doubling global food production by 2050; facing global pandemics; fixing deep structural crises in global capitalism; coping with an additional two billion people by 2050; adjusting to a world defined by two-thirds of humanity living in cities; contending with resource scarcities; and handling severe stresses to critical ecological systems. The South Korean Government's embrace of the green economy explicitly recognizes the reality of the perfect storm.

From a complexity perspective, South Korea is positioned within the late conservation phase of a complex system's adaptive cycle (see Diagram 1). The late conservation phase

Diagram 1: Complex Adaptive System Cycle



Source: Adapted from Gunderson and Holling, 2002: 34.

is defined by an extreme state of overshoot, where the system is in a relentless pursuit of efficiency within its rule-set, here understood to be the political economy of neoliberal globalisation. South Korea is also part of a major geographic transition in the core of the global capitalist system from its twenty-first century centre in the United States toward a twenty-first century Asian centre. As part of the emerging core,

South Korea is positioned within a highly unstable, oscillating global system, one that

is either in or is soon approaching a critical threshold or tipping point, into the release phase of the modern system. Understanding the positioning within this tipping point and the transition to the release phase is the key for understanding South Korea's future.

Overshoot means South Korea is currently past a threshold of sustainability, defined as a scenario in which present forms of societal organisation result in an extreme disequilibrium between sources and sinks, whereby the disequilibrium compromises present and future capacities for reproduction. Positive feedback loops within South Korea's complex system send South Koreans signals that they should relentlessly pursue efficiency within the neo-liberal globalisation rule-set, while constructing significant economic, political, social, and cultural signals that prevent it from embracing policies and actions that would cause system stabilizing negative feedback loops. Lacking a system operating by negative feedback loops, South Korea, along with the rest of the global community, can drive itself to collapse. The Government's green economy commitment, however, marks an important paradigm shift, suggestive of what Meadows, Meadows, and Randers, in their *Limits to Growth*, call the 'sustainability revolution'. It constitutes a national-level attempt at creating negative feedback loops that will be necessary for weathering the perfect storm of catastrophic system collapse.

The Urban Century

According to many observers, humanity has entered an urban century. We are on course to extend the global urban population to two-thirds of humanity by 2030, a level of city dwelling unprecedented in human experience. Of course, that two-thirds will be part of a growing global population, which is on-track for nine billion people by 2050, which may grow to ten billion by the end of the twenty-first century. These demographic realities are a driving force within the perfect storm's multiple challenges. We know that the majority of this urban transition will take place in Africa, followed by Asia. South Korea has largely completed its process of transformation, with 83 per cent of its population now settled in urban spaces. While it is relieved of the demographic shift, South Korea remains within the larger global problematic of how we go about making our urban spaces both sustainable and resilient. The UN Habitat's *Cities and Climate Change* states the challenge in stark terms:

'As the world enters the second decade in the new millennium, humanity faces a very dangerous threat. Fuelled by two powerful human-induced forces that have been unleashed by development and manipulation of the environment in the industrial age, the effects of urbanization and climate change are converging in dangerous ways which threaten to have unprecedented negative impacts upon quality of life, and economic and social stability'.⁸

Any approach to bringing humanity back from collapse by creating negative feedback loops will require addressing the combined forces of urbanisation and climate change. Newman, Beatley, and Boyer's *Resilient Cities*, echoes this conclusion, but adds energy to the list of challenges to tackle.⁹

Given the dismal state of our ability to address the existential threat of climate change, as well as the current trend toward a relentless exploitation of proven reserves of hydrocarbon based energy, ¹⁰ and the dramatic boom in non-conventional hydrocarbons, shale oil and natural gas hydraulic fracturing, ¹¹ it appears our ability to realise substantial negative feedback loops is severely compromised. Led by the United Nations, as well as local and regional governments, humanity is increasingly turning to mitigation and adaptation as the best path forward. These efforts focus on significantly enhancing disaster risk reduction (DRR), especially through the United Nation's Hyogo Framework¹² and the construction of either sustainable or resilient cities. ¹³

In *Resilient Cities*, Newman, Beatly, and Boyer present four potential future scenarios for the world's cities.¹⁴ The first is collapse, where cities experience a radical loss of complexity accompanied by significant population decline. The second is the 'ruralized city', in which modern cities, deeply disconnected from their bioregions, 'return to the garden', by adapting a 'semi-rural lifestyle'. Cities will become more self-sufficient, especially in the area of food production. They will shift toward an eco-village model, similar to England's 'transition towns', that are defined by smaller scale, lesser density, lower consumption, and slower lifestyles. scenario is the divided city, where class defines the outcome. The rich build enclaves within existing cities, or in new spaces that are isolated, defended, and cordoned off from the perfect storm. These enclaves will be opulent boutique cities where the very best of technology is deployed in an increasingly futile effort at holding back the discomforting effects of collapse. The majority of the population is left outside the gates in a *Mad Max*, Hobbesian dystopia. The divided city will require increasing levels of militarisation in order to keep the masses and effects of catastrophe out. These walled cities, following Mike Davis' analysis in Ecology of *Fear*, are very much in play. ¹⁵

Finally, they present resilient cities as an outcome. These cities follow the eco-city model of the divided city, but provide it for all the citizens. To realise this desirable outcome Newman, Beatly, and Boyer show the importance of technological The transition to a resilient city is highly dependent on the so-called 'Sixth Wave of Industrialism', which they describe as the 'complete reorientation of industrial society to a different set of technologies and rethinking of how we organize cities'. 16 The Sixth Wave consists of sustainability, radical resource productivity, whole system design, biomimicry, green chemistry, industrial ecology, renewable energy, and green nanotechnology. The Sixth Wave corresponds to the sustainability revolution called for by Meadows, Meadows, and Randers in *Limits to Growth*. ¹⁷ is the convergence of Castells's 'information age' with sustainable, eco-urban design. ¹⁸ Resilient cities consist of renewable energy - carbon neutral, distributed (decentralized in key infrastructures like energy, water, and waste), photosynthetic, eco-efficient (closed-loop system/recycling beyond the bin) and place basedbioregional, and sustainable transport.

One of the leading ways humanity has approached the problem of twenty-first century urbanism is through the eco-city concept. Richard Register, a philosopher and founder of Eco-city Builders, was the pioneer of the concept, first articulating the idea in his 1987 book, *Eco-city Berkeley*. Eco-city Builders' understanding of an eco-city 'is

conditional upon a healthy relationship of the city's parts and functions, similar to the relationship of organs in a living complex organism'. This definition emphasizes the integration between city design, planning, building, and operations 'in relation to the surrounding environment and natural resources of the region, utilising organic, ecological and whole-systems lessons to actually reverse the negative impacts of climate change, species extinction and the destruction of the biosphere. ²¹ As Ekblaw, Johnson, and Malyak comment, 'the relatively broad definition of eco-cities has unsurprisingly lent itself to a wide range of applications, much as the terms 'green' and 'sustainable' are often used loosely'. ²² Exploring eco-city typologies, they maintain that there are two broad types. First, there are eco-cities that are new cities, built from a zero point of urban infrastructure. These new cities are heavily planned propositions, but also carry with them a high degree of innovation, creativity, and experimentation. Examples of this typology include Masdar in the United Arab Emirates, multiple efforts in China with Dongtan and the Sino-Singapore Tiaiin Eco-City Project in the forefront²³, and New Songdo City. The second group consists of existing cities that are incorporating eco-city design principles into a broader and longer-term process of urban renewal, often in response to the failure of national government attempts at formulating a climate change plan, as well as the failure of the international community to effectively renew the Kyoto Protocol. These early adaptors, according to Ekblaw, Johnson, and Malyak, see both the urgent need to begin changing, but also the opportunity to become the new wave of global cities.²⁴

New Songdo City: Building the Future

New Songdo City's origins are clearly rooted in the business hub strategy, especially South Korea's recognition of its economic vulnerabilities and advantages within globalisation's maturing regime of neo-liberalism. The Ministry of Finance and Economy understood that South Korea's model for economic growth was encountering a process of 'deindustrialization', and needed reform to be competitive with Japan and contend with China's emergence as a global economic power. ²⁵ state decided to create Free Economic Zones (FEZ) 'as a new growth engine to upgrade the Korean economy. 26 The FEZs had the goal to become business, logistical, and IT hubs 'as leading areas for globalization'. 27 As a business hub, South Korea was within a four-hour flight of 51 cities with a population of over one million people. As a logistical hub, the Ministry promoted Pusan and Kwangyang, as well as the newly constructed world-class international airport in Inch'on. As an IT hub, South Korea has a robust electronics industry, led by Samsung, but also a strong research and development sector with a highly educated labour force. The 2003 FEZ Law promoted deregulation, tax incentives, and labour flexibility as incentives to attract foreign direct investment. A key part of the strategy was to entice corporations to set up offices in South Korea by creating an 'optimal living environment', including world-class educational and medical facilities demanded by foreign nationals. The state went so far as to make 'English compulsory in official documents', and promoting the construction of golf courses in foreign national residential areas. Between 2003 and 2004, three FEZs were established, including Inch'ŏn, which included the plan for New Songdo City.²⁸

South Korean planners also saw Inch'ŏn as an excellent location for contending with the considerable limitations facing Seoul's continued urban expansion. By the mid-1990s Seoul was running out of land for expansion as each growth spurt pushed the

city further up the sides of surrounding mountains. Continued growth would require expensive and ecologically damaging mountain cuts. Seeking an alternative, the Government turned to Inch'ŏn's open waterfront spaces for urban development.²⁹ A key part of the vision was the Government's decision to build Seoul's new international airport thirty miles from the capital, in a landfill zone near the port of Inch'ŏn. Completed in 2001, the airport joined several new airport projects throughout Asia that were part of the significantly increased level of air travel that came with globalisation. With these airports, a new urban form began to emerge, what John Kasarda calls 'the aerotropolis', in which airports are the urban centre 'with cities growing around them, connecting workers, suppliers, executives, and goods to the global marketplace'. Kasarda and Lindsay understand New Songdo City to be a leading example of the twenty-first century aerotropolis, with Inch'ŏn International Airport serving as an integral part of the long-term plan.

The South Korean Government originally contracted with the Daewoo Group to undertake the development of New Songdo City. Daewoo had planned to locate their media centre on reclaimed marshland south of the airport, but those plans fell apart when the Daewoo Group dissolved during the Asian economic crisis.³¹ With South Korea's neo-liberal turn, the Government looked to foreign developers to lead the floundering project. In 1999, the City of Inch'on hired Jay Kim to find a developer. A Korean-American nuclear engineer, Kim had the state's confidence through his years of working for Westinghouse on South Korean projects. reading about the One Lincoln Office Project in Boston, Kim contacted John Haynes the CEO of the developer Gale International. Upon meeting Kim in Boston, Haynes informed Gale International's Chairman, Stan Gale, about the project and Gale gave him the go-ahead to pursue it further. When Haynes visited South Korea, he immediately enticed Gale to see the site first-hand.³² In an interview, Gale explained to Kasarda and Lindsay, 'They tracked us down, wanted us to build a city in the ocean, and no one else was interested? What was going on here?.... scared everyone else away. It wasn't until I saw the airport that I understood where they wanted to go with this'. 33 Indeed, Gale International signed up as the developer in 2001, the same year the airport opened.

The 2001 contract that Gale International signed with the City of Inch'ŏn was valued at US\$12.7 billion, and it partnered the developer with POSCO Engineering and Construction, South Korea's largest steelmaker and icon of the nation's industrial past. Planners set the project's budget at US\$35 billion, and J. P. Morgan made the first investment at US\$350 million. Officials scheduled project completion by 2020, but its initial phase was to be finished by 2008. Gale International selected Kohn Pedersen Fox to be the project's principal architect. The developer also secured the consultancy and design services of Arup, best known for its work on the Sydney Opera House, the HSBC Building in Hong Kong, and the Bird's Nest in Beijing, but Arup is also an early pioneer in eco-city development with China experience. Cisco Systems, according to a Harvard Business School study, became the project's 'major technology player', which was part of the company's Smart+Connected Communities Initiative. Joining Gale International in building New Songdo City was United Technologies and the Hanjin Group. An advisory group from Harvard University guided the formation of New Songdo City's international school, which was

undertaken with collaboration from Milton Academy, where Gale International's CEO and President, had been a student. Philadelphia International Medicine and New York-Presbyterian Hospital participated in designing a world-class hospital complex.³⁴

They planned an urban complex that was ambitious, futuristic, and utopian. At a cost of US\$60 billion, the new city contained an international school, a golf course designed by Jack Nicklaus, a 100-acre green space modeled after New York City's Central Park, Venetian-styled canals, a world-class LEED [Leadership in Energy and Environmental Design] convention centre, a block of LEED office towers, luxury residences for 65,000 people, five luxury hotels, a hospital complex, a bridge to Inch'ŏn International Airport, and clusters of buildings for a range of research and development enterprises.

Becoming an Eco-City

New Songdo City's emergence as a green city resulted from the convergence of South Korea's seeking a competitive edge in globalisation, Kohn Pedersen Fox's ecoboutique-city vision, and their increasing awareness about issues of sustainability that merged with the state's green economy programme. The South Korean state understood the advantages offered by green cities in the global economy. For example, Lee Hwan-kyun, head of the Inch'on FEZ, told the Financial Times, 'This project is a pivotal part of the survival strategy for our economy in this globalised era'. 35 Huh Chan-guk, an economist at Korean Economic Research Institute, also told the Financial Times that New Songdo City needed to do something to 'differentiate itself from other free-trade areas to make foreign investors choose it'. 36 The developer began to construct a futuristic vision of New Songdo City that 'reflects a new global culture—one not dominated by a single nation or region, but a diverse group of people with similar tastes and needs. This new generation of residents demands state of the art technology, eco-friendly Green buildings, a universal business language (English), world-class recreation, and high caliber medical and educational facilities'. 37 Echoing this vision, Gale International's CEO John Havnes told Milton Academy, 'It is awe-inspiring to know that we are doing something that has never really been done before—designing, developing and building an entire city from the ground up. Our goals might seem lofty, but I really think they are attainable—to build one of the greenest, most sustainable, most ubiquitous cities in the world, with an unmatched quality of life'. Kohn Pedersen Fox maintains that 'New Songdo City builds on this effort [the state's green economy framework] by implementing measurable initiatives that will help mitigate growing global and regional environmental conflicts'.³⁹

The turning point for New Songdo City's development as an eco-city was in November 2006. 'Despite the fact that the construction of the city was well underway', Kohn, Pedersen and Fox explain, 'Gale International began to ask how New Songdo City could be improved. The environment soon became the focus of a critical reevaluation'. Gale International sponsored what is known in green circles as a 'Charrette', which is a workshop that gathers all stakeholders for a process of brainstorming about ways to become more sustainable. Kohn, Pedersen and Fox state, 'A dedicated team made up of the New Songdo City project developer, key architects, engineers, and environmental experts participated in an Environmental Opportunities Charrette to assess and identify ways to improve environmental

performance and quality of life in the city. The development of long-term sustainability initiatives and systems, which would be considered in every design decision and adaptable to changing needs, was the goal'.⁴¹

The Boutique Eco-City and Global Apartheid

New Songdo City represents the significant problem of twenty-first century transformation, the state of being between stages of a complex adaptive system that is not fully within the conservation phase of modernity nor fully entered into the release phase. It represents the thinking and actions of humanity at a tipping-point, almost a liminal state of becoming something new that retains old ways of being, seeing, thinking, and acting. At the critical threshold, New Songdo City marks South Korea's continued embrace of capitalism in the late conservation phase, an attempt to win the game of globalisation by integrating itself into the sinews and circuits of global capitalism. By its own recognition, this position is not sustainable, yet it remains a predicament of necessity within the rule-set of planners. At the threshold, New Songdo City also represents an aspiration and vision for the future, one defined by a utopian quest to free humanity from the confines of a complicated and increasingly dysfunctional culture-nature relationship. In this vision, the past remains through the deployment of modern technological solutions. City appears caught within the necessary contradictions of the tipping-point, where planners and designers force the old and the new into physical, symbolic, and ideological spaces of the eco-city. A question remains whether New Songdo City can serve two masters, globalisation and sustainability, or if the attempt is yet another indicator of the instability, uncertainty, and awkwardness of humanity's crises-driven departure from humanity.

New Songdo City exists within the Enlightenment's meta-narrative of rationality. Through the scientific deployment of reason, humanity can find its liberation from suffering and progressively realise the perfection of the human condition. Yet, as suggested by the Frankfurt School's critique of Enlightenment rationality, modern projects like New Songdo City carry a dark side that bring with them modernity's troubled history of marginalisation, repression, and exploitation. Deployment of our best technology, finest planning, and depths of social and financial capital to build an eco-city whose reason for existence is to be inviting enough for the global elite to opt to reside within raises hard questions about what will happen to the global majority, those billions of existing and new urban dwellers, many of them consigned by modernity to slums, who do not have the option to live in the eco-city.

Urban scholars like Edward Glaeser argue that the urban form triumphs because of its openness, its willingness to accept the marginalised into its confines and offer them the opportunity to make a go of it. This idea is Henri Lefebvre's 'right to the city'. In their *State of the World Population: Unleashing the Potential of Urban Growth*, the United Nations Population Fund strongly advocates for the 'right to the city' approach to the great challenges of twenty-first century urbanisation. The report explicitly states that excluding the poor from the city is 'futile, counterproductive, and a violation of people's rights'. The basics of social justice, as urban geographers like David Harvey have argued, demand that we confront the inequalities and inequities generated by urban planning and design. Harvey writes, 'The question of what kind of city we want cannot be divorced from what kind of

social ties, relationship to nature, lifestyles, technologies and aesthetic values we desire. The 'right to the city' is far more than the individual liberty to access urban resources; it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanisation. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights. Ekblaw, Johnson, Malyak explain, 'one common weakness of Masdar, Songdo IBD, and master-planned cities in general is the tendency to underrepresent the equity issues due to overemphasis on economic growth. The completely new city must attract business in order to succeed and often attempts to sustain rapid growth to earn returns on massive capital investments. In order to attract industry, policies naturally favor the wealthy and increase income disparities'. ⁴⁷

Stanford Kwinter illustrates the crucial link between eco-city design and the right to the city. 'We may learn over the next years that cities, even megacities, actually represent dramatically efficient ecological solutions', writes Kwinter. But, he asserts that 'this fact alone does not make them sustainable, especially if the forces of social inventions remain trapped in tyrannies that only ecological thinking on an ecumenical scale can free us from. For ecological thinking too has its counterfeit and debased forms, and many 'sustainability' discourses remain more oppressive than liberatory, more stifling than inventive, and it would be at great peril if we were to continue to assume that these two areas of approach, and especially their methods and presuppositions, are necessarily complementary'. A critical review of New Songdo City's conceptualisation and implementation illustrates a silence concerning the right to the city, a fascinating erasure given the planner's keen awareness of the great challenges facing humanity in the twenty-first century.

A 25 December, 2012 entertainment news item reported that Hyoyeon from the pop group Girl's Generation, purchased a luxury apartment in New Songdo City. It was in the Prugio apartment complex, which the reporter claimed had 999 units. Hyoyeon's was a penthouse on the 60th floor. The reporter quotes a real estate agent as saying,

'In the case of New Songdo City, it is not only in close proximity to Seoul's Gangnam, Yeouido, and Ilsan, but it is close to the Incheon International Airport (voted World's Best Airport Seven Years in a Row) which will fit the preferences of people who have lots of overseas schedules. This development features pleasant and safe housing conditions, excellent educational standards, access to some of the best amenities, and provides one of the best mixtures of work and play, which is why celebrities tend to move here'. ⁵⁰

When eco-cities become twenty-first century boutique cities, humanity moves closer toward global apartheid. The privileged few in the global north, globalisation's élite class, will enjoy the benefits of the tipping-point's innovation and creativity, while the global majority will be left in geographies of increased catastrophe, forced to use their social capital to improvise, innovate, and create new ways of being, seeing, thinking, and acting within an urban dystopia that's potentially beyond our capacity to fully comprehend. In this scenario, the boutique eco-city becomes an isolated geography

of an early twenty-first century vision that increasingly becomes preoccupied with keeping systemic collapse outside the spatial barriers which define its pampering of the desires of the élite. The eco-city's élites will be reduced to travelling to other islands within the perfect storm, to Masdar City or Dongtan, passing over humanity, increasingly detached from reality and uninformed by the new epistemic, the emergent property of humanity produced by those weathering the perfect storm. Overtime, New Songdo City's entire logic will give way to the logic of being a walled-city, the antithesis of the design's intent to become a global city.

Endnotes

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² United Nations Environment Programme, *Overview of the Republic of Korea's National Strategy for Green Growth*, p. 8.

³ See Yunshik Chang, Seok Hyun-ho, and Don Baker, *Korea Confronts Globalization*; Kevin Gray, *Korean Workers and Neoliberal Globalization*; and Samuel Kim, *Korea's Globalization*.

⁴ Amadu Sesay and James Bryant Lewis, eds., *Korea and Globalization: Politics, Economics, and Culture.*

⁵ Glen David Kuecker, 'The Perfect Storm: Catastrophic Collapse in the 21st Century', pp. 1-10.

⁶ Dennis Meadows, Donella Meadows, and Jorgen Randers, Limits to Growth: The 30-Year Update.

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⁹ Timothy Beatley, Heather Boyer, and Peter Newman, *Resilient Cities: Responding to Peak Oil and Climate Change*.

 $^{^{\}rm 10}~$ Bill McKibben, 'Global Warming's Terrifying New Math'.

¹¹ See International Energy Agency, World Energy Outlook 2012; Hart Energy Publication, Unconventional Reserves: Reliable Asset Performance; and Leonardo Maugeri, Oil The Next Revolution: The Unprecedented Upsurge of Oil Production Capacity and What It Means for the World.

¹² See United Nations, *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*; and United Nations, *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and*

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¹⁵ Mike Davis, *Ecology of Fear: Los Angeles and the Imagination of Disaster*.

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¹⁷ Meadows, Meadows, and Randers, op. cit.

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¹⁹ http://www.ecocitybuilders.org.

²⁰ Richard Register, Ecocity Berkeley: Building Cities for a Healthy Future.

²¹ http://www.ecocitybuilders.org/about-us/missionvision/.

²² Jessica Ekblaw, Erin Johnson, and Kristin Malyak, *Idealistic or Realistic?*: A Comparison of Eco-City Typologies.

²³ Michael Burnham, A River Ran Through It: A Case Study of Yuhuan, a Disappearing Chinese Island and Aspiring Eco-City.

²⁴ Ekblaw, Johnson, and Malyak, op. cit., p. 14.

²⁵ Yong Chun Baek, 'Attraction of High Value Added Buinesses – Experience of Free Economic Zones in Korea'.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Kohn Pedersen Fox Associates, New Songdo City; Green City, p. 31.

³⁰ See http://www.aerotropolis.com; and John Kasarda and Greg Lindsay, *Aerotropolis: The Way We'll Live Next*, pp. 3-6, 353-358.

³¹ Donald Southerton, *Chemulpo to Songdo IBD: Korea's International Gateway*, p. 93.

³² Ibid, pp. 93-94.

- ³⁴ Annissa Alusi, Robert Eccles, Amy Edmondson, and Tiona Zuzul, *Sustainable Cities: Oxymoron or the Shape of the Future?*, p. 5.
- Financial Times, 18 August, 2004.
- 36 Ibid.
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- ³⁸ Milton Academy, 'A Brand-New City'.
- ³⁹ Kohn Pedersen Fox Associates, op. cit., p. 15.
- ⁴⁰ Ibid, p. 22.
- ⁴¹ Ibid.
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- ⁴⁴ United Nations Population Fund, *State of the World Population. Unleashing the Potential of Urban Growth*, p. 3.
- ⁴⁵ David Harvey, *Social Justice and the City*.
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- ⁴⁷ Ekblaw, Johnson, and Malyak, op. cit., p. 23.
- ⁴⁸ Stanford Kwinter, 'Notes on the Third Ecology', p. 103.
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- $^{50}\,$ Pkdance, 'Girls' Generation Hyoyeon Purchases a Luxurious Penthouse in New Songdo City, Incheon'.

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2032: Juche-Oriented Environmental Futures

Robert Winstanley-Chesters

During the reign of Kim Jong II, strategies and projects focussed upon environmental development in North Korea were often claimed to incorporate elements of a developmental approach rooted in paradigms of conservation and preservation. The DPRK's environmental focus has moved towards floral and faunal conservation, growth in an interest in low-carbon and alternative forms of electricity generation, and agricultural development based on organic models. Environmental aspects have even begun to play an important role within the narratives of legitimacy and presentation through which the institutions and ruling dynasty derive support and justification. This paper, given recent developments in environmental matters, will attempt to ascertain whether a determination of future directions for North Korean environmental policy under the rule of Kim Jong Un is yet possible. It will do so by engaging in an analysis of how such a direction might affect current or contemporary projects and themes within North Korea's environmental practice. Lastly, this paper will engage in a degree of speculative, futurological analysis and prediction as to where such themes might place North Korea and its environmental sector in twenty years time.

Key words: Environmental Issues, Ideology, Pragmatism, Economics, Legitimacy, Presentation/Propaganda.

2032: Juche-Oriented Environmental Futures

Introduction

Development and management of the natural world, the resources derived from it and policy strategy relating to environmental utilisation have long been an important part of North Korea's approach to what might be described as 'revolutionary' industrial/economic development. The historical narratives of the DPRK feature the adoption of environmental strategies derived from paradigms of imposition or transformation, as well as those sourced from a recognisably conventional application of models of central economic and industrial planning, an approach shared with many other 'socialist' economies. Since the collapse of the Warsaw Pact and the crisis/famine period of the early 1990s, the DPRK has attempted a reconfiguration of its environmental approach and practice sourced from those foreign institutional actors with whom it engaged during that period of economic and political flux.

During the reign of Kim Jong II strategies and projects focused upon environmental development in North Korea were often claimed to incorporate elements of an approach rooted in a paradigm of conservation and preservation. Politico-legal frameworks governing relationships between its institutions and the natural world have been rewritten along lines more acceptable to the developing external environmental consensus. We have seen the development of floral and faunal conservation, a growth in interest in low-carbon and alternative forms of electricity generation and agricultural development based on organic models. Environmental aspects have even begun to play an important role within the narratives of legitimacy and presentation through which the institutions and ruling dynasty derive support and justification.

This paper will consider, given the recent development in environmental matters, whether it is yet possible to determine a future direction for North Korean environmental policy under the rule of Kim Jong Un. If a distinct direction is apparent having undertaken such an investigation, it will attempt an analysis of how such a direction might affect current or contemporary projects and themes within North Korea's environmental practice. One such theme might be, given North Korea's recent success in obtaining the registration of 'Hamhung Hydropower Plant Number 1' within the UNFCCC's CDM process, the future place of the exploitation of such environmentally based financial instruments within its economic planning, and the impact this might have on diplomatic/political approaches by external actors. Lastly, developing this investigation of contemporary circumstances, the paper will engage a degree of speculative, futurological analysis and prediction as to where such themes might place North Korea and its environmental sector in twenty years' time. Could academics and economists of 2032 see North Korea as an important, intentional beneficiary of new low/no carbon economic realities, a place of developing floral and faunal biodiversity based on an expert conservational approach, or a valuable producer of organic or bio-dynamic produce?

I suggest that contemporaneous developments in the political, ideological and institutional relationships with the environmental realm might give a futurologically minded enquirer or investigator potential possibilities as to the future shape of these relationships. Such an investigation might also determine elements of the politico-geographic space created by such approaches and relationships. To support the grounds for such an investigation, this paper will introduce the historical environmental approaches undertaken by the DPRK, approaches which have generated the urban and rural space and environmental relationships present in

P'yŏngyang and the nation as a whole in recent years. Secondly, it will identify the environmental approaches taken by the contemporary DPRK, especially those generated by the strategic needs during the famine/crisis period and its immediate aftermath. One element of this more recent environmental approach has been its role within the DPRK's narratives of legitimacy, an approach that perhaps reached its apogee during the mourning/funeral period for Kim Jong II. Thirdly, this paper will assess whether it is yet possible to determine a future direction for North Korean environmental policy under the rule of Kim Jong Un, commenting on the recent success of the DPRK's registration of projects under the United Nations Framework Convention on Climate Change's (UNFCCC) Clean Development Mechanism (CDM) process. The 'success' which is described in the introduction will serve as a pointer for the last section of the paper which addresses the future. Here I will speculate whether such success might direct or nudge the DPRK and its environmental sector in twenty years' time into a strategic direction resulting in its emergence as an important, intentional beneficiary of new low/no carbon economic realities. I will also investigate whether its current regional diplomatic initiatives relating to conservation might transform the DPRK into a locale for floral and faunal biodiversity and whether the same economic influences that have driven its engagement with the CDM process might result in a DPRK in twenty years' time that is an emerging or valuable producer of organic or bio-dynamic produce.

Historical Environmental Approaches of the DPRK:

1. Initial Capacity/Infrastructural Development in the Post-Korean War Era
In my research, I have adopted a periodic approach towards understanding and analysing the historical narratives of environmental and developmental management. Such narratives may be categorised into major periods in North Korean history and within them a number of subperiods, forming a response to particular geo-political or environmental events or themes.

The periodisation of the DPRK's environmental approach starts, as with much else in its history, with war. Bruce Cumings describes the Korean War as having left a scorched earth in its wake. Within P'yŏngyang some 93 per cent of all buildings had been destroyed and there had been an enormous level of damage and destruction done to the environment of the Much of the industrial and agricultural infrastructure which had been put in place by the colonial Japanese administration had been destroyed, and the DPRK found itself a blank slate, needing to rebuild and reconstruct much of its agricultural and industrial base and to rehabilitate much of the natural environment.² The infant DPRK gained much technical expertise from both the USSR and the PRC for the rehabilitation of the natural world and environmental development, which included the intellectual/ideological influence of Stalinist-era central planning.³ Kuark describes the DPRK's agricultural policy of the time as having only two primary goals, 'the swift reconstruction and rehabilitation of the warshattered factories making agricultural implements, and of farms and irrigation systems so as to increase grain production and meet the pent-up demand for food', and secondly the rapid socialisation of agriculture by means of collectivisation.⁴ Although very little consideration was given to environmental matters during this period, wide-scale transformative reclamation of virgin land or the destruction of forests appears not to have taken place. Instead developments which might be categorised as improvements and extensions to already industrialised agricultural land focussed on increasing the levels of industrial production. It is in fact quite difficult during this initial period to see a distinctly native or local ideological approach to environmental or agricultural development. Kim Il Sung's statement from 1956 that 'Rice is immediately socialism. We cannot build socialism without rice' resembles many rhetorical flourishes during this period of his rule.

2. Great Leap Forward-influenced Policy

The initial developmental and environmental approach focused upon rehabilitation and rapid capacity-increase was short lived. Upon the death of Stalin and the solidification of the power of Nikita Khrushchev as Soviet Premier, a process of radical and abrupt geo-political change began that would have a direct impact upon such environmental strategies. Khrushchev's 1956 'Secret Speech' denouncing Stalin, and a document in April entitled 'On the Personality Cult in the DPRK' which heavily critiqued the political strategy of Kim Il Sung forced a shift in diplomatic and political positioning within the Warsaw Pact. This breakdown in relations between the USSR and China became known as the Sino-Soviet split. On the part of the DPRK there was a rapid political and diplomatic movement away from the USSR.⁶ This tumultuous period for the DPRK also created the political and ideological space for a revision of internal policies towards the natural world which in the end would enable a distinct 'Jucheoriented' environmental strategy to emerge.

Building upon approaches developed during the Great Leap Forward in the People's Republic of China with the urgency of Yundong and revolutionary speeds and models, the Ch'ŏllima Movement was launched in 1958, which was the first of a number of categories of 'revolutionary urgency' within the DPRK. However, in the North Korean context, the urgent and transformational approach of the 'Great Leap Forward'was less overt. Kim Il Sung refused at the time to engage in gargantuan projects such as the draining of lakes or the widescale demolition and terracing of mountains. Rather the Ch'ŏllima approach focussed upon a smaller scale of development which quickly abandoned the radical collectivity of the Chinese He may have chosen this path perhaps because he was aware of the impending and obvious failure of much of the Chinese policy, issues of labour supply within the DPRK and the general size of the population, as well as the danger of large groupings of people.⁸ Although some of the dramatic rhetoric appears to have rubbed off in the title of Kim II Sung's 1964 work 'Let's Make Better Use of Mountains and Rivers', industrial and environmental development within the DPRK was not achieved through the radical reconstructing of mountainsides, but instead on a more technocratically-minded and practically focussed regime of resource utilisation.

3. Technocratic/ Indigenous Approaches to the Development of the Environment The period of ferment created by the Sino-Soviet Split and the 'Great Leap Forward' forced

North Korea to begin the development of a relatively indigenous approach to agricultural and environmental productivity. Kim Il Sung's *Theses on the Socialist Rural Question in Our Country*⁹ gives a grounding in the role of the environment within the wider context of the industrial and agricultural strategy of the DPRK, and the practical policies to be followed within that strategy. Within the *Theses*, Kim lays out an ideologically cohesive, sound and locally sensitive approach to agricultural and environmental development. Environmental management and improvement was to be achieved through the functioning of the 'Three Revolutions Movement' within the landscape itself in which a new ideology would be applied to the practical management of the environmental and agricultural realm through a reconfiguration of the concepts and strategies relating to the technical, cultural and ideological aspects of environmental development. The *Theses* also called for a hierarchical organisation of agricultural production according to the following pattern: peasantry over the urban working class, agriculture over industry and the rural over the urban, the full incorporation of industrial management practice into the agricultural and rural economy, and lastly the collectivisation of rural ownership. The *Theses* call for the development of

agricultural and natural landscapes to follow the same strategic system as that of urbanised industrial areas, not just to achieve the goals of the 'Three Revolutions Movement', but also to further the wider revolutionary aims of Juche. He says that 'in order to eliminate the distinctions between the working class and the peasantry, it is necessary to rid the countryside of its backward state in technology, culture and ideology'. Here we see, perhaps for the first time, the beginning of a real systemisation of political ideology focused on the environmental systemisation which led Peter Atkins of Durham University to describe 'the landscape of the DPRK ... [becoming] ... an outcome or a by-product of socialism but also a key medium through which society is transformed'. The technological revolution called for in the 'rural theses' led to a rapid and wide-scale revision of agricultural practice, within five key areas. These were 1) the expansion of irrigation and the water supply, 2) the electrification of the countryside and rural areas, 3) land 'realignment' so as to incorporate mechanised agricultural processes, 4) the increase in the use of chemical fertilisers, and 5) the reclamation of tidal lands and swamps to create more land for agricultural production.

4. The 'Arduous March' Era: Emergency Environmental Strategies

The institutional approach governed and directed by the 'rural theses' held sway over the DPRK's environmental and developmental approach for many years. The inbuilt destabilising supply and cost issues which disrupted many a central plan in the Warsaw Pact¹² eventually made the approach unstable and it was abandoned at the Party Congress of 1980. The more ad-hoc and reactive environmental approach of the 1980s also collapsed at the moment of the Warsaw Pact's collapse. Political and academic narratives surrounding North Korea and Juche thinking today generally assert the developmental and environmental policies of these previous eras as having categorically failed, citing the famine and crisis conditions that occurred between 1992 and 1997, but also less dramatic subsequent events. Within the environmental field however a 'perfect storm' of contributing factors cannot be ignored. These included environmental impacts such as serious droughts in the early 1990s which reduced harvest levels, and intense and sustained rain fall in 1994 which further reduced harvest levels and damaged agricultural land.

Faced with a disastrous set of environmental circumstances and radical changes in the geopolitical possibilities for seeking help to deal with them, the DPRK next adopted some radical survivalist strategies. In 1992 the Russian Federation and the Commonwealth of Independent States, the successor bodies to the USSR, informed North Korea that all future trade was to be at world market prices, and (even worse for a country with virtually no hard currency reserves), they had to pay by cash in advance of delivery. Within the year Kim Il Sung announced what was known as the 'Let's Eat Two Meals a Day Campaign', presaging the famine that was to come. In the field of environmental management, strategies were also abruptly changed.

As an emergency solution to the crisis, the authorities within the forestry sector abandoned the policy of decades in an attempt to create more land area for the cultivation of basic crops. It was announced that 'the Ministry of Land Management and Environmental Protection ... sanctioned deforestation, in order to produce crops on the marginal land, especially on sloping land'. ¹³ Internal documents and data from the DPRK on the extent of such deforestation are not forthcoming, but external studies undertaken by United Nations agencies after 1995, the peak year of disruption, note the impact of this change in policy. Bobilier records the results of the UNDP/FAO investigation which concluded 'that more than

500,000 hectares of marginal lands were deforested and cultivated'. Recent FAO reporting has asserted, utilising statistics sourced through the FAO STAT system, that forestry cover in the DPRK declined in total from some 8.2 million hectares in 1990 to 6.8 million hectares by the year 2000, that is, nearly a fifth of the nation's total forest cover was removed in a decade.

5. Adjusting to New Realities and a New Era: Encountering/Incorporating Foreign Environmenal Ideologies and Philosophies

There is no doubt that this era of environmental disaster and geo-political transition was extremely challenging for the DPRK. Much of the research literature that focuses on the possibility of its collapse, dissolution, and eventual reunification with the Republic of Korea (South Korea) derives from the seeming inability of its institutions and leadership to respond at the time with meaningful or positive solutions. In the midst of this tumultuous period, however, I would claim that it is possible to discern the development of new institutional responses to environmental failures within the DPRK and a developing ability of bureaucratic and ideological forces to mitigate such failures. One could categorise such developments as paradigms of conservation and preservation for environmental management.

The route for such a development is both interesting and for most people entirely unexpected, though perhaps for seasoned DPRK watchers not that surprising. If we can remember the triangular approach that North Korea took to coping with the geo-political shifts during the Sino-Soviet Split era and the nimble ideological and practical footwork undertaken by the DPRK as the difficulties with the 'Great Leap Forward' in China became clear, it cannot be surprising that north Korea attempted similar triangulations in order to adjust to an era in which it had even fewer political allies, and virtually no economic or practical support.

In order to extract itself from the period of crisis and disaster, the DPRK was forced to ask for help from outside agencies such the World Food Programme, the UN Development Programme (UNDP), the Food and Agriculture Organisation (FAO), and the International Committee of the Red Cross. The DPRK authorities are regarded by many scholars (such as Woo-Cumings, Eberstadt and Noland) as having utilised these organisations to their own advantage despite having being beset by crisis and potential regime collapse. Noland, Robinson and Wang say that 'these floods played an important public relations role insomuch as they facilitated the North Korean Government's portrayal of the famine as a product of natural disaster'. Although I do not aim to contribute to the debate surrounding the veracity of the DPRK's claims, nor whether outside agencies and other NGOs have been subject to institutional exploitation by the DPRK, I believe that it is undeniable that the entrance of Western institutional actors into the role of funders and supporters of some aspects of North Korean overnmental framework has enabled it to develop its institutional capabilities and equip itself with some of the bureaucratic and ideological tools needed to survive in the post-Soviet and post-famine eras, and which focussed its ideological direction towards a rapidly developing environmental and conservational institutionalism.

The Environmental within the Funeral/Commemoration of Kim Jong II

Led by the need to connect with the themes of conservation and environmental protection espoused in the wider world, the environmental and the natural have increasingly begun to play a key role both in terms of economic productivity/possibility and supportive legitimacy within the DPRK. Perhaps the most overt and noticed exemplars of the DPRK's developing environmental approach was an environmental element within the mourning/funeral

process for Kim Jong II. The *Rodong sinmun* newspaper stated that 'Bears live in deep forest and sleep in a burrow in winter. That day, however, the bears appeared on the road in the daytime, on which Kim Jong II took his way, and roared for a long time. It was really mysterious...even beasts seemed to cry with sorrow for the demise of the heaven-born great man. The *Rodong sinmun* is here reporting one of a number of intriguing events that according to North Korea's media occurred during the period immediately after the death of Kim Jong II. Some of these events were picked up by media outlets in the wider world, such as the BBC and even the *Daily Telegraph*, and were presented for the curious value that such reportage represents. The prospect that bears, owls, and cranes might even notice the death of Kim Jong II appears a slightly spurious or tenuous one. However, it points to a vital element in the usage of the environment and the natural world within the DPRK, namely legitimacy, the legitimation of the regime.

Pronouncements surrounding grieving and distraught cranes and magpies, dead birds and cracking ice on Mt Paektu, ¹⁸ all form part of a cohesive and comprehensive strategy of internal legitimative presentation, in which the natural world is incorporated within the same framework as the more conventional, human citizenry of North Korea. Therefore not only is the natural world subject to the same demands of loyalty, honorific glorification and grief (as in the case of the death of Kim Jong II), but they also possess the same 'natural' desire as humans to support and celebrate the manifestation of national perfection represented by the Kim family. This narrative strategy is not only directed at an internal audience, but also at regional environmental forums to which the DPRK belongs where it is used to assert the legitimacy of the DPRK. The prospect of North Korea as an environmental lodestar may be difficult for 'cynics' to accept, but it is one which must be useful in some way to those responsible for its transmission.

Success under Kim Jong Un within the UNFCCC/CDM Process

Within the DPRK's institutional framework, there is perhaps only one element more vital than legitimatory usefulness when measuring the validity of this approach - the capacity for generating economically exploitable goods, especially hard currency. Following the acceptance of the external world's environmental strategies and agenda after the period of the 'Arduous March' as well as the development of narratives of legitimacy focussed on the environment, the DPRK has been engaging with the economic possibilities presented by the environmental sector, primarily some elements of the environmental infrastructure put in place by the Kyoto protocol and the Intergovernmental Panel on Climate Change's CDM system. Therefore, to me this recent development in the DPRK's environmental approach at the start of Kim Jong Un's rule is the most important development so far.

The DPRK's Ministry of Land and Environmental Protection published its first 'National Communication' on climate issues in the year 2000¹⁹ and was the 149th nation to ratify the Framework Convention on Climate Change on 27 April, 2005. Since that date its institutions have been attempting to extract what, apart from the legitimative or positive narrative aspects, is the primary advantage to be gained from its signing, namely the financial return open to it through the 'carbon credit' element of the CDM system.

As a comparatively small nation punching way below its theoretical weight in terms of carbon emissions, the DPRK would be in a good position to extract financial advantage or leverage from the CDM. However in order to do so it must participate as a sovereign actor; it must be fully engaged and adept at the sort of bureaucratic expertise and justificatory

practice which is a hall mark of modern capitalistic social democracies and their attendant corona of NGOs and other external actors.

North Korea has in the past not proven itself to be particularly well versed in the elements of such institutional practice and has had little previous success in its attempts at registering economic or developmental projects under the UNFCCC system. On 16 August, 2012 it was reported that the DPRK had succeeded for the first time in meeting the conditions of registration. The Hamhung Hydropower Plant Number 1 was the first carbon credit earning project within the DPRK's jurisdiction. 20 It has since been reported that five other projects have gained acceptance under the CDM scheme, including the Paektu-san Sŏngun Youth Power Station Number 2 and Ryesong-gang Youth Power Stations 2 and 4.²¹ This was an enormous success for the DPRK authorities, though it is not known how the connection was forged with either the Czech Ministry of the Environment who serve as the external supporter and Topico Energia, a Czech Bio-Mass dealer to whom these credits have been assigned. It is perhaps not the financial success that it may at first seem. At the time of accreditation, the DPRK's accredited 158,496 tonnes of CDM reductions were worth only 364,540 euros annually on the open market until 2023 because the Certified Emission Reduction (CER) credits (derived from the CDM scheme) were worth 2.3 euros a tonne. 22 Directly they were worth even less, as the DPRK's emissions factor involved in the generation of figures for direct claims from the CDM process was only 0.59018 euros a tonne.²³ Therefore in total the credits were worth only 215,144 euros.

Future of the DPRK Low/No-Carbon Economics

Such apparent paucity of reward for the DPRK under the current CDM accreditation process may not be the end of the story. The UNFCCC and CDM failed to set a decent and appropriate floor under a cap and trade schema around a useful and utilisable carbon trading market. This has been a widely examined, reported and contested process. Theoretically the CER credits should be worth 30 US dollars (23 euros) a tonne minimum.²⁴ This should generate nearly five million US dollars (3.8 million euros) annually for the DPRK. When this paper was written originally, it was widely held that the CDM and UNFCCC process was undergoing a slow collapse and would be replaced eventually by a system which took into account the need to set an appropriate minimum cost. Since then, complex pressures on the CDM system have forced the price of credits lower to a record of 31 euro cents in November. 2012,²⁵ and then to an all-time low of 1 euro cent a tonne on 23 April, 2013.²⁶ Understandably such a lack of value resulted in an almost complete collapse in trading. The main market recorded no trading on the 22 and 23 July, 2103.²⁷ Such lack of trading reflected the attempts by wider market participants to extract value from their carbon emission portfolio using non-UN accredited or more complex instruments such as Emission Reduction Units (ERU). Since that market low point, the CER market has recovered to 60 euro cents a credit.²⁸ This is still an extremely low and unsustainable level for the system as a whole, but it is recognised by participants and formulators that in the future it will be necessary to arrive at a more appropriate way of pricing a monetised system for carbon emissions and credits.

For North Korea, the most important part of this story is that it participated in the first stage process and (presumably since such a future system which functioned correctly could be financially very lucrative to it) it will be involved in the second stage of its development. The existence of a further four DPRK projects currently under assessment by the CDM Executive Board suggests that North Korea's institutions have not lost interest in the concept in spite of

the system's current instability and inefficiency. Intriguingly these projects are not focussed on conventional generation, but on approaches to emissions reduction such as methane from farm animals, and the more efficient use of street lighting.²⁹

However even given the current lack of efficacy seemingly inherent within the CDM process, it is not the only element in the wider emissions trading network, and certainly not the only one from which a participant might extract financial advantage. There exists a secondary market in the CDM process's Carbon Exchange Framework (CEF) credit product which the DPRK could potentially exploit, as well as highly complicated financial instruments known as CAT bonds. CAT(Catastrophe Bonds) are exchange-traded insurance-based derivatives, based around the valuations of the cost of the types of disaster affecting certain nations.³⁰ There are generic CAT bond products relating to the risk of climate change impact upon hypothetical Pacific Island nations, as well as very specific bonds such as those connected to hurricanes which might affect Haiti or the Dominican Republic, or earthquakes hitting Japan. These bonds are traded on a market organised by the insurer Swiss Re known as the CAT Bond Total Return Index, and according to Bloomburg's latest forecast are currently outperforming the generic stockmarket by several percentage points.³¹ There is also a secondary market in CAT bonds, a future's market in CAT bonds, and a composite market in which generic government-issued bond certificates are leveraged through a Default Swap mechanism with CAT bonds so that the possibility of a future or potential catastrophe begins to effect the value of a nation's more generic financial paper.³² It does not need to be said that such financial instruments are highly complicated. However, they are no more complicated for the DPRK to access than the current CDM process. North Korea has previously shown a propensity to engage with financial instruments before, and in future accessing the CDM process as well as the more esoteric products such as CAT bonds and CEFs could well prove not only financially useful, but diplomatically productive.

Another element to the CDM process, especially as the DPRK has apparently chosen to focus its first applications within its electricity generation sector, is the export of energy from such accredited projects bringing with it the potential for the export of the DPRK's own advantage in carbon offsetting terms against the carbon dioxide production in other nations. This would allow the DPRK to charge a premium for electricity produced by such projects, and to further develop its hydropower and tidal power projects, perhaps by 2032 become a net exporter of electricity, supporting the PRC in offsetting its rapidly increasing carbon emissions and in meeting its post-Kyoto targets.

Floral/Faunal Biodiversity: Protection and Conservation

Moving beyond matters of climate change and carbon trading, a further strategic element the DPRK might seek to exploit is the leveraging of its different and non-normative historical experience and developmental approach, even going so far as to exploit its developmental failures and economic collapse. According to the International Crane Foundation (ICF), a US-based conservation organisation, Red-crowned cranes used the Anbyŏn plain in Kangwŏn Province, North Korea, as a wintering destination since 'before recorded history until the late 1990s'. The late-1990s decline and then total disappearance of the 240 birds that regularly migrated from Russia to Anbyŏn in late October until March or April could be directly attributed to the famine conditions in North Korea at the time. As starving people foraged and stripped the landscape bare to survive, no food sources remained for the cranes, which typically feed on small invertebrates in wetlands and leftover grains on fallow rice paddies. The cranes of Anbyŏn are currently the focus of the International Crane Foundation's

attempts at rehabilitating the regional environment, so as to attract migrating cranes back to their previous wintering habitat.

Organisations such as the Wildlife Conservation Society of New York in collaboration with the Russian Far Eastern Academy of Sciences and the DPRK's Academy of Sciences have also attempted to develop a framework for the conservation of the Amur Tiger populations, and possibly Siberian Tigers, whose ranges extend to or are local to the DPRK. Together these organisations have sought to protect the fauna of the Chinese border regions and the far north-west of North Korea, areas of little use so far as economically productive narratives are concerned to the DPRK, but highly valuable within the potential narratives of conservation and preservation.

Perhaps by 2032 the DPRK will have become as adept at leveraging its apparent biodiversity as it is may have become in relation to its current low level of carbon emissions. Floral and faunal conservation worldwide attract grants and funding from a multiplicity of national, international and NGO agencies, and this alone could prove lucrative. There are possibilities surrounding eco-tourism within the Demilitarised Zone [DMZ] if North Korea could find some way around its differences with South Korea on the 'Green Capitalism' approach represented by the DMZ Peace Park Project. The DPRK has proven willing to open and exploit its landscape's tourist potential before, even in spite of difficult diplomatic relations, such as the case of tourism in Mt. Kŭmgang and Mt. Paektu.

Alternative Agricultural Approach: DPRK Organic Futures?

Although the participation of the DPRK in the CDM process, or eco-tourism in the DMZ by 2032 may sound far-fetched and futurological in nature, to me it has the greatest developmental possibilities of all the aspects of environmental and landscape management. A key historical example would be the direction given by Kim II Sung to the food generation capacity of the DPRK. He proposed the home production of enormous quantities of meat sourced from rabbits, who were to be fed on a food pellet made from lugworms. The rabbit food was the result of a twenty-year research programme. This strange and esoteric example is not unusual to researchers on the DPRK's approach to development.³⁴ As a by-product of the collapse of the Warsaw Pact, the DPRK has been forced to further adapt its agricultural practice and strategy, as it did with its industry and economic fields. Previous to the famine and the collapse of the communist trading bloc, the DPRK's agricultural sector was heavily industrialised, in fact one of the most 'chemicalised' approaches to the production of food on the planet. Since 1992, the DPRK has been unable to produce the fertilizer it needed to sustain such a system. Nor could it afford the fuel needed to maintain such production or to obtain the hard currency required to buy that level of fertilizer from other sources. The DPRK has had to find an alternative route for this production, the self-reliance of its citizenry and their rabbits not filling the gap.

External agencies and institutions with an environmental focus at the time of the famine, along with desperately needed supplies, brought with them a potentially longer term solution to North Korea's agricultural problem - low chemical or organic farming. There is now in P'yŏngyang the Organic Agriculture Development Association [OADA], answerable to the DPRK Ministry of Agriculture, which runs some five model farms around North Korea. By 2005, these farms were producing over 10,000 tonnes of organic wheat and barley, and 8,000 tonnes of organic vegetables.³⁵ This association also aims to export North Korean organic pork, mushrooms and fruit to the European Union and has set up a dairy, managed on organic

principles, of some 1,200 cows whose milk it also seeks to export to the European market.³⁶ The UK, facing an acute shortage of organic milk due to a reduction in the number of dairy farms, is forced to import its organic milk from Poland. Perhaps by 2032 the DPRK will have developed its agricultural base to such an extent that it becomes a substantial exporter of organic produce to a developing Chinese market and further afield to the European Union.

Further to these agricultural aims, the OADA is seeking to develop the capacity for the production of bio-diesel in North Korea, aiming to produce over 28 million litres of biodiesel in its first year. Whether the aims of the organisation are in any way realistic is of course another matter, but it is jointly funded by the European Union's International Environment and Education Extension Plan (IEEEP), and by the American Friends [Quaker] Service Committee.³⁷ There is also a joint project funded through Europe AID between the Dutch Foundation for Agricultural Research and the DPRK's Research Institute of Agrobiology which is seeking to develop ways of breeding disease resistance into seed potatoes so that North Korea might increase its organic potato production.³⁸

Final Thoughts

In this paper, I have sought to establish the intellectual ground so that the reader might, if seeking to engage in futurological thought or analysis surrounding the nature and potential of the DPRK and its environmental/agricultural productive capacity of 2032, recognise that in order to do so they must examine and imagine the future environmental or developmental potential of North Korea from the standpoint of its current reality. The future of the DPRK will not be one of grand utopian schemes, but will be far more prosaic, just as in the present the DPRK is not really a space of grand utopian possibility and fulfilment, but a reality far more 'conventional'. This future will be one in which productive capacity is harnessed to the possible and the exploitable, one in which the financially exploitable will be exploited, where every potential economic furrow will be ploughed and whatever advantage can be gained will be taken in order to survive and exist. In short, from this perspective, discounting any potential or unexpected collapse of its current order and system, the DPRK of 2032 will closely resemble that of 2012.

Endnotes

Bruce Cumings, The Origins of the Korean War.

² Yoon Kuark 'North Korea's Agricultural Development during the Post-War Period', pp. 82-93.

³ Jan Prybyla, 'Soviet and Chinese Economic Competition Within the Communist World', pp. 464-473.

⁴ Kuark, op. cit., p. 83.

⁵ Kim Il Sung, 'Rice is Immediately Socialism (Letter to the Chairman of the South P'yŏngan Provincial Party Committee), 28 January 1956', pp. 25.

- ⁹ Kim Il Sung, 'Theses on the Socialist Rural Question in Our Country'. ¹⁰ Ibid. p. 167
- ¹¹ Peter Atkins, 'The Dialectic of Environment and Culture: Kimilsungism and the North Korean Landscape', p. 328.
- ¹² Nicholas Eberstadt, *The North Korean Economy: Between Crisis and Catastrophe.*
- ¹³ Baptiste Bobilier, Environmental Protection and Reforestation in DPR of Korea, Project Evaluation and Feasibility Study, p.5.

- ¹⁵ Food and Agriculture Organisation, Global Forest Resources Assessment 2005.
- Marcus Noland, Sherman Robinson, and Tao Wang, 'Famine in North Korea: Causes and Cures', p. 746.
- ¹⁷ Rodong sinmun 'Heaven Born Great Man and Peculiar Natural Phenomena', 2011.
- ¹⁸ Korean Central News Agency, 'Phenomena Witnessed During Mourning Days'.
- ¹⁹ Ministry of Land and Environment Protection of the DPRK, 'DPRK's First National Communication under the Framework Convention on Climate Change'.
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- ²² Charles Meade, 'Cat Bonds Beating Corporates Most Since November: Credit Markets'.
- ²³ Department for Environment, Food and Rural Affairs, *Emissions Factor Database*.
- ²⁴ William Nordhaus, A Question of Balance: Weighing the Options on Global Warming Policies.

⁶ Balasz Szalontai, Kim Il Sung in the Khrushchev Era: Soviet-DPRK Relations and the Roots of North Korean Despotism, 1953-1964.

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- ²⁹ United Nations Framework Convention on Climate Change, *CDM-SSC-CPA-DD: Cfl Lighting Scheme in DPRK*.
- ³⁰ Bertie Russell, *Politicising the Climate: Knowledge, Power and Resistance in the Movements for Climate Justice.*
- 31 Charles Meade, op.cit.
- ³² Bertie Russell, op. cit., p. 152.
- Elena Kim, 'Returning Cranes to North Korea: Eleana Kim on the Grus Japonensis'.
- ³⁴ David Michalk and Derek Mueller, 'Strategies to Improve Cropland Soils in North Korea Using Pasture Leys', p. 1.
- Randall Ireson, 'The Knowledge Sharing Experience in Agriculture'.
- ³⁶ Gesellschaft für Nachhaltige Entwicklung Witzenhausen, EU Project DPR of Korea.
- ³⁷ Scott Snyder, 'American Religious NGOs in North Korea: A Paradoxical Relationship', p. 4.
- ³⁸ Wageningen University and Research Centre, 'Integrated Potato Disease Management (IPM) DPRK'.

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Gazing into the Crystal Ball: Environmental Crises as a Formative Factor for the Korea of 2032

Young-hae Chi

What will be the formative factors for the situation on the Korean peninsula in 2032? This article presents a conjecture against the theoretical backdrop that local social-political processes are conditioned by major changes in the power structure of international relations. It envisages environmental crises, both global and regional, as one of the most decisive elements that will shape Korea leading up to 2032. In particular the course of events will be largely influenced by developments in international climate control regimes, the responses of China and North Korea to local and global environmental threats, and possible natural and human-caused disasters. Environmental problems have tended to bring civil society sectors together as they also helped to proliferate organisations and consultative bodies wherein the governments and NGOs of East Asia have sought a common solution. The tendency of domestic and regional convergence will continue to grow for the next two decades.

Key words: Environmental Crisis, Religious Harmony, Korean Environmental Movements, Regionalism, East Asia.

Gazing into the Crystal Ball: Environmental Crises as a Formative Factor for the Korea of 2032

Introduction

What will be the formative factors for the Korean peninsula in 2032? In envisaging the decisive factors, one useful exercise is to ask how far South Korea has changed from 20 years ago. Unquestionably there has been a sea change. One could again ask what factors have brought about such a change. A pattern emerges from the way that South Korea has been changing over the last twenty years. It has been predominantly shaped by external events rather than by internal ones. In other words the changes in South Korea were brought about more as a reaction to the impact and stimulus coming from outside than as a result of any internal dynamism.

We see the most significant change of that kind in South Korea's *détente* with its former enemies, Russia and China, which culminated in the establishment of formal diplomatic relationships in 1991 and 1992 respectively. A series of partial thawings in the relationship with North Korea soon followed. Such changes would not have been possible if the Berlin Wall had not collapsed in the first place. Other important events include the financial crunches of 1997 and 2008. The long-term consequences of the Asian and global financial failures on the South Korean economy and society are still subject to debate. Yet, however the long-term consequences might turn out, the financial crises triggered off various restructuring programmes that led to economic and social unrest during the last decade. These events, which originated from outside of Korea's border, forced its economy, trade relations, and domestic socio-demographic distributions to be drastically restructured in a way that still has a huge impact, whether positive or negative, on the daily life of ordinary citizens.

To know exactly what the Korean peninsula of 2032 will look like is beyond human ability. Yet, it is not difficult to envisage the pattern in which the forces that could shape the future will interplay. Most possibly we will see the same pattern working here: that is, events occurring at the international level will create and limit choices available to South Korea. Kenneth Waltz has made essentially the same argument. Extensive studies of major changes in international relations and their relations to the domestic politics of individual countries has led him to conclude that the global structure of power both balances conditions and shapes processes wherein certain actors emerge or become defunct.²

There is a good reason why Waltz's analytical framework will apply to South Korea's case as well. South Korea now has exhausted much of the inner dynamism that can trigger off large-scale social change. The last instance of such a kind is the rise and fall of the government led by military leaders during the early- to mid-1980s. Since that time, South Korean society has developed a remarkable degree of stability, which has helped to improve its ability to locate potential sources of upheavals and absorb their impact before they could cause a large-scale rupture of the social fabric. The same,

however, does not apply to events happening outside the country's border. South Korea has virtually no control over them. Moreover, the deeper the event is rooted in the power structure of international relations, the greater and the longer its impact on the country will be.

It is against this broad theoretical background that this article attempts to envisage the course of events up to the year of 2032. The main thesis is that environmental crises, particularly global climate change and regional pollution problems, will emerge as one of the most defining factors, in both positive and negative directions, for South Korea's domestic politics and foreign relations for the next twenty years. This is not to suggest that we can single out any one factor as the most decisive element for the future of a country. Korean unification is undoubtedly another critical element. But a prediction of such a political event requires too many actors to be taken into account at this stage. In contrast, as for environmental change, we have relatively more thoroughly gathered and better understood data, which will help us to make a less arbitrary projection for the future course of events.

This paper will briefly look at how serious the present environmental conditions are at global and regional levels. It then will proceed to identify a few things that are most likely to affect the course of events in South Korea during the next twenty years in relation to the environmental problems. Finally, I will outline what the Korean peninsula of 2032 will look like in view of the present environmental crises.

Global and Regional Pictures: The State of Environmental Crises

For the last fifty years, the global surface temperature has been rising rapidly. In January 2010, NASA released data on Earth's surface temperatures showing that the decade ending in 2009 was the warmest on record.³ In January 2011, NASA and NOAA (National Oceanic and Atmospheric Administration) announced jointly that 2010 was tied with 2005 for the hottest year ever in recorded human history.⁴ The 2007 Intergovernmental Panel on Climate Change (IPCC) report made it clear that the trend toward greater global warming and climate change is unequivocal.⁵ It pointed to Green House Gas (GHG) emissions as the villain, particularly carbon dioxide (CO₂) and methane, which trap heat in the earth's atmosphere.⁶ The reading of CO₂ atmospheric concentration as of February 2013 is 396.80 ppm (parts per million).⁷ The most crucial question is how much margin there is before global warming reaches a critical point. The Copenhagen Conference of 2009 has offered a scientific case for keeping temperature rises below 2°C against the base year of 2000.⁸ If the global community fails to keep the temperature rise within this limit by the end of this century, at least 20 to 30 per cent of life on the earth is expected to become extinct.

But, according to James Hansen, a NASA climatologist, a 20 to 30 per cent extinction of life is a disaster scenario. He argues that realistically the surface temperature rise should be capped at far below this level, preferably 1.0 degree. If this capping limit is translated into the CO₂ atmospheric concentration level, it should not exceed 450 ppm maximum. Since there has been a steady increase of 2 ppm every year and the present concentration increase level is 396.80 ppm, assuming that the world will manage to lock GHG emissions at the present increase level, we have just less than 30 years before the

world hits what climatologists call a tipping point.

According to research by Joeri Rogelj and Malte Meinshausen, the stated aim at the Copenhagen Accord is not enough to halt global warming. They argue, 'the Copenhagen Accord has a stated aim of keeping global warming to below two degrees Celsius. However, according to countries' stated ambitions for reducing emissions, global yearly emissions of greenhouse gases will increase by 10 to 20 percent above current levels and reach amounts equivalent to 47.9 to 53.6 gigatonnes of carbon dioxide (GtCO₂-eq) by 2020. This would result in a greater than fifty percent chance that warming will exceed three degrees Celsius by 2100... To be on track for meeting the 'below 2° C' climate target, global emissions of no more than 40 to 44 GtCO₂-eq have to be achieved by 2020'. ¹⁰

The environmental issue in East Asia should be looked at against this larger picture. The region has been contributing significantly to global warming. Developing countries in Asia account for about 48 per cent of the total carbon dioxide emission. This is due to the relatively faster economic growth of the region compared with the rest of the world and, more specifically, due to excessive consumption of domestically produced cheap fossil fuels and unprecedented population growth. Import of used cars not fitted with exhaust gas purifying technology by less well-off countries aggravates the emission problem. 12

There are environmental problems which affect the region directly, mostly taking the form of trans-boundary pollution which is very difficult to tackle due to geographic proximity. Polluted air spreads acid rain throughout East Asia. Of particular concern to this region, and to China and South Korea in particular, is the constantly rising level of sulphur oxides and nitrogen oxides concentration in the air. The greatest portion of the pollution is accounted for by rapid industrialisation in the central and southwest regions in China and along the western coasts of both Koreas. Studies of acidity deposition in the region's air show that sulphur oxides and nitrogen oxides have brought extensive damage to forests in the three countries, together with some indirect effects involving soil acidification and mobilisation of toxic metals such as aluminium. If

Although the countries affected by acid rain have striven to curb the acidity level in precipitation including the establishment of EANET (Acid Deposition Monitoring Network in Asia), they have so far achieved no notable success. ¹⁵ There is also the problem of desertification in northern China and Mongolia, partly due to the increasing acidity of the air. It is from these deserts that yellow sand is blown away carrying toxic and carcinogenic chemicals through prevailing winds to the Korean peninsula and Japan. Fine, dry soil particles hazardous for human health carried in the winds often force primary and secondary schools in South Korea to close. ¹⁶

Yet, pollution of LMEs (Large Marine Ecosystems) surrounding the Korean peninsula is equally a serious trans-boundary problem. Particularly the Yellow Sea LME has been subject to serious abuse such as oil leakage which is a constant feature of fishing activities in the Yellow Sea. In addition, the sea waters are filled with inland sources of pollution such as untreated sewage, toxic farming chemicals, and industrial waste, particularly those discharged from the industrial cities along the Chinese coast of

the Bohai Sea, and from the west coast port cities of North Korea. ¹⁷ South Korea also has been contributing significantly to the degradation of water quality. The country has carried out large-scale land reclamation projects along the west coast destroying biodiversity there. In addition, its fishery lets 33 to 66 per cent of feed dissolved in the waters without being utilized, and this causes eutrophication and more frequent occurrence of red tides.

South Korea's policy makers have been under heavy pressure to fight threats from deteriorating environmental conditions at these two levels - global and regional. These developments are closely intertwined with economic and industrial activities at global and regional levels. Unless the policy makers find an effective way of balancing economic growth with efforts to curb the cost involved in tackling these problems, they will continue to see the tendency of these external events limiting their policy options for the next twenty years.

Factors Likely to Shape South Korea's Options

A number of factors may shape the future course of South Korea. In this paper, the discussion will be limited to four major ones: 1) the future of the international climate change regime, 2) China's response to environmental crises, 3) ecological response and change in North Korea, and 4) potential large-scale natural or human-made disasters in the Korean peninsula.

The first round of the Kyoto Protocol came to an end in 2012. The general consensus is that the UN Framework Convention on Climate Change did not achieve the desired level of emissions reduction under the protocol. The Copenhagen Accord of December 2009 also failed to produce an agreement for emission reduction enough to halt future global warming at below 2°C. Nor could the parties to the 2011 UN Climate Change Conference, held at Durban, produce a comprehensive, legally binding clause except agreeing to prepare such a deal by 2015 and make it effective by 2020.

Whether the parties to the Durban conference will be able to draft such a deal, of course, relies upon the outcome of the efforts to persuade the US and China to sign it. If the two most polluting countries opt out, or only accept a minimal emission reduction, it will not only fail to reduce the global carbon emission but also give other countries a good excuse to jump on the bandwagon. While such a scenario remains a possibility, it is also possible for the two environmental behemoths to play a greater role in tackling global warming for the next twenty years. This will be particularly the case given mounting international pressure, especially from low-lying nations or islands in equatorial regions such as Bangladesh, Indonesia, and Tuvalu, where the rise of sea level is threatening the life of a majority of their people or even the physical existence of the country as a whole. ¹⁸

One of the core obstacles has been disagreement over the broad question of who should accept how much of the responsibility for the existing damage done to the earth's atmosphere and to take on the corresponding burdens. Whatever the outcome of this debate, South Korea will no longer be able to avoid assuming greater responsibility in the next rounds of environmental negotiation. In 1992 South Korea ranked fifteenth in the global league table of CO₂ emission. For the seventeen years thereafter it became

the seventh biggest source of the GHG with the emission of 578.97 million tonnes per annum. It is now even ahead of the United Kingdom, which ranks tenth with 532.44 million tonnes. Under the Kyoto Protocol the EU accepted a commitment to reduce GHGs by 8 per cent by 2008-2012, as measured against a baseline of the 1990 emissions level. Given that, within this overall 8 per cent EU abatement target, the UK has voluntarily accepted its obligation to reduce CO₂ emission by 12.5 per cent as an Annex I category state. Given the present level of South Korea's annual carbon emission in comparison, it is almost certain that the Republic of Korea will have to accept a heavier reduction target. Undoubtedly, this will oblige South Korea to take more comprehensive policy measures domestically, which will seriously constrain economic and social policy options.

The China factor has both international and regional dimensions. China has been constantly under attack for failing to assume greater commitment to reducing its GHG emission. While it may have to take more drastic measures in reducing carbon emission, it will also face pressure from adjacent countries to take a more active stance in fighting regional air and water pollution. In particular, it will be under heavy pressure to control yellow sand by slowing down desertification in its northern territories. China itself has a large stake in the reforestation of the affected lands since air pollution in China has reached such a degree that it can no longer ignore the health hazards to the residents in its major northern cities.

The level of environmental damage is extremely high in North Korea. The damage to its soil, air, and seas is a classic case of the environmental disaster which was characteristic of the former Soviet satellites in Eastern Europe. The closed nature of North Korea's socio-economic system is one of the main causes of the environmental fiasco, together with the orientation of the planned economy towards excessive wastage of natural resources. In addition, North Korea regularly has suffered famines since the mid-1990s which has led people to destroy its forests for securing additional farming land and for heating. At the moment, one-third of its woodland, equivalent to 1.6 million hectares, lies bare. ²³

Although it requires urgent reforestation, North Korea has no adequate financial resources to do so. The race for industrial development against South Korea for over a half-century has also contributed to the contamination of its rivers and soil, particularly the Taedong River which flows through its capital city. The rapidly degrading environmental condition will increase South Korea's stake in any future South-North Korean dialogue, due to the collateral damage to South Korea's own air and seas and to the related cost-sharing problems.

On the question of natural disasters, there is the possibility of the eruption of Mt. Paektu. In a conference held in 2010, Prof. Seong-hyo Yoon of Pusan University and Prof Jeong-hyeon Lee of the Institute of Science Education in South Korea argued that the evidence of a near-term eruption is mounting and the damage could turn out to be ten times greater than that caused by the 2010 eruption of Eyjafjallajökull in Iceland. They presented a scientific case for the need of the East Asian countries to be seriously concerned about the disaster scenario. Furthermore any possible disaster involving nuclear power plants should also draw immediate attention, due to the geographic

proximity between the four East Asian countries.²⁵ But we cannot go deeper into these issues here. There are too many unforeseeable and unquantifiable factors involved for making any meaningful projection about the possibility of such events to happen and their consequences.

Possible Impacts of Environmental Crises

The Office of the Prime Minister, in consultation with the Presidential Committee on Climate Change Response, coordinates environmental policies between the relevant ministries of the Republic of Korea Government including negotiation over pollution control and expenditure with other countries. However there is a serious degree of functional overlap between these administrative bodies. ²⁶ There needs to be a comprehensive ministerial body which will centralise the required tasks in foreign affairs, economy, and environmental policy makings. This new body will also need policy inputs from various non-governmental organisations, such as corporate businesses, the media, religious groups, scientific communities, local and central political parties, and educational establishments. Policy outcomes will greatly depend on how effectively the government organises all these bureaucratic functions to balance the conflicting organisational interests.

But the structure of government is only one aspect of the many changes needed to improve the Republic of Korea Government's response to policy needs. Another is the need for a change in policy orientation. In September 2008, the Government announced that it would support massively the 'climate industry' as a new economic driving force. The new vision, seeking to catch the two goals of environmental protection and sustainable economic growth within one policy package, will continue to remain a focal point for domestic and foreign policies of the South Korean Government during the next twenty years.

This vision will help to accelerate the expansion of alternative energy industries as well as industries manufacturing clean-energy products. For example, the production of electric and hybrid cars, together with related industries such as electric battery production and power-outlet-point networking, will constitute a dominant proportion of the total industrial output. At the same time firms and factories will be obliged legally to install emission-reduction equipment in most or all of the manufacturing processes. Compliance with the relevant laws and regulations will inevitably raise the production cost and constrain investment in research and development, leading potentially to long-term unemployment and other social problems. Production cost is all the more likely to increase, given the expected imposition on Korea of an Annex I category status and the associated obligation to reduce GHG emission.

Impact on Civil Society

The rising environmental crises at global and regional levels is most likely to affect the way that the civil society evolves in South Korea. Over the last thirty years various civil society groups have emerged which, through education and the mobilisation of the general public, have brought an unprecedented degree of change to South Korean society. Only when we survey the whole gamut of the activities carried out by all of these civil society groups is it possible to describe how significant the impact on the

whole society has been and will be. However, this article will only focus on the civil society groups involved in the environmental movement and present them as a model case for the way civil society groups react to the stimuli coming from outside of South Korea's border.

The environmental group is the civil society group which has become the most influential in the wake of the environmental crisis, while also being the most susceptible to the impact of outside stimuli. In South Korea, the environmental movement was started by left-wing, anti-governmental activists as a way of finding an alternative strategy for attacking what they perceived as an oppressive government in the mid-1980s. Although South Korea suffered numerous pollution problems during the phase of industrial growth in the 1970s, a proper awareness of the importance of the environment emerged mainly after the launch of the Korea Institute of Pollution Issues (*Kongch'uryŏn*) in May 1982.²⁸ It was not the environmental activists or scientists but anti-government activists comprising students, labour union leaders, and radical left-wing political activists - who first raised their concerns about the environmental consequences of the Republic of Korea Government's industrial policies. They all rallied behind this institute in search of an alternative route to fighting against the brutal military government.

Naturally these first generation activists did not necessarily see environmental problems as an urgent issue. Some left-wing political activists even considered them as an unnecessary diversion of their energy, hence detrimental to the efforts to bring about a change of government. Yet the institute still drew its vitality primarily from an ideological line established along the slogan, 'Fight pollution, Achieve a nuclear-free peace'. They took advantage of the clear line that divides the villains and the victims in the cases of industrial pollution to strengthen their strategic stance in attacking power élites. In some popular cases such as Pak Killye's pollution-induced pneumoconiosis (1988), the death of Mun Sŏngmyŏng from mercury poisoning (1988), the birth of babies with physical defects born around the nuclear power plant in Yonggwang (1989), and the building of a factory producing *toluene diisocyanate* (TDI) in Kunsan (1990), the institute played an important role in educating people about the rising level of industrial pollution. In the case of the planned building of a nuclear waste facility in Anmyŏn Island (1990), the systematic protest against it led to the abandonment of the plan by the South Korean Government.³⁰

In the early 1990s the environmental movement entered a new phase. The Rio conference in 1992 gave a new impetus to South Korea's environmental organisations that now started to sprout throughout the country, and opened up the vision of the local groups to the wider questions of the planetary ecological condition. As a result, the socialist and anti-capitalist ideological tenet of the existing environmental movement gave way to a more practical and more ecologically oriented one. Such a new direction received a ready welcome from various religious groups such as Protestant Christians, Catholics, Buddhists, and Wŏn Buddhists. The religious leaders began to seek a common understanding of life and the coexistence of all life forms as a way for the peaceful integration of humanity with is natural habitat.

Initially, politically motivated activists found it difficult to harmonise their political

agenda with this new trend in the ecological movement. Yet, as they assimilated to the new perspective, they became a driving force for various national campaigns to protect rivers and mountains from various commercial and Government-funded development plans which had had a destructive impact on them. Some were unsuccessful such as the attempt to thwart the construction of Sihwa Lake (1996-1998) or Saeman'gŭm (1998-2006). But they managed to force the Government to drop some major projects such as the construction of the Tong-gang River Dam (1998-2000), nuclear waste sites in Anmyŏn-do (1990) and Pu'an (2003), and the Grand Canal Project (2008).

During the last thirty years of the environmental movement, two things stand out. The first is the emerging role of religions. As South Korean religious groups became aware of the theological/religious implications of growth-focussed economic policies within their own belief systems, there has been growing collaboration in protesting against the destruction and deformation of terrains and waterways. The most dramatic example of this inter-religious collaboration was the march of 305 km from Saeman'gum to Seoul led by Catholic, Protestant, Buddhist, and Won Buddhist leaders. It took place from March to May, 2003 in protest against the Government-led Saeman'gum Project. The convergence between religions in Korea emerged as a part of a larger social process in which various commercial sectors, religions, scientific communities, and political circles increasingly sought a common space for dialogue, and concerted action on serious environmental issues.

The second element is the increasing collaboration between Korean and foreign environmental organizations. As mentioned earlier, since Korean activists attended the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro the hitherto politically-oriented movement began to look at the environmental crises from the totality of its impact on the planetary ecology. Due to this broadened ideological horizon, the period often saw an alliance between domestic and foreign environmental groups in fighting against Government policies, cleaning up oil spillage along its coasts, or holding joint workshops to develop intellectual positions such as the Korean-German Symposium on the Saeman'gum region held from 4 to 6 March, 2003.³⁴

The two converging trends, on the internal and external fronts, are likely to continue to grow during the next twenty years. Particularly, challenges posed by climate change are likely to intensify collaboration between South Korea's civil society groups with international environmental organizations. While the Government will be fighting for a reduced share of the burden and greater influence in international climate control regimes, civil society groups, free of these constraints, will demand more radical policies from the Government, some of which may originate from international ecological movement organisations. Peace and life has been a key ideological tenet which facilitated cooperation between South Korean and foreign green movement groups. In turn eco-philosophy has been instrumental in bringing religions in South Korea together toward concerted actions based on the grand principle of the coexistence of all life.³⁵ The two processes of integration will keep influencing each other during the next two decades, thus increasingly constraining the Government's economic and industrial policy options.

South Korea and Political Convergence in East Asia

On the external front, South Korea will be able to expand its environmental projects abroad and by doing so offset losses from the increasing economic and industrial costs that will follow her obligation to comply with various regulations under international climate control regimes. South Korea will all the more actively use emission reduction mechanisms provided under the Kyoto Protocol. Starting in Australia in 1993, Korea participated in a number of afforestation and reforestation projects abroad, in New Zealand, Vietnam, Indonesia, and Paraguay. Korea is most likely to expand such projects, both to earn surplus carbon credits and to build up expertise in the field. Moreover, if North Korea gathers momentum for economic growth in greater integration with the world economic system and environmental control regimes in East Asia, it will actively seek Clean Development Mechanism (CDM) projects for industrial waste treatment and air purification. Some air and water treatment technologies developed by South Korean firms have reached the technological frontier giving them a competitive edge against their Japanese or European counterparts.

Korea may actively seek CDM projects in China as well. China has been notoriously reticent for hosting CDM projects and, instead, preferred bilateral programmes for fear of losing control. Yet, this will not be always the case. The Republic of Korea has already succeeded in procuring CDM projects in the area of hydraulic, solar, and wind power plants in China in the last few years. Moreover China is under increasing pressure to agree to the compulsory reduction of GHG emissions, and so during the period leading up to 2032, China is most likely to take more aggressive measures to curb its GHG emission, which will significantly weaken its reservation toward multilateral negotiation. In this circumstance, any drastic moves by China towards tackling its environmental problems will offer South Korea more chances of procuring CDM projects.

Crises often bring enemies together, and those common threats do not have to be political or military. In March 2007, North Korean officials suddenly approached South Korea and requested provision of earthquake monitoring equipment. Around that time, there had been talk about the eruption of Mt. Paektu. In March 2011, experts from both Koreas met in Panmunjŏm and agreed to conduct joint research on Mt. Paektu including field investigation and joint conferences. These events are merely an example. The need to tackle common natural disasters has tended to bring convergence among the four East Asian countries, which is attested by the sheer growth of consultation bodies and regional contingency plans.

Equally, the last twenty years has seen the greater proliferation of regional organisations in the field of pollution control than in any other aspect of international relations in East Asia. The first formal meeting of high officials on environmental crises in Northeast Asia was held in 1993. The officials agreed that the North-East Asian Sub-regional Programme for Environmental Cooperation (NEASPEC) should be established under the supervision of the United Nations Economic and Social Commission for Asia and the Pacific. Since then, NEASPEC has been involved in pollution reduction, nature conservation, and energy efficiency projects in the region. The tenth meeting of high officials met in Okinawa, Japan in 2000, facilitating the establishment of various bilateral and multilateral consultative bodies for tackling common environmental problems in the region.

Although there have been ever-widening networks of mutual consultation and support among East Asian countries, there is no guarantee that this trend of convergence will continue to grow without facing serious challenges. Firstly, many of the aforementioned transnational pollution problems require effective legal agreements and a stable political structure in which such agreements can be implemented, and this demands a substantial degree of relinquishment of national sovereignty. However, no East Asian government is likely to renounce even a small part of its own political autonomy to tackle the common pollution problem at this stage. Secondly, more fundamental than the first point is the reluctance of the East Asian states to shift from the fossil fuel-based model of economic development to one more congenial to sustainable growth. Any delay in dealing with regional sea and air pollution and halting the rising CO₂ emission will soon result in a situation wherein the cost of reversing the trend of environmental degradation far outweighs the benefits, and could even fail to stop run-away environmental degradation.

Yet, these two problems are overshadowed by a third problem. To determine each nation's share in the burden will be one of the most difficult tasks for the policy makers of the region. The problem will be particularly acute in the case of long-range air pollutants. South Korea and the governments of neighbouring countries do not have the same advantage as European states which have achieved economic parity and a fair level of political integration before they embarked on negotiating pollution control. The East Asian states have yet to form a comparable political and economic platform before embarking on an effective negotiation over burden sharing. Moreover the isolation of North Korea in the context of North-South Korean military confrontation has created a hole in what is essentially a multilateral platform, obstructing scientific investigations of pollution cases or negotiations involving all the parties affected in Northeast Asia.

In spite of all these adverse factors, there is a strong prospect of regional convergence to continue during the next two decades. The rapidly deteriorating environmental conditions at global and regional levels are unquestionably one of the most pressing concerns to the governments. In particular the level of maritime and air pollution in East Asia has become so serious that policy makers can no longer ignore these problems. As Paul G. Harris rightly observes, the region is most likely to show the pattern of assimilating domestic policies, environmental policies in particular, to the demands of the international climate control regime and to the mutual interest of the East Asian countries.⁴⁵

Even with the most difficult question of burden sharing, the East Asian countries are not incapable of resolving these problems. The United Nations has been closely cooperating with East Asian countries over pollution problems in this region, and is likely to expand its role for facilitating bilateral and multilateral negotiations. Moreover, the experience of negotiations among EU member states can set a good model for East Asia to follow. For example, the EU member states set up the first Sulphur Protocol (Helsinki, 1984) in order to reduce sulphur dioxide (SO₂) emissions. Beginning with a simple principle of uniform percentage emission reduction targets, its negotiations over time evolved a more sophisticated equity principle which aims at achieving a given deposition target

whereby burdens are distributed by equalising the marginal costs of deposition reduction across sources or parties.⁴⁶ Parties to the East Asian pollution control regime could adopt a similar model and develop it into a formula acceptable to the member states with all the cost and benefit data of each state adequately counted in.

Conclusion

The scenario presented here features both optimistic and pessimistic consequences in a complex matrix. How one will cancel out the other is difficult to judge, but events that are to be woven out of these two opposing forces will present the Republic of Korea with a full range of opportunities as well as challenges. Domestically, environmental crises will force various social sectors to seek a common solution, although the process may not necessarily produce harmony between them. On the external front, the same problems will require the convergence of national goals between South Korea and its neighbours in East Asia. Although the negotiation process may inevitably harbour disagreements and conflicts as well, in the long run the shared threat may help to push the East Asian countries towards where Europe was half a century ago when it began to form an economic and political community. While Europe was haunted by the common enemy of another world war, East Asia is now facing the common enemy of systemic collapse.

Endnotes

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Hansen believes that the safe level of atmospheric carbon dioxide is no more than 350

² For example, see Kenneth N. Waltz, *The Theory of International Politics*.

³ http://earthobservatory.nasa.gov/IOTD/view.php?id=42392.

⁴ http://www.nasa.gov/topics/earth/features/2010-warmest-year.html.

⁵ The IPCC Climate Change 2007: Synthesis Report, p. 30.

⁶ Ibid, p. 36.

⁷ http://www.co2now.org.

⁸ United Nations, Framework Convention on Climate Change, 'Report of the Conference of the Parties on its Fifteenth Session, *FCCC/CP/2009/11/Add.1*, March 30, 2010. South Korea's official proposed action at Copenhagen 2009 was to reduce emissions unilaterally by 4 per cent below 2005 levels by 2020.

⁹ James Hansen, 'Tipping Point: Perspective of a Climatologist', p. 13.

ppm (parts per million), or even less. See also his article 'Twenty Years Later: Tipping Points Near on Global Warming' posted in *Huff Post Green*, 23 June, 2008.

 $^{^{10}\,}$ http://www.pik-potsdam.de/news/press-releases/archive/2010/copenhagen-accord-misses-2b0-c-climate-target.

¹¹ Yoshiki Ogawa, 'East Asia's Energy and Environmental Problems', p. 38.

¹² Ibid, p. 29.

¹³ H. Shang, Y-K. Kim, and D. Xu, 'Forestry Problems and Air Pollution in China and Korea', p. 133.

¹⁴ Ibid.

Mika Mervio, 'The Environment and Japanese Foreign Policy: Anthropocentric Ideologies and Changing Power Relationships', p. 55.

¹⁶ Chosŏn ilbo, 8 March, 2008.

¹⁷ Alfred M. Duda and Kenneth Sherman, 'A New Imperative for Improving Management of Large Marine Ecosystems', pp. 818-19. See also Jun She, 'Pollution in the Yellow Sea Large Marine Ecosystem: Monitoring, Research, and Ecological Effects'.

¹⁸ For the impact of sea-level rise on these countries, see Yasuko Kameyama, ed., *Climate Change in Asia: Perspectives on the Future Climate Regime*, pp. 3, 61, 109, 240.

¹⁹ For conflicting views about responsibility, see Howard A. Latin, Climate Change Policy Failures: Why Conventional Mitigation Approaches Cannot Succeed, pp. 117-30.

²⁰ IEA Statistics: CO2 Emissions 2012, http://www.iea.org/co2highlights/co2highlights.pdf.

²¹ Parliament of the United Kingdom, House of Commons Climate Change Bill [HL] Bill 97 of 2007-08.

²² Egbert Tellegen, 'Environmental Conflicts in Transforming Economies: Central and Eastern Europe', p. 76.

²³ Jae-yong Choi, *Tongbuk-A hwan'gyŏng hyŏmnyog-ŭi hyŏnjae-wa mirae* [The Present and Future of Environmental Cooperation in East Asia], p. 29.

²⁴ Chosŏn ilbo, 13 November, 2010.

The nuclear accident at Fukushima is a classic case, but China and Korea are not immune to the occurrence of a similar disaster. There already has been an accidental power cut at the nuclear power plant at Kori, South Korea on 9 March, 2012. See *Chosŏn ilbo*, 15 March, 2012.

²⁶ Currently, the South Korean Government has allowed the proliferation of institutions and ministerial bodies dealing with environmental issues. These institutions include the Ministry of Environment, the Ministry of Knowledge Economy, the Ministry of Education, Science, and Technology, The Korea Eco-Products Institute, the Korean Agency for Technology and Standards, the Korea Institute of Environmental Science and Technology, and the Regional Environmental Technology Development Centres.

To achieve this policy goal, the PCCCR adopted the following action plan in September 2008: 1) the promotion of energy saving and the improvement of energy efficiency in industry, 2) more than doubling research and development investment in climate change, and 3) the development of climate-friendly industries and the promotion of the export of their products. The reference for this decision is found in a statement of 2008 from the Prime Minister's Office referred to in English as 'Comprehensive Plan on Combatting Climate Change' which is contained in the document *Task Force on Climate Change* (18 September 2008). This is quoted in Jae-Seung Lee, 'Coping with Climate Change: A Korean Perspective', p. 362.

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²⁹ Ibid, p. 140.

³⁰ Ibid.

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³² Ibid, pp. 145-46.

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³⁵ Recently, scholars representing various Protestant churches, Roman Catholics, Buddhists, Wŏn Buddhists, and Confucianists published a series of research books in

search of a common understanding of life and peace as the basis of a concerted environmental movement. For the most comprehensive treatment see Taehwa munhwa ak'ademi, *Chonggyo sahoe tanch'edur-ŭi hwan'gyŏng hwaltong hwalsŏnghwa-e kwanhan yŏn'gu* [A Study on the Promotion of Environmental Movements by Religious Organisations].

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<sup>36</sup> Jae-yong Choi, op. cit., p. 27.
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³⁷ Ibid, p. 43.

³⁸ Paul G. Harris, *Global Warming and East Asia*, pp. 86-108.

³⁹ Jae-yong Choi, op. cit., p. 30.

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⁴¹ Miranda A. Schreurs, 'Problems and Prospects for Regional Environmental Cooperation in East Asia', p. 210.

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North Korea's Dual Network of Mobile Telecommunications Systems and the Futures of the Korean Peninsula

Bum Chul Shin and Il Han Bae

This paper provides a history of North Korea's telecommunications system which was first introduced in 2002 and analyses the emergence of a dual network system: the official network fully controlled by the Government, and the unofficial network which was begun for business communications by Chinese residents in North Korea and now is used by the populace to avoid Government control. Based on this study, what can be claimed is that the unofficial network of telecommunication in the DPRK could cause a regime shift in a few decades by transforming itself into a defector network working against the regime. From this viewpoint, various futures for the Korean peninsula may be forecasted. Considering the change of the political environment surrounding the Korean peninsula and the technical development of telecommunications, it is possible to anticipate a critical point, which could happen in next decade, when North Korea would be unable to control its people's access to the outside world because of the use of the unofficial telecommunication devices as a portable mass data storage system. This paper will propose some suggestions as to how these changes in communication will affect North Korea's politics, culture and economy.

Key words: North Korea, Telecommunication Systems, Mobile Device, Data Storage Device, Dual network.

North Korea's Dual Network of Mobile Telecommunications Systems and the Futures of the Korean Peninsula

Introduction

From 11 million subscribers in 1990, the number of mobile communication subscribers is expected to reach 6.8 billion which is almost same as the world's population in 2013. The growth of mobile telecommunications has led to the transition of how people network each other from an analog-based network through a 'copper line' to a digital-based system to a 'bit.' There are two different prognostications on the effect of the development of a digital network. Nicholas Negroponte, co-founder of the MIT Media Laboratory, said that information transferred through a bit can offer the free exchange of information and, by extension, change the structure of a society by changing the people's way of life and thinking. On the other hand, Evgeny Morozov pointed out that politicians tend to have optimistic views on the technology derived from the internet. He also said that new media technology is not a tool which encourages democracy and freedom in a society, but rather it is the means for strengthening authoritarian government.

The Jasmine Revolution which swept over the Middle East in 2010 triggered world-wide research on the effect of information and communications technology (ICT) on the weakening of authoritarianism and the diffusion of democracy. However, it is now necessary to study the effect of ICT on North Korea, one of the most closed societies in the world, because it has been barely influenced by the political/economic power of the exchange of information through the bit. We shall focus our discussion of North Korea's ICT on its mobile telecommunications in order to create some scenarios about the future conditions of North Korea and the Korean peninsula, potential changes in ICT and their influence on North Korean society.

Technological Determinism vs. Social Construction of Technology

The Jasmine Revolution brought high expectations that the diffusion of ICT in North Korea might result in its transition from a closed society to a more open and democratic one. With the third-generation transmission of power to Kim Jong Un completed in 2012, North Korea has opened up towards information technology (IT). Despite the surveillance and control of its people, North Korea does permit them to make international calls in major cities. Consequently, it is expected that North Korea will be exposed to a radical change through ICT.

There are two different views on the prospect of changes. One is an optimistic view that the exposure of North Koreans to foreign culture through the new IT environment could lead to a civic revolution or to a gradual opening-up of the society with a greater desire to reform the social system. This standpoint is related to the perspective of technological determinism. The other point of view is the prudent view that North Korea will allow IT to be diffused in the

country, but - if political threats exceed economic benefits, the authorities would block the communication network. In this view, it is too hasty to relate the diffusion of IT to the democratisation of North Korea. Rather, the distinct characteristics of IT in North Korea need to be taken into consideration when making scenarios about the future. This viewpoint is related to the concept of the Social Construction of Technology (SCOT).

Our study adapts a point of view different from either of the standpoints mentioned above. Actor Network Theory (ANT), developed by Bruno Latour, we feel is the best way to understand the current system of IT in North Korea. We chose this theory because - by seeing all the objects in the system as a heterogeneous network made by the combination of the actions of various actors, one can develop different scenarios about how the IT environment in 2032 could transform North Korea.⁴

Actor Network Theory and the Dual Network of Mobile Phones

In ANT theory, society is a big network. In the network, there are many key agencies acting in the system, some of which are not human, such as objects and technologies. To explain this, Bruno Latour adapts the concept of the non-human actor who can be seen as an actor who is symmetrical to a human actor. According to this concept, technology as an actor can have activeness, and the activeness of technology can affect human activity and, by extension, change it. In ANT, society is a collective mixture of the human and the non-human.⁵

ANT starts from the question of why some people have more power and others have not enough, even though two people may have an inherently similar physical condition. This theory does not ask what people with more power can do, but focusses on why they can have such power, and why some people cannot have such power. The answer to these questions comes from the concept of the non-human actor. Physical and biological differences between humans are imperceptible. However, in this theory it is important to understand the differences derived from how powerful people relate themselves to non-human actors which exist outside of the human. Thus, people who can mobilize more of the power of the non-human are able to obtain a greater degree of power.

In ANT, the network is a connection between the human and non-human actors. The important point in the process of establishing an actor network is the obligatory passage point (OPP). The OPP is the point through which a certain person or organisation must pass in order to achieve their goals. The actor who succeeds in creating an OPP can gradually attain power when people pass through his OPP. Most OPPs hide their internal processes and reveal only inputs and outputs so that people become alienated by using the OPP. Therefore, to solve this problem of alienation, the actor who has the information about how technology works as an OPP should not monopolise it. On the contrary, information should be open to the public.⁶ This is the main point of ANT and our study focusses on this aspect.

Dissemination of IT in North Korea

North Korea, unlike South Korea which possesses the world's leading IT infrastructure, has a low number of households with access to a computer, and a rather small number of users of the internet, intranet and mobile communications. In the early 1990s, North Korea set up a policy to control internet usage when the internet was brought into service for the

Government.⁷ The North Korean authorities block the free circulation of information by setting a high user fee, obstructing general public usage.

The mobile telephone was first introduced into North Korea in November, 2002. The first commercialised mobile service in North Korea used the GSM system (Groupe Spécial Mobile) which was established as the European standard by the European Telecommunications Standards Institute (ETSI). First becoming available in the exclusive industrial zone of Najin-Sŏnbong (now called Nasŏn), only key figures in the party, the security department of the military, the police, the secret police and high-ranking officials could use it. The general population began to use mobile phones from December, 2008. 'Koryolink' (75 per cent owned by Egypt's Orascom Telecom and 25 per cent by the state-run Korea Post and Telecommunications Corporation) opened the Wideband Code Division Multiple Access 3G network, and currently has a monopoly on the mobile communication service of North Korea. Orascom said that the number of mobile phone subscribers started from a base of 91,000 subscribers at the end of the year 2009, had 430,000 subscribers by the end of 2010, had increased by September, 2011 to 809,000 subscribers, and had reached one million subscribers by January, 2012. Although the number of subscribers has increased steeply, the service is still only available to 20 per cent of the North Korean population.⁸

A significant sign of North Korea's change was when North Korea announced an investment guide on 26 September, 2012. International communication centres will be placed in P'yŏngyang and Nasŏn. In those centres, international calls and emails can be made to any country, meaning that North Korea effectively has lifted its ban on international calls. Although the number of mobile phone subscribers has risen, the contents and record of every call in North Korea is monitored by the authorities. However, supplementary features of mobile phones, such as the playing of music or the watching of videos, have gained popularity amongst the general population. According to inside sources in North Korea, the number of young people who store South Korean music and films in their mobile phone for listening and watching is increasing. This phenomenon has been spread by the wind of the '(South) Korean Wave' or *Hallyu* of the media culture. However, if listeners are caught, their phones are confiscated by the authorities. However, if listeners are caught,

Official Network of Mobile Phones

Even though the North Korean authorities recognise the danger of the wide dissemination of the mobile phone, they nevertheless encourage people to use them, because the expanding telecommunication industry can be an important means of earning foreign currency. Chinese traders visiting North Korea regularly say that the Ministry of Communications sells mobile phones for around three hundred American dollars even though the Ministry bought them in China for eighty American dollars. In addition to a net profit of around two hundred and twenty dollars per phone, a registration fee of one hundred forty dollars is added to the selling price of these phones.¹¹

Considering that there were one million subscribers of mobile phones by February 2012, the North Korea Government appears to have earned around three hundred million American dollars except for the profit of Orascom. This fixed income is important for Kim Jong Un to achieve his goal of making North Korea a prosperous country. However, the North Korean Government needs an actor who is free to connect with the outside world and has a

cooperative attitude toward their regime. Orascom meets these conditions and became an OPP for the official network of mobile phones in North Korea. ¹³

Unofficial Network of Mobile Phones

North Korea underwent a serious economic crisis from 1994 to 1997, a period referred to as the 'Arduous March'. During this period, the central government's food rationing system collapsed; many people who could not get food rations died of hunger. At that time, Chinese living in North Korea began to emerge as actors who could let North Koreans earn their living by border trade and smuggling. As a result, a network was set up with many North Koreans, enabling people to earn their livelihood in a situation where the Government was unable to maintain rationing.

ANT gives a more detailed explanation to the functioning of this situation. North Koreans who want to earn a livelihood by trading with Chinese in China must be connected to Chinese in North Korea who then become an intermediary or OPP. Chinese in North Korea have kept their position as an OPP by using their unique ability to freely meet North Koreans, and Chinese in both China and North Korea. There is a close relationship between the development of a trade market and the unofficial network of mobile phones since the unofficial network is a necessary tool for both North Koreans and Chinese in North Korea to exchange information. As a result, the Chinese in North Korea have extended their position to being core actors in the unofficial network of mobile phones.

Chinese mobile phones and their networks were important 'non-human agencies' which enabled Chinese in North Korea to create a network with North Koreans. As China's economy rapidly developed in the 1990s, the mobile network system became established throughout the whole country including the border area near North Korea. ¹⁴ Many Chinese in North Korea gave their Chinese mobile phones to North Korean traders and shared useful information with them. For example, during the period of the 'Arduous March', unofficial farmers' markets appeared spontaneously. Through this process, the unofficial network of mobile phones in North Korea expanded. The unofficial network of mobile phones, from the early 2000s, changed into one which threatened the North Korea Government by enabling North Koreans to make contact with people in South Korea for the purpose of exchanging information. ¹⁵

Consequently, in North Korea there is a dual mobile phone network, an official and an unofficial network, which coexist together, but are in conflict with each other. The reason why those two competing networks can coexist is that they share the common purpose of surviving difficult situations and circumstances. The official network has been used by the authorities for survival during the period of the nation's financial difficulties, and the unofficial network has been used by individuals to survive financial difficulties in their personal lives. To survive these difficulties through using the official and unofficial network of mobile telephones, foreign currency must be attained effectively from the OPPs, which are Orascom for the official network, and Chinese residents in North Korea for the unofficial network. As North Koreans accumulate wealth, they also become key actors in the official network of mobile phones by buying the mobile phones offered by the North Korea Government.

However, the official network and the unofficial network of mobile phones cannot coexist in the long term. To maintain the Government's system, the official network of mobile phones must block the unofficial network since the unofficial network of mobile phones enables North Koreans to break away from the Government by connecting them with people in China as well as in South Korea. In the short term, these competing networks of mobile phone will coexist as long as foreign currencies are effectively circulated in those systems. In the long term there is a probability that these networks could evolve into more capital-friendly and market-friendly systems because the only way to sustain each network is by the circulation of foreign currencies.

North Korea's Mobile Telecommunication Forecast

Although it is difficult to forecast what kind of IT devices and services will appear in the next twenty years in North Korea, it is possible to say what level of specification and performance IT devices will have by applying an evolutionary pattern of core technologies which have held the central place in the North Korean IT industry over the past decades. IT devices (which day-by-day are getting smaller, cheaper, and with higher performance) are now making cracks in the Government's ability to control the nation through the spread of unofficial mobile phones which can make international calls and to use DVDs which contain foreign contents. Therefore, for a forecast of the IT environment of 2032, it is important to analyse the potential for the transformation of North Korea.

Evolution of Key Technology: Driving Force of the IT Industry

Moore's law, according to the experiential pattern of the IT industry, states that the number of transistors in an integrated circuit (IC) doubles every 18 months. Experts anticipate that silicon micro-machining will reach the physical limit for chips by the year 2020. However, the development of a technical breakthrough such as a one-atom transistor is also expected to occur by the same time. ¹⁶

In the fields of electronics other than the integrated circuit, Moore's law has not been applied. The capacity of data storage doubles every 12 months and the communications bandwidth of optical fiber communications doubles every 9 months. The trend of doubling bandwidth is expected to continue until the year 2030. The overall trend of revolutionary technological development enables people to use cheaper, smaller electronics with a higher performance, at a cheaper price and with a faster communication service year by year. In 2010, Google announced that they would setup a test-bed for the optical fiber-based 1Gbps service, which is one hundred times faster than present AT&T and other communications services. In addition, in twenty years, a 100Gbps service will be possible for a company which installed the right kind of fiber technology.

The UK telecommunications regulator Ofcom commissioned a report on the future of fibre from the firm Analysys Mason. In the report, Ofcom said that between the years 2025 and 2030, shared fiber technology would be able to offer 10Gpbs to each user. Furthermore, individual fibers would be able to offer 100Gbps regardless of whether the internet service providers offered it or not. The speed of the 4G LTE service of South Korea now has reached 50Mbps. Through the dissemination of the 4G LTE service, developed countries by 2020 and developing countries by 2030 will have general access to 1 to 1.5Gbps service from

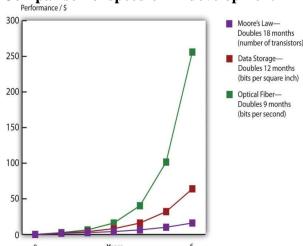


Figure 1.1 Comparison of speed of IT development

Source: Shareholder Presentation by Jeff Bezos, Amazon.com, 2006.

their major cities. With the rapid dissemination of mobile broadband, mobile telecommunication will become the core of communication systems in 2030. It is expected that by 2030, 60 per cent of the world's population will use mobile broadband, not fixed broadband. ¹⁸

Considering the development of mobile communications, it also is important to track the change in the field of data storage. It is expected that portable data storage devices will change extraordinarily in the next twenty years. In 2012, the basic specification of a storage unit on a personal computer is its hard drive which can store 1 terabyte, equal to 1024 gigabytes. Mobile devices such as iPhone5 have 16 gigabyte memory as a basic option. According to Seagate Vice President Mark Re, hard disks will be able to store 100 to 200 terabytes of information for \$150 by 2020 and, by 2030, storage capacity will reach 1 petabytes which is equal to 1024 terabytes¹⁹.

Figure 1.2. Data storage device forecast

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	2020 Forecast	2030 Forecast			
Hard disk drive (internal)	100 to 200 terabyte for \$150	1 petabyte (1024 terabyte)			
Portable media capacity	1 terabyte	100 terabyte			

Source: http://computersight.com.

100 terabytes of information equals at least 10,000 hours of high definition (HD) media which is more than a year's HD broadcasting (8,874 hours). In other words, people would be able to store as much information as they would need for a year in their palm. If free access to the internet can be guaranteed, people can get more storage space with less payment through the use of the cloud service. In addition, as the internet comes into the era of big data, the quantitative growth of data storage will be followed by the qualitative growth of contents such as the creation of petabyte-sized data.

Advancing Transition of Telecommunication Systems

In North Korea, the number of subscribers of mobile phones reached eight out of every hundred people less than four years from the beginning of the mobile service. Considering the pace of the dissemination of mobile service in China, it is expected that the number of subscribers in North Korea will reach ten million in 2022.

Table 1.1 Mobile phone subscribers in China

	2000→(10 years)→2010	
The number of subscribers out of every hundred / millions	6.72 / 85	67.04 / 859

Source: International Telecommunication Union (ITU) 2011.

Table 1.2 Expected mobile phone subscribers in North Korea

	2012→(10 years)→2022	
The number of subscribers out of every hundred / millions (population)	4.10 / 1 (2434)	41.0 / 10 (2500)

Source: World Urbanization Prospects, the 2011 Revision, Department of Economic and Social Affairs of the United Nations (DESA) & Orascom business report 2011 for three quarters²⁰

Regarding mobile devices, at least half of them will be a smartphone which can store and play media and apps. At the same time, for the amusement of people, contents players such as iPad and X-box will come into wide use. However, considering the history of the North Korea Government's control over its people, usage of telecommunications devices are likely to be kept under surveillance. Therefore, among the two key drivers of the IT industry, it would be more useful for us to focus on the dissemination of data storage devices including mobile phones.

Unlike the telecommunication system, data storage functions in devices are difficult to control. When the number of subscribers exceeds ten million in 2020, the dissemination of uncontrollable information through data storage devices which are mainly on mobile phones will be hard to control. With rapidly increased information, the society of North Korea could have enough potential power to be transformed regardless of the will of either the Government or the general public. In this case, it is necessary for actors (who might be the North Korean Government, the general public, or the South Korean Government) to forecast plausible and challenging scenarios in order to prepare for the future. Through the process of having various scenarios in mind, it might be possible for them to create their own preferred futures.

Korean Peninsula 2032 Scenarios: Aspirational Futures and Four Generic Futures

The Institute for Alternative Futures has developed the concept of 'aspirational futures' as a means to consider what the future might be. The concept envisions futures in terms of three different zones.

- 1) The 'Zone of Conventional Expectation' which reflects the 'best estimate' or 'best guess' scenario based on the best available intelligence, informed by environmental scans as well as any fundamental assumptions used by the organisation.²¹
- 2) The 'Zone of Growing Desperation' which asks the oft-avoided question, 'what could go wrong?' Scenarios in this zone emerge from a list of major challenges that would be relevant to the organisation.²²
- 3) The 'Zone of High Aspiration' which describes a future where a critical mass of stakeholders successfully pursues visionary strategies leading to a surprisingly successful outcome. Scenarios in this zone can become powerful motivators for organisational change.²³

The approach taken by the Institute for Alternative Futures is closely related to the University of Hawai'i Manoa School's four generic futures scenarios, created by Prof. James Dator and developed by researchers at the Hawaii Research Center for Futures Studies.²⁴ The 'Four Generic Futures' approach describes futures in four different zones.

- 1) 'Continued Growth' is the 'official' view of the future of all modern governments, educational systems, and organisations. The purpose of government, education, and all aspects of life in the present and recent past is to build a vibrant economy, and to develop the people, institutions, and technologies to keep the economy growing and changing forever.²⁵
- 2) 'Collapse' can come from one or another cause (or combination of causes) and can lead either to extinction or to a 'lower' stage of development than currently exists. ²⁶
- 3) 'Discipline' or a 'Disciplined Society' arises when people feel that 'continued economic growth' is either undesirable or unsustainable. Some people feel that precious places, processes, and values are threatened or destroyed by allowing continuous economic growth. They wish to preserve or restore the places, processes, or values that they feel are far more important to humans than the endless acquisition of new things and/or the kind of labour and the use of time which is required to produce and acquire them.²⁷
- 4) 'Transformation' or the 'Transformational Society' focusses on the powerful transforming power of technology especially robotics and artificial intelligence, genetic engineering, nanotechnology, teleportation, space settlement, and the emergence of a 'dream society' as the successor to the 'information society'.²⁸

Our study uses a combination of approaches of the Institute for Alternative Futures and Hawai'i Research Center for Future Studies concepts of 'zone' in developing scenarios for North Korea by establishing four scenarios for the future which also includes a visionary outcome.²⁹

Figure 1.3 Scenarios for North Korea and East Asia in 2032

		North Korean Control	
		Continuation	Mitigation
Outside Situation	*Chinese economy fails to keep growing. *Political tension and authoritarian control.	Scenario 1. Retarded Control Society.	Scenario 2. Failed Control Society.
	*Cooperation of East Asian countries. *Energy, environment problems in control.	Scenario 3. Ubiquitous Control Society.	Scenario 4. Quasi-democratic Society.

The four scenarios for the future of North Korea are based on two premises:

- 1) that the evolution of information communication technology will proceed apace for the next twenty years, and that
- 2) there will be neither a war on the Korean peninsula, nor will the North Korean regime collapse.

The scenario map is composed of two variables. The first variable (across the top of the figure) is the extent of the North Korean regime's ability to control its people and the technology which they will use. The second variable (down the left-hand side of the figure) is the regional situation of East Asia. Developments in neighbouring countries, especially continued stable growth in China, will mainly affect the control strategy of the North Korean Government.

Scenario 1. North Korea as a 'Retarded Control Society'

In this scenario, the Chinese economy, the growth model for the North Korean regime, declines abruptly from the late 2010s. World economic recession promotes social conflicts, riots, and the withdrawal of foreign capital from China. The Chinese Communist Party which is in a state of political crisis strengthens its social control through biometric technology which proves not to be effective. Energy and environmental problems impede the restitution of the world economy. In 2023, the Chinese and Japanese navies clash in the South China Sea. The resolution to this conflict is negotiated between China and the US, but it seriously damages the democratic growth of China. The power gap between the US and China is still evident.

North Korea, which has made some progress in an open economic policy during the early days of the Kim Jong Un regime, meets the structural limits of growth because of the worsened economic environment. Economic cooperation with South Korea is interrupted by the inconsistent policy of the North Korean regime, which proclaims a retro-style Juche economy, not dependent upon foreign markets, because it is said to be better than the capitalistic economy in protecting the basic life of people. The regime still controls the people tightly.

The people commonly enjoy South Korean contents through portable devices, and envy the prosperity of the southern economy. The state-controlled IT service is quite popular, though the network of users cannot openly offer resistance to the regime which still controls their basic life. Although the North Korean regime fails to eliminate either the unofficial TC network or the flow of southern digital contents completely, these do not form a serious threat to the rule of the middle-aged Kim Jong Un.

Scenario 2. North Korea as a 'Failed Control Society'

Political chaos in the Chinese Government encourages conflict within the North Korean élite. Kim Jong Un fails to manage this conflict and is removed by young military leaders in 2024. However, the newly established leadership is not effective in fulfilling the needs of the people who have been demonstrating for a better life. The North Korean regime is close to the edge of collapse, though it manages to negotiate with South Korea for economic support to avoid an uncertain future.

The strict control of the Workers' Party is drastically reduced, but the authoritarian political system does not change into a democratic one as the people wish. People are able to communicate with the outside world through the unofficial telecommunication network, which is actually cheaper, and safer than the officially allowed and filtered international phones of the state-owned telecommunications agency. People freely enjoy *Hallyu* contents, and create their own social network where any kind of critical opinion is allowed. In result of this change, South Korea becomes a major partner for economic development, and call centres for South Korean companies open in P'yŏngyang.

Scenario 3. North Korea as a 'Ubiquitous Control Society'

The Chinese economy keeps on growing, and catches up with the US economy by 2032. The Chinese Communist Party peacefully adopts a democratic path by holding multi-party, democratic elections without also losing its power to control the nation. The success of China in both economics and politics leads neighbouring countries, such as Taiwan and North Korea, effectively to become subordinate to the Chinese economy.

North Korea which has achieved impressive economic success for the past two decades, now becomes a country with a stable and active economy. In the 2010s, a steep increase of wages in China promoted the transfer of its labour-intensive industries to its neighbouring ally, North Korea. The border between China and North Korea begins to enjoy foreign capital flow from China. Kim Jong Un, with economic confidence, opens North Korea's door to South Korean companies from the early 2020s. The North Korean Government invests in developing ICT-intensive industries including the operating systems of computer games, smart phones, and network facilities. With this investment in ICT, the northern regime eagerly imports security technology such as RFID and biometric sensors.

In 2024, the North Korean regime provides at no cost a new Kim-family badge, which is actually an electronic tag for official activities. This badge automatically connects to the main control system of the Government, displaying peoples' identity, their movements, their economic activities, and even their access to the official network.

People are generally satisfied with their improved economic environment, but have become

aware of the impossibility of making systematic resistance to the regime in a web-based, central control system. The unofficial telecommunication network is completely terminated by a sophisticated jamming system adopted by Government. All IT devices now contain operating systems made in North Korea which automatically recognise people's access to unauthorised contents. However, North Korean people can enjoy foreign contents such as South Korean drama and music (*Hallyu* contents) through unofficially imported devices, but always have to be careful about being tracked by the Government. Despite the few exceptions of some unofficial devices, the 'smart' dictatorship of Kim Jong Un actualises the ubiquitous control over its people as was depicted in George Owell's novel *1984*.

Scenario 4. North Korea as a 'Quasi-democratic Society'

North Korea has made impressive economic progress due to low wage competitiveness compared with China and other neighbouring countries. However, the fruit of this improved economy has not been distributed evenly. Although riots against the corrupt dictatorship have spread by the day, Kim Jong Un refuses to accept political reform based on the needs of the North Korean people. As the unofficial telecommunication network emerges as a channel for political discontent, in 2020 Kim Jong Un prohibits ordinary people from using mobile phones which results in a fatal blow to his power. In 2021, young military officers supported by the new middle class which has accumulated wealth through the emerging unofficial network of mobile phones conduct a coup that ends with the dethroning the Kim family.

The newly-established leadership manages to maintain a diplomatic balance between China and South Korea to get maximum support. Since then, North Korea seems to be on the right track to democratic reform. North Korea now becomes an important manufacturing base for the companies of South Korea. Nonetheless, more than half of the North Korean people - who are excluded from the middle class, still prefer the authoritarian control of the Kim family to the new élite who try to establish policies representing the interests of the middle class. Although control over the use of the internet for the expression of critical opinion still remains, the ability for freedom of speech increases greatly. The North Korean people freely experience foreign contents, and the young generation starts to think of themselves as being cosmopolitan. The more North Koreans exchange ideas with South Koreans, the issue of reunification emerges naturally.

Conclusion

This study has been conducted on the premise that North Korea's ability to control its people's access to the outside world could be stymied by the growth of the unofficial telecommunication system. We will now consider the strengths and weaknesses of each scenario in terms of this basic premise.

Scenario One considers the economic decline of China and its influence on the future of the Korean peninsula. This scenario may be categorized as a 'Disciplined Society' as described in the concept of the four generic futures proposed by the Hawai'i Research Center for Future Studies. For the unofficial telecommunication network to expand within North Korea, it is essential for China to be the driving force of the economic growth of North Korea. However, in this scenario China loses its economic influence, and consequently the unofficial telecommunication network loses its driving force. Significant social change could not occur because the North Korean Government would be able to strengthen its control over the people's communications.

In Scenario Two, two important conditions are described - political chaos in China and economic cooperation with South Korea. These two conditions result in the increased usage of an unofficial telecommunication network with South Korea. This scenario is a combination of two of the scenario types of the four generic futures – the 'collapsed' authoritarian control of North Korea, and the 'continued (economic) growth' of South Korea. The Korean peninsula is dominated or led by the economy and culture of South Korea.

Considering the current situation in North Korea as described in this study, the first and second scenarios have some possibility of coming true. One feature of these scenarios is that there are no emerging issues regarding the unofficial telecommunications network. All characteristics of a North Korean future mentioned in these two scenarios are based on current trends, which are expected to make way for new trends based on current emerging issues. These characteristics can be seen as a strength in prognostication due to their giving a high possibility and connectivity with current trends to these scenarios. However, those characteristics can also be the weakness for these scenarios. Since there are no emerging issues dealt in these scenarios, it would be hard to use them for forecasting a long-term future.

Scenario Three is based on the successful economic growth of North Korea followed by a high-tech and ubiquitous control by the Government over its people. Advanced technology would be used to terminated the unofficial telecommunications network, which in turn would enable the Government of North Korea to open its door to South Korea with confidence because of its ability to control the country. This scenario may be compared with the 'Transformational Society' of the four generic scenarios.

The strength of the third scenario lies in that it shows the influence of emerging issues for prognosticating the future of North Korea. The potentiality of North Korea for the development of advanced technology for the purpose of controlling its own society is an important emerging issue in this scenario. However, the influence of countries surrounding North Korea has been ignored here. Advanced technology for the control of its people could be challenged by new forms of technology developed in neighbouring countries as has happened with the emergence of an unofficial telecommunications network.

The second function of mobile devices for use as a storage device should be carefully considered to provide more details for this scenario. As mentioned above, it is anticipated that one iphone-sized device could store data which is equivalent to one year of HD movies. This is enough information which if received could alter someone's views. Given that the dual telecommunication network is the core aspect of each of the four scenarios, North Korea is likely to continue to experience an increasingly close relationship to its neighbours. Therefore, the independent action of the North Korean Government which is described in the third scenario do not fit with the basic assumptions of this study.

The fourth scenario is focussed intensively on both inside and outside relationships between the Government of North Korea, the North Korean people and other changing factors. The relationship between the Government and the people has been changed due to the unofficial TC network, which becomes a channel for political discontent. In addition, the rising middle class is motivated by the economic wealth accumulated through the extension of the

unofficial TC market. In this scenario, the authoritarian regime is changed by the new élite which represent the interests of the middle class. The exchanging of opinions throughout the network is, to some extent, allowed despite the continued control of the internet.

The strength of Scenario Four lies in its being cautious about extremism. This scenario suggests that any change in the regime is likely to dissuade people from embracing the extremes of either authoritarianism or democracy. The regime is changed, but the society persists in a relatively slow transition from its past towards a more democratically influenced society. This cautiousness is why the topic of this scenario is described as a 'Quasidemocratic Society'. This quasi-democratic society reflects the preferred vision for the Korean peninsula by conveying the impression that both North and South Korea are working on creating a well-balanced society. More importantly, the unofficial telecommunication network would continue to play an important role in enabling the continued transformation of the Korean peninsula.

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An Institutional Approach to Economic Reform and Development: Towards a Developmental Understanding of North Korea

Christopher K. Green and Steven C. Denney

North Korea is not an average low-income state with a moribund national economy. The outcome of the state's Suryŏngist-Sŏn'gun ideological and economic structure is a well-run, sector-specific economy within a neglected national economy, all ordered around the maintenance of the ruling system, which is led and tightly controlled by the Kim family. However, the pockets of efficiency that exist in this sector-specific 'Royal Court Economy' could, in principle, be used to catalyze the steady development of the people's economy in line with the basic tenets of New Structural Economics, all without the Government being forced to yield its monopoly on power. This is not happening, however, because the Suryŏngist-Sŏn'gun system of governance acts as a roadblock to the realisation of the idea. In North Korea, the economic sectors chosen to receive the guiding hand of state protection are not selected according to principles of comparative advantage as they should be, nor do they power the wider national economy. This means that while the Democratic People's Republic of Korea is drastically underfunded, the Government (the leadership and the Korean Workers' Party) is not, because it monopolises the funds generated by a parallel economic structure. This structure is more efficient and more profitable than the remainder, but the surplus value it creates is not allocated in an efficient manner.

Key words: Institutional Approach to Economic Reform, Development Economics, North Korea, Kim Jong Un, Pockets of Efficiency.

An Institutional Approach to Economic Reform and Development: Towards a Developmental Understanding of North Korea

Introduction

With its focus on the internal structure of governments, the developmental state model has been used to explain the rapid economic growth which took place in post-World War II Japan, South Korea, and Taiwan. In this paper, the model is used to highlight the institutional constraints to economic growth in North Korea from the mid-1970s to the present. It argues that there is no *a priori* impediment to economic growth in North Korea, which, just like its Northeast Asian neighbours, has 'embedded' bureaucratic structures capable of providing administrative guidance for economic development. However, these bureaucratic structures are not autonomous from predatory interests and are thus misused by the North Korean Government, limiting their scope and transformative power. Even so, the presence of 'pockets of efficiency' within North Korea's bureaucratic structure leave modest cause for optimism.

The paper begins with a general overview of the literature on development economics and a brief summary of the developmental states of Japan, South Korea, and Taiwan; here the concepts of 'embedded autonomy' and 'pockets of efficiency' are introduced and explained. This is followed by a short historical summary of North Korea's 'Royal Court Economy' and then a review of the ideological and political underpinnings of the North's economy. The concluding section summarizes the developmental state model as it applies to North Korea.

The Ball in P'yongyang's Court: A World Beyond the Washington Consensus

As little as a decade ago, it would have been anathema for a Washington-based financial institution to publish an article in support of a model of overt state intervention for the purpose of fostering economic growth. Yet this is precisely what the World Bank is now doing. Therefore, viewed within the historical canon of development economics as an academic discipline, this paper comes at an optimal time, since the neo-liberal understanding, best understood as the 'Washington Consensus', is no longer the orthodox view.¹ Three major events have had a major influence upon this process of change: first, the late 1990s Asian financial crisis, which put the credibility of pure market-based approaches to the sternest of tests; second, the ongoing rise of the Chinese economy as part of a broader regional economic success story; and third, the global financial crisis, which began in 2008 and has yet to be overcome.

The 'New Structural Economics' that has emerged from this series of challenges presents a direct challenge to neo-classical economic prescriptions. It centres on the notion that a state wishing to follow a development track must ultimately opt to pursue its comparative advantages, and one that does so will 'successfully upgrade its endowment structure, tap into the potential of latecomer advantages, sustain industrial upgrading, increase its national income, create jobs and reduce poverty'. Where the theory diverges from the neo-classical

school is in its insistence that this process necessitates state intervention in the economy. In the end, it explains that governments need the freedom to offer 'transitory protections to [pre-existing] nonviable firms' and to actively facilitate the entry of private companies and foreign direct investment into sectors in which the nation enjoys comparative advantage, thus improving resource allocation and bringing about dynamic economic growth. In essence, it is a process of 'opening markets while also providing government support to facilitate the growth of new industries'.³

This shift in emphasis within the World Bank is indicative of a broader paradigm shift in development economics. During the era of neo-classical revivalism (1980s-1990s), 'structural adjustments' were seen as the panacea to stagnant or moribund economies. To foster economic growth (and as a condition for receiving loans), international lenders like the World Bank pushed least developed countries (LDPs) to privatise and deregulate; in other words: to reduce the degree of intervention by the state. Now, chief economists at the World Bank publish reports advising governments to 'play an active role in facilitating the movement of the economy from a lower stage of development to a high one', in addition to implementing 'an appropriate sequencing of liberalization policies ... in domestic finance and foreign trade [rather than 'shock therapy] so as to achieve stability and dynamic growth simultaneously during [economic] transition'. That the World Bank's chief economist from 2008 to 2012, Justin Yifu Lin, found common ground with formerly outlying development economist Chang Ha-joon marks a paradigm shift in development economics.

How They Got Started: Characteristics of the Developmental State

The term 'developmental state', however, emerged from the analysis of three much earlier examples of state intervention for the purpose of facilitating economic growth: first Japan, and then South Korea and Taiwan. Research into these success stories shows clearly that the three were not just random states in a broadly similar geopolitical space with diligent workforces that happened to preside over a period of impressive economic growth. Rather, it was as a result of effective bureaucratic design.

That a country has a booming economy does not mean it is a developmental state; and likewise, a developmental state could, theoretically, grow in an un-explosive, unimpressive way. While East Asian developmental states did not adhere to the tenets of neo-classical economics or to the policy prescriptions recommended by Washington-based economic and financial institutions, neither were they centrally planned economies where state planning supplanted the function of the market. Rather, researchers have established that developmental states intervene, but in a 'market conforming' way that mobilizes market forces in a different and potentially more efficient manner than in an unfettered free market.⁷

But what researchers concluded truly differentiates a developmental state from the other typologies of a state is not the presence of mere market conforming government intervention; rather, it is the internal structure of the state apparatus that does the intervening. Peter Evans, a comparative political economist, provides one of the best explanations of what this means in practice. Building on previous work in the comparative political economy literature, Evans uses the idea of 'embedded autonomy' to explain the unique institutional traits of the East Asian developmental states. According to Evans, 'embedded autonomy' captures the way 'pilot agencies' in developmental economies represent an amalgamation of Weberian

'corporate coherence', institutional insulation, and the necessary state capacity to intervene in a way that replaces entrepreneurship and 'induces decision-making'. In addition to enjoying a relatively high degree of isolation from political influence, the key bureaucratic institutions in such states are also tightly connected to the social structure, which enables smoother bureaucracy-society relations.

Though protection from the influence of politics and politicians and businessmen is conceptually simple enough, 'embedded autonomy' is more complex. It is rooted in Mark Granovetter's critique of economic and sociological theories of economic behaviour. Granovetter asserted that much of economic theory under-socialises behaviour, while much of sociological theory over-socialises it. He thus proposed a more accurate view of economic behaviour as being 'embedded' within social relations. Evans makes use of Granovetter's conceptual framework to explain how bureaucracies in true developmental states take advantage of their close ties to business and industry for the purpose of developmental coordination and as a way to enhance the receptiveness and effectiveness of administrative guidance. Embeddedness, as Evans understands it, 'implies a concrete set of connections that link the state intimately and aggressively to particular social groups with whom the state shares a joint project of transformation'. There is no better illustration of embedded autonomy at work than the state-society relationship of the Pak Chonghui period in South Korea. 11 So embedded were government-chaebŏl 12 relations at the time that 'Korea Inc.', a label used to describe an intricate Government-business relationship, entered the discourse by economists studying Korea. ¹³ In Korea, Government-business relations were, like Government-anything relations at the time, a highly top-down relationship, partly as a consequence of the deeply penetrating colonial state apparatus bequeathed to both Koreas by the Japanese colonial government. ¹⁴ To the chagrin of progressive historians, the Government institution most responsible for the impressive economic growth in South Korea, and the other 'miracle economies' of East Asia, was the bureaucracy, arguably an outgrowth of the modernisation that took place prior to the Korean War. A brief summary of the instrumental role played by bureaucracies in Japan, South Korea, and Taiwan during the postwar reconstruction era will provide a short but sufficient overview.

Who Did It and How: Bureaucracies and Economic Growth

The ability to implement a long-term industrial policy through the actual planning, intervening, and guiding of the economy, held apart from rent-seeking politicians and the short-term visions of businessmen, was a role filled in Japan by bureaucrats from the Ministry of International Trade and Investment (MITI), in South Korea by the Economic Planning Board (EPB), and in Taiwan by the Council for Economic Planning and Development (CEPD).

In Japan, MITI achieved its greatest independence and a sufficient degree of autonomy in the post-war period when its chief rival—the military—was disbanded as required by the US-enforced Peace Constitution. MITI sought long-term economic growth through various measures, most-notably its control over foreign technology licensing and access to foreign exchange (the famed 'approval mechanism'), which it used to foster and control competition amongst businesses. Through its 'colony agency'—the Economic Planning Agency (EPA)—it revealed which industries it had an interest in selecting (industries to which technology and money were directed). This selection served the function of guiding competition to strategic

industrial sectors, or to reprise a colloquialism, 'picking the winners and losers'. 15

Like MITI, South Korea's EPB exercised discretion over which companies received foreign loans and technology. This gave the bureaucracy a similar mandate to pick winners and losers through the capital import bureau setup within the EPB, in addition to serving the role of the ministry responsible for economic planning and budgeting. The economic growth plans drawn up every five years were the responsibility of the EPB. Though the EPB, unlike MITI, was initially under much tighter executive oversight, by proving its economic planning competence and commitment to furthering the national interest it was eventually granted autonomy similar to that enjoyed by MITI. Even when Korea's political leadership attempted to reign in the EPB's autonomy and decision-making ability, it quickly learned that the ability of the EPB to act autonomously was an essential condition for foreign investment. No one likes a dictator - especially investors.

In Taiwan, the CEPD's efforts to wrangle itself loose of political control were, as Johnson states, 'similar to South Korea's'. The announcement of an end to aid from the United States led to the creation of the CIECD, which took over the role that US aid had served and 'took on developmental planning and coordination functions'. However, compared to its Northeast Asian counterparts, Taiwan's case is slightly 'messier'. Taiwan had no equivalent *zaibatzu/chaebŏl* industrial structure, meaning that while it also used tariffs, quantitative restrictions and imports controls à *la* administrative guidance to foster the development of strategic industries (picking winners and losers), it differed from Japan and Korea in that both the political leadership and the bureaucracy were less averse to foreign influence. ¹⁹

As can be seen, despite the differences between the bureaucracies of these three East Asian states, particularly regarding the type of relationship their respective economic bureaucracies had with the political leadership, embedded autonomy ties them together and highlights the essential role bureaucratic agencies played as the institutions which were the primary catalysis for economic growth. This was achieved via: 1) relative autonomy from political influence and the necessary control over technology and capital (re: approval mechanisms), and 2) the effective use of administrative guidance, the smooth functioning of which was achieved through social embeddedness.

These three success stories represent the full implementation of a dictum often evoked in the political economy literature to indicate a hand-in-glove relationship between state and bureaucracy. If permitted to so-do, 'politicians reign and bureaucrats rule'. Despite their manifold differences, these bureaucracies, and the political systems within which they could develop, represent the underlying reason for sustained economic growth in three diverse parts of modern East Asia, and it is this that warrants their being grouped together and labeled the 'Developmental State Model' of economic growth.

Broadening the Discourse: the Developmental-Predatory Continuum

The success stories of Japan, South Korea, and Taiwan make them worthy of close analysis, but also draws fire away from the middle ground. In Evans's view, it is vital to think about all developing states as being on a predatory-developmental continuum, which then allows for better comparative appraisal of internal state structures and, therefore, prospects for reform and development. The key lies in understanding what triggers a move on the

continuum from less predatory to more developmental, and vice-versa. 'Pockets of efficiency' are one way to catalyse shifts along this continuum.

'Pockets of efficiency' is a relatively common idea, as work on Mozambique has shown. ²⁰ However, they have been best documented with reference to the Brazilian state of the late twentieth century. ²¹ Known as *bide de emprego* [source of jobs], merit-based recruitment for developmental institutions was not a priority in Brazil at the time. Thus, a forward-looking Weberian bureaucracy committed to the collective goal of development was unable to develop. However, from time to time, and seemingly counter-intuitively, pockets of efficiency still arose. These were bureaucratic enclaves genuinely committed to development, and acting in a similar way to the bureaucratic structures in true developmental states, such as existed in South Korea at the same time. ²²

Overall, the literature on the developmental state shows that it is the presence of a forward-looking, embedded Weberian bureaucracy staffed by the country's best and brightest united under a mandate to grow the national economy that is the key to a successful developmental state. And it is this that differentiated Japan, South Korea and Taiwan from the Philippines and other 'predatory states' during the latter half of the twentieth century. At the same time, while states such as Brazil were less successful, they still saw pockets of efficiency rise and fall within far more ineffective governing bureaucracies. Very few countries are completely lacking in areas of bureaucratic efficiency.²³ Controversially, we argue that North Korea has also seen, and continues to harbour, similar pocket(s) of efficiency within the so-called 'Royal Court Economy', but that they are not recognised as such.

Introducing the Royal Court Economy

A key question remains, what does this talk of a 'developmental state model' really have to do with North Korea? The country is a basket case. Though it rebounded from the destruction of the Korean War more rapidly than its southern competitor, and even enjoyed nominally better standards of living for a spell, since the dawn of the new century it has existed in what can be classified at best as non-fatal stability. This does not appear to make it an attractive bet for future development.

However, while it is true that the economy of North Korea, when viewed as a single, cohesive structure, is in a very poor condition, viewing it in that way is misleading. Some sectors of the North Korean economy are well developed and very efficient, and herein is the point: North Korean pockets of efficiency have existed for more than thirty years.

In 1997, shortly after his defection, one-time Korean Workers' Party International Secretary Hwang Changyŏp described the existence of an economic structure parallel to, partially dependent upon, but administratively independent of North Korea's version of the standard socialist 'People's Economy'. In his subsequent memoirs, Hwang said that in 1974:

'Kim Jong-il made a system with Party organizations from every level at its core, giving the work of earning foreign currency to loyalty fund-earning agencies to be created in provinces, municipalities and counties, with the money earned to be given to the Party.'²⁴

According to Hwang, Kim had concluded that it was no longer possible for the North Korean

Government to prosper off the activities of the people's economy, which he knew was already in decline. Therefore, he decreed that key areas of economic activity be ring-fenced and developed in order to provide a constant stream of foreign currency to the party, or more precisely the supreme leader, or *Suryŏng*. These so-called 'loyalty funds' would be under his direct control, and he would use them to pursue the regime's goals. This primarily meant the maintenance of a costly patrimonial system whereby material benefits and opportunities for self-aggrandisement were exchanged for personal loyalty, known as *sŏnmul chŏngch'i*, or 'gift politics', and military strengthening to ensure that threats to the regime, both from within and without, were deterred.

Then, in 2003, another high-level refugee, Kim Kwangjin, fled his post in Singapore to offer a greater level of clarity on the system that had grown out of Kim Jong Il's 1974 decision. Kim Kwangjin called it the 'Royal Court Economy', explaining that Kim Il Sung [Kim Ilsŏng] had been the one who originally ordered the hiving off and merging of the military-industrial complex outside the confines of the people's economy, that he 'excised the munitions industry from the Cabinet in the early 1970s', but adding that something much more fundamental had occurred at the same time:

'[Kim Il Song's heir] Kim Jong-il created a new central party department called 'Office No. 39' - named after the arbitrary office number where it began operations. Under 39's umbrella, 'Daesong General Bureau' (a massive manufacturing and trading conglomerate) emerged, thus forming a new economic sector completely independent from the central planning and Cabinet control. The ensuing advent of new foreign exchange banks would also contribute to the process of destabilizing the existing economic system and the state's unilateral control of the foreign currency. From this new, independent sector run by the Central Committee of the Korean Workers' Party (KWP)—and ultimately controlled exclusively by Kim Jong-il—the Royal Court Economy would attain its current status.'²⁷

The Royal Court Economy is comprised of all party economic institutions, the party economic structure (meaning all economic entities controlled by party departments), and the munitions industry. Directly controlled by the top leadership of the Korean Workers' Party and overseen by those in charge of 'Office No. 39', it has grown to control more than 100 entities involved in a range of activities, including banks, a tile factory, a smelter, and many more. Other entities in the people's economy also pay so-called 'loyalty funds' to the Government. It should be noted that these funds are part of the given entity's overall budget and are not the sole reason for the existence of the entity itself.

Thus, the Royal Court Economy resembles the Brazilian case outlined earlier in this paper. In other words, it is a large pocket of efficiency within a far less efficient whole. In an interview with the authors of this paper during November 2012, Kim Kwangjin expounded on the nature of this pocket of efficiency, saying that the Royal Court Economy 'introduces better technologies, and has better production lines. The people managing these industries are much better qualified than others to run businesses, in terms of finance and how to handle financial problems; their labour sector produces better products, they travel more than others and introduce more information'. ²⁹

Office No.39 is only partially embedded in that it operates for the benefit of the 2.5 million people (slightly more than 10 per cent of the population) the Royal Court Economy serves, meaning members of the élite and those in the semi-élite that continue to receive guaranteed rations by dint of their work.³⁰ People operating outside it, be they market traders or persons assigned to entities within the people's economy, never see any direct benefit from the Royal Court Economy.³¹ Nevertheless, it plays the role of the provider of administrative guidance to those entities within its purview. It oversees their actions; it coordinates investment in them; it controls their balance sheets. Were it to be given the order by a developmental dictator, there would be no economically valid reason why it could not be used to power the growth of the national economy.³² This is what Pak Chŏnghǔi did in South Korea and, as noted earlier, the prevailing economic orthodoxy of today would have no theoretical quarrel with such a model, encouraging states to intervene in national economies to direct funding and talent in the direction of areas of comparative advantage.

Talking Ideas: North Korea's State Ideology

However, if North Korea were to follow such a path, it would have to escape its ideological straitjacket, because while institutions themselves are important, the ideas that underpin them are just as crucial. This is why, of all the available approaches to understanding what spurs institutional change, the 'culture-based structured interest' view best explains the complex interactions between actors, ideas, and institutions.³³ Permitting culture a place in political economy broadens the theoretical lens, thus creating space for the consideration of human agency, worldviews, and, importantly in the case of North Korea, the ruling ideology.

North Korea is a state that emphasises the importance of correct thinking. Though not fundamentally different from the emphasis Stalin placed on ideas over circumstance, Charles Arsmtrong finds that, 'as so often is the case in North Korean communism, ideas came first. 'Correct' thinking made successful economic production possible, not the other way around'.³⁴ The two concepts most frequently used to explain the North's ruling ideology *in toto* are *Chuch'e* [commonly, Juche], whereby 'the masses of the people are the master of the revolution and construction and they have the strength to push them', ³⁵ and, since the famine of the late 1990s, *Sŏn'gun*, or 'carrying on the revolution and construction with the army as the main force on the principle of giving priority to the military affairs'. ³⁶

The official line posits *Sŏn'gun* as an outgrowth of *Chuch'e*. One official publication reads: 'The *Chuch'e* idea is the root of the *Sŏn'gun* idea. The *Chuch'e* idea clarifies the principle of defending and realizing the independence of the popular masses and the nation, the principle of strengthening the driving force of the revolution and enhancing its role and the principle of grasping the people's thoughts as the main factor in the revolution and construction. The *Sŏn'gun* idea is based precisely on these principles.'³⁷

And later:

'In compliance with the guiding principle of the *Chuch'e* idea on applying the theory of putting the main stress on thoughts, the *Sŏn'gun* idea puts up the revolutionary soldier spirit as the main factor in defending the destiny of the nation and propelling overall socialist construction.'³⁸

Although North Korean propaganda officials pretend *Chuch'e* has explanatory value, the briefest study of the ostensibly foundational idea reveals its ambiguous application and understanding. In his work on the etymology of the word, Brian Myers concludes that *Chuch'e* is a hollow concept; its status as North Korea's *de facto* ideology is largely the result of misreadings and confusion among journalists, Korean studies scholars, and even the North Koreans themselves.³⁹

But whereas *Chuch'e* reveals little about the structure of North Korea's economic and political systems, *Sŏn'gun* clearly underscores the nature of ideational barriers to institutional reform, thus providing an explanation for North Korea's failure to improve its economic performance.

Sŏn'gun was forged during the difficult years of the mid-1990s, a period which saw the dissolution of the communist bloc, the withdrawal of economic support from Soviet Russia, the death of state-founder Kim Il Sung, and the onset of a famine that killed hundreds of thousands. Though not a novel idea as the North Korean propagandists claim, ⁴⁰ *Sŏn'gun* nevertheless explains how and why the contemporary North Korean state operates in the way it does and, crucially, why its economy remains moribund (instead of dynamic) and its political system corrupt (rather than developmental).

Heonik Kwon and Byung-ho Chung, in *North Korea: Beyond Charismatic Politics*, demonstrate how *Sŏn'gun* operates as the idea which guides policy-making decisions and ordinary life in the country. Their explication of *Sŏn'gun* strengthens the claim that regime legitimacy, and thus its continuity, is so tightly wrapped around the *Sŏn'gun* narrative that any serious deviation from it would threaten the existence of the embattled regime. The most important action of a citizen is to harbour the right idea. The authors explain that in order to justify the constant belt-tightening demanded of average North Koreans, the consequence of a prioritised military economy, and as a way to validate the overt militarisation of politics and society, 'North Korea [declared itself] the sole vanguard of the Third World revolution and a leader among developing nations in their collective struggle against coerced incorporation into the 'new world order' orchestrated by American imperial power, and thus [as] 'the only source of light that can ignite the fire of self-determination among peoples in the Third World'.⁴¹

Kwon and Chung make it clear that demilitarisation, or a 'nonmilitary solution to the crisis in international socialism', is an unacceptable deviation from the 'correct thinking' as outlined in the ideology of Sŏn'gun. When Sŏn'gun is combined with its metaphysical counterpart, Ch'ongdae [barrel of a gun], it provides both a raison d'etre for North Korea vis-à-vis its wealthy southern neighbour and a clear path towards what, according to both state ideology and national narrative, is the ultimate goal for the state and its citizenry - a militarised struggle for the revolution and a continuation of partisan heritage. Reform would unravel this completely, bringing North Korea back from the precipice but leaving it without a narrative by which to justify its existence vis-à-vis South Korea.

The implementation of any meaningful economic reforms in North Korea would thus precipitate the dissolution of the correct thinking model itself, and with it both allegiance to the state and loyalty to the regime, especially the *Suryŏng*—currently Kim Jong Un [Kim Chŏngŭn]. Political leadership is legitimized through *Sŏn'gun* politics, and cannot exist

without it. In the words of Brian Myers, '[North Korea] cannot shift focus from military affairs to economic affairs without becoming a fourth-rate South Korea', a condition which would precipitate its collapse. ⁴³

Myers' conclusion is not universally held, however. There is another side to the debate, and it has long been promoted by former US State Department official and US-DPRK negotiator Robert Carlin. Carlin hypothesises that the supremacy of *Sŏn'gun* politics is not absolute, and that it comes under constant pressure from officials who are willing not merely to countenance, but even to encourage, an economics-first, i.e. developmental, approach. Carlin's position is best represented in an article entitled 'The Debate in Bloom', which he co-authored with Joel Wit in 2006. In it, a close reading of North Korean publications, especially the economics journal *Kyŏngje yŏn'gu* [Economic Research], led the pair to conclude that from 2002-2005 there was a 'debate in bloom' occurring between *Sŏn'gun*-supporting conservatives and economic 'reformers', with momentum behind those in favour of change.⁴⁴

According to Carlin and Wit's reading, reformists and conservatives clashed over whether the nation's power was being enhanced by concentrating on strengthening military power. To the naysayers, diverting a higher proportion of the national budget to the People's Economy, at the expense of the defense industry, would better serve the nation, and help perpetuate the existing system. If true, this thinking represented a reversal of the conservative Sŏn'gun line, a de facto rejection of the state's ruling ideology and a refusal to harbour 'correct thinking'. ⁴⁵ Carlin and Wit justify the presupposition that economic reform would not result in North Korea 'becoming a fourth-rate South Korea' in this way:

'[M]any observers ... are distracted by the constant repetition of the term 'military first' in the North Korean media. There is a tendency to take this literally and to assume that every reference to the term constitutes a reaffirmation of it. But the military first concept is no more a sound guideline to real North Korean policy than was that of *Chuch'e* (self-reliance) in earlier years. These are not policies but slogans.'⁴⁶

In other words, based in part on Carlin's experience of talking to members of the North Korean Government, the two conclude that *Sŏn'gun* is boilerplate propaganda, and disregard it. To them, espoused ideology is thus not a decisive factor in North Korean economic development. However, *Sŏn'gun* works to undermine Carlin and Wit's thesis in another way, by questioning the notion of post-totalitarian institutional pluralism. This theory, which posits competing bureaucracies within the North Korean state, is a natural and essential precursor to any 'debate in bloom'. ⁴⁷

Power is the Only Thing: Arguing against Institutional Pluralism

Sŏn'gun is predominantly about power. Or, as the International Crisis Group's Daniel Pinkston would have it, 'Power is not only critical to Sŏn'gun politics, power is the only thing in Sŏn'gun politics'. Thus, in the rigidly top-down Sŏn'gun system, which prioritises military expenditure and where power is highly concentrated on a moral basis around the supreme leader and his closest confidants, the idea of a plurality of opinions from competing power centres on issues of key national interest such as whether or not to pursue economic reform, lacks coherence.

Scholars generally agree the North Korea ruled by Kim Il Sung between 1945 and 1994 showed, starting in the 1960s, all the major traits of a totalitarian state and that these traits have persisted into the post-Kim Il Song era. This meant that the unification of the three major hierarchies (those of power, money/property, and knowledge/science)⁴⁹ dramatically limited the personal sphere of the nation's subjects and reduced to the vanishing point the ability of a civil society to exist, much less to come to terms with and thus restrict state power. This, in the words of an entry in the *Great Soviet Encyclopedia*, led to a state with 'absolute control over all aspects of life... complete regulation by the state of all legal organizations, discretionary power in the hands of the rulers, prohibition of all democratic organizations, and liquidation of constitutional rights and freedoms'.⁵⁰

Conversely, 'post-totalitarian institutionalism' points toward something completely different, and more malleable: a debate, played out in part on the pages of the state media, wherein different actors competed for Kim Jong Il's ear in an attempt to win him over to one or other policy position.⁵¹

However, this thesis is fraught with danger, and questioned by those with first-hand experience. According to Jang Jin-sung, a high-ranking defector from the North, there was never any room in Kim Jong Il's North Korean media for opinions on major policy questions other than those of Kim himself. Speaking with the authors in November 2012, Jang noted, 'Kim Jong Il would make known his opinion on important matters, and then it would be down to the writers to present his position'. ⁵² In short, Jang sees post-totalitarian institutional pluralism as a substantive overstating of North Korea's progress out of the totalitarianism Kim Il Sung built.

To demonstrate by way of example, there is little evidence to suggest that North Korean nuclear and missile policy - which certainly counts among North Korea's core national interests, in late 2012 and early 2013 was influenced in any way whatsoever by an institutional debate, as the post-totalitarian institutional pluralist thesis implies should have been the case. Rather, if we look at the events of December 2012 and January 2013 which led up to North Korea's third nuclear test on 12 February, 2013, it is clear that there is an orchestrating body controlling which institutions (Korean Workers' Party, state administration, the Cabinet, and the military and National Defense Commission) speak publicly at which times throughout, what they say, what they do, and which constituencies they engage with. The picture is in keeping with that put forward by Jang. By incorporating information received from civilian sources inside North Korea, the highly centralised decision-making structure becomes uniquely visible if we examine the following chronology: ⁵³

- 10 December, 2012: The Korean Committee of Space Technology whose specific institutional make-up is not known, releases a statement announcing that the window for a long-range rocket launch previously scheduled for some time between the December 10 and 18 is to be pushed back to a period ending on December 28.
- 12 December, 2012: The rocket launch goes ahead, within the original launch window.
- 7 January, 2013: Eric Schmidt, the executive chairman of Google, arrives in P'yŏngyang. The trip follows a visit by North Korean officials to the headquarters of Google on 1 April, 2011.
- 10 January, 2013: Eric Schmidt departs P'yŏngyang.

- 15 January, 2013: Seoul-based *Daily NK* reports that the Korean Workers' Party Propaganda and Agitation Department (a party entity) describes the visit as the head of a 'famous Internet company' coming to congratulate North Korea on its successful rocket launch.⁵⁴
- 22 January, 2013: The UN Security Council adopts Resolution 2087 in response to the December 12 missile test, which was performed in violation of existing UN resolutions.
- 22 January, 2013 (two hours later): North Korea's Ministry of Foreign Affairs (a state administrative entity) releases a statement criticising the UN decision.
- 23 January, 2013: North Korea's National Defense Commission (a military entity) releases a statement condemning the UN decision in harsher words and stating North Korea's determination to conduct further missile launches and nuclear tests 'targeting the United States'.
- 25 January, 2013: Kim Jong Un leads a meeting of security and foreign affairs officials in P'yŏngyang (spanning the party, state administration and military), during which he announces that the North will take 'great national steps' in response to the UN resolution. It is widely reported on state television.
- 29 January, 2013: The National Defense Commission (military), which Kim chairs, declares a new level of military readiness, requiring added security measures on the ground, the calling up of reservists and the halting of all leave for enlisted men.
- 30 January, 2013: Local level civilian lectures overseen by the Korean Workers' Party cell structure (party) inform assembled citizens, 'The alliance of imperialists including the UN are sanctioning us to try and crush socialism in the only such country left in the world', and that 'The new Pak Kŭnhye administration wants to start a war with us, so people from every organ, enterprise and Worker and Peasant Red Guard unit must prepare to meet the threat'. 55

Given the timeframe involved, it is highly unlikely that the above events were outcomes of debate or inter-agency wrangling. Rather, they show the hallmarks of inter-agency preplanning, top down decision-making and a focus on the unequivocal pursuit of the national interest. As a *Sŏn'gun* state with a genetically pre-ordained charismatic leader applying the logic of a partisan army to state functions of national importance, this is not surprising. There is little room for debate, only obedience to orders from above.

Of course, the *Sŏn'gun* ideological roadblock could be overcome if it were possible to simply change track and pursue a new ideological approach, to change the nature of the correct thinking. However, North Korea's hereditary ruling system precludes this escape route. As noted by Kwon and Chung, there is nowhere on earth where more effort or per capita resources have been poured into attempting to maintain and continuously refresh a form of charismatic leadership than in North Korea.

The regime has transformed the charismatic and, thanks to his Manchurian guerilla pedigree, uniquely legitimate leadership of Kim Il Sung into a genetic *fait accompli* for the so-called 'Mount Paektu bloodline'. They have stretched every sinew of the idea of a charismatic leader, and in that way extended the Kim family's ruling legitimacy back as far as Kim's parents, and forward to his son, Kim Jong II, and onward to the grandson, Kim Jong Un. This

is not merely physical, it also encompasses the hereditary transfer of ideas. History has become the only state-sanctioned guide to future policy.

Conclusion

North Korea is not an average low-income state with a moribund national economy; the outcome of the state's *Suryŏngist- Sŏn'gun* ideological and economic structure is a well-run, sector-specific economy within a neglected national economy, all ordered around the maintenance of the ruling system, which is led and tightly controlled by the Kim family, a third-generation hereditary ruling élite.

As this paper demonstrates, the pockets of efficiency that exist in the sector-specific Royal Court Economy in principle could be used to catalyse the steady development of the people's economy in line with the basic tenets of New Structural Economics, all without the Government being forced to yield its monopoly on political power. Institutions such as Office No.39 - which are already partially embedded into the social structure, could be used as a starting point for further integration. Moreover, given the relative ease with which developmental dictatorships are able to provide political isolation and protection for specific institutions, the notion that Kim Jong Un might wish to confer such a status on a developmental institution is not unduly farfetched in and of itself.

However, the *Suryŏngist-Sŏn'gun* system of governance acts as an ideological roadblock to the realisation of this idea. In North Korea, the economic sectors chosen to receive the guiding hand of state protection are not selected according to principles of comparative advantage, nor are they positioned to power the wider national economy. ⁵⁶ Rather, they are selected according to an alternate hierarchy of need, with two things predominating: public and state security concerns, as required by Sŏn'gun, and gift politics, as required by Suryŏngism.

What the focus on *Sŏn'gun* security means in practice is that only a limited percentage of the population is permitted to make contact with outsiders, and even then to a very limited extent, while information entering the country is also strictly controlled and rationed. Andrei Lankov is not the only one who believes that the influx of information that reform would precipitate would equal regime collapse⁵⁷—Kim Jong Un and those in the inner circle of leadership show signs of agreement with this point of view.

Suryŏngist gift politics are no less problematic. According to Kim Kwangjin:
'[The Royal Court Economy] raises funds for Kim Jong-il, and he uses the funds according to his priorities. If the Royal Economy were to produce results and these were reinvested in production, then that would be fine. That would expand industry and that would help grow... a better economy. But it is not the case. They raise the funds, making use of all their resources and privileges, and then this all goes in cash to Kim Jong-il. He takes these funds and uses them for his priorities.'58

What this means in practice is that while the state known as the Democratic People's Republic of Korea is drastically underfunded, the Government, meaning the leadership and the Korean Workers' Party, is not because it monopolises the investment of those funds

generated by the parallel economic structure, more efficient and more profitable than the remainder. In other words, the Royal Court Economy is a pocket of efficiency no different to any other in the arena of development economics. As such, it represents North Korea's best chance of escaping from the economic trap that it finds itself in. However, for as long as the monies earned from the entities within it go on being channeled into unproductive activities, North Korea will not be able to rise to the challenge of the new economic orthodoxy symbolized by New Structural Economics. This will not be due to an absence of opportunity; it will be due to the regime's decision to funnel its available resources into unproductive activities linked to the maintenance of charismatic rule.

Endnotes

Justin Yifu Lin, *The Quest for Prosperity*, p. 256.

¹ The Washington Consensus, a package of policy prescriptions assigned to developing countries in economic and financial crises by Washington-based developmental institutions such as the International Monetary Fund and the World Bank, was for the most part synonymous with neo-liberalism and the market-based approach to development in the 1990s. See John Williamson, 'What Washington Means by Policy Reform'.

³ Ibid.

⁴ For a summary of structural adjustments and Structural Adjustment Programmes (SAPs) see Jason Oringer and Carol Welch, 'Structural Adjustment Programs'.

⁵ Justin Yifu Lin, New Structural Economics: A Framework for Rethinking Development, pp. 27, 33.

⁶ In a *Development Policy Review* publication, Justin Lin and Chang Ha-joon debate the merits of state intervention and comparative advantage. See Justin Yifu Lin and Chang Ha-joon, 'Should Industrial Policy in Developing Countries Conform to Comparative Advantage or Defy It? A Debate Between Justin Lin and Chang Ha-joon'.

⁷ See Alice Amsden, Asia's Next Giant: South Korea and Late Industrialization (Oxford, Oxford UP, 1989); Chalmers Johnson, MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975; and Robert Wade, Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization.

⁸ Peter Evans, Embedded Autonomy: States and Industrial Transformation.

⁹ Mark Granovetter, 'Economic Action and Social Structure: the Problem of Embeddedness'.

¹⁰ Evans, op. cit., p. 59.

 $^{^{11}}$ Officially from 1961 to 1979, although the developmental state era began quite some time after Pak took power in a *coup d'etat*.

- ¹⁵ Chalmers Johnson, 'Political Institutions and Economic Performance', pp. 152-153, and 'The Economic Bureaucracy', Chapter 2 in Chalmers Johnson, *MITI and the Japanese Miracle*, op. cit., pp. 35-82.
- ¹⁶ Russell Mardon, 'The State and the Effective Control of Foreign Capital: The Case of South Korea', pp. 116-119.
- ¹⁷ General Chŏn Tuhwan, who led South Korea from 1979-1987, attempted to curtail the independence of the EPB, but was strongly rebuked by negative foreign investor feedback. See Chalmers Johnson, 'Political Institutions and Economic Performance', pp. 154-155.
- Johnson, 'Political Institutions and Economic Performance', op. cit., p. 155.
- ¹⁹ 'The Economic Bureaucracy', Chapter 2 in Robert Wade, *Governing the Market*, pp. 195-227. Wade's section on 'Consultants and Tasks Forces' best illustrates the level of foreign influence in Taiwan. See especially pp. 211-217.
- ²⁰ Lars Buur, et al, 'Mozambique Synthesis Analysis: Between Pockets of Efficiency and Elite Capture'.
- ²¹ See Luciano Martins, *Estado Capitalista e Burocracia no Basil Pos64*, and Eliza J. Willis, *The State as Banker: The Expansion of the Public Sector in Brazil*.
- ²² One such example was Brazil's National Development Bank (BNDE) under Juscelino Kubitschek. According to Peter Evans, 'the BNDE offered a clear career path, developmental duties and an ethic of public service'. Peter Evans, 'Predatory, Developmental, and Other Apparatuses', op.cit., p. 577.

- ²⁴ Hwang, Changyŏp, *Nanŭn yŏksa-ŭi chilli-rŭl poatta*," [I Saw the Truth of History], p. 221.
- ²⁵ Kim Kwangjin, 'The Defector's Tale: Inside North Korea's Secret Economy'

¹² A Korean word meaning a large, multi-sector conglomerate entity that can best be described through the use of examples: Samsung, Hyundai-Kia, LG, POSCO et al.

Peter Evans, 'The State and the Politics of Adjustment', p. 157.

¹⁴ For more on the legacy of the penetrating Japanese colonial administration, see two works. For South Korea see Carter Eckert, *Offspring of Empire: The Koch'ang Kims and the Origins of Korean Capitalism*, 1876-1945. For North Korea see Charles Armstrong, *The North Korean Revolution*, 1945-1949.

²³ Lars Buur, op.cit.

The 'Suryŏng Economy' is alternatively referred to as the 'Party Economy' or the 'First (Leader's) Planned Economy'. See 'A Historical Primer to the North Korean Economy', New Focus International, 8 February, 2013. This may be found at: http://newfocusintl.com/a-historical-primer-to-the-north-korean-economy/.

- ³⁰ The figure of 2.5 million people represents an estimate of the scale of the essential goods distribution system which continues to operate for privileged groups in North Korea. This figure was provided by Professor Ra Jong-yil of Hanyang University at a private meeting in Seoul during December 2012 and can be used as a general estimate of the size of the élite in North Korea today.
- ³¹ The North Korean economy is becoming increasingly integrated, especially around the nexus of private commerce. As a result there are many ways in which persons outside the Royal Court Economy might benefit from it indirectly.
- ³² Kim Kwangjin, 'Pukhan-ŭn chigŭm haibŭrid-ŭi ch'eje toen chung inga?' [Is North Korea now becoming a hydrid system?]. Kim explains that one of the key problems in the North Korean case is the leader's constant interference in economic decisions, leading to incoherent policy outcomes.
- ³³ Chang Ha-joon and Peter Evans, 'The Role of Institutions in Economic Change', p. 108.

²⁶ Kim Kwangjin, op. cit.

²⁷ Ibid.

²⁸ Ju Song-ha, 'Kim Chŏngil pijagŭm tamtang hadŏn kŭ kongsik sŏksang-e mosŭp tŭrŏnae iryejok' [Kim Chŏngil's slush fund is publicly revealed – an unprecendented story].

²⁹ Interview with the authors in November 2012.

³⁴ Armstrong, op. cit., p. 165.

Juche Idea: Answers to a Hundred Questions, p. 1. Juche represents a mix of human-centered, self-reliant development wedded to Marxist principles of the human triumph over nature.

³⁶ Questions and Answers on the Songun Idea, p. 1. Sŏn'gun represents the essentialist prioritisation of the military and military-industrial complex in resource allocation, but also the absolute pre-eminence of power relations in international affairs.

³⁷ Ibid, p. 4.

³⁸ Ibid.

The argument that North Korea risks becoming a 'fourth-rate South Korea' if it eases the beating of wars drums has not only been made by Kwon and Chung. Brian Myers has made this same argument time and again. For a summary of Myers' argument and contending viewpoints, see Steven Denney, 'A Debate (Again) in Bloom'.

Brian Myers, 'Ideology as Smokescreen: North Korea's Juche Thought'.

⁴⁰ As Adrian Buzo explains, the militarisation of North Korea began not in 1994, but in 1962 following the Cuban missile crisis when it became evident that the Soviet Union would avoid direct confrontation with the United States and thus be unlikely to provide North Korea with a level of security necessary to justify a non-militaristic development strategy. In the same year, 'The Fifth Plenum of the Fourth KWP Central Committee (CC) adopted the policy of Equal Emphasis, signifying that the country would place emphasis on economic development and military preparedness equally', though in reality this would '[initiate] a military build-up which, in relation to the scale of the human and material resources of the country, can only be described as staggering'. Adrian Buzo, *The Guerilla Dynasty: Politics and Leadership in North Korea*, p. 62.

⁴¹ Heonik Kwon and Byung-ho Chung, *North Korea: Beyond Charismatic Politics*, p. 77.

⁴² Using the imagery associated with the passing of two guns from father (Kim Hyŏngjik) to son (Kim Ilsŏng), Kwon and Chung elaborate on the philosophy of *Ch'ongdae* which is explained generally as 'the entirety of North Korea's social forces, which, in the North Korean idiom, are united in the sacred task of defending the core revolution ... with our lives'. Kwon and Chung, op. cit., p. 89.

⁴³ Press briefing at the Asia Society Korea Center, 25 November, 2012, Seoul, Korea. A video of the event is available at: http://www.youtube.com/watch?v=JKgZE5wwc-I.

All Robert L. Carlin and Joel S. Wit, 'The Debate in Bloom'. There are many other adherents of this school of thought, including Moon Chung-in and John Delury of Yonsei University, and, following the logic of an internal debate to its natural conclusion, US Federal employee Patrick McEachern. He wrote in *Inside the Red Box* that North Korea under Kim Jong Il became a post-totalitarian realm of competing policy positions. See Patrick McEachern, *Inside the Red Box: North Korea's Post-totalitarian Politics*, p. 73.

With a great revisionist zeal, the North Korean Government claims that *Sŏn'gun* dates back to the day when Kim Il Sung was gifted two pistols by his father in the early 1920s. As noted by Adrian Buzo, North Korean militarisation also dates back to the very earliest years of the state's inception, meaning that it is somewhat misleading to say that *Sŏn'gun* was launched in the 1990s. See 'The Emerging Tyranny, 1958-70', Chapter 3 in Buzo, *The Guerilla Dynasty*, pp. 57-79.

⁴⁶ Carlin and Wit, *North Korean Reform*, op. cit., p. 36.

- ⁵² Jang Jin-sung is a former member of the Korean Workers' Party Central Committee and the Chosŏn Broadcasting Committee. He is now the chief editor of *New Focus*, an online media source based in Seoul.
- ⁵³ Daily NK, which provides much of the open source inside information on North Korea available internationally, keeps records of conversations with sources but does not make them public for security reasons. However, individual published articles are cited.

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⁴⁷ McEachern, op. cit., p. 101.

 $^{^{48}}$ Daniel Pinkston, 'The Unha-3 Launch and Implications of UN Security Council Resolution 2087'.

⁴⁹ Alexander Korchak, Contemporary Totalitarianism: A Systems Approach, p. 7.

⁵⁰ Ibid.

⁵¹ McEachern, op. cit., p. 73.

⁵⁴ Choi Song-min, 'Google Delegation Becomes Propaganda Tool'.

⁵⁵ Kim Kwangjin [not the person interviewed in this paper], 'Emergency Lectures Emphasize Threat of War'

⁵⁶ With the obvious exception of those involving primary goods such as coal, gold, or uranium.

Andrei Lankov believes that enacting economic reforms would be akin to the current regime planting the seed of its own demise, emphasising the destabilising effects of a sudden and massive influx of information—a consequence of broader economic reform. He has stated bluntly that 'reform would mean suicide' for the North Korean regime. This is from a speech given at an *NKnet* lecture on North Korean Human Rights, 25 April, 2012. For a summary of the speech, see Matthew McGrath, 'Lankov on Reform in North Korea'.

⁵⁸ Interview with these authors in November 2012.

⁵⁹ Typified by the construction of statues and other commemorative edifices which do not generate surplus value.

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