"LANDSCAPE AS POLITICAL PROJECT"THE "GREENING" OF NORTH KOREA, SINCERITY OR OTHERWISE? INVESTIGATING THE PROCESS OF IDEOLOGICAL INCORPORATION IN NORTH KOREA

Robert Winstanley-Chesters University of Leeds

Environmental management and practical policy strategies relating to it have always been an important part of North Korea's approach to what would be locally described as "revolutionary" industrial/economic development. However, since the collapse of the wider Soviet Bloc, and the famine period of the mid 1990s, it has been possible to determine a change in policies relating to the management of the natural world in North Korea. Pyongyang's government and institutions have begun to respond to developing themes within the theory and policy of governments, strategists and theoreticians from the wider world inspired by concepts of "conservation" and "preservation," derived from environmental or "green" movements. North Korea has sought to incorporate such governmental or strategic themes within its ideology—in ways that do not destabilize its own philosophical or governmental frameworks, but instead serve to strengthen them. Accordingly, projects within North Korea, whose focus is environmental management, have begun to resemble those of the wider world and in the closer East Asian neighborhood, but to what end: environmental rehabilitation or regime survival? This paper builds on previous research identifying historical narratives relating to environmental management within North Korea and the routes through which its institutions translate ideological or philosophical development into practical policy; it investigates the routes through which North Korea incorporates foreign or external ideas within its own theoretical construct—how these ideas and projects spurred by them are utilised for domestic and international propaganda needs. It seeks to evaluate if the sincerity or otherwise of such an incorporation can be established and ultimately whether this would prove useful in the development of analysis focused on construction or translation of theoretical development or institutional functionality within North Korea.

Introduction

Current political, academic, and media narratives surrounding North Korea are focused primarily within three areas of approach. It seems difficult for many scholars to examine North Korea, its politics and policy from outside the paradigms of "unknowability" and opacity, threat or collapse. These narratives have not, however, led to the making of much progress in understanding the nature of North Korea's policy, political actions or intentions in recent years. From an academic perspective they do not shed much light on the actuality of ideological or policy development within North Korea.

This paper seeks to approach North Korea from a different perspective, that of regarding it as a pragmatic actor in both its internal and external policy. Within it I will briefly introduce the historical environmental strategies of North Korea, with some key examples that track the development of such strategies through the historical narrative from the infant post-Korean War North Korea through Sino/Soviet splits to the era of the "arduous march," the post-1992 famine and the general collapse of its environmental policy at this time. I will suggest that North Korea has, throughout its history, continually adjusted its environmental strategy not only to reflect its developing ideological formulation but also to accommodate new realities in its geopolitical positioning and any presentational or propaganda needs it might have. Such a strategy has brought the Democratic People's Republic of Korea (DPRK) to its current position in which its environmental strategy revolves around elements of conservation and an awareness of the natural world that derives, it seems, from western/wider world theories surrounding the environment and presents us with a DPRK that claims to be "green," and strategically undertakes many projects and schemes which seem to be sound from an environmental ethical standpoint. Therefore, finally this paper will seek to investigate the question whether the DPRK understands what it is to be "green" in a conventional way, present some practical examples of how the DPRK's current environmental position affects both practical policy and institutional functionality and to analyze the veracity, or otherwise, of a "green" Pyongyang.

Historical Environmental Strategies of North Korea

Post-War Initial Capacity/Infrastructural Development

Environmental management within North Korea and analysis surrounding it starts with war. Bruce Cumings, for example, describes the Korean War as hav-

ing left a scorched earth in its wake. Within Pyongyang some 93 percent of all buildings had been destroyed and there had been an enormous level of damage and destruction done to the environment. Much of the industrial and agricultural infrastructure that had been put in place by the colonial Japanese administration had been destroyed, and the North found itself in a situation with something of a blank slate needing to rebuild much of its agricultural and industrial base and to rehabilitate much of the natural environment.

North Korean institutions did so, engaging much technical expertise from both the Union of Soviet Socialist Republics (USSR) and the People's Republic of China (PRC), and incorporating much of the intellectual/ideological influence of Stalinist era central planning.² Once the war was over from a military perspective (in the political and diplomatic senses it has, of course, never ended), North Korea's bureaucracy spent quite a short period re-organising and assessing the damage done during hostilities. By September 1953 North Korea had formulated a "Three Year Plan" for the reconstruction of the country, and entered into negotiations with the USSR for an extension of its credit lines.

The industrial and environmental policy which external credit paid for focused primarily upon what I will term an "impositional" approach to the natural environment, in which industrial or infrastructural development is simply imposed on or within the environment, essentially regardless of context. Examples include iron and steel works, such as those reconstructed at Huanghae, Kimchaek and Sungjin, an oil refinery at Nampo, power stations at Sup'ung and Pyonyang, new mills at Sinuiju and Pyongyang, a fertilizer plant at Hungnan, and a seafood cannery at Sinpo.

In the agricultural realm North Korea obtained a large number of tractors and sewing machines, as well as vast tonnages of fertilizer. Kuark describes the policy outlook of Pyongyang's Department of Agriculture as having only two primary goals: "the swift reconstruction and rehabilitation of the war-shattered 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 socialization of agriculture by means of collectivization."

There are many examples from this period of environmental improvements following impositional models, Prybyla noting that "in 1956 alone, the Chinese army gave 740,000 man - days to the building of irrigation ditches and dams,

¹ Bruce Cumings, *The Origins of the Korean War* (Princeton, NJ: Princeton University Press, 1981).

² Jan S. Prybyla, "Soviet and Chinese Economic Competition Within the Communist World," Soviet Studies 15 (1964): 464-473.

³ Yoon T. Kuark, North Korea's Agricultural Development during the Post-War Period, The China Quarterly, 14 (1963): 82-93.

including the Pyong Nam reservoir."4 It is also reported that out of state investment between 1954 and 1956 of some US\$ 120 million, nearly US\$ 80 million (4,200 million "old" Won), went on "irrigation and river dyke projects." Such projects led to a rapid increase in productive agricultural capacity and by 1957 some 301,350 extra acres of arable land and 940,800 extra acres of irrigated land had been put into a serviceable condition.⁶ Although very little consideration was given to matters strictly conservational or preservational, during this period large scale reclamation of virgin land or destruction of forests appears not to have taken place; merely improvements in already industrialized agricultural land which led to the overall increase in industrial production. It is, in fact, quite difficult during this initial period to see a distinctly North Korean or Juche orientated approach to the environmental or to agricultural development in spite of Kim II Sung's statement from 1956 that "Rice is immediately socialism. We cannot build socialism without rice." The statement bears much in common with Lenin's "Communism is Soviet power plus the electrification of the whole country," in that it serves as the foundation base for North Korean socialism just as Lenin's statement determines the color of Soviet Communism. Perhaps, Kim Il Sung's statement outlines a socialism marked by agrarian resource and capacity issues of the sort that would dog North Korea throughout its history.

"Great Leap Forward" Influenced Policy

North Korea's initial period of impositional environmental development focused upon rapid capacity increase was short lived, however, as upon the death of Stalin and the solidification of the power of Nikita Khrushchev as Soviet Premier a process of radical and abrupt political change began that would have a direct impact upon such environmental strategies. Khrushchev's 1956 "Secret Speech" denouncing Stalin and recent Soviet critiques of both the strategy and political approach of Kim Il Sung ("Comrade Kim Il Sung is surrounded by bootlickers and careerists [...]" was the opinion of a Soviet official named Petrov according to the Hungarian Charge d'Affaires in Pyongyang at the time), forced a shift in the positioning of the parties involved within the War-

⁴ Prybyla, "Soviet and Chinese Economic Competition Within the Communist World," 469.

⁵ Kuark, "Korea's Agricultural Development during the Post-War Period," 83.

⁶ Ibid

⁷ Kim Il Sung, "Rice is Immediately Socialism" (letter to the chairmen of the South Pyongan provincial party committee), Jan 28th, 1956, Works, vol. 10, (Pyongyang, Foreign Languages Publishing House, 1956), 24.

⁸ Lenin, "Speech Delivered At The Ninth All-Russia Conference Of The Russian Communist Party" September 22, 1920, Collected Works, vol. 31(1965), 275-279.

⁹ L. Keresztes, "Report, Embassy of Hungary in North Korea to the Hungarian Foreign Ministry," 1955;

saw Pact, a breakdown in relations between the USSR and China known as the Sino-Soviet split and rapid political and diplomatic movement away from the USSR by North Korea. This tumultuous period, however, also created the political and ideological space for a revision Pyongyang's policy towards nature and the natural world that in the end would enable a distinct "Juche orientated" environmental strategy to emerge.

During this era of distantness from the Soviet Union Mao directed Chinese industrial, agricultural, and environmental policy away from the path of development following during the "First Five Year Plan" and instigated what has become known as the "Great Leap Forward." During this time Chinese environmental and developmental policy was ingrained with an almost existential urgency.

Judith Shapiro identifies multiple possibilities of intent within mass campaigns of popular infrastructural or industrial capacity building (known as "Yundong"), stating that the "goals of these mass mobilizations for rapid change varied from socio-political transformation to economic development, and the campaigns served variously to introduce new policies, change attitudes, rectify malpractice and purge class enemies [...] and were often adjusted upward as campaigns continued."¹⁰

This sense of almost impossible pace served to break natural and historical connections citizens had with their local natural environments, and sometimes religious and spiritual traditions connected with them, to disorientate and to militarize—and it is this disorientated head-long rush into change that enabled many of the projects attempted and achieved within the Great Leap Forward to take place. This impossible pace has been described as "revolutionary speed" and the individuals and communities engaging with it as "revolutionary models," in which the perfect manifestation of a particular element of theory or policy is personified or anthropomorphized. One famous example of such a "revolutionary model" in practice being that built around the village of Dazhai and its inhabitants who undertook a legendarily rapid reconstruction of their farming land after an incident of devastating flooding.¹¹

It may have been the concept of revolutionary urgency and its physical or narratological manifestation as "revolutionary speed" that most inspired Kim Il Sung, because by September 1958 the Ch'ollima Movement was launched (Ch'ollima being a mythical flying horse, a Korean version of Pegasus). This

B. Salontai, Cold War History Research Project Budapest, www.coldwar.hu (accessed October 20 2013).

¹⁰ Judith Shapiro, Mao's War Against Nature (Cambridge, Cambridge University Press, 2001), 71.

¹¹ Mitch Meisner, "Dazhai, The Mass Line in Practice," Modern China 1, no. 4 (1978): 27-62.

was the first of a number of categories of "revolutionary urgency" defined within North Korea over the course of its existence. However, in the Korean context the acute sense of revolutionary urgency and transformation which was a hallmark of the "Great Leap Forward" appears to have been blunted so far as agriculture was concerned. Kim Il Sung was perhaps aware of the impending and obvious failure of much of the Chinese policy (which would result in economic collapse and abject and acute famine). More than that disaster, perhaps, Pyongyang's institutions considered particular issues of labor supply within North Korea, the general size of the population and the potential dangerousness of large groupings of people. Whatever their reasoning, Pyongyang and Kim Il Sung for the most part refused gargantuan scale mega projects, such as the draining of lakes or the wide scale demolition and terracing of mountains, and focused instead through the Ch'ollima movement on a smaller scale of development, abandoning much of the radicalism of the Chinese model.

Technocratic/Indigenous Approaches to the Development of the Environment

The period of ferment created by the Sino-Soviet Split and the difficulties of the "Great Leap Forward" forced North Korea to adopt strategies of development focused upon agricultural and environmental productivity that were relatively indigenous to it; although we must not downplay the role of technicians from either the USSR or the PRC, even at the height of Sino-Soviet split Soviet technicians were involved in preparatory works for some hydrological projects.¹²

Kim Il Sung's "Theses on the Socialist Rural Question in Our Country" serves as the foundational grounding for both more general industrial and agricultural strategy of North Korea, and for the practical policies to be followed within that strategy. Within the theses Kim Il Sung lays out a fully "Juche orientated" approach to agricultural and environmental development.

Environmental development was to be achieved through the functioning of the "three revolutions movement" within the landscape in which Juche thinking would be applied to the environmental and the agricultural through embedding of conceptions and strategies relating to "revolutionary" technical, cultural and ideological elements within development. The Theses also called for a hierarchical organization 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 was also called for, as well as the final

stage in the collectivization of rural property,¹³ in which the post Korean war settlement of mixed pattern of land ownership with agriculture would end and cooperatives be abolished in favor of collectives.

Following these changes, the Theses call for agricultural and natural landscape development according to the same systemic approach as urbanized or industrial areas, not just to achieve the goals of the "three revolutions movement," but also to further the wider revolutionary aims of Juche: "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."¹⁴

In the "Rural Theses" we perhaps can see, for the first time, the beginning of a real systemization of political ideology related to the environmental field and which led Peter Atkins of Durham University to describe the result as leading to "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" was to have led to a rapid and wide-scale reconfiguration of agricultural practice, within five key areas. These were the expansion of irrigation and water supply, the electrification of the countryside and rural areas, land "realignment" so as to incorporate mechanized agricultural processes, increase in the use of chemical fertilizers and the reclamation of tidal lands and swamps to create more land for agricultural production. ¹⁶

We can investigate the practical environmental policy, ideological development and their manifestations derived from the "Rural Theses" and other statements and pronouncements from Kim II Sung during this period more easily by examining the realm of hydrological engineering.

The Korean Peninsula, and especially the North, had always been a highly irrigated geographic area,¹⁷ and there had been much irrigation construction during the colonial Japanese period.¹⁸ However, after the publication of the Theses, North Korea adopted a radically techno-centric approach, disregarding almost completely gravity-fed systems. What followed, inspired by the "Theses,"

¹³ Kim Il Sung, "Theses on the Socialist Rural Question in Our Country," Works vol. 18, (Pyongyang, Foreign Languages Publishing House, 1964).

¹⁴ Ibid

¹⁵ Peter J. Atkins, "The Dialectic of Environment and Culture: Kimilsungism and the North Korean Landscape" in *Environment and Development, Views From the East and the West*, ed. A. Mukherjee (New Delhi, Concept, 1985), 328.

¹⁶ Kim "Theses on the Socialist Rural Question in Our Country" (1964).

¹⁷ Conrad Totman, Pre-industrial Korea And Japan in Environmental Perspective, (Leiden: Brill, 2004).

¹⁸ Ramon H. Myers, The Japanese Colonial Empire, 1895-1945 (Princeton: Princeton University Press, 1984).

was the building of an extensive and elaborate system of pumping stations and reservoirs (3,505 pumping stations for the main trunk network alone, ¹⁹ to spread water throughout upland and lowland areas). Between 1954 and 1998, irrigated areas increased from some 227,000 hectares to 1.2 million hectares (As of 1990 there are apparently "1,700 reservoirs throughout the country, watering 1.4 million hectares of fields with a ramified irrigation network of 40,000 kilometers, which irrigated about 70 percent of the country's arable land."²⁰ Also, according to Yu and a Library of Congress report from 2004, North Korea built a field based system, whereby 400,000 hectares of upland land is irrigated by "mobile water guns, sprinkler, furrow and other drip methods for fruit trees."²¹ Perhaps unsurprisingly, these developments and the completely irrigated furrow system transformed upland agriculture, massively increasing productive capacity and transferred enormous spaces that were previously wild to agricultural exploitation.²²

Secondarily to hydrological engineering we can also examine the impact of the Theses on what Pyongyang termed "under-utilized" land, through the medium of land reclamation. "For The Large Scale Reclamation of Tidelands" published in 1968 contains Kim Il Sung's foundational statement on this issue that, "In order to increase grain output and mechanize farm work in our country, it is imperative to bring tidelands under cultivation [...]." Not only does Kim and North Korea focus on the need to cultivatable exploitable land through strategies of tidal reclamation, but themes within the "Theses" related to furthering technical and ideological revolution are also sustained through this reclamative work: "Reclaimed lands are vast plains where machines can be used for every kind of farm work. Therefore a small amount of manpower is needed to tend them." 24

As well as serving such ideological aims, reclamation projects can also serve to be demonstrative of Juche thinking's reflexivity and practicality. Within larger projects, for example, problems appear to be the source of their own solution—one example being an iron ore mine in South Hwanghae Province

¹⁹ United Nations Development Programme, Food and Agricultural Organisation, DPR Korea: Agricultural Recovery and Environmental Protection (AREP) Program: Identification of Investment Opportunities. vs. 1-3, (New York City: UNDP, 1988).

²⁰ Chong-ae Yu, (2005), The Rise and Demise of Industrial Agriculture in North Korea, Paper No. 08-05, The Mario Einaudi Center for International Studies, Cornell University, 11.

²¹ Ibid.

²² Ibid.

²³ Kim Il Sung, "For The Large Scale Reclamation of Tidelands," (1968) in *Works* vol. 33, (Pyongyang Foreign Languages Publishing House), 73.

²⁴ Ibid.

that faced with issues related to the disposal of the mine's spoil, was instructed to "begin dumping this [spoil] in the sea from a long conveyor belt to create a causeway linking several islands to the mainland." Atkins identifies three of the projects as being "the damming of the sea at the Amnok River to create 110,000 hectares," "in South Pyongan province a stretch of land out to sea up to sixteen kilometers" and "in South Hwanghae all the deeply indented bays were to be dammed." ²⁶

"Arduous March" Era—Emergency Environmental Strategies

The political and academic narrative surrounding North Korea and Juche thinking today generally site its environmental strategy's failure and collapse within more recent years. There has been extensive research focused upon the food crisis of the early to mid 1990s, for example, with much of it connected with the developing academic field of transition politics and economics. This field sees North Korea as an outlier of political statistics, one pole of a spectrum of transition inevitably away from communism and socialism. The famine period of the early 1990s is seen by many researchers and politicians as evidence of the failure of Juche and North Korea's historical economic, agricultural, and industrial policies, reinforcing still further the inevitability of its collapse and transition.²⁷ For many analysts the famine is an indictment of the entire structure of North Korea's institutional framework and not policies derived from its ideological approach.

However, North Korea's difficulties at this time could be seen in perhaps less damming terms, the result of a "perfect storm" of contributing factors including unrelated environmental impacts such as serious droughts in the early 1990s which reduced harvest levels and intense and sustained rain fall events in 1994 that further reduced harvest levels and damaged agricultural land. Of course objectivity demands the connectivity of these environmental factors with the collapse of the Soviet Union, the Warsaw Pact and the wider communist economic realm that North Korea depended on for much of its trade and eco-

²⁵ S. Kim, "New Heightened Spirits Prevail in Tideland Reclamation Project," *Minju Choson*, 20th December 1983, JPRS/DTIC Document 4110/062, www.dtic.mil (accessed October 01, 2013).

²⁶ Atkins, "The Dialectic of Environment and Culture: Kimilsungism and the North Korean Landscape," 326

²⁷ Meredith Woo-Cumings, The Political Ecology of Famine: The North Korean Catastrophe and Its Lesson, ADB Research Institute, Research Paper 31 (2002); Nicholas Eberstadt, The North Korean Economy: Between Crisis and Catastrophe (New Brunswick, NJ: Transaction, 2007).

nomic support coupled to the cumulative and frequent technical inefficiencies and discrepancies within the DPRK's industrial and agricultural sector.²⁸

Whatever the causation, the impacts were dramatic. Samuel Kim reports that North Korea's economy contracted by some 13.7 percent in 1990 alone, and a further 18.8 percent by the year 1994.²⁹ Whereas in 1975 Pyongyang had exported some 328,000 tonnes of rice and corn, instability created through problems in central planning had caused North Korea to begin importing rice and other grains which had reached a tonnage of some 1.2 million tonnes by 1990.³⁰

Faced with such a disastrous set of circumstances and enormously negative changes in the possibilities for seeking help to deal with them, North Korea adopted some radical survivalist strategies. In 1992 the Russian Federation and Commonwealth of Independent states, the successor bodies to the DPRK's former ally, the Soviet Union, informed the DPRK that all future trade was to be at world market prices, and worse than that for a country with virtually no hard currency reserves, 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," at the very least presaging the famine that was to come.

In the field of environmental management, strategies also abruptly changed. As an emergency solution to the crisis the authorities within the forestry sector abandoned even the pretence of long running policies focused on the need and aspiration for afforestation in an attempt to create more land area for cultivation of basic crops: "The Ministry of Land Management and Environmental Protection [...] sanctioned deforestation, in order to produce crops on the marginal land, especially on sloping land." Internal documents and data from North Korea 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 Food and Agriculture Organization of the United Nation (UNDP/FAO) investigation which concluded "that more than 500,000 hectares of marginal lands were deforested and cultivated." Recent FAO reporting has asserted, utilizing statistics sourced through the "FAO STAT" system, that forestry cover in the

²⁸ Ibid

²⁹ S. Kim, "North Korea in 1995: The Crucible of Our Style Socialism," Asian Survey 36, no. 1 (1996): 61-72.

³⁰ Ibid.

³¹ Kim, "For The Large Scale Reclamation of Tidelands" (1968).

³² B. Bobilier, Environmental Protection and Reforestation in DPR of Korea, Project Evaluation and Feasibility Study (Pyongyang: Triangle Generation Humanitaire, 2002), 5.

³³ Ibid.

northern half of the peninsula declined in total from some 8.2 million hectares in 1990 to 6.8 million hectares by the year 2000,³⁴ or that nearly a fifth of total forest cover was removed in a decade.

Post "Arduous March"/Famine Period—Towards a "Greening" North Korea

There is no doubt that the famine era was a time of great challenge for North Korea and much of the research and popular literature that focuses on the possibility of its collapse, dissolution and eventual reunification with the Republic of Korea (ROK) derives from the seeming inability of its institutions and leadership to respond with meaningful or positive solutions at the time. In the midst of this tumultuous period, however, it appears to be possible to determine the development of a set of new institutional responses towards the environment within North Korea and an increase in its internal bureaucratic and ideological ability to mitigate against environmentally destructive practice. We might even be able to declare this process of development "greening."

There are a number of questions to be raised, of course, surrounding the potential existence or emerging of a "green" North Korea, the first of which being, given the DPRK's apparent lack of receptivity towards ideas deriving from outwith its traditional ideological realm, how have such ideas been encountered and where is their source? If the politically triangulating approach North Korea took to cope with the geopolitical shifts during the Sino-Soviet Split and the politically and ideologically evasive action adopted as the difficulties with the "Great Leap Forward" in China became clear are borne in mind, it might not be surprising that, forced to adjust to this new era in which North Korea had even fewer political allies and virtually no economic or practical support, it attempted similar triangulations.

In order to extract itself from the period of crisis and disaster, Pyongyang and its institutions had been forced to ask for help from external agencies. The World Food Programme, UN Development Programme (UNDP), the Food and Agriculture Organization (FAO), and International Committee of the Red Cross are some of the initial entrants. Authorities in Pyongyang are regarded by many scholars³⁵ as having, despite being beset by crisis and potential regime collapse, utilized the entrance of these organizations to their own advantage: "These floods played an important public relations role insomuch as they facilitated

³⁴ FAO, Global Forest Resources Assessment 2005 (Geneva: United Nations, 2005).

³⁵ Woo-Cumings, The Political Ecology of Famine: *The North Korean Catastrophe and Its Lesson; Eberstadt, The North Korean Economy: Between Crisis and Catastrophe*; Marcus Noland, Korea After Kim Jong II (Washington DC, Institute for International Economics, 2004).

the North Korean government's portrayal of the famine as a product of natural disaster."³⁶

Although I do not aim to contribute to the debate surrounding the veracity of Pyongyang's claims surrounding the famine, nor whether outside agencies and other NGO have been subject to institutional exploitation by North Korea,³⁷ I believe that it is undeniable that the entrance of western institutional actors into the role of funders and supporters of some aspects of its institutional and governmental framework has enabled North Korea to develop its governance capabilities and equip itself with some of the bureaucratic and ideological tools to survive in the post-Soviet and post famine era. This institutional development focused its ideological approach, so far as the environment was concerned, in the direction of a rapidly developing institutional consensus towards the conservational and preservational.

Following the immediate crisis and famine, both UNDP and the FAO engaged with North Korean institutions to build capacity and capability within the environmental sector. Part of these institutions was an assessment of the state and condition of North Korea's forest stock and the functioning of institutions and structures within its forestry and timber extraction sector. The results of this review were summarized within the three volume series, "DPR Korea: Agricultural Recovery and Environmental Protection (AREP) Program, Identification of Investment Opportunities." This document is now virtually unobtainable in its original version, however, Hippel and Hayes, Bobilier, and others make extensive reference to it. Bobilier summarizes the UNDP/FAO exercise's findings in a feasibility study published by the French NGO "Triangle Generation Humanitaire" in 2002.

North Korea's forestry sector asserted the researchers was beset with problems, including "bad management of forests and wood shortages, increased erosion, leading to a loss of soil productivity in rice fields and a high vulnerability to flood damage, loss of soil productivity in sloping lands [...] impossibility for natural regeneration." UNDP/FAO researchers and Bobilier, however, maintain that as far as institutional commitment was concerned "the Government recognizes the importance of land management and reforestation." Encoun-

³⁶ Marcus Noland, S. Robinson, and T. Wang, "Famine in North Korea: Causes and Cures," *Economic Development and Cultural Change* 49, no. 4 (2001), 746.

³⁷ Noland, Korea After Kim Jong Il, 2004.

³⁸ David F. Von Hippel and Peter Hayes, *The DPRK Energy Sector: Estimated Year 2000 Energy Balance and Suggested Approaches to Sectoral Redevelopment* (Berkeley, CA: Nautilus Institute, 2002).

³⁹ Bobilier, Environmental Protection and Reforestation in DPR of Korea.

⁴⁰ Ibid., 5.

⁴¹ Ibid.

tering such organizations and the environmental philosophy that inspired them derived from paradigms of conservation appears to have piqued the interest of North Korean institutions. Soon, policy statements and ideological or theoretical statements that included an element of environmental thinking emanated quite regularly from Pyongyang and a "greening" in both practical and ideological terms appeared underway.

What is it to be "Green" in a North Korean Context? In Practice and in Theory

It is tempting when addressing issues of policy development in North Korea, as it with most countries and political systems, to start with the realm of the ideological, and ask ourselves, what would it mean in an ideological sense to be "green" in a North Korean context? Is there now a "green" element to Juche or Songun thinking? Such searching, however, would be to assume that North Korea's ideological system is in some way coherent or cohesive (Brian Myers of course asserts otherwise),⁴² and that Pyongyang's academics or theoreticians will have first systematized environmental or "green" thinking within the wider ideological framework followed by the institutions and the population in general, or indeed such a framework exists or is followed at all. It is in fact best to start with the realm of practical policy, as this is often where ideas are first generated within North Korea, ideological or theoretical formulations coming later as a way of explaining, justifying or extracting some propaganda or presentation advantage from success.⁴³

A good example of ideological development in North Korea initially sourced from the output of practical environmental policy development, and itself derived from the practice undertaken during a collaborative exercise involving external partners revolves around wind generation technology. In May and September of 1999, a team of American energy specialists from The Nautilus Institute including the academics Peter Hayes, and David Von Hippel along with their North Korean counterparts, installed seven wind generators, with just over ten kilowatts of capacity, and a power house with electrical equipment that could provide stand-alone power, as well as interface with the North Korean grid, at Unhari, a small coastal village 70 miles west of Pyongyang.⁴⁴ This was the first instance of wind power installation in North Korea, as well as the first

⁴² Bryan R. Myers, *The Cleanest Race: How North Koreans See Themselves and Why it Matters*, (New York: Melville House, 2001).

⁴³ Han S. Park, The Politics of Unconventional Wisdom, (Boulder, CO: Lynne Reiner, 2002).

⁴⁴ David F. Von Hippel et al., Rural Energy Survey In Unhari Village, The Democratic People's Republic of Korea (DPRK): Methods, Results and Implications (Berkeley, CA: Nautilus Institute, 2001).

time an energy survey or socio-economic assessment of the impact of a project had been undertaken on any issue.

Having been exposed to the possibilities of utilizing wind as a source of power generative capacity during this exercise and the environmental/conservational theory behind its utilization and practice during the Americans' visit in 1999. North Korea has continued the development of wind power generation capacity and policies designed to support it. Pyongyang was supported in this by the gift of two fully functional large capacity turbines from the Danish turbine blade manufacturer, Vestas, 45 and there are now many other turbine projects in the DPRK some with turbines of a capacity of up to 75KW and an estimated nationwide production of 3MW by the end of 2004. Pyongyang has also formulated a National Wind Energy Strategy which involves comprehensive mapping of areas of exceptional wind speed and, therefore, potential power generation, and extending national capacity to 100MW through the development of test sites running at up to 10MW a site. 46 Most surprisingly, perhaps, is the fact that South Korea's Ministry of Unification has examined the prospect of collaborating with North Korea's Ministry of Power on a project to construct a series of 750KW turbines near Rason, enough to generate the power for a population of 150,000 people.⁴⁷

Investing in wind turbine technology of course could be regarded as simply a normal part of energy production planning policy, as it would be for most other nations. However, in North Korea's case it is important to remember that this was a country facing utter economic and institutional ruin, whose power production and transmission systems were reliant on materials and support that either no longer existed or unobtainable due to its lack of hard currency reserves. Thus, wind power's development as a technology and a possibility has seemed vital to its bureaucracy and institutions on the grounds of cost and reduction in dependence on foreign agencies. Naturally Pyongyang has continued to explore the possibilities for the utilization of nature's energy generating capacity and to move towards operating as much as possible as a low-carbon economy. This is indeed environmentally friendly. However, it is better for the environment in the way that the countries of the former Soviet Union drastically reduced their carbon emissions after 1992 (presenting countries such as the Russian Federa-

⁴⁵ Vestas, "Delivered Vestas turbines as of 31 December 2011," http://www.vestas.com/en/about-vestas/profile/track-records/results-%E2%80%93-countries-and-regions.aspx, (accessed 19 October 2013).

⁴⁶ David F. Von Hippel, P. Hayes, "DPRK Energy Sector Development Priorities: Options and Preferences," Energy Policy 3 (2009).

⁴⁷ Wikileaks, 2011.

tion and Ukraine with a very good deal in terms of their post Kyoto protocol position,⁴⁸ due to the collapse of the Soviet and Warsaw Pact industrial sector.

Following these new practical strategies of policy focused on paradigms of action that are more overtly environmentally sensitive, North Korea has begun to incorporate new approaches towards the environmental realm within its own metaphysically nationalistic philosophical construction (as identified by Park).⁴⁹ Just as citizens of North Korea are expected to play their part in national glorification, so also in relation to the environment and the natural world.

During the periods in which environmental policy was focused upon paradigmatic relationships with the natural that we might term "impositional" or "transformational," such as in the early 1960s, nature's role was essentially that of a passive supportive element so far as nature and regime were concerned. The environment existed in order to be imposed upon or to be transformed, and its active role in North Korean ideology was as a subject or subjected element, as well as to generate the highest level of productive capacity as was possible.⁵⁰ Since the famine era, however, and following North Korea's presentation of this disastrous period as a second "arduous march," connected to the guerrilla struggle against Japanese occupation in the 1930s and 1940s, in which a seemingly hostile natural world was visualized as a force to be militarily overcome, the environment has been conceptualized in a different, more active way.⁵¹ North Korean ideology now apparently incorporates the environmental in an almost individualistic sense akin to those citizens who offer their support and loyalty to the governing sources of power within the country, namely the Kim dynasty (examples of which can be found in the commentary following the death of Kim Jong II).52

The Environmental as Legitimator/De-Legitimator

Internalizing North Korea's Conception of "Green"

The environmental has thus entered the contemporary period, serving in North Korea as an element, subject and function of regime legitimacy and playing an important role in the legitimating process. Perhaps, the first example of this can

⁴⁸ Christoph Bohringer, "Economic Implications of Alternative Allocation Schemes for Emission Allowances," Scandinavian Journal of Economics 107, no. 3 (2005), 563-581.

⁴⁹ Park, The Politics of Unconventional Wisdom.

⁵⁰ Kim, "Theses on the Socialist Rural Question in Our Country."

⁵¹ KCNA, "Achievements Made During "Arduous March", http://www.kcna.co.jp/item/1997/9703/ news3/13.htm#7, 1987 (accessed 19 October 2013).

⁵² KCNA, "Phenomena Witnessed During Mourning Days," (2011) http://www.kcna.co.jp/item/2012/201201/news07/20120107-30ee.html (accessed 19 October 2013).

be seen not long after the famine period ended and in the midst of many connections with foreign environmental institutions, in the forestry management sector.

There had been a National Tree Planting Day for many years in North Korea, April 6, ostensibly commemorating the visit of Kim Il Sung in 1947 to Munsu Hill. This visit formed the foundational event within the Forestry Sector and is recounted in the text "Let Us Launch a Vigorous Tree Planting Movement Involving All the Masses." However, in 1999 and without reference to the change, National Tree Planting Day became March 2. This new date commemorated an earlier event, on March 2, 1946, when Kim Il Sung climbed Mt Moran (on the outskirts of Pyongyang), with both Kim Jong II and Kim Jong Suk. The reader will, perhaps, note that at this point in 1946 the hill climbing Kim Jong II would have been four or five years old. In this way the institution of the National Tree Planting Day and the Forestry Sector for which it serves as the annual ceremonial connection around which popular events and other projects within the sector are organized is connected with the developing themes of environmental awareness, as well as serving to extend the grounds of both the legitimacy of the regime and of North Korea more generally. It does this through incorporating an environmentally focused act within an "on the spot guidance" visit, and within the context of North Korea's "holy trinity" of Kim Il Sung, Kim Jong II and Kim Jong Suk (Kim Jong II's mother and anti-Japanese guerrilla heroine). It is a powerful image for North Korea and North Koreans, and indigenous readers would understand it as such. The Korean Central News Agency (KCNA) described the background to the event in the following terms "On March 2, 53 years ago, the President Kim Il Sung climbed up Moran Hill together with the revolutionary fighter Kim Jong Suk and General Secretary Kim Jong II and said that many trees should be planted there and turn it into a recreation place for the people [...]" and, accordingly, "the working people across the country are now all out in the drive to plant more trees in mountains and fields of the country on the occasion of the tree planting day."53

Regime Legitimacy and the Death of Kim Jong Il

Recently during the mourning/funereal period following Kim Jong Il's death and the accession of Kim Jong Un to power there were many similar examples of the environmental utilization for the purposes of underlining, supporting or developing the legitimacy or superiority of the nation and regime. KCNA re-

⁵³ KCNA, "Spring Tree Planting Begins in Korea," http://www.kcna.co.jp/item/1999/9903/news03/02. httm#10, 1999, (accessed 19 October 2013).

ported many at the time, including an inscription on Mt Paekdu glowing red ("Kim Jong II's autographic writings—'Mt. Paektu, holy mountain of revolution. Kim Jong II'— in particular, were bright with glow. This phenomenon lasted till 5:00 pm"),⁵⁴ the ice on the lake at the top of the mountain, Lake Chon cracking despite freezing temperatures, and even birds supposedly adopting postures of reverence or mourning. KCNA also reported:

"A natural wonder was also observed around the statue of the President standing on Tonghung Hill. At around 21:20 pm Tuesday, a Manchurian crane was seen flying round the statue three times before alighting on a tree. The crane stayed there for quite a long while with its head drooped and flew in the direction of Pyongyang at around 22:00 pm. Observing this, the director of the Management Office for the Hamhung Revolutionary Site, and others said in union that even the crane seemed to mourn the demise of Kim Jong II born of Heaven after flying down there at dead of cold night, unable to forget him)."55

Such events and reports serve to connect the legitimacy of the regime, representing as it does within its narrative and narratology, the manifestation of the Korean nation's most positive elements, with the environmental realm. It does so through the connection of the nation as constructed and participated in within the human realm, with the natural world, allowing the environmental to form part of the metaphysical construction of Korean nationhood (a metaphysical approach to nationalism described by Park).⁵⁶

Externalizing North Korea's conception of "Green"

Having examined the use of the environment as a tool for the national and regime legitimacy, one can conclude that they serve an important internal role within the perception created by the institutions of government that its citizenry are expected to adopt. It follows, therefore, that if such a use of the environment, in a "green" sense can be a positive factor in legitimating either the regime or the nation itself, it must be possible to utilize such a narrative in the external realm. North Korea has recently begun an incorporation of such legitimative practice into its management and narrative of external relations, both with nongovernmental actors and foreign sovereign governments.

⁵⁴ KCNA, "Phenomena Witnessed During Mourning Days" (2011).

⁵⁵ Ibid.

⁵⁶ Park, The Politics of Unconventional Wisdom.

The DPRK as Successful Environmental Actor

Since the year 2000 for example, North Korea has marked World Environment Day, ⁵⁷ has instituted a "biodiversity day" from 2001, and associated this with the "International Day of Biodiversity." ⁵⁸ Since 2011, North Korea also marks annually "International Swamp Day," ⁵⁹ and has even established an "Environmental Protection Fund" in 2005, which, it is envisaged, will "augment financial and material support to covering the whole land with forests and gardens as required in the new century, protecting bio-diversity, water resources, atmospheric environment and land resources and their sustained development and use on a scientific basis." ⁶⁰ North Korea has also reorganized its internal legal frameworks surrounding usage of land and the protection of the environment.

North Korea utilizes its commitment to all of these transnational days, as well as its new systems of environmental law in order to leverage up its role within regional diplomatic initiatives that focus upon the environment. Within this regional context Pyongyang now seeks to develop relationships with its near neighbors focusing on conservation and the environment in order to support wider regional sustainability of agricultural production and environmental management. North Korea is part of the "Greater Tumen Iniative," a project shared between it, Russia, Mongolia and China to reduce water pollution, habitat loss, and reductions in biodiversity in the areas surrounding the Tumen River, as well as wider issues of biodiversity. It is also part of the North East Asian Forest Forum, which exists to promote and develop strategies for forest restoration in the region. Ultimately, Pyongyang utilizes these regional and local collaborations and relationships based on environmental issues to not only increase the level of authority proffered by such relationships within its internal context, among its own population, but also to function as a contrast between it and nations which are not perceived as being so environmentally sound or engaged, namely, the USA, Japan, and South Korea.

⁵⁷ KCNA, "World Environment Day Observed" (2000), http://www.kcna.co.jp/item/2000/200006/ news06/05.htm#6 (accessed 19 October 2013).

⁵⁸ KCNA, "International Day of Biodiversity Observed in DPRK" (2007), http://www.kcna.co.jp/item/2007/200705/news05/23.htm#11 (accessed 19 October 2013).

⁵⁹ KCNA, "World Swamp Day Observed," http://www.kcna.co.jp/item/2011/201102/news02/20110202-10ee.html, 2011, (accessed 19 October 2013).

⁶⁰ KCNA, "Environment Protection Fund Established" (2005) http://www.kcna.co.jp/item/2005/200507/ news07/15.htm#4 (accessed 19 October 2013).

The United States/South Korea/Japan as Environmental Friends

North Korea within its diplomatic and "propaganda" narratives is something of a "past master" when it comes to de-legitimative strategy. If one examines the output for example of its information/propaganda ministries or from its art studios one will be aware of the image presentation of Americans, in particular within its cultural narratives (at least those created by institutions of government), has been deliberately highly negative over the years. Americans are presented as physically degraded and ugly in most visual presentations, symbolic of their perceived moral and ideological degradation and decadence (Brian Myers' 2011 book "The Cleanest Race: How North Koreans see Themselves and why it Matters" is a vital text for this theme), and are contrasted with clean, tall, attractive and young Koreans as much as possible.

North Korea often contrasts within its news media and press releases its apparent goal as it sees it, of an international paradigm of self-determined, independent and self-reliant nations with what it sees as the United States and other western nations' goal of imperialist, exploitative action against weak, disempowered nations whose sovereignty is constantly called into question. Along with its news agency KCNA, within its presentation of both international and local news, attributes social or economic misfortune (such as the credit crunch and economic downturn, or the recent riots in the United Kingdom), to what it perceives as the decadence and de-legitimate nature of ideological formulations of those nations.

The KCNA has also recently started to include environmental issues within this de-legitimative narrative. The Tsunami and Fukushima disaster in Japan in 2011, for example, were utilized as a narrative tool to demonstrate the apparent weakness of the Japanese government as well as its economic and ideological model ("[...] the successive explosions at the Fukushima Nuclear Power Plant and the leakage of massive amounts of radioactive materials plunged human-kind into a horrible nuclear disaster. Japan can never evade responsibility for it"). The United States is also a target of this de-legitimative strategy, its approach to managing the chemical aftermath of the Korean War is heavily critiqued ("The cases of the burial of defoliant proved that the US forces are not 'guardians of freedom' and 'protector of peace' touted by them but the biggest group of criminals in the world"), as its strategy towards climate change negotiation, the functioning of institutions such as the Kyoto protocol and the world

⁶¹ KCNA, "KCNA Blasts Japan's Decision to Extend Sanctions against DPRK" (2011), www.kcna.co.jp (accessed 19 October 2013).

wide environmental impact of both the United States itself and its diplomatic and strategic priorities.⁶²

Conclusion – Is being "green" in North Korea "green" at all and does it matter?

Within this paper I have aimed to give clear account of the development environmental policies and approach during the cold war period within North Korea, as well as offering some demonstration of how these policies and the ideological/philosophical conceptions and construct behind them have been subject to change and transformation dependant on external factors, such as the diplomatic, military or political situation in which Pyongyang found itself at the time coupled with the method and practice of North Korea's practical environmental and developmental policy. Secondly, I have aimed to provide clarification of the process through which North Korea has continued to utilize a pragmatic strategy during recent times. This includes Pyongyang's incorporation of the environmental ideas and strategies of the institutional actors it engaged with for the first time during the famine period of 1992 to 1997, such as NGOs and departments of the United Nations, which were sourced from the "green" or environmental movements.

North Korea has incorporated such theory, strategy and approach in its own inimitable way, one which we may not immediately recognise as "green" or environmentally focused at all. Just as it is difficult, if not nigh on impossible to assess the reality of any element of action, strategy or theory that derives from North Korea, it is, perhaps, impossible to determine whether Pyongyang has really undergone an ideological or policy transfer to a "green" or environmental paradigm. However, the fact of the incorporation of apparently "green" or environmental terminology and practice within not only the institutional management of some of Pyongyang's areas of economic priority, such as energy production or industrial development, but also within its presentation/information/propaganda framework and both its internal and external legitimative/delegitimative narratives and strategies, perhaps, suggests something that in North Korean terms is more important. For Pyongyang, it seems, that being "green" or focused on the environment serves as a useful tool in the maintenance and construction of its institutional functionality, national capacity and the continuation of not only its ideological construction, but also its dynastic line. For North Korea there can be no greater level of sincerity or importance. Y

⁶² KCNA, "US Premeditated Environmental Pollution Blasted in S. Korea" (2011), www.kcna.co.jp (accessed 19 October 2013).