# Reassessing China's Growing Presence in the Arctic: A World-System perspective

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#### **Abstract**

This paper intends to provide an analytical framework to interpret China's growing presence in the Arctic from the perspective of world-system theory. I have set up the analytical framework from the following four aspects. Firstly, China's externalizing behavior in the Arctic region is governed by the internalized law of value of the modern world-system, i.e., the endless accumulation of capital. Secondly, China has benefited and is still benefiting from the division of labor, with Southeast Asia, Latin America, Africa, and most recently the Arctic serving as a relatively subordinated resource periphery. Thirdly, driven by a strong upward mobility, China has leapfrogged the periphery and semi-periphery and gained a semi-core position with an upward trend towards the core, by offering a favorable external environment to the Arctic (invitation to promote). Lastly, since the world-economy is currently in a Kondratieff B-phase, China, as an emerging global core power, is logically dedicated to the relocation of productive activity and the probability of alternative profitable outlets, where the Arctic is highly compatible.

**Keywords:** China, Arctic, world-system theory, endless accumulation of capital, division of labor, upward mobility, Kondratieff B-phase

#### **Introduction: China's Growing Presence in the Arctic**

Within IR studies, specific geographical locations, such as the Arctic, being isolated and treated as "independent or semi-independent systems" has had a long tradition (Wegge, 2011: 166). However, the abnormally warm winter has made the Arctic a major cause of global concern among IR and IPE researchers. Recently, much academic, media and diplomatic attention has been paid to China's participation in Arctic affairs. With its extraordinary economic growth, China has become more visible in issues concerning the global economy as well as international monetary policies and has gradually moved its policy focus abroad.

Briefly speaking, "Beijing pursues its polar strategy across multiple domains: political, economic, scientific, and military" (Pincus, 2018). Despite being considered an "Arctic newcomer", China is earning increasing focus in the Polar North. During the past decade, "the Chinese see the Arctic and the Antarctic as a high priority in China's national policy on global presence" (The Arctic, 2018). Both Wong (2018) and Goodman & Freese (2018) agree with

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this sentiment. Wong (2018) gives the following examples of China's "ambition" in the Arctic, "the country [China] entered into joint ventures with Russian gas companies, it built a large embassy in Iceland, it helped finance the Kouvola-Xi'an train in Finland, it thawed its relations with Norway and it invested into Greenland" (Wong, 2018).

It is frequently advocated that China has been interested in the Arctic since 1995, "when a group of Chinese scientists and journalists travelled to the North Pole on foot and conducted research on the Arctic Ocean's ice cover, climate and environment" (Jakobson, 2010: 3). China's first Arctic expedition was conducted, as a milestone of carving out a foothold in the High North, by a wide range of scientists in June 1999. Soon after, the Arctic Yellow River Station, was established in Norway's Svalbard in July 2004, by the Polar Research Institute of China. After completing their eighth Arctic expedition, the State Oceanic Administration (SOA) announced in October 2017 that, "China will double the frequency of Arctic expeditions to once a year from this year" (Fang, 2017). Consequently, China's ninth Arctic expedition departed from Shanghai on July 20, 2018, carrying out the mission of constructing an Arctic operational monitoring network with its research vessel Xue Long (Snow Dragon) as a platform. Moreover, it is worth mentioning that China has started building its second icebreaker (the Xue Long II), and its first polar expedition cruise ship, which are expected to be to be operational by 2019. These scientific expeditions reflect China's willingness and capacity in conducting polar research, which laid the foundation of China's growing presence in the Arctic.

After constantly expressing its polar interest for years, China, in May 2013 in the Swedish town of Kiruna, successfully obtained the formal status of permanent observer member in the Arctic Council, which can be interpreted as a historic step towards China being seen as a key player in the Arctic region. On December 10th of the same year, the China-Nordic Arctic Research Center (CNARC) was formally inaugurated in Shanghai by 10 member institutes, four of which are from China, with capacities to push forward Arctic research.

After a long period of speculation, the State Council Information Office of the PRC published a white paper titled "China's Arctic Policy" on January 26<sup>th</sup> 2018, vowing to actively participate in Arctic issues as both a "near-Arctic State" and a major stakeholder in the region (Gao, 2018). According to the released white paper, China's attention will be focused on the following four aspects: 1) the development of Arctic shipping routes; 2) the exploration for and exploitation of oil, gas, mineral and other non-living resources; 3) utilizing fisheries and other living resources; and 4) developing tourism as "an emerging industry" (ibid). Put simply, China's interests in the High North can be traced through two categories. On the one hand, China will actively participate in scientific research, resource exploration and exploitation,

shipping and security. On the other hand, China, being part of the globe, will keep an eye on climate change and its potential consequences as a matter of course (Wong, 2018). Furthermore, China has been trying to embrace the Arctic as part of President Xi Jinping's Belt and Road Initiative, aiming at constructing a "Polar Silk Road" or "blue economic passage", on which China and Europe are interconnected through the Arctic Ocean (ibid; Lanteigne & Shi, 2018). Therefore, the "Polar Silk Road" should be taken as "a new route through the unfrozen Arctic, dominated by Chinese trade and tied into Beijing's global ambitions" (Goodman & Freese, 2018).

#### Understanding the Debate on China's growing presence in the Arctic

By the avoidance of being aggressive and thus seen as a revisionist power challenging the existing governance regime, China considers the relationship between itself and the Arctic region as a "win-win situation" (Ross, 2017). However, China's Arctic policies, summarized in its White Paper, have also imaged "concerns about being marginalized from what the Chinese government sees as an economically important region due to the country's lack of Arctic geography" (Lanteigne & Shi, 2018). Why then, with borders lying over a thousand miles away from the Arctic Circle, is China so keen on the Arctic? Could the vast reserves of oil, gas, marine bio-resources and mineral resources or enormous economic potential from the utilization of new shipping routes, which have been raised and emphasized repeatedly, be the essential reason? In the following parts, the article intends to review the existing literature regarding *China's growing presence in the Arctic* and identifies the knowledge gap for proposing the research objectives and research questions.

It is frequently advocated that China's growing presence in the Arctic could be taken as one of these "new areas of interest" (Wegge, 2014: 83). The overriding driving forces behind China's desire to the Arctic are economic: "how China can benefit from new economic opportunities offered by the warming Arctic" and "how a warming Arctic will adversely affect China's economy" are China's top concerns related to the Arctic (Jakobson & Peng, 2012: 10). As many scholars and commentators have pointed out, China has become an increasingly significant economic actor with stakes in shipping, resource utilization and consumption, climate change, as well as scientific research (Jakobson, 2010; Campbell, 2012; Jakobson & Peng, 2012; Guschin, 2013; Hsiung, 2016; Chen, 2012).

However, China's participation in the Arctic has been described as "China's ambition", "intrigue", "voracity" or even a "Chinese ghost" by the western media (Fu, 2013). Without having any direct geographic access to the High North, China's economic, scientific and

diplomatic efforts in the Arctic region have aroused innumerable debates and negative reactions in academic and policy making circles (Lasserre et al, 2017: 31). To some extent, the Arctic has been an emerging destination where "China threat" with an "ambitious and arrogant" portrait (ibid) might materialize (Beck, 2014: 306). Although the Arctic, as many observers have asserted, is not and will not be a priority of China's foreign policy in the near-to-medium term, China's growing presence in the Arctic raises concerns about their intentions in the region.

By reviewing China's scientific, economic and political interests in the Arctic, Alexeeva and Lasserre (2012: 80) held a relatively optimistic attitude and claimed that China had been seeking cooperation with Arctic countries based on the Arctic exclusive economic zone (EEZ) projects, mainly because of its energy demand, rather than the aggressive ambition of securing access to resources and shipping lanes as many commentators had warned. Likewise, Liu (2017: 55) regarded China, in the foreseeable future, as a collaborative partner rather than a challenging one by examining China's Arctic policy and its performance in the Polar Code development and fishery regulation process.

Some scholars are standing between pessimism and pragmatism, taking a relatively "value-free" position when analyzing and interpreting China's behavior in the Arctic. "What purposes do Chinese sources have in viewing the PRC's Arctic approach, and what does China's recent course of action appear to be? Are all these Chinese sources in accordance with what China appears to be doing, and if not, what purposes do they serve?" After examining the above questions, Wright summarized China's Arctic approach into two phases: "the rhetoric and culmination of idea" phase and "the strategic buyer" phase (2013: 1-2). While the former has created awareness, wary or even skeptical voices in the western world, the latter approach has worked well and given China a "stronger foothold" in the Arctic. Taking a different conceptual angle, Wu (2016) located "China's presence in the Arctic" in the broader context of global governance and argued that China-Arctic relations will follow the "push in" strategy with its own "active advocacy, lobbying and outside activities" (Wu, 2016).

As mentioned, there is considerable debate in Western academia over how to interpret China's ongoing behavior in the High North. More specifically, the attitudes towards China's growing presence in the Arctic vary a lot from positive to negative and with some scholars standing in between. However, the political science literature (esp. IR) has come to a general consensus that China is keen on natural resources as well as the maritime transportation potential of the melting Arctic.

According to the numerous existing literature on the subject, most scholars believe that China has been/will become an increasingly active and important player in the Arctic, since the Arctic could function as a source of oil and gas. Furthermore, the profitability of new shipping routes due to the great reduction of sea ice cover in the Arctic Ocean can be considered as one of the new economic potentials, which have evoked China's growing focus in the region. While a substantial body of literature has targeted the functional driving forces of China's engagement in the Arctic, much less attention has been devoted to the systematic level or underlying causes. In other words, none of these analyses has systematically elaborated the structural causes of China's growing presence in the Arctic. Given the above discussion, the article poses the main research question as: *How can China's growing presence in the Arctic Region be better conceptualized and understood?* 

## Methodological Consideration: The World-System Perspectives

Enlightened by Immanuel Wallerstein and his world-system approach, I take a broad theoretical perspective to conceptualize and interpret China's increasing engagement in the Arctic, refraining from a superficial phenomenon-to-phenomenon or surface-level understanding. To put it another way, China's growing presence in the Arctic cannot solely be attributed to either the economic potential of resources and new shipping routes or a latent negative impact from climate change. Rather, actors' behaviors in world politics are influenced by their "positions" in a social structure (White et al., 1976: 730-780). That is to say, it also involves the underlying systemic, contextual, and historical causes: it is the structural position (China is located within the world-system) that matters. Similarly, from a holistic standpoint, "the system contextualizes the instance, and the instance gives further expression to the development of the system" (Baronov, 2018: 12). According to the theory, each country's activities are embedded into the world system, therefore, it is imperative for us to analyze and understand China's behavior in the specific historical context, which is so far a gap in the Arctic research field.

A question can be raised regarding the applicability of world-system theory in the nexus of China-Arctic relationships. Based on world system theory's original core, semi-periphery, periphery stratification, all countries in the Arctic region (apart from Russia), be they small or large, belong to the classic "core" of the capitalist world system. Despite this paper's unit of analysis being the nation state, its analytical category is centered on the contemporary global division of labor in connection with global production chain (GPC) and global value chain (GVC). China's global economic rise is altering the status quo of the world system's established structure and "global arrangement". In other words, China's rise is generating different implications and impacts on different stratifications of the world economy, a new challenge on the already divided stratifications of the world economy. The further intensification of

China's industrialization and the increasing share of China's GPC and GVC since the 1990s went hand in hand with two parallel processes, the "intended" deindustrialization in the North and the "un-intended" deindustrialization in the South. The consequence is that China is further moving into the core (North), while at the same time other semi-peripheral countries are being pushed out of the semi-periphery and into the periphery. In a nutshell, the rise of China is changing the conventional North-South dichotomy, and China is creating a new North-South axis.

As mentioned, the states in the Arctic region are not peripheral ones according to the original stratifications of world-system theory. However, the new reality is that some core countries, including the US and Canada, have been exporting raw materials to feed the global "made in China" phenomenon, and China is the largest high-tech exporter in the world. In this regard, the Arctic states can be understood as, in relationship to the "made in China" phenomenon, "resource peripheries" in the current world economy. Today, most topics and debates surrounding China-Arctic relations are resource-related: raw material, transportation, environment, etc.

As a macro-sociological perspective, world-system theory has made great contribution to the explanation of the dynamics of the "capitalist world economy" from a holistic and integral approach which uncovers latent structures. Taking a holistic perspective, China's behavior should be understood from its "position" and the "change of position" in the overall structure of the world economy, rather than narrowly interpreted from the "internal" factors. Therefore, a world-system perspective is selected as an analytical tool in this project with the purpose of examining and explicating the substantial causes of China's growing presence in the Arctic.

In order to set up the conceptual framework, I will here summarize key views that Wallerstein has explained at length by means of a list of propositions most relevant to the research question of this article:

- a) The modern world-system is a capitalist world-economy, governed by *law of value*, i.e., the drive for the *endless accumulation of capital*.
- b) Over the long historical spectrum, this world-system has expanded through successively incorporating other parts of the world into its *division of labor*, which creates cross-border flows of labor, capital and commodities through chains of exchange, investment and production and ultimately results in the system's embedded inequalities (X. Li, 2017).

- c) The world-economy is dominated by *core/periphery* relations, with *semi-core* (Kick et.al. 2000: 133) and *semi-peripheral* as intermediate positions. Most of the countries within the semi-core/semi-peripheral position have a strong *upward mobility* in the system.
- d) In contrast with the Kondratieff A-phase, the B phase is perceived as a downturn with the *relocation of productive activity* or the probability of alternative profitable outlets.
- e) The hegemonic cycles consist of the rise and decline of *successive* guarantors/hegemons of global order, each one with its particular pattern of control, or in other words, *mode of governance*.

Since officially joining the capitalist world-economy with its opening-up policy in 1978, China has experienced an evolutionary process from a *peripheral* to a *semi-peripheral* position. Although whether China should currently be taken as a definite *core* state or not is still a matter of controversy, no one has questioned or criticized its upward tendency. In line with the cyclical rhythms, one of the fundamental features of the capitalist world system, China has been increasingly regarded as an emerging political and economic *system-guarantor* with its economic performance benefitting from the *law of value*. Xing Li went further with his optimistic comment that "the rise of China will eventually generate 'promotion by invitation' and bring about the enlargement of 'room for maneuver' and 'upward mobility' for the global periphery that is tempted to 'seize the chance'" (X. Li, 2017). In accordance with the rationality of the *relocation of productive activity*, this argument might, to some extent, interpret China's growing presence in the Arctic during the last decade after pouring money into Latin American and Africa. More importantly, the Arctic has been targeted as the next destination of labor, capital and commodities according to the essence of the world-system, to be specific, the process of successively incorporating the other parts of the world into its *division of labor*.

Based on the above analysis, we might draw a preliminary conclusion that world-system theory could be an appropriate theoretical tool of setting up a conceptual framework for understanding China's growing presence in the Arctic from a holistic and systematic perspective.

#### Analysis: it is not China but its position in the world economy that matters

The purpose of this section is to attempt to review and appraise Wallerstein and his world-system perspective, to identify the applicability and explanatory power of such an analytical tool to my understanding and interpretation of China's growing presence in the Arctic, specifically, to seek systemic-level answers to the research question: "why has China been increasingly involved in Arctic issues?" by establishing a conceptual framework. In answering

this question I will be better able to answer the aforementioned main research question. According to Wallerstein, "state structures and their external relations" should be regarded as the "political organization of the capitalist world economy" (Wallerstein in Linklater, 1990: 119). Therefore, the role of the state has been limited and has not been taken as the unit of analysis, which ultimately places the capitalist world-economy at the center of the analysis.

To get to the heart of China's growing presence in the Arctic, the world-system perspective must situate China's behavior within a rigorous approach to the evolution of world capitalism on a much longer schedule. In this regard, I argue that the basic and main points extracted from world-system theory may help explain the underlying causes of China's behavior in the last few decades.

This article seeks to explain China's growing presence in the Arctic by reexamining Wallerstein's writings, arguing first that China's externalizing behaviors in the Arctic region are governed by the internalized law of value of the modern world-system, i.e., the endless accumulation of capital. China has benefited and is still benefiting from the division of labor, with Southeast Asia, Latin America, Africa, and most recently the Arctic serving as a relatively subordinated periphery. Third, driven by a strong upward mobility, China has leapfrogged periphery and semi-periphery and gained semi-core status with an upward trend towards the core, by offering a favorable external environment to the Arctic (invitation to promote). Finally, since the world-economy is currently in Kondratieff B-phase, China is logically dedicated to the relocation of productive activity and the probability of alternative profitable outlets, where the Arctic is highly compatible.

#### The endless accumulation of capital

Most would regard the capitalist world-economy/capitalism as a social system on the basis of the "production for profit" and the "endless accumulation of capital" (M. Li, 2008: ix). Therefore, the pursuit of "the endless accumulation of capital" is seen as the defining and unique feature of capitalism.

The modern world-system, in existence in at least part of the globe since the long sixteenth century, is a capitalist world-economy. This means several things. A system is capitalist if the primary dynamic of social activity is the endless accumulation of capital. This is sometimes called the law of value. Not everyone, of course, is necessarily motivated to engage in such endless accumulation, and indeed only a few are able to do so successfully. But a system is capitalist if those who do engage in such activity tend to prevail in the middle run over those who follow other dynamics. The endless accumulation of capital requires in turn the ever-increasing commodification of everything, and a capitalist world-economy should show a continuous trend in this direction, which the modern world-system surely does. This then leads to the second

requirement, that the commodities be linked in so-called commodity chains, not only because such chains are "efficient" (meaning that they constitute a method that minimizes costs in terms of output), but also that they are opaque (to use Braudel's term). The opacity of the distribution of the surplus-value in a long commodity chain is the most effective way to minimize political opposition, because it obscures the reality and the causes of the acute polarization of distribution that is the consequence of the endless accumulation of capital, a polarization that is more acute than in any previous historical system (Wallerstein, 1999: 57).

Stated most simply, the essence of the core, semi-core, semi-periphery, periphery conception is "the fact of unequal exchange", achieved by a range of fundamental mechanisms "that continually reproduces the basic core-periphery division of labor itself" (Hopkins & Wallerstein, 1977: 117). Some have taken the mechanism as the "distribution of gains from technical progress", which increases in productivity. To be specific, these gains, for various reasons, result in higher wages in the core countries and in turn lower prices in the peripheral areas. In short, the core benefits from technical progress while the periphery suffers from the same process (ibid), where unequal exchange takes place.

The length of the commodity chains determines the boundaries of the division of labor of the world-economy. How long they are is a function of several factors: the kind of raw materials that need to be included in the chain, the state of the technology of transport and communications, and perhaps most important the degree to which the dominant forces in the capitalist world-economy have the political strength to incorporate additional areas into their network (Wallerstein, 1999: 58).

Being part of the world economy in an interdependent era, China has no choice but to follow the deep-rooted law of rule of the modern world-system, i.e., the endless accumulation of capital. Since "the capitalist world-economy depends on the nonrenewable resources for nearly 90% of its total primary energy supply" (M. Li, 2008: 148), China, as an increasingly emerging world power in recent decades, is obliged and expected to explore potential raw materials and bring such additional area into the domain of the capitalist world-economy. It is acknowledged that, "the extensive Arctic continental shelves may constitute the geographically largest unexplored prospective area for petroleum remaining on earth" (USGS, 2008). As Borgerson (2008: 67) stated, Arctic reserves are around a quarter of the remaining undiscovered and commercially accessible oil and gas deposits and resources. Not unexpectedly, with the vast potentially recoverable reserves of crude oil (90 billion barrels), natural gas (1,700 trillion cubic feet) and liquid natural gas (LNG) (44 billion barrels) (USGS, 2008), the Arctic is hardly negligible as a reserve pool of raw materials. Therefore, the ongoing relationship between China and the Arctic, specifically, China's effort at incorporating Arctic raw materials into the

commodity chain, reflect both the basic rule of law, the endless accumulation of capital, and the above-mentioned mechanism that instantly reproduces the core-like/periphery-like division of labor. In other words, such effort will help to expand the geographic boundaries of the division of labor of the world-economy.

### Division of labor

Contrasted to the prominent position of class in Marxist literature, "the world-system theorists repeat their claim that the unequal exchange of the core/periphery division of labor is the central fact of the world economy" (Bergesen, 1984:369). Simplified, the capitalist world economy is perceived as a world division of labor (Wallerstein, 1979: 159-275), that are "constitutive of, continually reproduce, and regularly alter relational structures of production" (Hopkins and Wallerstein, 1977: 114).

On a world-scale, the processes of the division of labor that define and integrate the world-economy are dyadic, dividing the "world" into a complex set of paired opposites, which we designate as "core" and "periphery". (ibid)

One of the distinct characteristics of a capitalist world-economy was described later on as "an axial division of labor in which there is a core-periphery tension, such that there is some form of unequal exchange that is spatial" (Wallerstein, 1990: 288-289). In other word, the world-economy, known as a "largely self-contained" entity following Wallerstein, is based on a "geographically differentiated" division of labor (Skocpol, 1977: 1976-1977). Each major zone core, semi-periphery, and periphery, has a distinct economic structure, partly because of its "particular mixture of economic activities" (e.g., core activities commanding the vast majority of surplus; peripheral activities with little or no surplus) and partly because of its "characteristic form of labor control". Therefore, the three major zones are treated and rewarded differentially by the world economy, "with surplus flowing disproportionately to the core areas" (ibid:1077). More explicitly:

Commercial capitalism grew out of and substantially developed a territorial system of exchange of fundamental commodities. The division of labor in this exchange network was not only functional but also geographic, involving the exchange of relatively processed and differentiated goods for raw materials. The main structural feature of this world-system came to be this division of labor between the emerging core areas producing manufactured goods and the emerging peripheral areas producing raw materials. The boundaries of the system were determined by the extent and intensity of economic production and exchange. (Chase-Dunn & Rubinson, 1977: 454; Wallerstein, 1974b)

As demonstrated above, the operational logic of the modern world-system (the unique mode of production), claimed by Wallerstein (1974a: 126-127), is profitable commodity production through a labor exploitation process of the peripheral areas. In line with Wallerstein, Xing Li defined the division of labor more simply as follows:

Historically, the division of labor within the capitalist world economy brought about and resulted in flows of commodities, labor, and capital across different geographical areas through chains of production, exchange and investment...the different positions in the global division of labor and the change of patterns of competition and competitiveness planted the system from the very beginning with contradictions that led to the dichotomy of development vis-à-vis underdevelopment. (2016:10)

It is, therefore, imperative to mention that the core/periphery division of labor, as a "structural constant" of the world-system (Chase-Dunn & Rubinson, 1977: 460), is among integrated production "processes" rather than particular "products" (Hopkins and Wallerstein, 1977: 116). As has often been noted, the various geographical areas which constitute the division of labor are specialized according to specific productive tasks with distinct economic rewards (ibid: 127).

Historically, geographic expansions have been a major mechanism through which the system brought in new areas of low costs that helped to check the secular tendency of rising pressure on profitability (M. Li, 2008: ix-x).

Accordingly, China was once regarded as "one of the last large geographical areas that was incorporated into the capitalist world-economy and did not actively participate in the system-wide division of labor until very recently" (ibid). This situation, however, has been more or less changed due to the chances for a total meltdown at the North Pole, since the Arctic region began to emerge as the next geographical area, which is to be incorporated into the capitalist world-system. To put it in another way, China once functioned as "a strategic reserve" (ibid) for the capitalist world-economy after it was included in the international division of labor. Following the same logic, when China upgrades itself to a core-like country, the function of "strategic reserve" shrinks gradually and new areas should, in turn, be brought in.

In recent months, the world is witnessing an increasing number of Chinese investment and infrastructure projects taking place in the Arctic. More specifically, cooperating with Russia, China's National Petroleum Corporation (CNPC) plays an important role (20% stake) in the Yamal Liquid Natural Gas (LNG) project (Gran, 2018). Though currently on the precipice of a tense trade war, China and the US have pushed forward a \$43 billion Alaska LNG project, aiming at strengthening China "economic and strategic position in the world's largest emerging

frontier" (Feng & Saha, 2018). Moreover, the ongoing mining projects in Greenland, namely the Citronen Fjord Zinc project and Kvanefjeld REE project, also reflect China's footprint in accessing the Arctic. Equally important, the Polar Silk Road should be regarded as another ambitious effort made by China with the purpose of smoothing the chains of exchange, including cooperating with Russia on the Northern Sea Route (NSR), promoting Iceland as a logistical hub, establishing a 10,500-kilometer cable in Finland, and investing in roads, railways, and bridges in Norway and Sweden.

Taken together, China, as part of the emerging core areas, has endeavored to bring about flows of commodities and capital in the Arctic region through chains of production in the domain of raw materials. In other words, China is currently following the operational logic of the world-economy, i.e., the profitable commodity production from the peripheral Arctic region. It is no exaggeration to draw the conclusion that China's specific productive tasks are highly dependent on its core-like position in the world-economy, whereas the Arctic's is on its periphery-like position.

## *Upward* mobility

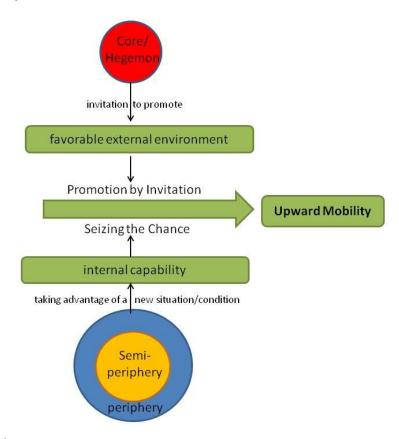
From the world-system perspective, upward mobility refers to either the peripheral countries moving to the semi-peripheral position or the semi-peripheral countries moving to the core position. Conversely, either the core countries moving to the semi-peripheral position or the semi-peripheral countries moving to the peripheral position is called downward mobility. Bilotti (2003) has empirically examined economic development in Japan as a case for upward mobility. After incorporation into the world-economy in the mid-19<sup>th</sup> century, Japan gained semi-peripheral status which could be seen from its trade pattern. Specifically, Japan exported light manufactured products to the core and heavy industrial products to the periphery in the late 19<sup>th</sup> century. Having been trapped by its limited domestic market and barren natural resource base, Japan was unable to move from the semi-periphery to the core. Driven by upward mobility, Japan carried out the "flying geese" model (Kojima, 1977: 150-151) which highlighted the importance of technological development and industrial diffusion across countries and earned Japan's core status regionally in the 1970s and globally in the 1980s.

Most world-system scholars would agree that, without being plagued by the inherent nature of the world-system and the extractive logic of global capitalism, i.e., the core gets wealthier and more developed at the expense of the stagnation or even degradation of the non-core, some developing countries have experienced the upward mobility process aiming at "occupying an integrated 'core' position" over the past few decades, which at the same time

would challenge the hierarchical stability of the world-system (Clark, 2010: 1123-1128). The peripheral countries with upward mobility striving to upgrade themselves to the semi-periphery are more likely to achieve economic growth as a result of the alternation of their relative position in the world-system (ibid).

It is frequently advocated that "upward mobility" is highly dependent on promotion by invitation (the external forces offered by the core) and seizing the chance (the internal advantages of the semi-periphery/periphery). As Figure 1 shows, the existing hegemon or a group of core countries, with the purpose of realizing their own geopolitical and geo-economic interests, offer an invitation for the non-core nations to be promoted within the world-system (X. Li, 2016: 11). Such an invitation to promote gradually forms a favorable external environment for the semi-peripheral/peripheral countries with internal capabilities of benefiting from a new situation or condition to seize the chance. Therefore, the upward mobility takes place on the basis of the combination of promotion by invitation and seizing the chance.

Figure 1. The Upward Mobility Path



(Source: Author's own work)

Reading Figure 1 from the top, China, as a core-like country or an emerging economic hegemon, has already put forward an invitation for the Arctic region to promote the Polar Silk

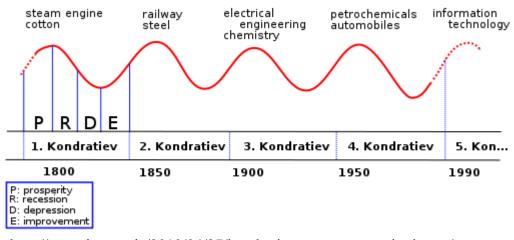
Road. Such an invitation provides a favorable external environment in the field of investment, infrastructure and technology. Similarly, reading from the bottom, the peripheral Arctic could take the advantage of the new situation created by China's Polar Silk Road with its unique internal capability (rich in unexplored resources, emerging new trade routes, etc.). Accordingly, promotion by invitation and seizing the chance jointly pushes forward upward mobility.

As Xing Li (2016:10) has claimed, driven by upward mobility, the emergence of China as "a new political and economic system-guarantor" can be plausibly taken as part of the cyclical rhythms of the system. The rise of emerging powers, especially China, symbolizes "the strength and success of the world system in bringing more untapped parts of the world to the logic of capitalism without changing the fundamental relations of inequality within the system" (ibid: 11). To make it simple, the periphery has always been needed even if China carries out its upward mobility and successfully gains core status in the future. In this regard, the Arctic region should be perceived as the next destination of Beijing's capital and hegemonic outward expansion after Southeast Asia, Latin America, Africa, and the South Pacific. China's economic expansion, most recently to the High North, accelerates the "structural profit squeeze" of the capitalist world economy.

#### Kondratieff B-phase

In the modern world economy, Kondratieff waves (also written Kondratiev waves or K-waves) is taken as cycle-like phenomena ranging from 40-60 years with a rise stage, the Kondratieff A-phase, and a decline stage, the Kondratieff B-phase (Korotayev & Tsirel, 2010:3-57).

Figure 2. Kondratiev Cycles



*Source*: http://www.irenses.ie/2010/04/27/kondratiev-wave-economic-theory/. [Accessed August 30, 2018]

As is shown in Figure 2, the world economy is currently experiencing the Kondratieff B-phase.

What has happened is what always happens in B-phases: acute competition among the core powers in a situation of contraction, each trying to maximize its profit margins and minimize its unemployment at the expense of the others; a shift of capital from seeking profits in production to seeking profits in financial manipulations; a squeeze on governmental balance of payments, resulting in debt crises. There has been a relocation of production at the world level. (Wallerstein, 1993:3-4)

Such a downturn has, however, not been claimed as definitively bad times according to Wallerstein. On the one hand, it poses a chance for large capitalists to seize in order to find alternative profitable outlets which will ultimately lead to the rise of capital accumulation on an individual level. On the other hand, given the relocation of productive activity, one of the above-mentioned features of B-phases, it is hardly surprising that "some zone in the world-system sees a significant improvement in its overall economic standing" (Wallerstein, 1999: 36). With abundant oil reserves and navigable waterways, the Arctic region is showing its profitable potential by constructing thriving economies and rising energy prices in the context of globalization (Hastedt et al., 2015: 249). Therefore, China's huge enthusiasm in the Arctic could be understood as "seizing" the chance of searching for "alternative profitable outlets" and "relocating" its "productive activity". Korotayev & Grinin have contended that:

The change of K-wave upswing and downswing phases correlates significantly with the phases of fluctuations in the relationships between the World System Core and Periphery, as well as with World System Core changes (the growth or decline of its strength, emergence of competing centers, their movements, and so on) (2012: 47).

Through military expenditures, FDI, aid or emigration, there is a resource flow from the core to the semi-periphery and periphery for the sake of obtaining certain concrete gains, including the acquisition of colonies, making profits, opening markets, getting access to raw materials, etc. In line with such argument, it is understandable that China is pouring human, physical and financial resources into the Arctic in search of profits, markets, and most importantly raw materials.

Undoubtedly, the rise of East Asia, including China's recent rise, occurred during a Kondratieff B-phase. As Wallerstein bluntly pointed out, "it is East Asia that has been the great beneficiary of the geographical restructuring of this Kondratieff B-phase" (1999: 37). There has been fierce debate, especially in the sphere of international political economy, "whether the capitalist world-system is able or not to be rejuvenated by the take-over of a Chinese hegemon"

(Komlosy, 2013:375). Claimed by Komlosy and supported by Griffiths/Luciani (2011), Frank (1998), and Menzel (2015), "renewal would allow China to continue building up its industrial capacity (1990-2007/08) into a new cycle, by then transforming the initial dependency from Western impetus into the capacity to self-reliant R&D, setting new standards in product and process innovation within the next 25 years" (ibid).

Table 1. Kondratiev Cycles and Hegemony

Hegemon	Kondratiev A-	Kondratiev B-	Hegemon
	phase	phase	
GB up	1790-1820	1820-1850	GB peak
	Textiles		
GB	1850-1873	1873-1896	GB decline
maturity	Rail roads, steel		
U.S. up	1896-1914	1914-1945	U.S. peak
	Electro, chemistry,		
	food		
U.S.	1945-1973	1973-1990	U.S. decline
maturity	Mass consumer		
	goods, automobiles,		
	petro-chemistry		
China up	1990-2008	2008-2030?	China peak?
	Building up	Transforming	
	industrial capacity	dependent into	
		leading capacity,	
		setting standards	
China			China Decline?
maturity?			

Source: Komlosy, 2013:376

According to Table 1, the world is experiencing a Kondratieff B-phase, "the decline of U.S. hegemony would open a period of competing great powers, old cores striving to maintain, new ones to achieve a globally leading position, whether this position would open a new hegemonic cycle of the capitalist world-system or a posthegemonic Chinese-led market-economy" (Komlosy, 2013: 377).

#### **Concluding Remarks**

The paper concludes firstly that, China's externalizing behavior in the Arctic region is governed by the internalized law of value of the modern world-system, i.e., the endless accumulation of capital. The ongoing relationship between China and Arctic, to be specific, China's effort of incorporating the Arctic's raw materials into the commodity chain, reflect both the basic rule of law, endless accumulation of capital, and the above-mentioned mechanism that instantly reproduces the core-like/periphery-like division of labor. In other words, such effort will help to expand the geographic boundaries of the division of labor of the world-economy.

The paper concludes secondly that, China has benefited and is still benefiting from the world-economy's division of labor, with Southeast Asia, Latin America, Africa, and most recently the Arctic serving as relatively subordinated resource peripheries.

The paper concludes thirdly that, driven by a strong upward mobility, China has leapfrogged the periphery and semi-periphery and gained a semi-core position with an upward trend to the core, through offering a favorable external environment to the Arctic (invitation to promote). China's economic expansion, most recently to the High North, accelerates the structural profit squeeze of the capitalist world economy.

The paper concludes lastly that, since the world-economy is currently in Kondratieff B-phase, China, as an emerging global core, is logically dedicated to the relocation of productive activity and the probability of alternative profitable outlets, where the Arctic is highly compatible. China's huge enthusiasm in the Arctic could be understood as seizing the chance of searching for alternative profitable outlets and relocating its productive activity.

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