Globalization 4.0, Regional Coordinated Development 4.0, and Industry 4.0: The background to the "One Belt, One Road" strategy and its intrinsic nature and critical power[1]

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1. Introduction

In recent years in China attention has been rising toward regional development, and from 2013 to the present a great many regional development strategies[3] having major significance have been proposed one after another. In September and October 2013, when President Xi Jinping was on visits to Kazakhstan and Indonesia, he proposed the two respective major concepts of the Silk Road economic belt and 21st century maritime Silk Road, and drew attention from international society. In the "Decision of the Central Committee of the Communist Party of China on some Major Issues concerning Comprehensively Deepening Reforms" passed at the Third Plenary Session of the Eighteenth Central Committee of the Communist Party of China on 12 November 2013, it was proposed that "We will … work hard to build a Silk Road Economic Belt and a Maritime Silk Road, so as to form a new pattern of all-round opening". On 28 March 2015, on the authorization of the State Council, the National Development and Reform Commission, the Ministry of Foreign Affairs, and the Ministry of Commerce jointly announced the "Vision and Actions on Jointly Building the Silk Road Economic Belt and 21st-Century Maritime Silk Road" (hereinafter abbreviated to "Vision and Actions"). This has shown that the strategic concept which clearly demonstrates China's international clout of "One Belt, One Road" has already entered the implementation stage. The time period from the initial concept to the defining of the strategy, and then the final decision on the framework for action, was merely a little under two years, and from this fact it can be understood that "One Belt, One Road" has a serious importance for central policymakers (Zhang, 2015a). "Vision and Actions" explicitly shows the goals of the construction of "One Belt, One Road" to be the following: "To promote the orderly free flow of economic factors, the highly efficient allocation of resources and a high level of market integration, to promote the realization of economic policy coordination among the countries concerned, to carry out a large-scale, higher and deeper level of regional cooperation, and jointly to create an open, inclusive, balanced, generalized and preferential regional economic cooperation framework". If in the future China's "One Belt, One Road" strategy is successfully implemented, with the economic relations with the Eurasian interior growing close it will form a huge economic belt reaching 65 countries and 4.4 billion people (Luo, 2014). This will not only change the spatial configuration between China and the nations concerned, but at the same time will also engender an enormous, profound and far-reaching impact on the global economic and political landscape as a whole.

This paper begins with the broad-view spatial background in which the "One Belt, One Road" strategy is located, and the strategy's temporal background, intrinsic nature, and key driving forces are discussed. This paper is structured as follows. In Section 2 the "One Belt, One Road" strategy's temporal background is analyzed, and a detailed discussion on the strategy's historical responsibilities is undertaken. In Section 3, at the same time as a discussion focused on the intrinsic nature of the strategy being made, opinions are offered on how to ensure the implementation of the strategy from a regional policy structural perspective. In Section 4 analysis is carried out on the key driving forces within the "One Belt, One Road" strategy, and discussion is made on how to ensure the smooth progression of the strategy. Lastly conclusions are given.

2. The Background to "One Belt, One Road": Globalization 4.0

The proposing of the "One Belt, One Road" strategy was no coincidence whatsoever. In terms of the actual situation for the development of China's interior, the proposing of the "One Belt, One Road" concept is a declaration of China's intent to further raise its international position and influence, and is a historical inevitability. In terms of the course of globalization in its entirety, China's proposing of the "One Belt, One Road" strategy is not only because it is a necessity for its own development, but even more importantly, because during the course of Globalization 3.0 in the past there were inherent flaws in the global governance structure which the wave of tertiary globalization had formed, resulting in most countries now

[1] The Chinese-language version of this paper appears in the *Journal of Zhengzhou University: Philosophy and Social Science Edition,* Vol. 48, No. 3, May 2015, pp. 87–92, and we obtained the agreement of the author and the *Journal of Zhengzhou University* regarding the publication of the English-language version. The English version has been updated.
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[3] Representative examples are such strategies as the Jingjinji (Beijing–Tianjin–Hebei Province) collaborative development, "One Belt, One Road", the metropolitan area of the middle and lower reaches of the Yangtze, and free trade zones.

Table 1: The Basic Circumstances for Globalizations 1.0 to 3.0

Globalization Wave	Revolutionary Technology	Representative Countries	Principle Method
Primary (Globalization 1.0)	Navigation Technology	Portugal, etc.	Military Strategy
Secondary (Globalization 2.0)	Steam Engine Technology	Britain, etc.	Military Colonization
Tertiary (Globalization 3.0)	Electrical and Information Technology	United States, etc.	Advancement via Global Economic, Trade, and Financial Organizations, etc., Led by Western Advanced Nations

Source: Compiled by the author from Cui and Zhang (2002).

wanting anew to ensure an equal global economic development structure. In such circumstances, as an economic entity whose economic scale is second to the United States, which created the rules for the current global economic system, China's proposing of the "One Belt, One Road" strategy has a similar historical inevitability.

1) The History and Characteristics of the Three Past Globalizations

The whole period from the sixteenth century down to the present saw three waves of globalization, and each had its own respective characteristics as shown in Table 1.

Before the fifteenth century communications and transportation technology was backward, each part of the world was relatively isolated, and the path to globalization had not yet emerged. From the beginning of the sixteenth century, with the development of all forms of technology, and navigation technology in particular, European countries such as Portugal, Spain and the Netherlands, focused on the opening[4] of new seaways, and after the new seaways were discovered, European countries, including Portugal, Spain, the Netherlands, Britain and France, via war and plunder, and colonial economies, were able to achieve direct economic links with other regions of the world. The opening of new seaways and the initial colonies and plundering created the first shoots of economic globalization, and in a real sense this was the starting path for globalization. This wave of globalization can be called the Portuguese model, and its characteristic is military plunder. The secondary path of globalization began with two industrial revolutions in countries such as Britain. After achieving industrial revolutions from the eighteenth century to the early twentieth century, colonies and expansion became the main external method for such countries as Britain, France, and the United States. Amid such a process the whole world was partitioned by the power of capitalism, the capitalist world system was established, and the global market system was finally formed. This secondary globalization path can be called Globalization 2.0, and the British model, and its characteristic is military colonialization. From the middle of the twentieth century on, many colonies started to become independent, the global economic system which had been created through powerful military force grew unstable, and Western countries, with the United States in the lead, promoted the tertiary path of globalization via global economic, trade and financial cooperation organizations. The birth and development of three international economic organizations, namely GATT,[5] the World Bank, and the IMF represents the continuing development of economic globalization from disorder toward systemization and institutionalization, and this wave of globalization can be called the US model. As regards its characteristic feature, the global economic and trade management rules are principally led by developed Western countries with the United States in the lead.

2) The a Priori faults of Globalization 3.0 and the Expectations for Globalization 4.0

The three waves of globalization all differ, but their greatest point in common is that they are unequal. This inequality is expressed by inequality in status, inequality in development, and inequality in benefit. Inequality in status, amid the process of involvement in globalized economic activity, denotes an inequality in power status when the participants formulate global economic and trade activities and management rules. Regarding inequality in development, amid the process of development, the majority of late developing nations are restricted by the management rules[6] formulated by the Western developed nations, and indicates that they suffer a serious constraint to their development. Inequality in benefit, amid the process of globalized economic activities, denotes large disparities in benefit among the participants.

In the process of globalization under the Portuguese plunder model and the British colonial model, such inequality resulted primarily from military invasion and intimidation, and the colonies mostly did not benefit alone. Under the US globalization model, the action of leading by exerting military force has gradually become weaker, and the United States has not promoted economic links among different regions of the world by simple threat of force of arms, but has relied on the favorable conditions of huge

[4] Generally, Vasco da Gama for Portugal, and Columbus and Magellan for Spain, are considered to have been the leaders in opening new seaways.
[5] GATT was the predecessor to the WTO.
[6] Amid the late developing nations participating in economic, trade and financial activities, they have to clear a series of political, environmental and human rights' conditions which advanced Western countries have formulated.

capital and the market, and via designing basic frameworks to manage the global market, and formulating management rules beneficial to their own country, turned the situation around to get the maximum benefit, consolidating global resources. However, Globalization 3.0 which the US model represents similarly also has an unequal characteristic. At the same time, because the United States is currently the sole superpower in the world, such inequality is clearly shown within Globalization 3.0. If one takes as an example the main agent for the framework of globalization supporting the US model, namely the US dollar system, as the US dollar is the most important currency in the world, it gives the United States the capability of powerful control, and an advantageous position within world trade, and not only allows it to acquire many benefits on the path of globalization, but also expands the impact of changes or crises in the US economy on the whole world. The path of globalization which such a single benefactor controls is not able to satisfy the benefit and demands of all participants at the same time, and because supervision and constraints for the leading actor are lacking, the path of globalization as a whole will never become stable, and a partial crisis for the leading actor will end up changing into a crisis for the whole world. The negative impact which the 2008 global financial crisis had on the world is the best example of that.

Consequently, under such circumstances, it is a necessity for a majority of nations to construct anew a management system for globalization with the characteristics of being new and equal, along with also bringing benefit. The position of the United States in the world economy is declining, China's contribution to the world is increasing unremittingly, and thereby many nations including China have begun demanding a new global management system.

3) The Historical Responsibility of the "One Belt, One Road" Strategy with Globalization 4.0 as a Backdrop

Today, China has already become the world's number two economy, its foreign currency reserves in 2013 were close to US$4 trillion, and made up approximately one third of the world's foreign currency reserves (Li, 2014). Such results were ones from the tertiary path of globalization, but as the third path of globalization which the Western developed countries led brought about profound inequality, it was unable to satisfy the demands of a majority of nations in terms of equality in status, development and benefit, and at the same time the capable countries among the late developing nations, for example the BRICS, took a defensive stance, and the entire global economic system was not a harmonious one. Against such a backdrop China proposed the "One Belt, One Road" strategy, and its fundamental aim was to promote the path of quartary globalization with a development model for regional cooperation which is equal, mutually beneficial and mutually advantageous. Such thinking satisfies the pursuit of benefit toward the equal status of many late developing nations, and regarding some developed nations has a similar power of attraction. Consequently, the "One Belt, One Road" strategy can be called the de facto vanguard soldier on the path to Globalization 4.0. As for China, on the path to Globalization 4.0, if it preemptively leads Globalization 4.0, it would create new international relations centered on gaining benefit with cooperation, equality and collaboration via the implementation of the "One Belt, One Road" strategy, make a new-style global organization which is fair, free, and real, and China would have to pursue the path toward the internationalization of the renminbi.

First, for the construction of new international relations centered on gaining benefit with cooperation, equality, and collaboration, "One Belt, One Road" is the departure point. Differing from the United States' Marshall Plan, China's "One Belt, One Road" strategy is not one which aims at calling for the hegemonic conditions of the United States, via systematized preparation and formulation of rules, leading other regions' affairs (Jin, 2015). Despite the "One Belt, One Road" strategy speeding up the economic development of China and border regions and playing a role similar to the Marshall Plan in the direction of promoting a path to regional integration, it has a principle of constructing new international relations which are centered on win–win cooperation which is substantively equal, inclusive, open, and mutually beneficial, and differs completely from the formation of the international relations which the United States led with the pursuit of the Marshall Plan. Such new relations will ensure that the "One Belt, One Road" strategy will continue moving forward smoothly, and the central objective of Globalization 4.0 will never falter, and must be maintained over the long term.

Next, the construction of fair, free, and real new world-level economic, trade, and financial organizations will be important guarantees for the "One Belt, One Road" strategy, and will enable the consolidation of the fundamental operating principles for the advent of Globalization 4.0. Currently, there are three global economic organizations in the world, that is the IMF, the WTO, and the World Bank, and as these are mostly led by a group of Western developed nations headed by the United States, such developed countries have already obtained a fair degree of benefit, and they become the main method to control other countries; the management model of such organizations does not accord with the benefit of a majority of countries, and also does not accord with the global development wave of the future. Consequently, amid the "One Belt, One Road" strategy being promoted, and in accordance with the benefit of the majority of nations, it is extremely important that new organizations that cross borders and regions, which China has created and led, for example the AIIB (Asian Infrastructure Investment Bank) and the BRICs bank (New Development Bank), participate in finance and investment activities. These new organizations will come to consolidate the operating rules for the equal, free, and viable economic activity for the future path of Globalization 4.0.

Lastly, the internationalization of the renminbi is an important objective of the "One Belt, One Road" strategy, and is also an important guarantee to compete for the leadership on the path to Globalization 4.0. One of the key causes as to why the United States was able to maintain its leading position on the path of tertiary globalization over the long term was due to the US dollar being the most important global currency (Cheng and Xia, 2007). The

United States, relying on such an advantageous position for its currency, was not only able to keep a grip on the leadership amid global economic competition, but via adjustment of domestic monetary policy came to have influence on the global economic situation. Consequently, China, by means of the "One Belt, One Road" strategy, based on the foundation of trade and investment activities with the neighboring countries concerned, will promote the path to renminbi accounting, and should gradually raise the international status and influence of the renminbi; in so doing China will realize the path of internationalization of the renminbi, finally heighten the economic influence of China in all circumstances of the global economy, and will consolidate the foundations for leadership on the path of Globalization 4.0.

3. The Intrinsic Nature of the "One Belt, One Road" Strategy: Regional Coordinated Development 4.0

Reviewing Chinese history it is easy to find that, in the long era of agricultural civilization, China's strength and prosperity had once influenced the entire world. As early as the Han Dynasty over two thousand years ago, China had already built a bridge, namely the Silk Road, passing through East Asia, Central Asia, Western Asia, Europe and Africa, and this international channel had multifaceted dynamic effects, including global economic interaction and cultural dissemination. The Maritime Silk Road, also named the China [Ceramic] Road, was an extension of the land Silk Road, and like a silk ribbon closely connected together the countries which were on the periphery of the world's oceans. Historically, the ups and downs of the "One Belt, One Road" reflect those for China's development. In terms of form the "One Belt, One Road" strategy resembles a Silk Road Version 2.0, and although the "One Belt, One Road" strategy carries on some elements left over from history, in comparison with the historical Silk Road and Maritime Silk Road there have been dramatic changes. Today's "One Belt, One Road" is not just a simple land and sea international contact channel, but is a global network of contacts constructed borrowing historical symbols; today's "One Belt, One Road" is not just a channel for the export of China's traditionally superior manufactures, such as silk and porcelain, and for the import of other countries manufactures and crops, but is an integrated interactive platform taking interconnectivity as its foundation for such aspects as economics, culture, technology, capital, and resources. Actually, the nature of the "One Belt, One Road" strategy is China's regional coordinated development strategy Version 4.0,[7] but the standards for the regional space have included national and cross-border regions, and what the strategy represents is not just a localized regional contact channel, but a regional strategic design far exceeding the scale of the historical Silk Road and Maritime Silk Road, building up China's amalgamation with the entire world.

1) The Course of Changes in Regional Coordinated Development Strategy

China's territory is vast, and by region there are great differences in terms of natural resources, geographic environment, and cultural practices, and in terms of economic development also there are similarly great disparities. The realizing of regional coordinated development was the Chinese government's long-term regional development strategy objective. As early as the 1950s China's leaders raised the necessity of skillfully handling the developmental relationship between the coastal and inland regions (Yan and Bai, 2007). Since the middle of the twentieth century, China's regional development strategy has been constantly adjusted in line with the changes in the economic situation, and at different periods of economic development the focus of regional strategy has differed. Making analysis from the background of regional development, to date the changes in China's regional development strategy can be clearly divided into six stages: the inland construction strategy stage (1949–1964); the Third Front Movement strategy stage (1965–1972); the strategy adjustment stage (1973–1978); the coastal development strategy stage (1979–1991); the regional economic coordinated development strategy stage (1992–2006); and the Ecological Civilization Regional Economic Coordinated Development Strategy[8] stage (2007 to the present) (Zhang et al, 2014). Goals for the regional coordinated development strategy were clearly stated at the beginning of the 1990s. China's regional coordinated development strategy can be divided into four versions, according to the differences in the target toward which the direction for regional coordinated development is actually aimed.

Regional coordinated development 1.0 runs from its proposal at the beginning of the 1990s to the proposal of the 2004 regional overall development strategy: At the time of the "Eighth Five-Year Plan" (1991–1995), at the same time as continuing to give consideration to the necessity of coastal development, many projects were arranged in the center and west, and the share of national budgetary investment which the center and west made up clearly increased compared to the eastern and coastal regions. The true power of China's overall economy gradually rose, and with the model with the objective of the systemic reform of the socialist market economy continuing to be established, the central government began to lay emphasis on coordinated regional development. In September 1995, in "Some Opinions of the Central Committee of the Communist Party of China on the Ninth Five-Year Plan on the National Economy and Social Development and Long-Range Objectives to the Year 2010", the objective of regional coordinated development of "continuing regional economic coordinated development and a phased reduction of disparities in development among the regions" was

[7] This is not a case where only the western provinces are able to participate in the "One Belt, One Road" strategy, but in fact, as a strategy created by the nation, all provinces are included within the "One Belt, One Road" strategy.
[8] For more details please see Zhang (2013).

raised, and that objective was repeatedly brought up in subsequent five-year plans, and there were the regional coordinated development strategies of the Western Region Development Strategy implemented in 1999, and the Strategy of Revitalizing the Old Industrial Bases Including Northeast China implemented in 2002 (Zhang, 2007). Such regional coordinated development strategies, in just raising respective plans for resolving the problems which are prominent in the regions, are not by reason of proposing comprehensive solution methods and do not pay attention to all of China's regions within the strategies. In analyzing and reviewing the past regional strategies, the central government clearly proposed a regional coordinated development strategy for the whole of China in 2004. This strategy marked the entry into the Version 2.0 period.

Regional coordinated development 2.0 ran from the 2004 raising of the overall regional development strategy to the 2007 raising of Ecological Civilization. That is, after the measures of the western development and the Strategy of Revitalizing the Old Industrial Bases Including Northeast China were raised, in 2004 the Chinese government simultaneously raised the overall regional development strategy, including the Great Western Development Strategy, the Revitalizing of the Old Industrial Bases Including Northeast China, the Promoting of the Rise of the Central Region, and support for development led by the eastern region, "Some Opinions of the Central Committee of the Communist Party of China and the State Council on Promoting the Rise of the Central Region" was issued in 2006, and the main content of China's regional coordinated development strategy was clarified in rudimentary form. Prior to 2004, as China's regional coordinated strategy disregarded the central region, and was not a plan covering the whole country, it was redolent of a stop-gap measure. In 2004 the overall strategy for regional coordinated development was able to be summarized with four phrases (16 Chinese characters in total): the western development, the Northeast revitalization, the rise of the center, and the eastern initiative. Through these, there was the first incorporation within a strategic framework that aimed at a balance of development among the different regions of the whole country. All regions have been incorporated within the regional strategy, and while for this phase of the regional coordinated development strategy the improvement was notable, the development stage at that time was constrained, and flaws were also obvious: that is, too much emphasis was placed on economic development, and protection of the ecological environment was neglected.

Regional coordinated development 3.0 is the period from 2007 to 2013, which integrated the regional coordinated development overall strategy and the Principle Functional Districts strategy. Namely, the construction of Ecological Civilization was first raised at the 17th National Congress of the Communist Party of China in 2007, and adherence to making Ecological Civilization a precondition within regional coordinated development was called for, and ecology and economic results came to be emphasized simultaneously. This signifies that a major adjustment occurred in the content of the regional coordinated development strategy. In order to realize Ecological Civilization, the central government raised the Principle Functional Districts strategy based on the regional development overall strategy. The Principle Functional Districts are a new concept which hadn't existed before, and first appeared in the "11th Five-Year Program on National Economic and Social Development of the People's Republic of China". The "Opinions of the State Council on the Preparation of the National Principle Functional Districts Program" which was issued in 2007 showed the stages from the concept of the Principle Functional Districts Program to its operation, and became an important turning point in China's history of pursuing regional coordinated development. What the regional coordinated development had emphasized up to that point was a balance in the level of economic development, but the point which the Principle Functional Districts Program emphasizes is a regional coordinated development with people and nature in harmony, and is a departure from the past situation emphasizing a balance in the level of economic development only, and neglecting the flaws in the protection of resources and the environment. The coupling of the overall strategy for regional development and the Principle Functional Districts strategy is something for realizing the concrete means which are taken as necessary for Ecological Civilization, and raised a higher level of quality for the ideal of China's regional coordinated development.

Regional coordinated development 4.0 began with the all-round-opening regional economic coordinated development strategy, centered on the "One Belt, One Road" strategy which was raised in 2013. That is, while prior regional coordinated development strategy focused on domestic coordination, after the "One Belt, One Road" strategy was raised in 2013, an international perspective on regional coordinated development strategy became possible. On the one hand, after the world financial crisis of 2008 intense changes occurred at the global economic and political levels, with the uncertain factors increasing for China's peripheral regions, and the southeast coastal region in particular; on the other hand structural contradictions in the domestic economy and industry and social development became prominent, and the respective complex factors put great pressure on economic development. In such a situation, the new generation of the central leadership centered around Xi Jinping raised the "One Belt, One Road" strategy, included many Eurasian countries and regions as the target level for the regional coordinated development strategy, greatly opened up the space, placement and range for China's economic activity, continued to broaden the room for China's economic activity, and found a new driving force for the sustainable growth and development of China's economy.

As can be understood from the above, the "One Belt, One Road" strategy is an important task intrinsically belonging to China's regional coordinated development 4.0, and being an important constituent part within China's regional strategy system, the "One Belt, One Road" strategy is something which transcends the restrictions of the somewhat confined national administrative regions, and aiming outward China will enjoy reciprocal benefits with the peripheral regions or all the nations, and it demonstrates the sincere wish of desiring collaborative construction of a new regional cooperative development model with equal

cooperation.

2) The Foundations of a Regional Management System to Ensure the Implementation of the "One Belt, One Road" Strategy

The "Vision and Actions" made clear the future key issues for the "One Belt, One Road", including the principles for collaborative construction, the philosophical framework, the key points for cooperation, the mechanisms for cooperation, and the situation of the opening-up of the various regions of China, but is no more than a guidance document carrying a mission statement, and other than that examination is still awaited of many key issues, including for example the risk management issue, the issue of differing cultural interchange and intercourse, and the issue of mechanisms for discussion and operations. Considering the fact that the research is quite sufficient on the above-mentioned issues in the academic world, we don't intend to investigate these issues further in this paper,[9] but beginning from the intrinsic nature of the "One Belt, One Road" regional strategy we will attempt an analysis as to how to ensure the implementation effects of the "One Belt, One Road" strategy. According to the related theory for regional policy, the "One Belt, One Road" strategy necessitates the complete realization of the objectives raised in the "Vision and Actions", and it is necessary for the four concrete operational issues to be made explicit. First, who will administer it? That is, which branch will coordinate the "One Belt, One Road" construction? Second, whom will they administer? That is, which nations and regions will "One Belt, One Road" encompass? Third, how to administer it? That is, what methods to adopt for promoting the construction and development of the "One Belt, One Road"? Fourth, administer the effects? That is, how to evaluate the impact and effects of the construction of the "One Belt, One Road"?[10]

Regarding the issue of who will administer it: before the "Vision and Actions" was issued, the center had already established a "One Belt, One Road" construction work leading group, with Vice Premier Zhang Gaoli at its head. However, this is a domestic coordination institution, and in the future it will be possible to attempt to establish an international comprehensive coordination institution, and at the same time China should strive to lead the international comprehensive coordination institution.

Regarding the issue of whom they will administer: the "One Belt, One Road" construction is a specific measure for opening China up to the outside world, and a national strategy. Consequently there is no problem as to which provinces would be left out. However, it is currently not yet possible to determine which countries "One Belt, One Road" is to connect, and furthermore the range of countries involved is not fixed. Change is certain to occur as construction continues to progress, and the cause of this is the "Vision and Actions" which China announced, and not the "One Belt, One Road" planning. Many media in China understand "Vision and Actions" as "One Belt, One Road" planning, but this is not correct. From an academic viewpoint, "Vision and Actions" and "planning" are two different concepts.

Regarding the issue of how to administer it: the "Vision and Actions" proposed that cooperation took "policy linking, facility connecting, trade flow, capital circulation, and interlinking of popular sentiment as its main content", and has proposed cooperation mechanisms and the direction for opening to the outside world of all China's regions, but the specific policy instruments are not yet fully clear. The "One Fund, One Bank" (namely, the Silk Road Development Fund and the Asian Infrastructure Investment Bank), which China led and established, undoubtedly will provide financial support for the construction of "One Belt, One Road", but a policy instrument for the scientific determination of the promotion of the "One Belt, One Road" construction remains a major issue awaiting study.

Regarding the issue of administering the effects: currently they can only evaluate the "One Belt, One Road" construction in advance, and the time has not yet arrived concerning the mid-term and after-the-fact evaluation work. For such a major activity it is essential to establish evaluation mechanisms, but the "Vision and Actions" does not mention the issue of evaluation mechanisms. Establishing scientific evaluation mechanisms for the "One Belt, One Road" is one of the key work focuses for the future.

4. The Key Driving Forces within the "One Belt, One Road" Strategy: The Upgrading of Chinese Industry to Industry 4.0

In order to promote the "One Belt, One Road" strategy, the harmonization of many conditions is necessary, including government support, cooperation mechanisms, and transport infrastructure, but taking the long-term view, as to whether China will be able to realize smoothly the upgrading of its industry is one of the keys to the "One Belt, One Road" strategy. This is because industrial cooperation is the most important content within regional cooperation, and the smooth forming of relationships with a rational industrial division of labor among the differing nations and regions will accelerate the pace of regional cooperation or regional integration. On the one hand the construction of "One Belt, One Road" involves sixty-odd nations, and as to whether in the future the system of the industrial division of labor among these nations can be formed smoothly will determine whether the benefit can be obtained which will be able to satisfy the many participants in the "One Belt, One Road" strategy, and at the same time the sharing of these benefits will influence the smooth implementation of the "One Belt, One Road" strategy. On the other hand the fundamental objective of China implementing the "One Belt, One Road" strategy does not lie in the exporting of productive overcapacity, but lies in attempting the construction of a developed community, a

[9] Please refer to the following papers: Sheng, Yu, and Yue (2015); Shen and Xiao (2014); Zhang (2015); Wang (2015); and Zhu (2015).
[10] The specific content of the "four administration" issues has already been raised in Zhang (2005), and for an authoritative description please refer to Zhang (2015b).

community of interest and a common destiny through the promotion of an open, comprehensive "One Belt, One Road" strategy. In addition, at the same time as the industrial system, as the basic framework for economic development, being the target of the work on a route of direct interchange for economic activity among the different nations and regions, with China being the biggest developing country, its industrial development will have a huge influence on other nations' industrial development. Consequently examination must be made of the problem of matching industries among the nations concerned with "One Belt, One Road".

1) Conditions for the Future Development of China's Industrial Structure with the "One Belt, One Road" Strategy

The countries which the "One Belt, One Road" involves not only include in part developed countries, but also include developing nations whose level of development is lower than China's. China, being the largest and one of the world's developing countries with the highest level of development, has a characteristic industrial structure which must have a great influence on the industrial development of the nations participating in the construction of "One Belt, One Road". The largest characteristic feature which China's industrial structure has developed is that the structure has been completed. China is one of the few countries in the world which has a complete industrial system. Moreover, China's industrial development has the characteristic feature of the "three lows": low cost, low-tech, and low threshold. For China there is currently already the capability of having high-technology advanced equipment in large-scale production, but in comparison with the West has not yet formed complete production systems for high-tech industries, many stand-alone products exist, and viewed overall it cannot be denied that the characteristics of the "three lows" of China's industrial development are clear.

As regards the completeness of China's industrial development structure and the characteristics of the "three lows", there is no doubt that China is facing great difficulties and pressure for a model change in the implementation process for the "One Belt, One Road" strategy. That is, on the one hand, with the completeness of China's industrial structure, whichever industry other countries, and in particular undeveloped countries, choose as their leading industry, it will be faced with competition with Chinese industry; on the other hand as the threshold of many of China's industries is low, it is easy for these nations to enter China's industrial competition. In fact, China is not afraid of competing with any nation at the current industrial development level. However, with China as the proponent and leader of the "One Belt, One Road" strategy, while there is a responsibility to make some concessions with an industrial division of labor system in order to build a harmonious common destiny, it is required that China's industrial development situation itself advances a prompt industrial model change and upgrading. The Chinese government is already firmly aware of this point. When Premier Li Keqiang visited Germany in 2014, he developed cooperation with Germany at the level of Industry 4.0, taking artificial-intelligence manufacturing as the main area for cooperation, and raised the need to increase the speed of the upgrading of the level of China's industry. Immediately afterwards in the *2015 Report on the Work of the Government* he raised the "Made in China 2025" strategy, that is, the planned implementing of the Chinese version of Industry 4.0. With China's highest stratum of leaders rating this as a change in industrial model and an upgrading of the "One Belt, One Road" strategy, they showed fully the profound and distinct recognition of the direction and driving force for a change and upgrading in China's industrial model as Industry 4.0.

2) The Significance of Making an Industry 4.0 System an Objective for China's Change and Upgrading of Industrial Model

In accordance with the differences in the representative transformation of technology, the path of the history of industrial development since the eighteenth century can be divided into a time series of the following four phases (Table 2).

China is currently at an overall industrial development level of Industry 2.0 and Industry 3.0, and Industry 4.0 is much farther off, but that doesn't mean that China cannot have an objective of the development of an Industry 4.0 system. Actually, as early as the beginning of the twenty-first century the Chinese government proposed a strategy which fused both digitalization and industrialization, and making analysis from the overall arrangement and strategic direction, the strategy is one which recognizes the Industry 4.0 concept model, and from this perspective China had early on already developed the fundamental tasks for the construction of the Industry 4.0 system. Via this, making the Industry 4.0 system the objective of industrial model change and upgrading should show the correct direction for China's future industrial development.

The Industry 4.0 system not only includes the industries within those such as manufacturing, but in fact, as a kind of production philosophy and model innovation, it relates to almost all industries, and what is more important, Industry 4.0 very strongly emphasizes the role of innovation in the industrial system as a whole, and this coincidentally matches the development strategy via the innovation operation which the Chinese government raises. Industry 4.0 has moved forward the upgrading to the current industrial system from the aspects of the conditions for links among industries which are different under the industrial system as a whole, the upgrading of part of the links which differ within the industrial chain, and the demand for workforce capacity and the quality of manufactured goods. More specifically, regarding the requirement of promoting a model change and upgrading of China's industrial structure in the Industry 4.0 system we raise the driving forces toward "One Belt, One Road" from two directions, as mentioned below.

First, taking the Industry 4.0 system as an objective of a model change of industrial development, it is possible to maintain Chinese industry's sustainable development, heightening China's overall power, and underpinning the implementation of the "One Belt, One Road" strategy. Over the last 30-odd years China's development model has been extensive, depending on low-wage labor capital, largely developing industry of a low technological threshold, and

Table 2: The Basic Circumstances and Characteristics from Industry 1.0 to Industry 4.0

Industry System	Basic Circumstances	Main Characteristics
Industry 1.0	From the 1760s to the middle of the nineteenth century, the factory mechanization which water- and steam-powered machines realized can be called Industry 1.0, and the result of this industrial revolution was that machine production replaced production by hand, and in economic and societal terms there was a transformation from a model taking agriculture and handicrafts as its basis, to a model with industry and machine manufacturing bringing about economic development	Machine Manufacturing Era
Industry 2.0	From the middle of the nineteenth century to the beginning of the twentieth century, the large-scale production of electrical goods which had the division of labor as its basis can be called Industry 2.0, and for the industrial revolution, via the completion of the separation of component production and assembly of manufactured goods, there was the cultivation of a new model of mass-producing goods	Electrification and Automation Era
Industry 3.0	Continuing from the 1970s to the present, the automation of manufacturing processes via the application of digital and information technologies can be called Industry 3.0, and with machines gradually replacing humans and doing the work, it has not only been applicable to a considerable proportion of "physical labor" but has also been able to take on a portion of "mental labor"	Digital and Information Era
Industry 4.0	Industry 4.0, beginning in 2010, and based on the making physical information systems intelligent, has taken people into the quartary industrial revolution led by manufacturing by artificial intelligence; the putting together of modules based on the lifespan of manufactured goods, the use of data on all manufacturing lines, and information and communication technology will form highly dynamic, individualized, digitalized manufactures and service industry models	Artificial-Intelligence Creativity and Manufacturing Era

Source: Compiled by the author, summarizing Ding and Li (2014).

has gained a certain market share. However, as the economy and society develop, China's labor costs continue to rise, in terms of the environment and resources also it becomes impossible for the traditional industrial development model to support the continuation of development, and China is being pressed by the necessity of creating a development model that meets the conditions of sustainable development. The Industry 4.0 system relies on the factors of knowledge and human capital, which marginal production theoretically will not decrease; it appears as an intensive, wise, and highly efficient development model in the actual development process, and via maintaining the sustainable development of industry it is possible to create a robust foundation for the improvement of the comprehensive strength of the entire nation, and the improvement of comprehensive national strength becomes the greatest guarantee for smoothly implementing the "One Belt, One Road" strategy.

Second, the development of the Industry 4.0 system can heighten China's industry and the mutual complementarity of the nation's industries involved in the "One Belt, One Road" strategy, and through that can lessen the forces hindering the implementation of the "One Belt, One Road" strategy. China's industry is currently positioned below the middle of the development stage for global industry, and the majority of the nations which the "One Belt, One Road" strategy will involve are positioned either below China or at almost the same position. Against such a backdrop, when promoting the "One Belt, One Road" strategy the competition for China and the other nations in the global market and each individual market will grow extremely fierce, and the creation of a new win-win relationship of cooperation which China advocates will probably be difficult. Consequently, based on the demand for its own development and the demand for new national relations which the "One Belt, One Road" strategy will build, China should undertake a model change and upgrading of its own industrial system based on the demand for the Industry 4.0 system, move away from the current stage of industry which already has no room for a lot of development and progress, aim at a higher position for its grade of industry, and the heightening of the degree of mutual complementarity among the industries of China and other nations is a force that will be key for reducing the number of obstacles standing in the way of advancing the "One Belt, One Road" strategy.

Summarizing the above, for the "One Belt, One Road" strategy a model change and upgrading of China's current industrial structure are necessary, in addition the Industry 4.0 system will not only be in line with the actual situation of China's surge in labor costs and abundance of human capital, but is also closely related to China's "Integration of Informatization and Industrialization" strategy and innovation-driven strategy, is the right choice of model change and upgrading for future Chinese industry, and will become a driving force for China's "One Belt, One Road" strategy.

5. Conclusion

In the Globalization 3.0 era, China has already formed an advantageous situation for participating in international economic cooperation and competition. This advantageous situation and the impact of the strong economy have acted

comprehensively, and China has formed an important foundation for participation in the competition for the right to lead the future Globalization 4.0. There is no doubt that the "One Belt, One Road" strategy is the inevitable choice for that competition. In addition, regarding the overall "One Belt, One Road" construction, China's regional structure, and particularly the western region, is giving rise to massive development activity, and extremely large changes must occur for the development of China and the nations involved in "One Belt, One Road". At the same time, based on the conditions for promoting the "One Belt, One Road" strategy, China's industrial structure will probably gradually upgrade toward Industry 4.0. After the "One Belt, One Road" strategy has been smoothly implemented, China's own development will not only be able to attain a high level, but also consolidate the foundations for realizing the Chinese Dream, at the same time encourage many nations along the route to get on the track of modernized development, and eventually change the economic structure of the entire world.

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[Translated by ERINA]