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Review Article

A Comparison with the State of Science and Technology between China and America etc. Western Countries

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Abstract

Through comparing China with America the difference of science and technology may be found. In the scientific front field the America has leading role but in the base field China maintains leading role. It is known that China has grown from big country to strength one in science and technology. The population in China is a difficult problem since the average GDP(gross domestic product) may be not too high level. So the endeavor must be done more in order to promote average one. In the military China has two aircraft carriers to proceed in near sea to protect abroad ones and territory integrity even Taiwan unification. MBA (master of business & administration) is prevail course for senior business and economy administration which may be a good merger of technology and administration.

Keywords: comparison; state; science and technology; China and Western country.

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1. INTRODUCTION

The United States is a country of immigrants from all over the world. It absorbs immigrants and talents from all over the world. This catapulted it into the position of the world's leading power - superpower - after the Second World War. It gets a lot of talent from Europe. Among them was Robert Einstein, whose theory of general and special relativity led the United States to be the first to produce the first atomic bomb in history. It is not only a leader in aviation; it is also the number one nation in space. The first spacewalk was made by an American, and the first moon landing was made by an American in 1967 [1-6].

The large population is the result of the backward ideology of feudalism in China. The ignorant semi-feudal and semi-colonial countries should absorb advanced western ideas and management systems as soon as possible, improve their enterprises' competitiveness and adapt themselves to the trend of globalization and integration. To use modern economic point of view, it is to realize population management as soon as possible and reduce the birth rate. We will improve the people's intellectual and cultural quality and manage enterprises and institutions.

In short China is meeting the opportunity in millennium so whether it can grow a strong country is our challenge currently. We must adopt a series political strategy to create a new world which includes new industrious ecology and mew industries. Meantime the preparation human resource has been trained such as excellent MBA and DBA to administrate the new industry. To improve science and technology level and incline the population may be a necessary route.

2. DISCUSSIONS

2.1 Comparison of China and America state

These remarkable achievements are based on strong science and technology. Thousands of scientists and engineers in the United States have paid the price of their blood and sweat. And 30 years after China's reform and opening up, a large number of outstanding scientists have emerged, such as Qian Xuesen, Qian Weichang and other meritorious giants. As a result, China's two bombs and one satellite have become a reality early on, becoming a top three aerospace power and moving forward as a powerful country. Manned space records have been constantly broken, and nine manned space missions have been carried out. Plan to put a Chinese man on the moon by 2020. There are also open leaders like Premier Zhu Rongji. Under the guidance of national policies, specific businesses are directly undertaken by enterprises and linked to the world market, which improves the competitiveness of enterprises and even the country. Steady implementation of the socialist market economy, so that the per capita GNP has reached 10,000 US dollars

mark. And make the country's population under control, so that China's population growth to 2020 after the start of negative growth. The population growth rate will be kept well below 5% per year for 30 years.

However, the number of Nobel Prize winners among many scholars is very small. Mo Yan and Tu Youyou are on the list, while other senior figures are not even nominated. This has something to do with the fact that foreign capitalism is wearing a chameleon to see people. The Chinese Academy of Engineering and the Chinese Academy of Sciences have thousands of academicians engaged in research on homosexuality. The great achievements were stolen by the Europeans and Americans. For what? Sino-foreign joint projects are too few to dare to compete with European and American experts. Biosynthetic drugs, for example, are widely studied abroad. Chinese herbal medicine is the essence of Yin and Yang and pays attention to dialectics. Small and medium-sized diseases can be treated; serious diseases need more money, long treatment period.

Fourteen Chinese Americans have won Nobel Prizes, half of them non-Chinese. It seems that the Nobel Prize is different. Only Chinese in the United States can win the Nobel Prize, but now it has been awarded to two local people, just to cover the eyes and ears. Japan exports SEM microscope, its price is more than 1 million yuan. It is the device most commonly used by researchers, although it is expensive to maintain and requires a lot of photocoolant for eight hours a day. It won't work without coolant. And to maintain the vacuum equipment, the motors have to work all the time, plus the electricity that the body uses, it's a lot more expensive. Must have special person to maintain, watch. However, because of its outstanding performance, even can see thousands of times the magnified image, and get people's recognition. And TEM in the Netherlands is worth $2 million. Very few people use it. It has a magnification of 20,000. A professional might not be able to see it, because it's too complicated to manipulate, and you need expertise. In addition to a clear view, there are diffraction patterns (like XRD), which can tell the distance between atoms and determine the phase of a substance. If China can produce them, the added value of the technology will be great. The physical atom detector was born, and it was possible to determine fairly accurate distances between materials with conducting properties. It can also determine the composition of substances, more accurate than SEM. It will be needed wherever there are scientific institutes. It is up to others to understand the precise nature of the microstructure.

Foreign hi-tech enterprises may invest in China, bring in their technology, or buy in, and engage in our own hi-tech and high-profit products. Foreign technology enterprises are called "Venture Firm", which belong to high-tech and new product enterprises. They develop and produce products, and when they mature, they sell them. This is common in university professors' side businesses. We should also set up enterprises with large added value and attract overseas students or workers back to China to set up factories. Japan and the United States to study abroad and in the enterprise to do a few years of personnel familiar with the product process and characteristics, they return to the establishment of science and technology enterprises, the absorption of funds to establish enterprises. Or come up with an idea to help other would-be businesses implement it, too. If necessary, foreign experts can be asked to come over to negotiate or employ it’s to implement enterprise productization.

Why can China make quantum computers but not accurate electronic devices like microscopes? You need to know how X-rays are made. Then use this data to find the materials and physical conditions that produce the X-rays. Like XRD, there is one diffractometer in every department abroad. The state of science and technology of a country reflects the level of scientific research of the country from one side, and cannot fully understand the economic level. But if the economy is developed, the level of science and technology will be greatly improved. good equipment, as long as the scientific research personnel have a certain strength, can obtain good performance.

Therefore, the improvement of the economic level and the level of professional and technical personnel will continue to innovate, so as to improve the new product research and development and manufacturing capacity. Exporting products with high technology and high technology content to foreign countries and generating foreign exchange earnings. To stand undefeated in the world of nations, many foreign students will come to China to study, which will add to our foreign exchange earnings. The current situation in China is outsourcing projects, sending people overseas to do projects. These are low-skilled and high-labor jobs, which are cheap and labor-intensive, although they may bring in a certain amount of foreign exchange. China will not only expand technical projects abroad, but also absorb advanced management and technology from abroad, which will benefit both sides.

In areas like aviation, high-speed rail and even space, China is still at an advanced level, and its core technologies need to be protected, new products developed, and foreign exchange in exchange for appropriate amounts. Russia and the United States are relatively advanced in aviation, and China is catching up. J-15 is mainly used for aircraft carriers and other carrier-based fighters. The F-10 and F-11, designed by China itself, are the fourth-generation workhorse. The F-22, the fifth-generation stealth fighter, and the stealth fighter currently being tested for vertical take-off and

landing will be the future aircraft. And transport aircraft such as 20, although the number is not enough but the prospect is good and the future development of passenger aircraft strength. The space sector plans to send a man to the moon by 2020. This is only the second time in the history of the world that a man has landed on the moon. The first time is in 1967 the United States Armstrong and other successful landing on the moon. China in the field of manned space On October 15, 2003, China's first manned spacecraft Shenzhou V was successfully launched. China's first astronaut Yang Liwei has become the first Chinese visitor to the vast expanse of space. China has made remarkable achievements in the field of manned space. It has become the third country after the United States and Russia, and has been able to launch satellites for other countries. In the future, it will launch satellites to probe the surface of Mars and make efforts to explore the surface of celestial bodies outside the moon. In November 2013, India will become the first Asian country to complete a mission to Mars by sending a Mars surface probe into orbit after a mission lasting more than 10 months. Excerpt from Jeju Healthy Living Pavilion.

2.2. China's economy to become the foundation of a great power

Through the difficulties, reduce the number of population to achieve good birth, good childbearing, less birth and later birth of a virtuous cycle, generally improve the national quality, to the economic power forward. To everyone has a job, everyone understands such a rare understanding of the situation, work hard, diligent entrepreneurship, increase per capita national income, to achieve beyond the developing countries, toward the aspirations of the developed countries.

If the population is about 500 million, our country's per capita income can reach 40 thousand US dollars now, and we have already entered the ranks of developed countries. At the same time, our national economy will become a world-class level, surpassing the United States to become the first in the world. The per capita income can reach the first level in the world, which can compete with the developed countries in Europe, such as Germany, Britain, France, Italy, etc., to ensure that the national welfare level reaches the first level. The welfare in Europe is of a high standard, especially now the European Community has eliminated the barriers between countries. People can travel freely and even go to work. The use of the unified euro has enhanced the cooperation between countries and promoted the economic and trade exchanges. Militarily, NATO has become the largest organization in Europe to protect the security of these countries. Eastern European countries experimented with the five-day, six-hour work week two decades ago. On Friday afternoons, almost no one can be seen, all go home to prepare to spend the weekend. Joblessness benefits and pensions are generous, contributing to Europe's lowest unemployment rate in the world. The details are as follows.

According to the Spanish newspaper Abesai on August 20, the British worked 42.3 hours a week in 2012, more than any other country in the European Union, according to the results of a survey by Fesco Adecco. The survey of work intensity across Europe was carried out across 10 countries with an average working week of 40.4 hours. The UK ranks first at 42.3 hours a week, Next came Portugal (41.3 hr/week), Poland (41 hr/week), Romania (41 hr/week), Germany (40.7 hr/week), Spain (40.2 hr/week), Sweden (39.9 hr/week), France (39.4 hr/week), Netherlands (39 hr/week) and Italy (38.7 hr/week).

The results also showed that across the European Union, men work an average of 41.1 hours a week compared with 39.3 hours for women, with men in Europe generally working longer hours than women. British men topped the list with an average of 43.6 hours a week, while the country where women worked the most hours was Romania at 40.7 hours a week.

Take France for example, I heard that there are 8 days in a week in France, and the working time in 8 days is not more than 35 hours. That's 7 hours a day if you work 5 days a week, then 3 days off! Now domestic, want to look for double rest job seems to be very difficult! And no one follows the 8 hour workday at all. It's basically 9 hours 10 hours.

In contrast, men in the Netherlands worked 39.2 hours a week and women in Italy worked 36.8 hours, both of which were the least intense. In Sweden, men and women work the closest hours, with men working 40 hours a week and women 39.8 hours.

Reducing the population will increase the per capita utilization rate of resources, thus improving income and welfare. After repeated cycles, the national production efficiency will be improved, and the country will develop in a faster form. Meanwhile, the utilization rate of resources will be protected, and multi-form utilization will enable more resources to be used, such as the oceans and Antarctica. Fewer resources are stored. Green environment, low carbon life can effectively protect the excessive development of resources, to ensure the survival of future generations.

Avoid damaging the atmospheric ozone layer, reduce the temperature effect, and give our future generations a chance to survive. More use of new energy vehicles and direct combustion power stations.

As China's economic power surpasses that of the United States, it lags into complacency. Once mentioned per capita then quickly inferiority, this vicious circle for a long time to continue, will

inevitably affect self-confidence, into enjoyment and peace of self-paralysis. So limiting population growth and increasing per capita output is a hard landing. We should learn that the population growth rate in western China is relatively low, which is caused by the backward economy. The coastal and central regions are growing quite rapidly.

Therefore, we should focus on job creation and development of infrastructure projects. That everyone has something to do at the same time convenient for the life of people daily life, diet to build a harmonious home, raise the level of national life, makes people's happiness index increased, people's real income increases, shorten with the developed countries such as America, Britain, France, Japan, Italy and so on, to develop export-oriented enterprise mode, overseas construction projects, increasing the foreign exchange income, increasing the income of export-oriented, We will increase GDP gross development production. Like Tsingtao beer, Haier is listed in the United States, even set up factories in the United States. Use our advantages to tap overseas markets, absorb foreign capital and manpower, and make first-class products for the benefit of mankind. Not only increase the work of foreigners, but also make us increase a steady stream of foreign exchange entry, not to kill two birds with one stone?

Increase export proportion, increase trade surplus. Instead of blindly lowering prices, we should shift from labor - and capital-intensive industries to technology-intensive enterprises, improve product quality, raise product prices and increase after-sales services. Work together to increase the quantity of foreign exchange exports. To make China an undefeated aircraft carrier, standing in the forest of nations for a long time, to make contributions to the world. Stop coal-fired power generation and encourage hydro, wind, solar and nuclear power generation. Can make us save the green resources of the earth. At the same time to strengthen environmental protection, low carbon life

2.3 On China's Aircraft Carrier

China launched its second aircraft carrier on April 26, 2017, which is 120,000-ton class and can carry more than 70 aircraft. It will become China's first homegrown aircraft carrier after the first 100,000-ton class carrier, the Liaoning. Their power is conventionally powered, and the catapult is also steam powered, which has to do with economy. The Russian aircraft carrier is also a dual ski-jump steam structure. It costs a lot less than a large nuclear power plant. France's 40, 000-ton light aircraft carrier, which has also used nuclear power, was dismantled from two 10, 000-ton destroyers and is apparently underpowered. It may not be enough if they use four such devices. So they should use conventional power. China is currently studying the electromagnetic catapult device test, believe that in the near future will be used on aircraft carriers.

In Dalian the second Shandong had been produced in 2019. It is said to be building the third aircraft carriers at the same time in shanghai, with a tonnage of around 74,000 tons. Using electromagnetic ejection device plate structure. This would be close to the mid-range US carriers in tonnage. It can carry about 70 planes. It is expected to enter service in 2022. India is the first country in Asia to have two aircraft carriers. India holds several Asian firsts: the first country in Asia to have an aircraft carrier after WWII, the first country in Asia to have operational experience with an aircraft carrier after WWII, and the first country in Asia to have a dual carrier battle group after WWII. These three "No. 1 in Asia" have made India a worthy "No. 1 carrier power in Asia". Their carrier is 40,000t class and can carry more than 30 aircraft. Vikramaditya, which has just been decommissioned, is joined by Vikrant, which is under development, and Vellaat, which is currently in service. So we have two carrier battle groups that are comparable to what India used to have.

China gained experience in transforming its aircraft carrier Varyag through the Liaoning. But now the launch of the "001A aircraft carrier" makes it possible for China to independently complete the whole system technology, including the carrier-borne fighter aircraft, without relying on any country. There are even comments that the Chinese navy, which for decades used Soviet Russia as its division in shipbuilding, has once again surpassed Russia in large vessel technology. The predecessor of China's aircraft carrier Liaoning is the sister ship of Russia's aircraft carrier Kuznetsov. The Varyag was only 60 percent complete when China took over. The Liaoning, which has been refitted and refitted on its own, can be called a new aircraft carrier, and has surpassed its older brother Kuznetsov in layout rationale and some key systems technologies.

Since the release of the first domestically built aircraft carrier of Type 001A, the attention at home and abroad has been almost unprecedented. What are the key technical data of the much-anticipated first domestically built aircraft carrier of China? According to the description, China's first aircraft carrier, the Liaoning 16, is 302 meters long, 70.5 meters wide and has a draft of 10.5 meters. The flight deck is 300 meters long and 70 meters wide, while the hangar is 262 meters long, 26 meters wide and 7 meters high. Standard displacement of 55,000 tons, full displacement of 67,000 tons, using two conventional power type engines, a total power of 200,000 horsepower. Since Type 001A No. 17 Shandong ship only modified part of the cabin of No. 16 Liaoning, but kept processing on the main structural dimensions, the main data did not change much, which was almost

identical with No. 16 Liaoning in appearance. However, there has been a big improvement in one major aspect, which is the number of carrier-borne aircraft carried by Type 001A No. 17 Shandong. According to a report titled "China reveals the number of fighter jets it can carry on its new aircraft carrier" published by the US global security website, the domestically built aircraft carrier that will soon be launched will carry up to 36 J-15 heavy carrier-borne fighter jets on normal missions, which is nearly 1.5 times the size of the Liaoning.

However, there are also Russian experts who give different views on the superiority of the aircraft carriers in battle with China and Russia. Konstantin Sivkov, first deputy director of the Russian Institute of Geopolitical Studies and a doctor of military science, said that overall, "our aircraft carrier [the Kuznetsov] is 10 to 15 percent more advanced than China's." If compared to American carriers, Chinese carriers "are only 30 to 35 percent of American carriers in terms of strike capability; In air defense missions -- only 20 percent of that; In terms of attacking submarines, it's about 60 percent of the capability of US carriers." As a result, China now has the largest number of aircraft carriers in the world. The UK, France and India are in the same league.

The French aircraft carrier Charles de Gaulle French aircraft carrier Charles de Gaulle, number R91, is France's first nuclear powered aircraft carrier and the world's only non-US Navy nuclear powered aircraft carrier, is also the only aircraft carrier in active service of the French Navy, also for the flagship of the French Navy; De Gaulle, named after Charles de Gaulle, is the tenth aircraft carrier in French history. The aircraft carrier Charles de Gaulle marks the establishment of the most complete national defense industry research and development system among European countries. Most of France's key weapons have been independently developed and produced. In many aspects, it is enough to become a school of its own besides the two powers of the United States and the Soviet Union. Since the 1970s, France has mulled the construction of a new aircraft carrier many times, but the initial question of whether to use conventional power or nuclear power? There were many different opinions. It was not until June 1984 that the final proposal for the new carrier "surfaced": the development and construction of a medium-size nuclear-powered aircraft carrier (originally intended to be two, but only one for financial reasons), with conventional take-off and landing aircraft on board. This once again shows the character of France's independence and self-reliance. It can be said that in the whole process of developing "Charles de Gaulle" aircraft carrier, France did not blindly follow the United States to build a large nuclear-powered aircraft carrier in an unrealistic way. Nor is it obsessed with developing small short take-off/vertical landing aircraft carriers like the British Navy. The basic idea for France to develop a new type of aircraft carrier is not only to meet the actual needs of France's future maritime operations, but also to be within the range of affordable military spending. France, which said on November 15, 2015 that it would send the aircraft carrier Charles de Gaulle, confirmed yesterday that it would set sail from France on November 18 and arrive in the Persian Gulf in mid-December to fight the extremist group Islamic State (IS). Due to frequent failures of its nuclear power plants, it was later converted to gas turbines.

Japan now boasts three Ohsumi-class "transport ships", which are close in size and combat capability to aircraft carriers. In addition, there are two Izumo class helicopter frigates and two Izumo class helicopter frigates. In essence, these four helicopters can be called helicopter carriers. South Korea now has a full load displacement of 19,000 tons of "Dokdo" light aircraft carrier. In South America, the carriers of Brazil and Argentina were bought from abroad. Argentina's aircraft carrier was decommissioned in the late last century. It is a Royal Navy Colosseum class aircraft carrier. It was purchased and refitted by the Netherlands in 1948. It was later sold to Argentina in October 1968 and entered service with the Argentine Navy in February 1969. Although the aircraft carrier has undergone three modernized refits, its performance is still poor. Thailand also has a 11,500 ton mini-carrier bought by Spain in 1997.

There is no doubt that the figures given by Russia's leading experts, if true, will indeed make the confident military fans feel ashamed. In fact, the 10-15% difference is not without valid evidence to confirm, but it does show that in the eyes of Russia, the Chinese carrier 001A is not as impressive as the Kuznetsov carrier. But the article in the Russian media acknowledged that China's next aircraft carrier would be a genuine outlier. China's existing high performance air defense missiles and phased array radar golden combination, to provide China's navy with a complete offensive and defense system. The stealthy hull design keeps up with the trend of The Times and is full of modern feeling. But the development of the main ships has come to a screeching halt, so that Chinese people for one of the pain.

2.4 MBA (Master of business & administration)

China has an MBA, following in the footsteps of Europe and the US. There is also the Doctorate of Business Administration (DBA), which is more recent and follows the trend. But many self-funded courses still smack of money. The amount of tuition and travel costs is staggering. Maybe it's just for a senior executive in a large corporation. To the common people, this is just an unattainable ivory tower. For example, China Europe Business School, everyone must have a laptop computer, all English teaching, but also need a large enterprise manager more than five

years of work experience, closed courses, first-class lecturer team. MBA in two years, now DBA too, right? In any case, this is indeed the place that China's top management school, training the senior management personnel of the large enterprise yearns for. Once you graduate, you can get the position of general manager and control hundreds or even tens of thousands of people. Salaries have risen from tens of thousands to hundreds of thousands or even millions of yuan. It can be said that the wind is smooth, the future is smooth. But is there any gold to be found in this trendy education? Most of them are half - time students and only come to school on weekends. After graduation, there will be thesis defense and only qualified will be graduation. Why are there none at the provincial or ministerial level? Can't public institutions get in? Blindly pay attention to the team of lecturers, but did not teach the real things. Whether the state can recognize it or not is one thing.

To really improve the level of business administration in order to graduate from all the schools that is still recognized by the state. The management department of Dongbei University of Finance and Economics, for example, ranks first in the country. Mature examination questions plus examination, through the national master graduate student unified examination of qualified, to enter the study here. A minimum of two years of working experience is required to be eligible for the examination. At least you have to talk from experience. There's no point in talking about unrealistic theories, and no one will recognize you. Especially business administration. Practice is the sole criterion for testing truth. Only with practice can we have standards.

In general to maintain the clear environment it may be created that peak carbon dioxide emissions and carbon neutrality can be done as soon as possible. This may help us to clear the carbon reservation and achieve the neutral carbon in recent future. The world requests low contamination environment including the tree, air & energy. This is a true live and aim for us to do and it must be realized through politic strategy and endeavor. What we build the science and technology besides population control is for better live so we still promote industrious level forwards. When China and world realizes the modern industry we may enjoy the new energy life.

3. CONCLUSIONS

China has met the opportunity of becoming a strong country so we must do preparation to new and old energy transformation from a big one. Since it has advantage in base scientific and technological level it can lead a new world that can wield their internal energy to build new construction for green world. To save ecological use and decrease the contamination from vehicles and factory is our destination. To decline domestic population and promote its average GDP is the key to be strong one in new world. To decline east and west difference is to still an important task for us to clear because it may cause the unbalance in China even world. So it must be cleared we can enjoy completing developed modern world. To improve east part low carbon and green environment &clear air live in future is also attained due to transfer the energy industry to western part. Meantime it must maintain a certain human resource advantage like specialist and professor is the future main leading effect.

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