



THE ROAD OF ASIA

INTERVIEWS WITH
SHANGHAI FORUM 2015
GUESTS



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Fudan University
Korea Foundation for Advanced Studies

┌ *In Shanghai Forum 2015, we recruited 23 of our top students as student journalists for honored guests at the Forum. Their specialist knowledge, commitment and self-assurance were all employed in taking down these words of wisdom. This book of records from the interviews is a crystallization of that gathering of words of wisdom and exchange of viewpoints with our distinguished guests.*

Shanghai Forum Organizing Committee extends its heartfelt thanks to every distinguished guest and student interviewer- we hope that, through this book, we can share the force of thought and wisdom with more of those colleagues engaged with Asia's Development. ┐

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Current European Economic Situation and Complementary Asia-Europe Relationship in International Cooperation

Editor: XU Jiawei



Fabrizio Saccomanni
Former Minister of Economy
and Finances, Italy



Interviewer: **CHEN Zhimin**
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There are some sorts of converging of approaches on your side and on our side. This is the time to promote internationally infrastructure investment. We hope we can continue to promote this idea, particularly linking infrastructure to technology innovation.

Chen Zhimin: Mr. Saccomanni, welcome to Shanghai Forum, it's my great pleasure to continue our conversation here in Shanghai. We know that you

have served Italian government as the finance minister, and you have deeply involved in the management of European economic challenges. So I think you have a lot to say to the European economic situation now. First we move on to Greece, we know that the Greek government is negotiating new bail-out agreement with EU and IMF, the government certainly want to end some of the austerity policy, but at the same time, they want new money from international lenders, so based on your observation, how will you assess the progress of this negotiation? And whether we can avoid Greek exit from the Eurozone?

Saccomanni: I think there is an agreement that exit will not be a good thing, neither for Greece, nor for Europe, for the Eurozone. So my understanding is that all efforts have been made to find an acceptable solution, this implies probably some greater decision by Greek authorities on what they want to do in terms of the adjustment program. Because everybody agreed that the previous program was not viable, it cost too severe for the poor segment of the society and not being fully implemented by the previous government, particularly as regards of the tax reform, so the impression was that rich people were not really contributing much to the solution of the Greek problem. Now, of course, all the European countries, including Italy, accepted the idea that the Greek government is to formulate a new program, and the problem is that this program has been so far not fully detailed, and it's only very general terms. So, in these very days, there is agreement to accelerate the negotiation on both sides and I hope in the coming days, there would be a solution. But as you said that the Greece needs more money from international lenders and I think it's necessary that they do prepare a viable reform program.

Chen Zhimin: So, you are quite positive that there will be a kind of deal?

Saccomanni: Well, I'm sure that everybody wants to avoid a dramatic situation, and perhaps sometimes, there's an expectation that if we arrived to the last minute,

then there will be major concession, but I think that's not the way to progress frankly. So it would be better to make a sort of very serious negotiation.

Chen Zhimin: For Europe in general, from 2009 Europe Crisis, the European Union has made lots of efforts to establish necessary mechanism to cope with crisis, so with all these measures and mechanisms there, are you confident that Europe is able to avoid another major crisis?

Saccomanni: Yes, I'm quite confident. Because as you said, important decisions have been taken, we have created the European Stability Mechanism which has provided assistance to five countries, including Ireland, Greece, Portugal and Cyprus. The total amount is over 200 billion Euros, so it's an important mechanism. It has additional resources which could go up to 700 billion Euros. And we also moved to create what we called the banking union, we have created a mechanism with which all banks are supervised by the European Central Bank, and that will provide assurance that all banks are in a sound position as far as their financial situation is concerned. And also the European Central Bank has been finally allowed to adopt an expansion monetary policy. These measures are not only guarantee that Europe can resist future crisis, but also are facilitating the resumption of growth. This is very important that the latest information pointed to significant recovery in all major countries, not only Germany, but also France, Spain, Italy. So I think it's a gradual exit from the very severe crisis, which was complicated by the fact that Europe does not have a single government, at least not for the economic policies, but we have a single central bank for monetary policy, so these mechanisms may have been created to deal with crisis, but now they will provide a strong support to the stabilization of the financial situation and also to growth prospects.

Chen Zhimin: Good news. But still there's a complicated factor and that's about Russia. In the contest of Ukraine crisis, the European Union has

imposed a number of economic sanctions against Russia. How you would assess the impact of these sanctions, not only the impacts on the European economy, but also on so called the effectiveness of trying to change the Russian policy?

Saccomanni: This is a very important politic issue in Europe. No doubt that the sanctions that the European Union imposed to Russia have impacted most European countries. From the purely economic point of view, the impact is more severe for European countries, and of course for Italy. Because we had a particular active relationship of trade and financial issues and I think we are indeed feeling an impact which is negative. That's why we hope that the negotiation will resume, so it's possible that we can look to a realization on both sides. I think Russia has to accept the fact that if they want to remain a partner of the international community, they cannot act the way they did. At the same time, Ukrainian situation is indeed extremely complicated. As I have worked as the vice president of the European Bank of Reconstruction and Development, I understood that the country was very difficult to manage because there're deep deviations from the pro-European segment of the population and pro-Russia segment. So it requires also stronger leadership in Ukraine to try to keep the country united because it's not an easy job.

Chen Zhimin: If we look at the news of the recent days, I think possibly the biggest challenge for Italy and also for EU is the illegal immigrants from North Africa, particularly from Libya. And recently the European Union has made the decision to launch military actions in the Mediterranean Sea, to intercept the smuggling boats. Other proposals under discussion also call for capturing or sinking the smuggling boats in the open sea, even on the shore of Libya, how you would comment on these proposals? And furthermore, lots of illegal immigrants have already arrived in Italy, so how you would deal with immigrant?

Saccomanni: First, I think there is a general agreement in Europe that any action that would evolve interventions in Libya would have to be authorized by the United Nations, although the decision has been take-in principle, it would be activated only if there is a positive decision by the Security Council of the United Nations. And the European diplomats are now working with China, Russia and the United States, to determine what would be the actual condition for the activation of any Libya action. So at this stage, I cannot comment on the details about what is being discussed at the very moment. It is a fact that the smugglers are in fact reutilizing those boats, as they have done in a number of cases for doing this kind of shuttle transportation of immigrants. As to the second question, I think a lot of immigrants have entered into Italy, to define whether they are legal or illegal is a very complicated issue, and it is not in my sphere of confidence, but I understand that these people are mostly leaving their country because of poverty and war, and you know that immigrants from Syria, Sudan or other countries where're situation of conflicts or wars, and they want to escape poverty and war, so it is very difficult to decide who is legal and who is illegal. Of course they are denied also because there is a fear that among these immigrants there might be some certain members of ISIS or other terrorist organizations, so we have to be extremely careful. It would be important to offer greater cooperation with legal authorities on this.

The problem is that in Libya now there're two separate governments, one is controlling the western region, and the other one is controlling the eastern part. Unless there would be an agreement whether to cooperate to check what is going on on the shores, it would be extremely difficult to reach a viable solution, we can only hope that there will be progress with the agreement of the United Nations and also with agreement of other European countries, which also is an important development because initially a lot of people said that it was an Italian problem, all the migrants were coming to Italy, but in fact, most of them want to rejoin their relatives in other countries and they will only transit through Italy because geographically, Italy is only eighty miles off the Tunisian coast, so it's a normal target for immigrants. But now I think there's a greater understanding in Europe

that this is not an Italian problem and in fact that migrants going to Spain, Greece and Italy all want to settle in different countries.

Chen Zhimin: I have a few more questions more important to China. Italy decided to join the Asian Infrastructure Investment Bank, it's so called AIIB, after UK's previous decision, and what are the reasons you think behind Italian decision to join the bank? And what kind of role do you think AIIB should play in the Asian development?

Saccomanni: First of all, Italy decided to join because we think it's a good idea to create an institution that would make efforts to promote infrastructure development. There's a big problem worldwide that over the years we have not invested enough in infrastructure. And of course we know from the days of Marco Polo that China is not that far away from Europe. Any investment that can reconnect Europe through Asia to China is going to be extremely important. And there are regions in Asia where there are still poverty, so anything that can create sort of stimulus to economic activity, to investment and also to modernization will be good. Because I assume that infrastructure investment would be mostly in the field of new technology, in transport, telecommunication, energy and production distribution. These are also good to deal with global problems and I myself had an opportunity to talk to the chief negotiator of China on this issue and my understanding is that this is not going to create competition either with the World Bank or the Asian Development Bank, but it's going to be complementary to what is being done. And in Europe, we have been working to set up a new fund for infrastructure investment which is part of the new plan launched by the new president of the Commission, Mr. Jean-Claude Juncker. So I think there is some sort of converging of approaches on your side and on our side. This is the time to promote internationally infrastructure investment. We hope we can continue to promote this idea, particularly linking infrastructure to technology innovation. We need to build something that can really help promote economic activity and economic recovery.

Chen Zhimin: This afternoon, we had a workshop and we discussed about the issue. We had a question actually, and we hope you might give us some answers, that is if the United Kingdom did not announce to join the bank, whether the other European countries would ever decide to join the bank?

Saccomanni: As far as I know, the negotiation took place almost at the same time. And I think China addressed the issue to all the major European countries at the same time. We assumed that the issue would be discussed openly at one of the meeting of G7. Instead, the decision by the United Kingdom was announced before the meeting, actually the meeting of the G7 is going to take place at the end of May for a few days under Germany chairmanship. But probably it was related to the domestic politic reasons in the United Kingdom of elections. It's not a surprise and we had really agreed that we would participate and the only question is the timing of when to announce, and we would not decide not to join or decide to change the idea because of the United Kingdom. It's only the question about when to be announced and the United Kingdom wants to be the first.

Chen Zhimin: Besides AIIB initiative, China has another one called “silk road” initiative, how would you assess the reactions in Europe towards Chinese initiative from your perspective, and whether you think the new European infrastructure investment initiative has some real substantial overlapping or converging with the Chinese initiatives so that we can integrate or coordinate and then facilitate both sides?

Saccomanni: My impression is that one of the reasons why we made not sufficient infrastructure investment globally is that firstly private investors show preference in short-term equity investment and they consider long-term investment in infrastructure very risky, because they see that in long-term, no one knows what to happen, financial condition may change and also political condition may change.

Private investors want to know what is the regulation concerning this kind of investment overtime and they all talk about the needs to have regulatory security, who is going to decide what are the electricity fees, gas distribution and networks. I think we have done not enough to manage those risks globally and this kind of initiatives can be absolutely complementary because I think probably you have much more expertise in Asian situation, and in European countries, we do have better knowledge on the situation in Europe, including in Eastern Europe because we've been acting there through the bank for European investment, the bank for reconstruction and development. I think complementarity seems to meet the key issue, but we need to work in order to provide good evaluation of the projects and to monitor their implementation. This could be a conducive effort in which all institution could join in. We also have to provide a certain degree of regulatory security to the implementation of the projects and there would be no surprises or changes. We have to make efforts from this point of view and all the experience should be brought together. The impact could be positive because we could have support from private investors who are now very disappointed because they get only very low interest rates from their investment. Longer-term investment can provide more profit to investors, so we have to find a way to reconcile these two problems that we don't have enough investment and the investors do not have sufficient yield on their investment. We could probably try to combine longer-term investment and security of higher levels and more effective implement of the projects.

Chen Zhimin: But what kind of role can Italy play in these Chinese initiatives?

Saccomanni: Well, Italy has a long history of participating in infrastructure projects in developing countries and we have certain good record of winning contracts in various countries in the world. I think there is good expertise and from this point of view we can also provide sort of support for these new initiatives.

There will be an Italian approach and we will work within the Europe but we hope that we can also involve our contractors and companies in the roads, dams and bridges all over the world.

Perspectives On High-Tech Era: New Patterns Of Business, Economy And Education

Editor: YANG Mengyu



Myron Scholes

1997 Nobel Laureate in Economics,
Frank E. Buck Professor of Finance,
Emeritus, Stanford University, U.S.A.



Interviewer: **Zhang Jun**

Vice Dean, Fudan Development Institute
Dean of School of Economics,
Fudan University

Technology leads to new economic conditions including individualization, flexibility and speed.

Zhang Jun: Every time I flew to the U.S, I think the journey is too long. Besides, it always takes a couple of days for you to get used to the time zone. So sometimes I prefer that we work or talk online, rather than physically be there.

Yesterday a business owner here in Shanghai told me that his company is working on an online communication platform which connects doctors in U.S.

with patients in China. As people in China are getting rich, they expect to enjoy high-level medical service in U.S, but it costs so much money to actually be there. So the company wants to catch the chance and establish such a platform to make a lot of money. But now, they really want to know, can we actually get connected through Internet.

Myron Scholes: I think that is what we already have. A friend of mine actually has a robot. The Robot works beside a doctor taking care of patients out of United States, and the robot send all the information back to another doctor sitting in the office in United States. And that means that the two doctors could work on the patients' cases together. And basically we can have that interface by using a robot.

Zhang Jun: Robot now is very popular in some rich Chinese families. Usually, they leave their parents alone at home for couple of days. Thus, they just put the robot in the house and keep watching what their parents are doing.

Myron Scholes: As we will have aging society, we need to figure out ways for children to look after their parents. Robots would be good children, just be there and look after them.

Zhang Jun: So I've heard that you are actually the fan of new technologies. So what's your idea about the technological frontier ten years from now?

Myron Scholes: It is a great question. I think that, basically, technology leads to new economic conditions including individualization, flexibility and speed. So with Internet functioning in business, I really believe that the market will turn from the product-focused mode to a consumer-focused mode. Consumers are willing to individualize what product they want, which brings in much more flexibility of how manufacturers and merchants make their products. The development of business network as I see is that the information highway will be used to help merchants to

figure out better solutions to satisfy consumers' needs more efficiently. That's the future.

Zhang Jun: And solution provider will be dominating the module production which is really different from massive production, in which you have larger scale production just to satisfy customers with unified products. Now you get very much different perspective. The consumers want customized what you offer.

Myron Scholes: So that's what customer wants. The fact is going to change everything. I do believe that the world is going to move from transaction processing model to transaction analyzing model. And the question will be how that will change economics, production and perhaps everything we do. It is important for merchants to have information highway and to understand the sequence of transaction. And they need to have the ability to use that information. With such knowledge and understanding, it will be more efficient for the merchants to sell goods and services. There's the block chain. The information highway and the sequence of transaction will help validate the trades and transactions and create way for the merchants and customers to interface each other to make their activities more efficient. Whether we can figure out efficient ways that enable us to overcome problems in transactions, such as transport problems, largely depends on how many information we have. And the more the information we have, the better the development of products and services could be.

Also, I think that the development of the block chain idea is a sign that something unbelievable is going to happen. It is expected that the block chain will help information flow around the world more flexibly, and remove the banking monopoly that we have, and the credit card monopoly and other monopoly that we have. So you open up the Internet, you find lots of tremendous innovation. People can tap in the network. They can innovate and create. My area is finance and

economics, and many things have been changed dramatically in this field. That could be amazing, I mean, that could satisfy all the function and finance could be done more efficiently. That could be exciting. But I also think that we are going to see that with the use of technology, robot, and innovations, tremendous numbers of breakthroughs in the net technologies will be building up.

And about the specification, many years ago, when I was a young man, my mother was in a department store for business in Canada. And miners, who had worked there, were supplied with boots of only one size. So the miners who had small feet had to stuff their boots with socks. And miners with big feet couldn't walk, because they could not get in the boots which made their feet hurts. So when there are innovators who sold boots with sizes of big, medium and small, they sold tremendous numbers of boots and their store flourished rather than others. So now I have a pair of shoes, the size is which 43.6. And in the future, the shoes for my right foot and left foot might be of different sizes. Maybe I'll have 43.5 for my left foot, as it is bigger, and 43.4 for my right foot. So basically everything is going to be more and more individualized. So the mode of innovation and production is going to change. We have research and development, but it should no longer be testing in the labs. It should be learning and creating, and you need to have feedbacks. Innovation is actually going to occur not only in the area of technology whether it is in China or U.S.A, or Europe, or Japan. And innovation will be based on ideas created through efficient feedback and efficient learning.

Zhang Jun: Do you believe that the new technologies, like 3D printer, will change the traditional ways of production?

Myron Scholes: It is amazing what is happening. Beijing has the largest 3D printing facility in the world. And right now, it is printing aircraft parts, like the wings and so on. You can make them lighter, and make them stronger. They need to be strong.

Remote medicine is a good idea and a most efficient case of applying technology in medicine. As the aging population increases, gradually, we will see more advances in the way we treat people. There are also ideas like improving productivity and efficiency. The way you use resources like water, or the way you use new energies like solar energy and so on, could be very important. If you could use resources and technologies in a right way, you would actually make things more efficient.

Also I guess the means of education in the world has really changed a lot. Look at the wonders of distance learning and how we really increase inclusive society where billions of people who have no education can learn. It is a marvelous change, because people need this. Right now in India, for example, the literacy rate is 10%.

Zhang Jun: 10%. It is much lower compared with the literacy rate in China.

Myron Scholes: The literacy rate in China is 80%. In Indian, only 1% of 800,000 teachers are qualified teachers. So if you want to bring the society up in the world in which we have a whole new innovation and creativity, it needs a cradle, which is better education. So that is why we need distance learning. I hope that the whole education system will be changed, and to be more individualized, instead of being one shoe for all. If we individualize education through distance learning, with a combination of technology, then we can have a more inclusive society globally, and increase the value of intellect. Because I believe that intelligence is not fixed. Many of us believe that we are born with certain level of intelligence. I don't think that is true. It keeps growing with the time. You get smarter because you learn.

Zhang Jun: Do you think the long-distance learning would be difficult in Indian?

Myron Scholes: Right. Many people have got something in their pocket, which is cellphone. The idea is that we could organize education activities through cellphones. We have cases of Internet learning in Africa. They have no teachers, no textbooks, nothing. But there is one computer. The students, the kids, all get around the computer and try to learn. Everyone wants to learn. Then the question is how we use Internet and how we use cell phones. We need to take into consideration the mobility, and the idea that everyone could have a mobile phone. Even some people who earn only 2 dollars a day are using cell phones. I don't know how they are doing it actually. They paid 10 dollars a month for the cell phone.

Zhang Jun: I heard that you purchased stocks in your high school years. It surprised me because I did not expect that young students could actually spend money on purchasing stocks.

Myron Scholes: Actually I was born in a place called Timmins in Canada, where there is a lot of penny stocks, so there was a lot of speculation in the stock market, and they all do gambling. I do not gamble. But I became fascinated with that and began to think about the economic value of it. I became interested in finance, partly, through watching what people do in stock market at that time.

Zhang Jun: What is the major you choose to study in McMaster University?

Myron Scholes: In McMaster University, I did mathematics and economics, mostly concentrated in math. When I graduated from McMaster, I didn't really know what I wanted to do, and then I went to the University of Chicago in 1962, and I became a computer programmer for one summer and worked with the professors who were doing the computer work. They found that I have great ideas so they gave me the scholarship of PhD.

Zhang Jun: So your supervisor is Eugene Fama?

Myron Scholes: No, actually, my supervisor is Merton Miller. I did a lot of research and worked with Merton, so Merton was really my mentor. Eugene is more like a contemporary at that time. He was couple of years ahead of me, but I worked with him, interacted with him, and he is really a bright economist.

Zhang Jun: When did you realize that the option model is something you can do to change the way we think toward the asset pricing, because previously all the ideas about the asset pricing has something to do with the risk premium. It looks like that you don't believe that is the right way. I am curious about when did you realize that you may get something new on it.

Myron Scholes: Maybe it is after I start to work at MIT. At that time I was working with my students, they brought options into the market, and I started to get into the problem of valuation of options. And I was thinking about the dynamic of options and how they changed, which was exciting to me, because risk was changing.

I talked a lot with Fisher Black, because he was also working on option model at that time. So we developed it together. And the interesting thing is that the formulation is done in 1971, and then it was used to trace on securities like the options exchanges in Chicago or New York in 1980. In another word, it is in 1980 that investment bank begin to change their ways on producing products. That created the financial revolution.

Zhang Jun: As we know that, the Black-Scholes formulation is regarded as one of the 17 formulations that changed the world. But I heard that, at first, your papers have been rejected several times

by different journals. So how did it eventually come out in JLE?

Myron Scholes: Because people find it too abstract in the very beginning, so we brought out interpretation to it and proved the formulation itself.

Zhang Jun: So how do you think about the formulation? Is it too complicated or too simple?

Myron Scholes: The formulation is, to some extent, too complicated, so people do not understand it. But also, it is unusual, because it is a way of valuing an option without knowing the exact future return of it.

Zhang Jun: I know that in 1997 you share the Nobel Prize with Robert Merton. What is the difference or relativity between the models?

Myron Scholes: Actually, I worked out the model with Fisher Black, but it is sad that he passed away two years before we won the Nobel Prize. Our model gave one solution to the price valuation, and Robert Merton gave another solution after us, which is an enhancement of interpreting things by continuous time mathematics that we hadn't use. But I still prefer the discrete time approach, which allowed for much greater flexibility.

Zhang Jun: Can you talk about what you are working on right now?

Myron Scholes: My recent focus is dynamic risk management. I am thinking about what the dynamic risks are and how to measure the risks. I hope to figure out how it changes and how to use this information. I try model it and apply it in how to manage portfolios.

Major-Country Diplomacy with Chinese Characteristics

Editor: JIN Yiming



WU Jianmin

Former People's Republic of China
Ambassador to France, Member of
the International Advisory Committee
of the Chinese Foreign Ministry



Interviewer: **WU Xinbo**

Vice Dean of Fudan Development
Institute, Executive Dean of the
Institute of International Studies,
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As a great power, the major-country diplomacy with Chinese characteristics shall inherit the past with development. Two points are important for carrying on the past: first, capture the themes of times, which have transferred from war and revolution to peace and development. The cooperation between two countries is based on shared interests, to realize win-win cooperation. Second, we adhere to the peaceful development.

Wu Xinbo: Hi, Mr. Ambassador Wu, welcome to the 2015 Shanghai Forum. Thank you for accepting my interview. Since last year, people around the world have been talking about China's "Major Country Diplomacy with Chinese Characteristics". As a veteran of China's diplomatic front, how do you see the so-called major-country diplomacy with Chinese characteristics?

Wu Jianmin: The idea of major-country diplomacy with Chinese characteristics was put forward by President Xi Jinping on November 29 last year at the Central Meeting on Foreign Affairs. I think it comes in a right time. The reasons are: first, our nation has been approaching the center of the world stage. Perhaps, this is the highest international status that China has ever enjoyed since the Opium War broke out in 1840. For over a hundred years of time, we have been on the edge of the world stage, thus the country's diplomacy was petty for seeking survival, far from the Major Country Diplomacy that China can now advance forward. Second, since we are now approaching closer to the center, the world also calls China to play a bigger role. The world is in an era of great change, then what kind of world order should we advocate and push for? Last October I went to New York, and chatted in a dinner with Former US Secretary of the States Henry Kissinger who has concluded his writing of a book called *The World Order*. He said in the dinner, the world keeps talking a lot about China, and people around the world are also looking for China's voice, but what is China's actual stand and what does China actually advocate for? Therefore in this particular international context, I think the proposal of the Major Country Diplomacy with Chinese Characteristics comes just in a right time, compellingly and correspondingly.

Wu Xinbo: Mr. Ambassador, what are in common between the major-country diplomacy with Chinese characteristics and the diplomacy China held in the period since founding of People's Republic of China? And in what areas where developments have renewed the new China's diplomacy over the past few decades?

Wu Jianmin: Well, since founding of the People's Republic of China in 1949 till now, China's diplomacy in general can be divided into 2 phases: The period prior to the Reform and Opening-up, and the period of the Reform and Opening-up. The two periods show some unique distinctions in China's diplomacy history.

During the period before the reform and opening-up, we think from China's diplomacy has endured an era of war and revolution, with supporting world revolution as the top priority. When I was young I had heard from a talk given by a central government leader that when a conflict of priority occurs between diplomacy and revolution, revolution always prevails. Chinese revolution had got supports of other countries, so we should support their revolutions, and at that time we also advocated for world revolution. That's the ideology we held then. The People's Republic of China at that special time is a new life that in nature which determines the diplomatic purpose was to seek survival.

Since 1978, China's diplomacy direction has shifted to the economic growth and reform and opening up as it adjusted its domestic strategic approach, and so was our diplomatic goal that has shifted to seeking development from seeking the bottommost demand of survival. World peace is the premise for seeking development. Thereafter Deng Xiaoping has taken a number of major moves, including: establishment of Sino-US diplomatic relations; signing of the China-Japanese Peace and Friendship Treaty; normalization of Sino-Soviet relations; and visiting the five neighboring countries: Myanmar, Nepal, Thailand, Malaysia and Singapore, purportedly to make clear to our neighbors that China adheres to the Five Principles of Peaceful Coexistence and China seeks cooperation, as well as the smooth return of Hong Kong and Macao. These big diplomatic moves have won China a long period of peace. It is significantly very successful.

As a great power, the major-country diplomacy with Chinese characteristics shall

inherit the past with development.

Two points are important for carrying on the past: first, capture the themes of times, which have transferred from war and revolution to peace and development. Such change implies that two main predicaments faced by the world at that time had been solved. Our policy keeps consistent with the world. The gist of the Five Principles of Peaceful Coexistence is development and cooperation. The cooperation between two countries is based on shared interests, to realize win-win cooperation. Second, we adhere to the peaceful development. Here, we have three do's and three don'ts. First, we do need peace. How could we develop without peace? Second, we do need the development. The development is the key to solve many issues. Third, we do need cooperation. China's modernization drive couldn't be progressed without opening to the outside the world. We have three don'ts. First, we don't seek expansion. We will never repeat western colonial expansion. Second, we don't seek hegemon, as former Soviet Union and the USA. Third, we don't seek alignment. China does not align with any states. The sixth principle of ten principle of 1955 Bandung Conference states "abstention from the use of arrangements of collective defense to serve the particular interests of any of the big powers." It actually means non-alignment. The Five Principles of Peaceful Coexistence proposes: mutual respect for sovereignty and territorial integrity, mutual non-aggression, non-interference in each other's internal affairs, equality and mutual benefit, and peaceful coexistence. It also means non-alignment. So, non-alignment is what we inherit from the past. China will not align with any states in the future, drawing the failure experience of Russia-China alliance after the founding of the People's Republic of China.

To push forward the Major Country Diplomacy with Chinese Characteristics, we should take into account the world, take into account our own country, and take into account the interests implied. For example, to judge that the theme of the era has changed, this is a consideration given to the world; China's taking economic

interests as the center of government policies to achieve a comprehensive well-off society, this is a consideration given to China our motherland; and taking account of the combination of the interests of China and the fundamental interests of the world, this is a consideration given to the interests.

Wu Xinbo: You just mentioned that in the time of our age, to make good judgment of the era is very important for China. Generally, Chinese stresses to adapting to the trend of time, or in a literal sense, taking a ride of downstream flow. So in the current era, what are favorable things that we face in pushing forward the strategy of Major Country Diplomacy with Chinese Characteristics?

Wu Jianmin: First, let me make clear what is called “adapting to the historical trend of time”. After the theme of the era has changed, the world has formed the trend of peace, development, and win-win cooperation. The night before the 10th anniversary of 911, I accepted an interview of a Washington Post reporter. His opening words are: "China is the biggest beneficiary of the 911. In the past decade, China has developed very fast. But We the U.S. were only caught in wars." I replied that I do not agree with your first sentence, we are not the biggest beneficiary. The key is we adapted to the world trend, while your country went against the wind. The ear of war and revolution has been long a thing of memory, but your country is still waging wars in Afghanistan, Iraq, and Libya. The outcome is the more the US involved, the more chaos the world becomes. You country just goes against the trend of the era. Comparatively, China just takes the ride of this trend. Our big development over the past three decades rests on our adaption to this trend. I think this will continue.

Second, what are favorable advantages we are facing? One, today's world is embedded with a rules-based global trading system, such as the WTO, in which we can sell to the world the products we produced, and we can buy goods other

countries made. Two, Asia is on the rise, and China is located opportunely in Asia. We see Asia's rise has been through five postwar waves: The first wave is Japan, the country adopted the export-oriented model to develop its economy; the second wave is in 1960s, when the 4 Asian tigers - Taiwan, Hong Kong, Singapore, and South Korea, emerged; the third wave is in 1970s, ASEAN countries such as Indonesia, Malaysia, and Thailand took on the wave for development; the fourth wave is China which, since it took the reform and opening policy in 1978, joined the tide of development; and the fifth one is India, this country began reform since 1991. Transforming from a planned economy to a market economy is a painful thing we encountered. At that time we sent a lot of people to Hong Kong and Singapore, for studying their successful experiences, and we gained a lot of precious lessons to light on our own road to modernization. In 2011, China's trade with the Asian countries reached \$1.2 trillion. The number is larger than the total of Sino-US trade and Sino-EU trade. As located in Asia where hosts some of most rapid and vibrant economies in the world, it is sure that would benefit China greatly.

Wu Xinbo: Today, global governance is riddled with many problems. As one of the fastest growing economies in the world today, China is vested with more expectations of other countries in hoping that it could play a greater role in global governance. Therefore in this sense, we think it also provides a better environment for us to push forward the Major Country Diplomacy. But, from a different perspective, what are unfavorable factors you feel that we have to face in pushing forward the Major Country Diplomacy with Chinese Characteristics?

Wu Jianmin: In terms of challenges, the biggest challenge for China I think is the habitual thinking. For thousands of years of the human history, what happened were always zero-sum games where one party gains what exactly the other loses. This habitual thinking has a very strong inertial sluggishness. In modern days, the world has changed greatly. Wars have lost its market to deter opponents, and hegemony,

power politics and law of the jungle simply does not work. This is great progress of human civilization. However, if one remains steeped in the old thoughts of class struggle, Cold War mentality, and the feel that wars can solve problems, their minds would be misled, and they would be unable to judge the world, unable to see the benefits brought about due to China and Asia's rising today, and unable to see the good environment we created.

Wu Xinbo: China's national strength is growing. In advancing the policy of the major country diplomacy, how should China use our strength in the process? Other countries are quite concerned about this. In a sense it is also a test of our capability.

Wu Jianmin: Chinese should keep minds clearly awaking, the blue song of "China threat" will be sung throughout the whole process of China's rise. The first reason is, among the world's 7.2 billion people, only a small fraction can really know and understand China, while most will take the historical rise of other countries as their mirror to make a reference to China. Historically, a great power after rising was always bullying others. How come China can be exceptional? They think. The second reason is, they will refer China to the former Soviet Union. They said, although President Xi Jinping put it very well, no expansion, no aggression, and no hegemony, then why did the Soviet Union took on the road of expansion, aggression and hegemony after it became a power? Why is that? Soviet Union was led by the Communist Party, so as your country. Why is that difference between the two? How can? Actually, they do not know the difference between the Communist Party of the former Soviet Union and the Chinese Communist Party. The third reason is, we are rising with a population of almost 1.4 billion that has never any precedent historically for such a rise with so many people. China is so large in size, and it is sure it will break the existing pattern of interests, so people are not very happy about that.

We should not underestimate the force of resistance coming from future. How should we do in that particular situation? First, we must build our muscle, the strength, behind us. No strength, no opportunity to get close to the center of the world stage. Now we get close to it, it just proves the growth of strength of our country. Second, we should justify our activities by bringing out the facts and reasons. What is soft power? Soft power is about reasoning and justifying, bringing out the facts and reasons to make people understand, to persuade them and make them moving. China's development and rise indeed will benefit the world. But to make people know this, what we should do is publicity, and our actions.

Wu Xinbo: It's conveniently like the case of the Asia Infrastructure Investment Bank that we initiated and put advance forward, despite the US opposition, in the end the majority of countries, including some major US allies, have still sought to join as member country. This is just because that it is a good thing for all of countries and that the way we move it forward is decent. So, it is just like what you talked about, most countries are countries of upholding justice, and most people of the world are upright people, sharing common sense. How does China's diplomacy get the people to understand China's idea and accept? It is about to bring about reasoning and make persuasions, and to do things good for all, thus we can win their hearts and minds.

Previously, you had talked about the world order, and indeed, the world order has been riddled for far to a point for overhaul. In modern days, especially after the rapid rise of China, people are more concerned about how to change it, and what kind of changes China could bring about to it. Well, from your opinion, to what degree and what role do you think China can play to reform the world order in the 21st century, and how to define it?

Wu Jianmin: China is both a reformer and promoter to the world order. It should

be fairly said that China benefits from the current world order. Otherwise, it is hard to explain the great achievement that China made in the past thirty years. However, the current world order is the order erected by the Western powers. No doubt, it is more favorable to the West. Some of the orders are in line with economic laws, but some are in favor of Western countries, for example, the actual control of the international financial institutions is still in the hands of Western powers. How to change this situation? The answer is the gradual reform. It is a progressive reform, not a revolution. We are both a participant and a facilitator of the reform. To push for reform is not easy, as it would impact to those vested interests. Therefore, we should bring out the facts and reasons to justify reforms, speak out the truth, and take actions. The Asian Infrastructure Investment Bank (AIIB) is a good example to explain China's push for reform. We do so, and the world comes together to promote infrastructure construction in Asia, to build a better Asia which, as a global economic power house, will have greater strength to develop the continent and the world. But we should keep our mind even more open. So many countries have participated in the Asian Infrastructure Investment Bank (AIIB), and we hope that one day the United States and Japan would also join in.

Wu Xinbo: Speaking of major-country diplomacy with Chinese characteristics, Ambassador Wu yourself is a very good, typical case for China's diplomatic success. Do you think in the 21st century, for our young people who would join the practice to push forward the strategy of major-country diplomacy with Chinese characteristics, what basic qualities do you think should they have?

Wu Jianmin: I think there are a few qualities that young people must have. First, the youths should understand the world, understanding what the trend is the world is going now. If you misjudge the world, do not know that the biggest changes in today's international relationship is the theme change of the era, but just keep stuck in the old thoughts of war and revolution, then you are deemed unable to get things

done. Second, the youths must know our country, and understand our basic principles. Our foreign policy is to adhere to peaceful development strategy. Third, we should be able to be reasonable. Know ourselves, know others, and know how to speak to get people understand you and to make more friends rather than enemies.

Wu Xinbo: Thanks! Ambassador Wu. Thanks for accepting my interview, your view today is very insightful and valuable. I think this will inspire the audience a lot. Thank you!

Wu Jianmin: Thank you!

Development Of Railway Transportation Is Essential For Sino-Russian Cooperation

Editor: ZHANG Xinrui



Vladimir Yakunin
President of JSC
Russian Railways



Interviewer:
ZHAO Huasheng
Chairman, Institute of
Russian and Central
Asia Studies, Fudan
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Interviewer: **SHEN Yi**
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University

We hear a very good perspective in developing on-land transportation of the goods and trades between Asia and Europe and vice versa. It is maybe the first time when we have the opportunity and real competition between the railway systems and deep-sea operators. So the future seems to be in favor of the development of this kind of relations and of the huge territories of Eurasian continent.

Zhao Huasheng: Thank you very much for accepting my question and also your time, Mr. Vladimir Yakunin. I have three questions for you. The first one is, we know just a couple of weeks ago, President Xi Jinping and President Putin signed the joint declaration of cooperation in connections between the Silk Road economic belt and Eurasian Economic Union. We know transportation has a crucial role to play in Sino-Russia cooperation in general, and in cooperation between the Silk Road economic belt and Eurasian Economic Union in particular. So looking forward to the future, what picture will you give us in that regard?

Yakunin: Firstly, I should say that the communications among leaders is always very essential for world development. Specifically, I refer to the level of understanding and trust between two leaders, Chinese and Russian, Putin and Xi Jinping. And in my mind, the agreement memorandums signed in Moscow paved a new road for very substantial development of, not only economical, but also political relations between us. From the perspective of the future, I suppose that I am completely supportive for the idea of collaboration between new silk belt, now I would say, new silk belt from the road of collaboration and economic development of Euro-Asian Union. But among those, I would particularly refer to Trans-Eurasian belt of development, which is the sister, or the brother of the original idea of the new Silk Road. To my mind, we hear a very good perspective in developing on-land transportation of the goods and trades between Asia and Europe and vice versa. It is maybe the first time when we have the opportunity and real competition between the railway systems and deep-sea operators. It is not controversial because everyone should fulfill the interest of South-Pacific sector or the economy, likewise air-fleet or air-cargo operations. So the future seems to be in favor of the development of this kind of relations and the development of the huge territories of Eurasian continent and sustainable and comprehensive, trustful integral development of economy of the countries of this continent.

Zhao Huasheng: Thank you. And the next question is about the railway system between China and Russia. For the past more than one hundred years, we only have one railway connection that links directly China and Russia, that is China's Manchuria and Russia's Zabaikalsk, which was opened in 1903. There are two other railways connecting China and Russia, but they are going through third country. That is the railway goes through Erlianhaote, and Mongolia, which was starting to operate in 1956, another one is through Xinjiang's Alashakou and Central Asia, which was opened just before the collapse of the Soviet Union. Do you think it is time for us to expand our railway connection between China and Russia, especially in the border areas because we have more than 4300 kilometers of common border lines?

Yakunin: Yes, you are absolutely correct. The first railway connection between China and Russia, which goes through Mongolia, is just a great achievement. But now it seems to be not enough. And the two sides are considering opening new transport operations, for example, constructing a railway over Ergun River. But, further to say, it is essential not only to increase the number of trans-border points for operation, but also to enrich the substance of this collaboration. The more goods we attract to the railway system, the better the economic development for will be. Russia started to develop vast area behind the Ural, due to the construction of Trans Siberia (Railway). In China, it is also extremely essential to develop impoverished regions through constructing railway communication. Where there is railways and other infrastructures constructed, there will be hope of a promising future and better life.

Zhao Huasheng: Thank you. And I also have another question. I think people of China and Russia are interacting more and more frequently with each other and people are getting more and more aspiring to see each other, to travel to each other's country. I think travelling by railway is an attractive option for a

lot of people. But the problem is that the train takes too long a time to travel. Many years ago I travelled three times by train from Beijing to Moscow and it took five-six days for a one-way trip. So do you think it is reasonable to build high-speed railway from Beijing to Moscow and from an economic point of view, do you think it is worthwhile?

Yakunin: It is more than reasonable and you are absolutely correct using the word “travel” in connection with railway transport, because flying above there is clouds and you don’t see anything there. That is just transporting a person from one side of the world to another. Travelling, that is observing the nature, observing a way of living of the people. So of course, being a railway person, I am in favor of this pattern of travelling, as far as there is landscape through this trip. You know, it will bring in great interest once a very high-speed railway system linking Beijing with London is created. And our leader was talking about the collaboration and the transporting route from the border of Pacific to the border of Atlantic. So that is the idea and new systems that are already invented, like the magnetic levitation railway systems, could also be taken in. Maybe one day in the future, the railway systems will transport people at a speed as fast as airplanes.

Shen Yi: My pleasure to be here and I have some very general questions. The first is about the strategic relationships, the strategic effect of the relationships between China and Russia in today’s world. You experienced the world from the 1980s till now (and) the world changed a lot. So what’s your understanding on the importance of Sino-Russia relations and how to develop this bilateral relation?

Yakunin: Since 1980s, I suppose the world changed dramatically. And the rise of China in the economic, social and political spheres has influenced the global paradigm of development. From this perspective, when we are talking about the future, of course the collaboration of territory of Eurasia, the collaboration between

two great nations, Russia and China, will be an even more essential factor of influencing the development in the world. So from this point of view, I suppose the latest visit of Xi Jinping, to Moscow to commemorate the victory in the World War II together with the Russian leaders and other leaders is a very clear sign of the trust, of the wish to develop this strategic alliance. So I am very positive that the collaboration between us will influence the future development of the world pattern.

Shen Yi: And when we are talking about the Sino-Russia relationships, we cannot neglect or bypass the elements of the role of United States in this bilateral relation. And today, of course, United States' relationships with both China and Russia have some problems or conflicts. What's your prediction or understanding on the future development of this triangle relationship? There is saying in today's world that closer relationship between China and Russia will lead to the collapse of the hegemony of United States, and a balance of power. What's your opinion on that?

Yakunin: Both Russian and Chinese leaders stated in Moscow that the friendship we have is not against anybody but in favor of our own development. So considering any closer relations between China and Russia as a challenge and risk for any other country is the very obsolete mentality of the post cold war period. In my mind, we need to accept that United States is a nation of great people, a nation of great achievements. We are bound to live in this world together. But you know in the contemporary world, when we are talking about stability, when we are talking about peace, when we are talking about trust, there are ambitions are not acceptable. You know I can talk about myself. I'm Russian. I don't want anybody to teach me how I should conduct my life. I don't accept it. I want my kids, my grandkids, and grand grandkids to live in a pure, clear environment, to live in a peaceful global environment with their friends from China, South Korea or the United States, wherever. And I don't accept any suppression towards my country, towards my people and towards my kids.

Shen Yi: And you are the very important VIP guest to this Shanghai Forum. Can you raise a few words to Shanghai forum, like suggestions or comments? I think they will be heartily welcomed.

Yakunin: We value very much the ideas, the platform and the substance of Shanghai Forum. And this time, once again, the Shanghai Forum presented itself as a free platform for idea exchange. And for the entire world, the words are being delivered, the remarks are being considered, and more essentially, the collaboration among representatives from different countries and backgrounds in the family of Shanghai Forum will be an essential basis for the further development of perspectives we shared here, which is expected to contribute to a more trustful, peaceful and sustainable global society.

Shen Yi: Thank you very much.

China Need Rebuild Its Social System to Get Out Of Low Fertility Trap

Reporter: ZHAO Di



CAI Yong

Assistant professor of Sociology at University of North Carolina and he has a PhD degree in sociology from University of Washington. Working with other authors, he published the book entitled China's Low Fertility and its Demographic Future. He also published dozens of papers. His research and teaching areas focus on China's fertility rate and demographic development, demographic policies and other social topics that exert significant influence.

It's difficult to get out of the low fertility trap once falling into it. To get out of the trap, we need to change social environment, rather than changing policies. This is a long-term process. We need to rebuild social system, better integrating childbearing, raising, family life and social life.

Reporter: People have different views on China's fertility ratio. Someone says it is 1.8, while others believe that it is 1.6. In your opinion, what's China's fertility rate? What kind of level is for China's fertility rate compared to other countries?

Cai Yong: China's fertility rate has changed over time. In 1990, according to census

data, China's fertility ratio was around 2.1. In 1992, the Family Planning Commission announced the ratio of 1.6. At that time, people didn't believe this figure, which had significant omission. In 2000, the census result was 1.22 and it was 1.18 in 2010. After the late 1990s, the National Family Planning Commission has claimed that the fertility rate is 1.8. Now, the data could be verified through education data, public security data and census data. So, we could find that omission exists indeed, but it is not that high. Based on available data, China's fertility rate may reach 1.4, much lower than the replacement fertility 2.1, which is a standard to maintain the demographic stable for a nation and a state.

The fertility rate in most of developed countries in the world is around 1.6-1.8. The USA is exceptional, nearly reaching 1.9. This figure remains around 2.1 and keeps dropping after the economic crisis. The fertility rate is better and never below 1.5 in North European countries because these countries have better public welfare policies. The fertility rate is very low in East Europe and South Europe, such as around 1.3 in Italy and Spain. The fertility rate in East Asia is the lowest in the world, such as 1.1 in Taiwan, 1.0-1.1 in Singapore, around 1.0 in Hong Kong, 1.2-1.3 in Republic of Korea and 1.3-1.4 in Japan.

Reporter: In your opinion, why does China keep a low fertility rate currently? What are the main reasons? How does the Family Planning Scheme affect the fertility rate?

Cai Yong: Many people believe that the family planning scheme significantly affects the fertility rate. However, this is only one of reasons. Even if China has not adopted the family planning scheme, the fertility rate in China will drop as well. Taiwan is a good example. Taiwan has never adopted the single-child policy and its fertility rate once dropped to 0.9. In the 1960s, the global population grew fast. Taiwan launched the "family plan" scheme (note: Family plan policy in Mainland is actually single-child policy, while Taiwan's family plan scheme is different from Mainland's single-child policy), contraception, improving women social status and

other measures. So, the fertility rate drops quickly. I joke that childbirth has unified across the straits: couples have only one child in both Taiwan and Mainland. Apart from family planning, technology advancement is another important reason. Now, contraception and abortion technology have been sophisticated.

In my opinion, the progress of social and economic development is the most important reason. As women improve their education and widely participate in economic activities, they have their dreams, rather than only focusing on family. In the past, many women had children at 18 years old. Now, many women complete their education at nearly 30 years old. It's too late for them to have babies. So, a low fertility rate is a result of a series of social development, rather than a result of one factor.

An important reason for a lower fertility rate in East Asia is that Confucian culture values children's education. First, people will make choices between education quality and quantity. With a certain amount of education expense, if a family has three children, such family may only support three children to complete high school education. If this family has one child, it could send him/her to study in the USA. Second, education has certain externality. When one-child family or family caring for the quality of education raise the education price, it will affect other family's decision to have one child or more children. People will compare their child's education background and don't want their children to lag behind others. Given as the above analysis, the fertility rate would not be high.

Reporter: In August 2014, as you said in your micro-blog account, China had fallen into the low fertility trap. What are your bases? In your opinion, when could China get out of this “trap”? What measures need to be adopted?

Cai Yong: The so-called “trap” refers to the fertility rate difficult to be recovered after falling to a certain degree (e.g. 1.5). The cost of childbirth is a social and external issue. Once the cost of childbirth is raised, it hardly drops as the house

price.

I have two bases to claim that China falls into a low fertility trap. First, it is based on statistical data. Second, it is based on our lots of research and observation. For example, we survey 3000 women qualified for having their second child. Through seven years of survey, only several percent of them have second child.

I believe that it's hard to get out of this "trap" and it won't realize in next ten years at least. Japan has retained a low fertility for nearly 40 years, and Taiwan has no change as well. Although childbirth has always been encouraged in Singapore, its fertility rate is still unchanged. It's difficult to get out of the low fertility trap once falling into it. To get out of the trap, we need to change social environment, rather than changing policies. This is a long-term process. We need to rebuild social system, better integrating childbearing, raising, family life and social life.

Reporter: How do you comment the results of the policy of allowing couples to have two children if either parent is an only child? How will China develop its population policy in the future?

Cai Yong: The policy of allowing couples to have two children if either parent is an only child was promulgated at the 3rd Plenary Session of the 18th CPC Central Committee. However, in the implementation, the family planning commission delays the approval due to afraid of baby boom. The family planning commission estimates that around 2 million babies will be born each year. However, there were only 1 million applications last year. Among these application, I guess only 50% of them will have babies maximally. So, only 500,000 babies will increase this year. Now, the newly-born population is around 15 million per year in China. So, 50,000 new-born babies won't make too many changes.

We needn't worry about the consequence of second child policy at all. I think that China shall lift all controls. To ensure the safe implementation of this policy, the

priority could be given to women above 40 years old and then to 35 years old.

Reporter: The long-term low fertility is considered as an important reason for Japanese economic slowdown. In your opinion, how will the low fertility affect China? Will China repeat the Japanese story again?

Cai Yong: We could not judge economic development only by determinism of population. Japan experiences the “Lost Two Decades”, which economy is stagnant and even shows a negative growth. However, Japanese life of quality is not degraded. Population is an important part of economy. Without population growth, we need other growth to compensate it, otherwise, the economy will slow down. GDP is per-capita timing number of population. In the long-term, low fertility will significantly affect economy. In the short-term, low fertility will also bring many opportunities for China. For example, China’s education has huge potential to grow. The expansion of higher education is explosive. This is the opportunities in economic and social transition.

Similar to Japan, China experiences fast economic growth when enjoying demographic bonus. Now, China’s industrial restructuring is also similar to Japan. China may repeat Japan’s economic slowdown. It is dangerous. However, in terms of demographic bonus, China has a large population. The sustainable development lies in population quality, rather than population quantity. China should lift population and registered residence control, provide more innovation space for its people and attract talents. As such, China could avoid Japan’s economic slowdown.

Market-Driven Environmental Governance: Approaches And Possibilities

Reporter: CHEN Yuting



Ben Cashore

Ben Cashore is the professor of Environmental Governance and Political Science in Yale University. He is also the Director of the Governance, Environment, and Markets Initiative at Yale (GEM) and Director of Program on Forest Policy and Governance.

International and domestic Environmental Governance will be most successful when effective interactions between governments and markets taken place. We are happy to see that China is embracing the future.

Reporter: Your work is mostly about domestic non-state, market-driven governance, to what extent do you think this mechanism will work in explaining international environment governance?

Ben Cashore: I will answer this question in two ways. Firstly, we are curious about what is Non-State-Market-Driven and why it exists. We see it everywhere, in forestry, mining, fishery and world's carbon market. Why does it exist? Is it for niche reasons or profit reasons? That helps answer the second question aiming at whether it really works. If you take the forest sector, non-state-market-driven is roused to address all forest products. But if you take fishery sector, it's the opposite

situation. So it depends on what programs it's trying to do and where its role is.

So we argue that we have two different collocations looking at none-state-market-driven in the climate sector. If you look at all the different market-driven factors in climate, the biggest impact will probably be the "learning" that takes place. Governments, firms, and NGOs all try to build the proper mechanism. The only significance will occur when the government decides to actually take that knowledge.

Learning is the key result of non-state-market-driven governance. Even it means eventually the government to take it over. In another example, there are a lot of Non-State-Market-Driven efforts on green building codes. Such as in Yale University we have green building standard given by private sector rather than government. There is very little likelihood that any country will be under such standard, so the direct effect is small, but what our finding is that governments in the United States are adopting these Non-State-Market-Driven building codes. So there is a direct impact on government looking at such code and realize they can maintain those rules if they work out well, and such rules become part of the government policy.

Now in the case of climate negotiation, another possibility for Non-State-Market-Driven is that although the international society may have international agreement, there is gap between the ideal solution and the reality, thus the Non-State-Market-Driven could fill in the gap. Take the CDM(Clean Development Mechanism) as an example, it's the mechanism under which the developed countries' governments make a lot effort to undertake projects in the developing world and get carbon credits. However, the critics said where is the environmental value among community in such mechanism? So instead of re-opening up the hard fought agreement, the CDM offers the Gold Standard in which includes communities and environmental values. In a lot of projects, you do not only need to get CDM but also CDM Global Standard Certification. That is a higher approach where private

authority reinforces government, and government reinforces private sectors. They act in different ways and it's a kind of interaction.

Reporter: What are your suggestions on how countries to be applicant to such international Certification System?

Ben Cashore: I think it depends on what the actual problem is. In forest, there are so much global trades along supply chains that I can see a lot of potential benefits. Right now if there are government rules for high standard forest practices in a country, the country will lose when competing with other nations for what it casts on its firms are too strict. This means it's hurting its own companies. But if the entire supply chain is hearing for the similar standard, countries don't have to worry any more for they can have market and protections at the same time. Sometimes this is hard to be achieved through international agreements, but as long as there is a supply chain, None-State-Market-Driven governance can foster that kind of fairness. The challenge is that, for example, FSC (Forest Stewardship Council) recognizes the specific rules that must be developed internally, so it is a global standard in principle but has actual specific rulings on stake holders inside each country. So countries may not get rid of the problem of worrying about being unfair, but by being supply-chains-focused such concern can be reduced. So I do see some potential.

Governments won't mind if companies are getting rewarded when consumers are paying more, the challenge is that there is no demand posed upon company. There is also possibility that Non-State-Market-Driven doesn't work for some other sectors, for sometimes it's unable to coalesce the interest. When it comes to forest, I see Non-State-Market-Driven working potentially quite well on how to regulate forest companies, or how to create rules to minimize the impact on the environment. But when it comes to land-use allocation, I think Non-State-Market-Driven is a very bad instrument, for it's hard to get enough market incentive for protection. So maybe we need more states' involvement when it comes to land use allocation.

Reporter: Can you give a more detailed description of the niche situation? How to make environmental policies under such situation?

Ben Cashore: There are lots of empirical examples of niche market. Sometimes the niche market companies, those who were initially involved, are better off because there are more consumers to buy their product. But sometimes they are worse off because they face competition and lose low value and chair. This depends on price and also on the policy dimension behind it. So a niche market can be created according to the logic of expanding, in which it reinforces the original market, or it could be created that undermines the original customer population. Policy makers must make sure when to reinforce the original market. For example in equal labeling, some companies do not want to become the mainstream, because there is only little room in the market place for certain number of consumers who pay more. If it gets too broad, the price will drop and they lose their market share.

This is an abstract concept but it has practical vocations for designing policies. It's the case you can trigger a bunch of different paths and panels of processes. In environment, you can have multitude path that works, but you need to have principle in mind in designing policies. We need to think about how to avoid a niche market that can't expand.

Reporter: For global Timber Legality Verification, China didn't accept it at first. Why do you think China change its attitude afterwards, and what market-driven factor lies behind China's appliance?

Ben Cashore: The interesting thing about Legality Verification is that while it is a transnational mechanism, it meant to help governments enforce their own laws, because it's about illegal activity. In Principle, it's not trying to challenge sovereignty at the level of rules, but on the level of mechanism. Ten years later all of the countries which initially opposed give some kind of support, including China.

Why these countries give some support at last is because there are greater assurances that there will be no effort to actually impinge upon sovereignty over substance. There is domestic deliberation, for China still has its own fidelity standard.

Such change refers to the pressure from the European Union and the US trade law, because they need some kind of assurance system. It was until the United States passed the act where it told that any importer who bring woods product into the US must show certain kind of certification, then China got concerned. It will face serious problems in the U.S. for being unable to prove product being legal. But internally the illegal logging file was under the state forestry administration, and the commerce file was under commerce department, so we argue that the forestry administration could regain some lost power domestically. So interaction internally might help explain too.

But again although market signals are strong and clear, they are also abstract, so it's not easy to know what it's really going to happen until we really see how it works.

Reporter: The global society has paid more attention to Rainforest in Brazil, what's your opinion on rainforest protection in Brazil? How do you evaluate the effect of Non-State-Market-Driven governance behind it?

Ben Cashore: The latest supply-chain-focused effort is now called No Deforestation Commitments. It's getting the private sector to commit not to buy products that would cause deforestation. This is addressed to soya industry in Brazil, what happened was that companies who stop deforesting in 2008 was recognized as part of this no deforestation commitment. A lot of NGOs now think this works. But I think the answer is no. This is a very weak tool. The reason is that no deforestation promises only happen after the deforestation occurred. So you finally get companies to agree to this stuff once their plans for deforestation have already

happened. Councils keep moving this kind of dates of deforestation down the time line, they will not sue companies that deforest after 1993, for soya, it's 2008. So I think it accidentally reinforce deforestation for supply chains, not stop it. I think they need to have much clearer land-use allocation to enforce government to be part of it. Non-State-Market-Driven can help reinforce such efforts absolutely, by certifying companies that are outsiders but part of that solution, but here market itself is a very weak instrument.

I think Galati Verification can play a role in land use allocation and in reinforcing government's policy. But that's different from the Non-State-Market-Driven or the no deforest commitment. Those are too weak, but if you reinforce government's policy it will work. I think environment governance has given too much responsibility to Non-State-Market-Driven, so we should give it pure burdens, and then it can do its job better.

Reporter: How do you evaluate China's efforts in dealing with climate change issues and what role do you think China will play on the international scale?

Ben Cashore: International norms have influenced on China's domestic approaches. The very norm of doing cap and trade system comes from the Europe and the U.S, so China now has these examples to refer to. China can also help these countries when they are trying to deliberate influence of global policy. It's obvious the case that China's role in international deliberations will be increasingly stronger, for it does not only concern its own interests.

About environmental policies, one thing is how long the policy lasts, the other is how easy it is to change. China has a strong government, it's barely easy to change a policy, but if it did want to, it can change it back. The mechanism for change is the one that if the government wants to, it probably could. In America, the power is so diffuse, so it's hard to change policies. China can do a lot more things quickly.

You now see how environmental issues have been paid more attention in China. There are some kinds of combination somehow. In 1970s, the U.S. decides to become a global leader in the government, and China also could, even faster than the U.S.

FTA Should Become A Model For Exploring And Developing High Level Game Rules For Countries Along The “Belt And Road” Initiative

Reporter: SHI Jinxing



CHEN Bo

Secretary General of the FTA Research Institute of Shanghai University of Finance, Deputy Head of the Department of World Economy and Trade, and doctoral tutor. His comments and views on the China's macroeconomic reforms and China (Shanghai) Free Trade Area have many times appeared on the domestic and overseas mainstream media such as "China Comment", "People's Daily", "21st Century Business Herald", "China Business News", and "The Wall Street Journal", etc.

FTA could be not just a system that can be based and used to explore high-level investment and trade rule system for China, but can be based and used to explore high-level rules for countries alongside the “Belt and Road” initiative, to set such rules as management of negative list of investment access, country's rule of law, government neutrality in the competitive markets, and capital account liberalization, etc.

Reporter: Some scholars believe that the Goose Mode in which China is leading is the true meaning implicated in the “Belt and Road” initiative, in your opinion do you think whether the countries along the routes are fit to the mode?

Chen Bo: Goose mode was proposed by the Japanese scholar, Professor Kiyoshi Kojima, who used it to describe the international division of labor between Japan and East Asian countries in the post-war era, mainly stating that for constant developments, backward countries could be driven by the developed countries under the mode in which Japan is seen as the head of the goose group and four East Asian "tigers" as wings, and Japan, through supply of its capital and technology, open of its market and inter-regional transfer of its traditional industries, help promote the development of the capital and technology-intensive industries of the four tigers which, in turn, would transfer their labor-intensive industries they lost competitiveness to the ASEAN countries positioned at the end of the goose.

The “Belt and Road” initiative is more similar to the division of labor along the global industrial chains. Still, China is a manufacturing based economy, as put it by the report “2025 China Manufacturing” released recently, “Since industrial civilization in the middle of the 18th century, the history of rise and fall of world’s powers and the history of China’s struggling, has repeatedly proved that without a strong manufacturing sector, there is no the country’s national prosperity”. Under this point of view, we still need a lot of energies and raw materials imported from Central Asia and West Asia on the one hand; on the other hand, our country is in the period of economic restructuring and upgrading, this means there must be some backward or less-efficient capacities or industries that are needed to be relocated to countries with low labor costs, including Southeast Asian countries along the maritime Silk Road, like Vietnam, Indonesia, and Cambodia. Meanwhile, worthy to mention, India's economic growth after adjustments reached 7.4 percent last year, somehow outperformed China. As for the question that whether China’s economy

henceforth would have been outperformed by India, I do not think it matters, after all, in terms of per capita GDP, China's is nearly five times of India's, so in the future, India is also an important candidate to accept China's industrial transfer.

China's current focus is to create and maintain an international environment that could be conducive to long-term development, meanwhile to put efforts to shift to higher value-added industries along the value chains on the one hand, and to look for other countries in the downstream to accept our excessive capacities on the other hand. What is more significant of the Goose mode is the spillover effect, it means that the developed countries' economic experiences and advanced technologies to spill over to neighboring countries through trade channels, layer by layer. In a sense it is like a point of wave rippling out to the whole surface. Currently, the "Belt and Road" initiative is more like cooperation along industry chains. Figuratively speaking, it is like dots to connect as a string.

Reporter: The ultimate goal of infrastructure investment is to enhance the demands for Chinese industrial products, and help upgrade China's economic restructuring, meanwhile promoting local economic development. In your views, how can we conduct the market-oriented principle, while avoiding unnecessary losses due from the government intervention?

Chen Bo: One of the problems we face now is the countries along silk roads are more backward than us in terms of economy, legal system and infrastructure. Due to imperfections of market mechanism, market failure happened everywhere, so it justified the needs of government intervention. The current "Belt and Road" initiative is the one that needs government interventions to help and encourage enterprises going overseas to use the comparative advantages of the host country such as cheap resources, labor and harbors, and to ensure stability of the international political environment, and to avoid damages to the investments due to the political instability and corruption and other negatives of the host government. Speaking at large, when it comes to international strategy, it is the hope that through

cooperation between countries, to ensure a good business environment in the host government that is guaranteed by our government's credit.

As for actual sites of investment projects, of course, they should be chosen based primarily on the market behavior. However, the companies going overseas should also pay attention to and respect local cultures, customs and religious beliefs, help local economic development, prosperity and stability, improve self-disciplines, and avoid short-term profits made at the expense of pollution or through sale of counterfeit and shoddy products that would produce negative externalities to other Chinese enterprises going abroad. For this regards, it also requires our government to regulate and constrain, and improve our legal system.

Reporter: In case of encountering political stability risks of host countries along the routes of infrastructure construction connectivity, what are better coping strategies we have?

Chen Bo: First of all, government departments should be more professional and efficient, and enhance the sense of our presence and influence in the host country. For example, the International Economic Department of the Ministry of Foreign Affairs is a new unit of the Ministry, established in 2012 in order for China, from political and diplomatic point of views, to better participate in international economic cooperation and economic governance, and to safeguard development interests and economic security of the country. In addition, it may be through chambers of commerce, think tanks, networking of people and intellectual supports. Generally speaking, on the one hand, we should strengthen the political, economic, cultural and social ecologic studies to the countries along the Belt and Road, and assess potential risk profile for our investments in the host countries; On the other hand, we should enhance our influence in these countries to develop good, long-term strategic partnership with local political, business and religious leaders.

Secondly, cooperation through more countries could punish the governments who

are with bad faith or breach of promise. For example, The Asian Infrastructure Investment Bank (AIIB) established currently has formed a collective action principle among all of its Member States. If a Member State blocks the port, cut off roads and takes other acts that violates the principles, it will be subject to punishments by other AIIB member countries, meanwhile its credit will be downgraded accordingly. In this way, we would form a real commonwealth of countries along the “Belt and Road” initiative that can effectively play out the effect to leverage China’s role in development of international rules and constraints.

Reporter: Financing is an important support for the “Belt and Road” initiative. In the process of supporting the “Belt and Road” initiative, how will AIIB promote internationalization of the Renminbi?

Chen Bo: First, in terms of depositing the statutory capital, RMB can serve as an alternative currency. Specifically to say, the Asian Infrastructure Investment Bank (AIIB) has a total of \$ 100 billion in statutory capital, in accordance with the "The Asian Infrastructure Investment Bank Charter", China's contribution is 30%, i.e. \$ 30 billion; if half of which, i.e. \$ 15 billion, can be paid in Renminbi, it can promote internationalization of Renminbi to a certain extent.

Second, if the RMB joins the basket of SDR currencies, it will make more than 180 countries to enhance the RMB shares in their reserves, and would be in conducive for increasing the quantity and frequency of RMB pricing and settlement to improve Renminbi internationalization.

Third, it may through AIIB infrastructure investment projects to play out the leverage effect, to improve the degree of RMB internationalization. For example, by the PPP ways to help domestic private capitals to actively participate in overseas infrastructure projects, to enlarge the use of RMB in the investment and financing transactions so as to enhance RMB internationalization.

In accordance with the provisions of "The Asian Infrastructure Investment Bank Charter", 37 countries within the Asia regions are accounted for 75% of the total contribution, while the remaining 25% are allocated to 20 countries outside the Asia. At the same time, for countries within Asia territory, the capital shares are allocated basically in accordance with the proportion of the gross domestic product (GDP) of a country in the region. And founding member countries outside Asia are also allocated by taking an important reference to their proportion of GDP to subscribe share capitals. From this arrangement, we see the largest contributor is China who is accounted for about 30% of the total capital, and the second is India who will contribute about 10%. On the other hand, total investment of Europe countries plus developed countries of Australia and South Korea is expected to be roughly equal to that of China. Although China currently takes the largest share, it is almost concluded that it would give up the veto power within the Bank.

Reporter: In addition to the financial support by the international organizations, another hot point in the market is the PPP model which levers social private capitals and forms the cooperation of government and social capitals to help the "Belt and Road" Initiative. The problem now is overseas projects such as energy, communication, high-speed rail and nuclear power are all directly related with the state-owned enterprises, in your opinion, could private enterprises have its part to play in this regard?

Chen Bo: Judging from the current Chinese overseas infrastructure projects, whether be it nuclear power, high-speed rail ways, large-scale equipments or energy, we see that all is dominated by state-owned enterprises. With gradual improvement of the infrastructure it will stimulate a lot of demands of infrastructure investments from China and other countries. Advantageous and excessive capacities of private enterprises in the areas of building materials such as steel, cement and glass may go out to the countries along the "belt and road" to cooperate with them.

Judging from the long run, the SOEs first going out can also explore and formulate

a system of rules in regards to investment and trade with the countries in order to protect the interests of domestic enterprises. With further development in terms of policy communication, connection of facilities, smooth trade flow, financing, and people-to-people connection, private companies can play a bigger role on this basis.

Reporter: During a recent interview with the Labor News, you talked about that the greatest significance of linking FTA and the "Belt and Road" initiative is that the countries along the Belt and Road could establish such new trade and investment rules that are based on reciprocal and equal opening. In your opinion, how would countries along the roads be able to achieve high standard of investment and trade rules while facing market imperfections, political instability, weak industrial base, and defective legal system?

Chen Bo: FTA is a testing plot explored and established by China in order to accept high-level investments or to accommodate to high-level investment and trade systems. We hope we can soon create a replicable system so that we can promote it through out the countries.

How can China's "Belt and Road" initiative interlink the FTA? Previously, energy security, investment security and capital free-movement assurance in the host country, among others, were the pressures in the trade and investment agreements that the United States and other developed countries placed on China. Now the relation of China to the Central Asian countries and West Asia countries along the silk routes is just like the America to our country previously. Look at in this way, FTA could be not just a system that can be based and used to explore high-level investment and trade rule system for China, but can be based and used to explore high-level game rules for countries alongside the "Belt and Road", to set such rules as, for example, management of negative list of investment access, country's rule of law, government neutrality in the competitive market, and capital account liberalization and so on.

So the role of FTA in the “Belt and Road” initiative can be summarized as: to learn the advanced, inspire the backward, and move to the same direction and in varying degrees.

Innovation Is The Key Point: The Next Decade For China And Asia

Reporter: XIE Xinchun



Maggie Xiaoyang Chen

Associate professor of economics and international affairs, George Washington University. Professor Chen's research focuses on multinational firms, international trade, and regional trade agreements.

There are mainly two ways to increase our productivity. One is by increasing the productivity of individual firms through innovation so each firm can become more productive. The other is by increasing our efficiency in resource allocation, so the more productive firms will receive more resources while the least productive firms exit the economy.

Reporter: The topic of the conference you attend in Shanghai forum is 'How to Reignite Asian Economy'. What kind of standards do you use to evaluate and predict Asian economy development? Based on those standards, what is your expectation for Asia's economy in the future?

Maggie Chen: The standards I typically look at are very similar to what everybody else uses and include, for example, GDP growth rate, export and import growth rates, inflation, debt-to-GDP ratio, FDI, and capital inflow/outflow. Based on these standards, I think Asia's economy is still going to be one of the fastest growing

economies in the next decade. Asia is still going to be the region where we will see stable growth, even though not as rapid as in the last decade. And this growth will still mainly be driven by trade, FDI, and investment in general, but hopefully the contributions of domestic demand, services, innovation, and productivity growth will increase in the meantime. So overall I'm still optimistic, but of course there are concerns such as the region- and even world-wide implications of China's slower growth.

Reporter: We can see that regional economic integration has become a mainstream in the world. So do you think that a higher degree of regional economic integration will be beneficial for Asia's regional economy development and stabilization, why?

Maggie Chen: Regional economic integration is definitely an unstoppable trend. It is happening everywhere and will continue to happen. I think overall it's beneficial for Asia's economic development and stability to promote regional economic integration. It provides not only more export and import opportunities for firms in Asia but also more FDI from multinational firms both within and outside Asia. Further, economic integration in Asia will lead to more cooperation between Asian countries that go far beyond economic integration. And especially when the U.S. is promoting TPP and TTIP, it's very important for Asia and particularly China to have counterpart partnerships and integrated blocs.

However, there're obviously issues. First, for example, the TPP currently does not involve China and Asian regional trade agreements are likely not going to involve the U.S. But there will be overlapping countries between these two types of trade agreement, which means that China and the U.S. could become sort of "spoke" countries in these agreement networks. If I were a firm, I would be interested in locating myself in the hub countries like Vietnam and Malaysia, which would have agreements with both China and the U.S., instead of the spoke countries. That would make the hub countries more competitive in terms of, for example, attracting

FDI. That's one of the issues we have to think about. Second, even though regional economic integration can provide more stabilization by diversifying markets, it can also propagate economic crisis. If some negative shocks happen in one of the member countries, they can be propagated to the other member countries because of the deep trade and financial linkages.

Reporter : So to what extent do you think Asia's regional economic integration can go? Can we form an integrated block like EU?

Maggie Chen: I don't think we are able to achieve the same level of integration as the EU, at least in the short term. EU is the most integrated economic bloc that we have seen in the world. The bloc is far beyond trade and even economic integration. Asia is different. In Asia, countries are overall less developed and their differences in stages of development are also greater. Because of that and cultural and historical reasons, countries' economic objectives are also very different. So I don't think we would be able to integrate as much as the EU. However, to get things started, trade liberalization is definitely the most important step right now. But even that requires a lot of work and effort because when you involve so many developing countries, negotiations can be very hard as everyone wants to protect their domestic sectors like agriculture and services.

Overall though, I think it's definitely a very nice step forward even if we may not be able to achieve as much integration as the EU. And maybe that's good because when you have deep integration like the EU, you could have many serious problems like the ones we have seen such as the transmission of crisis I mentioned earlier.

Reporter: What difficulties do you think may be confronted in the process of promoting a further development of regional economic integration in Asia?

Maggie Chen: I think one issue, as I said, is that most of the countries involved are developing countries and even these developing countries are in very different

stages of development. So when you try to integrate all these countries, you have to balance the interests of these very different countries and that's very hard. It's hard to harmonize the interests of so many different countries and come up with policies that everybody is willing to say yes to. For example, agriculture is always an area where integration can be difficult to push forward, and service is another sector. No countries want to become too dependent on foreign providers in these sectors. So these can be some of the challenges for integration.

Also, we have so many agreements, one on top of another. Like in Asia, ASEAN has signed agreements with China, India, and so on and, in addition to ASEAN, China has signed agreements with Singapore and South Korea. These agreements have become, what we often call, a spaghetti bowl. All these agreements have different rules such as the rules of origin and different depth. It's very difficult for firms and even countries to understand and navigate the system. If I were a Chinese firm and I wanted to invest somewhere, it could be very difficult to decide where, how much, and what to invest, because it's hard to tell which country would give me the best market access and the lowest cost. We know one of the most important features of globalization today is production fragmentation. Many firms segment their production and locate different stages in different countries to maximize profits. But when you have so many agreements intervene together, it's very difficult for firms to figure out the best production and location strategy. These are some of the challenges we will confront.

Reporter : Now we use “new normal” to define the world economy development situation after financial crisis of 2008, and Chinese chairman Xi Jinping also put forward the concept of the new normal of China's economy. So how do you think of China's new normal, such as the decline of speed for china's GDP development? And what are the international and domestic reasons for it?

Maggie Chen: The speed of China's growth has significantly slowed down. The

reasons behind it, I think, are quite obvious. Our growth in the last decades was driven by investment, trade, and certain industries like construction and manufacturing. The dependence on these growth engines could lead to a lot of risks and the economy as a result could be vulnerable. For example, when industrial countries like the U.S. and western European nations went into recession, the weaker foreign demand significantly reduced our export and total economic growth. As for infrastructure investment and construction, they cannot go on forever and therefore cannot be a sustainable source of growth. Also, China in the past several decades achieved one of the greatest structural transformations in history with millions of labor moving from agriculture to manufacturing and became the world's largest manufacturing economy. But we are now getting to a point where not much more labor can be allocated from agriculture to manufacturing and labor cost is rising rapidly. So all of these factors contributed to the slowdown of China's economy, which means that we have to find other engines of growth.

As we all know, we are now trying to change from investment- and export-led growth to more a domestic-consumption driven economy. We are also in the process of the next structural transformation, transforming from a mainly manufacturing economy to a more diversified economy. I think it's also very important to increase our TFP (total factor productivity) and to become a more innovative economy. In the last few decades, our productivity growth is slower than our GDP growth. There are mainly two ways to increase our productivity. One is to increase the productivity of individual firms through innovation so each firm can become more productive. The other is to increase the efficiency in resource allocation, so the more productive firms will receive more resources while the least productive firms exit the economy. That way, the aggregate productivity of the country will be improved, which is important for China's continuing growth.

Reporter: In 1990s, Japan has experienced a financial crisis arising from Real estate bubble. Both as east-Asian countries, do you think there's any similarity between the current situation of china's economy and that of Japan

in 1990s? In order to avoid china's economy falls into so-called "hard landing", what policies do you think can prevent china from repeating the mistake of Japan?

Maggie Chen: Yes, there are many similarities, like the bubbles in the housing market and the asset market and also the fact that both economies have been dependent on exports for growth. But there are also differences. For one, China's stage of development is very different from Japan's stage of development at that time. Japan at the time was already a developed country with high GDP per capita, but China now still has relatively low GDP per capita. That is one big difference between Japan in the 1990s and China now. That also means China can avoid going into the same situation as Japan did. China still has a large scope for economic transformation and growth. For example, China's service sector is still very open for more liberalization and growth. So China has more growth potential than Japan in the 1990s. In terms of economic policies, we need to avoid making the same monetary and fiscal policy mistakes Japan made and promote new sources of economic growth.

Reporter: One of the most important aspects of the new normal in china is industrial structure adjustment, which is also experienced by other developed countries before. Compared to those countries' experience, what do you think is the specific feature for this round of adjustment in china, and what is the experience that can be used as reference from other developed countries for china?

Maggie Chen: Countries that have experienced successful industrial structure adjustment are mainly in Asia and include, for example, South Korea, Japan, and Singapore. There's a lot of experience we can learn from them. The feature that differentiates China from all of those countries is that China's first round of transformation was moving the country from an agriculture economy to a manufacturing economy. That process made China the largest manufacturing

country in the world. Now we are entering the second stage of transformation, which is hopefully transforming the country to a more diversified economy. We should not give up manufacturing, but we should diversify our economy to have both manufacturing and service. So that's where we are at this point.

I think we can look at South Korea to learn from their experience. For example, we can learn from their R&D policies. South Korea encouraged firm innovation by providing credits and subsidies. We have already done a lot of that, but we could still improve the efficiency and the payoff of our innovation policy to better allocate the physical and human capital. We should have our own high-tech, high-quality firms and also gradually move up the value chain from mainly low-end manufacturing to an economy with also high-end, high-quality, high-skill manufacturing and services. Innovation and human capital are the key. Given that the survival rate of new firms is very low, what the government needs to do is to better identify companies with promise and potential, including both startups and existing companies, and offer them incentives to innovate, expand, and improve quality and productivity. Governments should also try harder to promote cooperation between universities and industries.

Reporter: Your main research interests are in the field of international trade. Under the environment of global new normal, what do you think should Chinese export-orientated enterprises choose for their development path?

Maggie Chen: China's export enterprises used to compete on prices. Now they should try to improve the quality of their products and services and the reputation in foreign markets. Just like what Japan and South Korea did. And after accumulating more export experience, these export companies can learn and expand across markets and products. The diversification is useful for growth and risk reduction. Some of these firms can also become multinational firms. There's evidence that suggests exporting can be a stepping stone for FDI. For example, I could start as an exporter, but after I understand the foreign market a little better, I

can directly invest in that country to reduce trade or production costs and increase market access. These can be the next steps for Chinese export companies.

How Can China Effectively Participate In Arctic Affairs After Becoming A Member Of The Arctic Council

Reporter: SHAO Yifan



CHENG Baozhi

PhD in international law, Wuhan University; Associated Fellow of Shanghai Institutes for International Studies; Director of European Law Research Society of Chinese Association for European Studies; Director of the Chinese Society of France Studies; and member of the EU Arctic Forum Advisory Committee; Mainly engaged in studies on the Arctic governance and international law- related issues.

The issue of climate change and environmental protection in Arctic could be a powerful, convincing argument for China to participate in the Arctic affairs. In terms of the Arctic affairs, it is not a taboo for us to talk about the benefits implied. Instead, what we need to consider is how to more effectively make contributions to the Arctic governance.

Reporter: When did Asian countries start to pay attention to the Arctic and participate in Arctic affairs?

Cheng Baozhi: Asian countries, mainly China, Japan and South Korea, their

involvement in Arctic affairs started with a set of researches and expeditions. In the 1990s, Japan had done frontier researches on shipping in Arctic. And we can say that the shipping industries of Japan and South Korea have paid great attentions to and are very concerned about the opening of the Arctic waterways, and they did very in-depth researches. In terms of China, its first involvement in Arctic affairs can be traced back to its 1980's expedition. Therefore, China is not a newcomer at least from the perspective of the Arctic expedition. But instead, it is leading in the world in some areas in Arctic expeditions after decades of development. From the social science perspective to watch the Arctic, China's first such concern came in 2007 when Russia planted flags on the seabed of the Arctic Ocean. After the incident, the domestic social science academics started Arctic researches from two aspects - international law and international relations. From the international law aspect, it mainly focuses on the legal status of the Arctic Ocean; and from the international relations aspect, it involves the Arctic countries attitude towards Asian countries participation in Arctic affairs and the development of bilateral and multilateral relations.

Reporter: Arctic matters involve territorial disputes, resource development, channel use, and environmental protection, etc. Then, in your view, what is the entry point for China to participate in Arctic affairs?

Cheng Baozhi: It has been more than two years since five Asian countries including China officially became observer countries of the Arctic Council. For the next step, how to make effective, full substantive participation in the Arctic Council and the Arctic governance process should be the issue that we urgently need to consider. I think we should mainly start with the issues of climate change, shipping, and Arctic resource. Especially from the point of view of environmental protection, it is not just an issue that should only be considered by the Arctic countries. Studies have shown that: the melting of sea ice caused by climate warming has far-reaching implications on the entire ecology, the environment, and the economic and social development of countries in East Asia. And some of influences will last even long-

term but cannot be easily felt or watched. For example, the global sea level rise caused by melting Arctic icebergs will cause a direct impact to China's coastal cities, such as Shanghai. Therefore, although China seems very far away from the Arctic Circle, and seems nothing to do with the Arctic affairs, in fact/reality, the North Pole impact is true to China's development. Thus, the issue of climate change and environmental protection in Arctic could be a powerful, convincing argument for China to participate in the Arctic affairs. In terms of the Arctic affairs, it is not a taboo for us to talk about the benefits. But instead, what we need to consider is how to more effectively make contributions to Arctic governance."

Reporter: Does the Arctic Council have any concerns in regards to China and other Asian countries' participation of the Arctic affairs? If so, how should we do to mitigate their concerns? Regarding this, what is the next Chinese research focus on Arctic issues?

Cheng Baozhi: Polar Regions are also being included in maritime power strategy of China when this strategy was put forth. Arctic and Antarctic is an important part of China's national maritime strategy. Currently, our investment in polar affairs is huge, and funds, personnel and logistics are adequately assured. In such circumstance, the State also raised higher requirements for relevant scholars engaged in research of international law and international relations. Singapore and South Korea, for example, they had all put forward their interpretive documents on Arctic policy. Putting it simply, it is the documents to state what their countries would do in the Arctic. But in China, we have not yet relevant documents issued. As a scholar, the next step we should do is to consider how to offer advices and suggestions, joint our wisdom with our country's needs and strategies, to explain more clearly our policy objectives, making it more easily understandable for people, and pave the way for China to participate in Arctic affairs. Anyway, despite the Arctic countries hold a positive attitude towards Asian countries involvement, but due to the fact that Arctic is close to their home, this always make them feel uncomfortable. Especially, with the enhancement of China's comprehensive

national strength, our country's participation is inevitably making the international community get concerned.

It should be noted that legal system of the eight Arctic countries, except Russia, are very soundly established, and their human rights standards, labor standards and environmental standards are very strictly imposed. At the same time, some of provincial and state governments of the Nordic countries and United States and Canada have also developed a lot of local laws and policies concerning on the Arctic. So, our study should not be limited to international or national laws and mechanisms; but probably these regional standards and laws may be in our next focus of research.

In all, I think we should not only need to clearly explain our own Arctic policy, but also should clearly and thoroughly understand relevant policies and regulations of other countries and regions.

Reporter: Different from the mechanism of Antarctic which relies mainly on the "Antarctic Treaty" to settle disputes, the disputes over the Arctic is primarily solved through international laws and the "United Nations Convention on the Law of the Sea". How do you think of the international legal system?

Cheng Baozhi: In order to enable our country more effectively participating in Arctic affairs, a new concept is raised by some Chinese scholars, "Near-Arctic State". The rationale behind is because China is situated in the middle latitudes of Northern Hemisphere, so they think China should not be defined as a "Non-Arctic State". In fact, their purpose is to demonstrate that China is not a general non-Arctic country. However, the western countries do not think so, they do not agree with the so-called concept "Near-Arctic State", they don't buy the plausible to count you as an "Arctic country". This phenomenon also reflects a fact that Western countries tend to have more powers on voices on international affairs. This is mainly because

the international laws and the existing system and ideas of the international laws are all originated from the West. What we can do so far is to make good use of existing rules of international law. But after all, these rules are their game rules that were developed by their countries. So, to engage in this kind of study, it is indeed more difficult for our domestic scholars. In addition, the overall level of China's international law study cannot fully meet the requirements in such a context that China has rapidly increased its influences on international affairs.

Reporter: Is there any mutual communication mechanism built between the observer States of the Arctic Council? And as an observer country, is there any mechanism established between China and the Arctic countries?

Cheng Baozhi: Although China has officially become an observer State, the Arctic Council has strictly provisions on observer countries, for example, when in a meeting, the observer countries can only be sited in designated areas with no voting rights. Put it in a hard sense or an ugly way, it is only when it required observer States to make contributions or to fulfill their obligations, they will miss the observer countries.

Some observers of the Arctic Council, such as Poland, are trying to organize meetings between the observer countries for communication. However, cooperation and communication channels between the observer countries are still less in number.

In terms of the ties with the Nordic countries such as Finland, Norway and Iceland, it should be said that China has smooth communication channels with them, for example, The Centre's Secretariat of the China-Nordic Arctic cooperation is just such an institution located in Shanghai. In recent years, we also went to Helsinki and Reykjavik to participate in several international conferences such as the Arctic Shipping Forum, the Arctic Frontiers, and the Arctic Circle conferences. It should be said as I mentioned before, the Nordic countries hold a more positive attitude

towards non-Arctic countries' participation in Arctic affairs, which is different from the United States and Russia. However, the Nordic Member States stresses more on observer states' contributions, but not on things like the so-called rights. In addition to the Nordic countries, China scholars studying the Arctic policies have also established corresponding communication mechanisms and platforms with scholars of the United States, Russia and other countries.

Reporter: As the Arctic sea ices are melting, the media attentions on Arctic waterways are keeping rising. How do you look at the strategic value of it for our country at the present stage?

Cheng Baozhi: Actually, to open Arctic waterways, it still faces challenges and problems of uncertainty ice conditions, lack of shipping infrastructure, higher requirements for the ship vessels (preferably with some icebreaking capability), pre-crew training inputs, lack of the ability to search and rescue, and marine insurances. Even in completely ice-free summer times, the annual shipping days they can achieve are not more than 100 days, therefore, it still cannot completely replace the Suez Canal, the Strait of Malacca and other traditional routes, at best it can only play a supplementary role. At this Stage, it is not included in China's "the Belt and Road " initiative, but on the longer term, the potential value of Arctic waterways will constitute an important strategic support in the process of carrying out our strategy.

Looking Forward To Working At A Deeper Level Of Free Trade

Reporter: XING Yanjing



CHUNG Chul

Senior Research Fellow, Executive Director of the
Dept. of Asia-Pacific, Korea Institute for International
Economic Policy

The recent conclusion of the China-South Korea FTA, will not only bring about a remarkable growth in the volume of trade between China and South Korea, but will also increase the vitality of investment and exchange activities between the two countries. The most important impact that the FTA is expected to have on Chinese enterprises is that it will expose them to face increased cooperation and competition. In regards to the government, the most essential aspect will be to build up trust and reputation through cooperation on the FTA, which is of high importance to both China and South Korea.

Reporter: The China-South Korea FTA will play a positive role in promoting the comparative advantages of various industries in the two countries, such as, the agricultural and textile industries in China, as well as the electronic

and chemical industries in South Korea. In addition to the growth in sales which can be directly observed, what other positive impacts will FTA bring to the various industries in the two countries?

CHUNG Chul: The conclusion of the China-South Korea FTA, will not only bring about remarkable growth in the volume of trade between China and South Korea, but will also increase the vitality of investment and exchange activities between the two countries. As the business environment improves, cooperation between the two countries will be promoted across a broader range of economic areas. The most obvious and meaningful impact is that more Korean enterprises will make investments in China, as will Chinese enterprises in South Korea, thus taking advantage of the production strengths of both countries in the global value chain and will improve production process to become more efficient. In addition, the FTA will make it more convenient for enterprises to capitalize on the consumer markets of the other country. The Chinese consumer market is very large, and is therefore quite attractive to Korean enterprises.

Reporter: China has developed extremely fast over the past 30 years, particularly in the manufacturing industry, earning itself a reputation as the “world’s factory”, however China still finds itself at the bottom of the “Smile Curve” in the global value chain. As China is now actively transforming to develop a high value-added manufacturing industry, how will the cooperation between China and South Korea help to promote this transformation?

CHUNG Chul: The most important impact that the FTA is expected to have on Chinese enterprises is that it will expose them to face increased cooperation and competition. A more competitive market will encourage them to practice self-motivated transformation, thus enjoying higher production efficiency. Another phenomenon which should also be emphasized is that China is becoming increasingly open, and certain low-end industries have already been challenged by some Southeast Asian countries. This phenomenon indicates that China has to leave

from the bottom of the “Smile Curve” and speed up the transformation of its enterprises. It should be noted that in the process of cooperation, foreign countries will not simply reveal their core technology, but rather the mechanisms of competition and cooperation can assist to encourage Chinese enterprises to practice self-motivated transformation and gradually develop their own high technology and core technology. The automobile industry is a good example of the aforementioned transformation.

Reporter: Through this competition and cooperation, what are some of the benefits that can China and South Korea provide to each other?

CHUNG Chul: It should be pointed out that the negotiation process of the China and South Korea FTA was very slow, requiring over ten years of investigation, joint study, and negotiations before, eventually leading to a consensus on the present contents of the China-South Korea FTA. Even now the level of liberalization of trade between the two countries is very low, thus this agreement is not considered as one of the high quality free trade agreements for various reasons. Currently the proportion of the liberalization of trade in goods is about 90% of the tariff items but only 85% in terms of the trade volume, while the trade liberalization in services has seen minimal advancement. The percentage of tariff lines subject to tariff elimination for the China-Korea FTA is 91% for China and 92% for Korea over the next 20 years. This is not an impressively high figure, particularly compared to Korea's other FTAs such as Korea-US FTA and Korea-EU FTA, which are going to eliminate tariffs for at least 97% for both parties over 10 years after entry into effect.

In terms of the trade of goods, Korea wishes to protect its agricultural sector, while China wants to protect some of its manufacturing sector -because both countries have faced with resistance within their own country. As you can imagine, even if these sectors are to be liberalized at a later date, it will still meet with local protectionism, and therefore it will be very difficult to further liberalize these

sectors. Of course, if the cooperation between China and South Korea is practiced in a smooth manner based on the existing contents of the bilateral FTA agreement, the successful experience will provide baselines for other countries when they negotiate with China. The significant gains from the China-South Korea Free Trade Agreement will attract more countries to participate in FTA partnerships.

Reporter: How will the advantage of industries in Korea such as health care and cosmetic surgery impact upon the relevant industries in China? Furthermore, the “Korean Wave” has already had a huge impact, how will China and Korea continue to cooperate in the cultural industry?

CHUNG Chul: Health care and cosmetic surgery are indeed very advanced industries in Korea. China and Korea have included minimal cooperation on the trade in services in the FTA, but the development will still be very fast - Korea and China agreed to hold a second round of negotiations on service trade and investment within two-years after the FTA enters into effect. Considering that China is also negotiating with United States on the bilateral investment treaty (BIT), after both sides reach a consensus on the BIT, the China-South Korea FTA will go further in lifting trade barriers in services and create new opportunities for some of these Korean industries to enter the Chinese market.

As for the cultural industry, China and Korea have already cooperated in this field through the joint production of a number of movies and TV series. China has a significant interest in investing in the Korean film and television industries. Korea has highly advanced technology used in the production of movies, including some high technology and appealing content. Through the agreement, Chinese side has more opportunities to invest, and the Korean cultural industry may provide very good investment opportunities for Chinese investors.

Reporter: The conclusion of the FTA is just the first step, what do you think will be the respective tasks of government and enterprises in the subsequent

process?

CHUNG Chul: The free trade agreement enables enterprises to face increased cooperation and competition, thus forcing the enterprises to become more innovative and creative. There is no need for us to worry about the enterprises, and we do not have to tell the enterprises where the opportunities lie, as the profit-seeking instinct of the private sector will naturally lead them to find and take advantage of new opportunities. In regards to the government, I think the most essential thing will be to build up trust and reputation through the FTA cooperation, which is important to both China and South Korea. It will be a loss to both countries if unfortunate events were to occur and damage the reputation. A high reputation will be of benefit for pushing further developments in the treaty, and will act as a benchmark when developing common interests and signing FTA treaties with other new trade partners. Additionally, due to the fact that enterprises change very fast whilst developing, and will encounter many new problems, it will be imperative that the government strives to update its policies in a timely manner to keep up with the requirements of businesses.

Reporter: A good example of the cooperation between Chinese government and enterprises is the “Korean Industrial Park” in Wenzhou, where the local government helped to introduce many Korean service agencies and provide consumer markets for products, what do you think of such forms of cooperation?

CHUNG Chul: I think this is a very good example of improving understanding and cooperation. The local government and central government play different functions. Establishing similar free trade areas is a very good effort, and if more such places are set up, both the local and central governments will gain experience which will be extremely beneficial in implementing the content of the agreement.

Reporter: In what regards do you think that the “Asian Infrastructure

Investment Bank” and FTA can produce synergies?

CHUNG Chul: The Asian Infrastructure Investment Bank is a part of China’s national strategy, and is closely tied to the “One Belt and One Road” initiative. The “One Belt and One Road” initiative is devoted to investing in poor or developing countries and helping them to build railways, roads, telecom and other infrastructure. FTAs are another part of China’s national strategy, promoting China’s trade and investment with other countries. The experience gained from FTA investment will be extremely beneficial to the “Asian Infrastructure Investment Bank” and its investments. The FTA partners can also undertake and follow up the investment of the “Asian Infrastructure Investment Bank”, accelerating the development process and improving investment returns. The “Asian Infrastructure Investment Bank” will also lead more countries to sign FTAs, and increase cooperation.

Air Pollution: How to Develop With a Cleaner Strategy?

Reporter: Katherine Gagen



Aaron J. Cohen

Dr. Aaron J. Cohen is Principal Scientist at the Health Effects Institute (HEI) and Affiliate Professor at the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. At HEI, Dr. Cohen manages an international program of epidemiologic research on the health effects of air pollution and is involved in developing and managing HEI's US and international research programs.

So even if factories are relocated into countryside, and their emissions are not reduced, then a certain amount of that pollution is going to come back and pollute the metropolitan area, so I think that unless those industries are cleaned up, that's not a long term and not even a short-term solution.

Reporter: How has the global health landscape changed due to air pollution over the past few decades?

Aaron J. Cohen: It's a mixed picture. In some areas, air quality has improved in recent decades, and health has improved as a result. In some areas, air quality has deteriorated over the last 20 years, and China is an example of that. And that, combined with the fact that more people are developing diseases that are affected

by air pollution, such as heart disease, lung disease, etc., has led to some very serious health burdens in places like China, and India. But it's an encouraging picture too in that it suggests that if countries with major air pollution problems take the type of steps that have been taken successfully before in places like the United States and institute programs for managing air quality and pollution, there will be health benefits. In China, they have been taking some serious steps to do that.

Reporter: What are some of the short-term effects of air pollution on global health?

Aaron J. Cohen: In the short-term, exposure to air pollution causes increases in mortality and admissions to hospitals from cardiovascular and lung disease. Exposure to air pollution also increases the severity of symptoms in people with lung diseases such as asthma.

Reporter: What are some of the long-term effects?

Aaron J. Cohen: Over the long-term, if you live in an area with elevated levels of air pollution, it increases your risk of actually developing cardiovascular and lung diseases, including lung cancer, and ultimately shortens your life. These are also the leading causes of mortality globally and in China. I don't know if your readers are aware that just about a year ago, the International Agency for Research On Cancer, a branch of the World Health Organization, determined after an exhaustive of all the available scientific evidence that exposure to outdoor air pollution in general, and airborne particles in particular, causes lung cancer. In addition, as the science advances we are learning more about the diseases that air pollution may cause, including pre-term birth and low birth weight and diabetes.

Reporter: You mentioned air particles, and I know that in your research you studied the effect of air particles as pollutants in the environment. The

particulate matter levels in China have been growing at an alarming rate.

Aaron J. Cohen: Yes, particularly in North-eastern China and the Jing-Jin-ji area.

Reporter: What do you think are the reasons behind this rapid increase?

Aaron J. Cohen: Well, it is linked to economic development. The growth of the Chinese economy has lifted many, many people out of poverty in which has improved the health of the Chinese people. And since the 1970s life expectancy has certainly increased. However, economic growth in China has been achieved at the cost of deteriorating quality of air water and soil with serious adverse effects on public health, which are now reducing life expectancy and eroding the benefits of economic development. That is an historical pattern seen in the United States and Western Europe, and based on those experiences, and on the availability of cleaner technologies, one would hope that rapid developing countries such as China and India, might be able to minimize or largely avoid environmental damage and its associated health effects. I think that's what we have to do in the future. This is something that I think China understands and is taking steps to address. I think what I said may be surprising or may be confusing in the sense that although economic development has led to increased life expectancy the associated pollution is now having the opposite effect

Reporter: It appears contradictory.

Aaron J. Cohen: So it's not that there have not been gains in life expectancy due to economic development, those gains have been substantial and important but could have been even greater absent the extreme pollution. In my talk tomorrow I will present some recent data and preliminary estimates from the Global Disease Burden, which illustrates some of these points.

Reporter: What are some of the challenges that China will face in the

future if air quality does not improve?

Aaron J. Cohen: Well, I think we already talked about some of them. I think it is clear that whatever the benefits of economic development that have been fueled by coal, pardon the pun, that kind of development cannot continue because at this point it is having a deleterious effect on peoples' health.

Reporter: Have you heard about how China's been moving a lot of its factories to the countryside? What do you think of that?

Aaron J. Cohen: I am not a policy expert, but the overall goal should be to reduce population exposure to health damaging air pollution. But air pollution travels. So even if factories are relocated outside of Beijing, into Hebei, for example, and their emissions are not reduced, then a certain amount of that pollution is going to come back and pollute the metropolitan area, so I think that unless those industries are cleaned up, that's not a long term and not even a short-term solution. Moving heavily polluted industries to other places is not a good long-term solution without cleaning them up at the same time.

Reporter: You also briefly talked about in the future, we should move towards cleaner development strategies.

Aaron J. Cohen: Right. And by the way, when I say we, I mean everybody. I think China's taking steps in that direction, obviously there have been efforts to cap the use of coal, and that's very welcome. But it's not just China. Clearly, in the United States, we have to do the same. We have to do it ourselves. It's a political struggle there, and it's a political struggle here as well.

Reporter: Do you think it's possible for a country to develop using cleaner technology with less of an impact on the environment?

Aaron J. Cohen: It depends on what you mean by develop. You mean, can the lives of people in the country be improved; can poverty be reduced? Yes, I think they can. I think it's a question of those policies and keeping that goal in mind. Again, this is a personal opinion of mine. I think there are examples of countries now that are moving very quickly, as quickly as possible, to renewable, but those are not countries as far as I know that are starting in the same place; they are countries of lower and middle income. But on the other hand, I find it hard to believe that if society sets a goal of clean development, as clean development as possible, that the state of technology now, both use of renewables and using the latest technology— if those are applied, that countries, like lower and middle income countries, don't have to go through the same period of extreme environmental pollution. I don't believe that there's not a way today, given all that we know, to do that, to develop in a cleaner way. People don't have to repeat past mistakes, like pollution; that's not necessarily the price of development. Again, these are not expert opinions, but I think there are enough examples that prove this can be done.

Reporter: We mentioned this briefly, but in the context specifically of China: what are some of the effects of air pollution exposure you've seen in China over the past few years?

Aaron J. Cohen: Air pollution increases the rate at which people die and shortens life expectancy. Many of the main diseases that kill people and disable people in China are diseases that are affected by air pollution: stroke, which is the leading cause of death in China, has been for a while, heart disease is next, but also lung cancer, chronic respiratory disease, chronic pulmonary disease, pneumonia in children and adults – all of those things contribute to this. So obviously you know, in regard to lung cancer, in particular the main cause of that is not outdoor air pollution, but it's smoking, which is also a major problem for China as well.

Using Social Media to Achieve Better Government- Public Communication and Serve the People

Reporter: WANG Zhenyu



DING Limin

Director of Shanghai Release Office under the General Office of the Shanghai Municipality Government. The Shanghai Release created by his team is one of the most influential new governmental media in the country. The micro-blogging fans are totally more than 11.6 million, and the Wechat fans are more than 1.1 million.

The greatest opportunity for the government brought by the emergence of social media is it provides the government the possibility to make breakthroughs over the traditional ways of information disclosure and dissemination. While the biggest challenge is: the government should have to directly face the people's appeals, and make timely and effectively response and communication.

Reporter: What do you think is the biggest opportunity and challenge faced by the government in the social media era?

Ding Limin: The greatest opportunity for the government brought by the emergence of the social media is it provides the government the possibility to make breakthroughs over the traditional ways of information disclosure and dissemination.

Previously, the government information disclosure is based on some of the traditional means, such as Government Gazette which is sold at news stands such as Dongfang Newsstand. But due to the publication cycle, it can't provide news in timely manner, and the public cannot keep in knowing the government issues. The second is through portal website for government release, but due to that it is generally a one-way dissemination, so it couldn't make real-time, effective interaction with Internet users. The third is through the media for release, but due to that every media has its own market position and might filter some information, so ultimately it may not help the government achieve a comprehensive, entirely and complete information disclosure. However, after emerging of new media such as micro-blogging and Wechat, things become different, and the government is able to directly dialogue and exchange views with the people, so to promote government information more effectively out-reaching and spread.

As for the challenge, my personal experience is: After emerging of the governmental new media, the government will have to more frequently and directly face people appeals, this, indeed, will require it to make timely response and effective communication, which would force the government to enhance efficiency. For example, now, if an unexpected thing breaks out in a place or a field, and if relevant counties or government departments release the news through micro-blogging or Wechat, then Internet users will directly communicate with the government, and the government should make response in a very short period of time. Currently, governmental new media has developed rapidly with large numbers. But, for a government to make effective exchange with netizens, the first thing it should do is to innovate new ways of communication and exchange.

Reporter: You once said, "To effectively guide public opinion in the services" is a purpose of Shanghai Release, then in your opinion, what is the position of the government's new media? And what are the characteristics of its services?

Ding Limin: Positioning of a government New Media is actually different from that of the common media. It is aimed to promote open government information, promote the work of the government agencies, rather than pursue of hot news and influence as the general media do.

The first feature of government new media is that its most important function is to publish authoritative government information. Around 60% information of Shanghai Release is governmental information which should go through an extremely rigorous process to ensure its accuracy and authority, so as to protect the government's credibility and ensure citizens' right to access information. Each year, Shanghai Release participates in important government affairs such as the "National People's Congress and the Chinese Political Consultative Conference, as well as local major events of Lujiazui Forum, Shanghai International Film Festival and Shanghai Book Fair, through microblogging and Wechat to deliver the news timely to the users

Second, it emphasizes to improve information services, particularly, improving intimacy and interaction with users. For this regards, firstly, it pays a special attention to the information related to the people's livelihood. Secondly, we take advantage of the micro-blogging platform's characteristics of highly interactivity. For the hot and difficult issues that face Shanghai urban development and management, we listen to public opinion and gather their wisdom, and after summary we report to the relevant government departments, as a reference for their governance policy. For example, as to the issue of "Black/illegal Cars" that the public concerns, we collected opinions and suggestions through the micro-blogging and Wechat, and feed it back to the transportation departments.

Third, for major emergencies, we timely release news to respond to social concerns. We will response to social concerns with authoritative source of information in the first place as soon as a major emergency occurs, to mitigate and eliminate the

breeding ground of rumors. In addition, we will classify and grade hot events through the government new media group. For example, for some of local emergencies, we will contact the new media team of relevant local government or agencies, to make jointly response.

Fourth, make full use of Wechat functional development, to innovate services for convenience of the people. Thanks to more rights that Wechat opens to its user accounts, as well as Shanghai government's well-placed information infrastructure, we have moved 13 public inquiry services to the Wechat of Shanghai Release. Citizens can easily enquire the bus timetable, balance of Public Housing Accumulation Fund account, real-time traffic information and other livelihood information, just by fingertip sliding on the Wechat. You can also make an online appointment for dealing with passport, marriage registration and other public services.

Reporter: Currently in Shanghai Release, what issues are people mostly concerned about? What are your opinions about this?

Ding Limin: From our operational practice, we see education, health care and transportation are areas that the public are most concerned about. The most concerned sector is the integration of 13 inquiry functions of the "Town Hall" services. Currently, the Page Views (PV) has reached 43 million. We can see only the issue of the real-time bus queries alone, it has exceeded 10 million PVs in the last two months. It can be seen, the information that is closely related to the public life is the information they need most; it can bring convenience to them and is what they like most.

Reporter: As a government new media, how can you and your team identify users' demanding, so as to provide a corresponding service?

Ding Limin: First of all, among our users, those under 30 is accounted for over

70%, and member of the Shanghai Release team are young, generally born in 1980's or 90's, and are ordinary citizens living in the city sharing similarity with the public users. Therefore, before each release of information, we will make anticipations by presuming that we were the public users with the general public's point of view. We will ask ourselves: whether the public has demands for such information, whether they are interested in the information? And whether such expression of information can be accepted by the users? If we assess that the content is concerned or interested by our users, then we will no doubt publish and spread the information through various channels and forms.

Secondly, we will identify the needs of users based on the feedback and research data. For example, for the inquiry services we promoted last October, we don't pursue its all-inclusiveness, but instead focus on citizen needs of high-frequency public services, and in consideration of the IT development of relevant agencies or Bureaus of the government, we move their information correspondingly with our technical power and rework it, and eventually move it to the Wechat platform. It should be said, with gradually increasing in query service functions, the cluster effect has also become increasingly eminent. Now, there are many government departments coming to contact us, hoping to move to the platform some of their high-frequency services that the public has high demands.

Reporter: In the new media era, what new requirements do you think are raised to civil servants?

Ding Limin: For the team of Shanghai Release, first of all, the basic requirement is to get familiar with the new media, and have the ability to skillfully use the new media. If you know nothing about the new media, how could you use new media to serve the people?

Second, they should pay attention to the change of trends. While Micro-blogging was still popular in 2013, we launched the governmental Wechat. Practice has

proved that we had captured the trends at right time, and have achieved smooth operation and promotion of the government Wechat. Just think, if we wait until now to launch government Wechat, it is highly possible that we had lost the best time to launch and we could not reach the effect we have now. This suggests that in the new media age, we need to keep a close eye on social media and have certain sensitivity, and to the degree as far as possible, do forward-looking observations and judgments of the trends.

Third, pay attention to the changes of ways of expression and language. In Government system the working language is mainly standardized. However, if we copy such language to the network, users might think it alien, and it is difficult to achieve communication effects. So, it requires the team of government new media to be familiar with the Internet language, and can use the language and the expression ways that the netizens are familiar with, to complete release and interpretation of government information, and realize better communication between the public and the government.

Environmental Issues: Interaction Between Scientists, Policy-makers And Citizens

Reporter: HU Jinghan



Shukmei Ho

Shukmei Ho is an internationally renowned scholar in environmental health, cancers, and related fields. She is currently Chair of the Department of Environmental Health, Director of Center for the NIH-funded Environmental Genetics, Associate Dean for Basic Research of the University of Cincinnati Medical College, and Director of the Cincinnati Cancer Center. Dr. Ho has been editor/reviewer of numerous scientific journals.

Politics, industries and policy makers need to trust their scientific colleagues when making decision that can affect millions around the world.

Reporter: Cincinnati experimentally legislated for the protection of air quality in 1881. And America issued Air Pollution Control Act in 1955. And later Parliament passed Clean Air Act. What experience can China learn from America's law-making practice?

Shukmei Ho: Cincinnati still has air pollution problems, although not on par with what Asia is enduring now. Law making in the US involves both bottom-up and top-down approaches, which can be an experience to share with China and other countries affected by air pollution.

While the top-down route tends to be coming from policy makers in the government and industries, it could also be coming from bottom up at the same time. Citizens and scientists can raise public awareness and elect new officials. They can make sure that officials listen and change, or they will not elect them. So when you want to make changes, you need both approaches. This is not exactly the case in China, but the America experience shows that bottom-up can be a very powerful way to influence the long-term changes.

For management of air pollution, systemic team efforts are needed, including environmental engineering, energy, transportation, public health, and policy and law. Since air pollution can spread across administrative border, national and even international law enforcement would be more effective than just a city's effort.

Reporter: Now haze is under spotlight of Chinese society. We see that many big cities also went through air pollution, like Los Angeles photo chemical smog episode in 1943, London smog incidents in 1952. Do you agree that environmental deterioration is inevitable during social development? How do you see the interaction between economic development and ecological environment?

Shukmei Ho: Rapid industrialization is often associated with increased pollution emission, which occurs in many countries. However, the extent of pollution should be minimized given available technology on pollution control.

Every coin has two sides. Haze, or smog as often called in the US, can be a prompt for clean energy and advanced air filtering technology use. Our environment is fragile in many senses, and a balance can be achieved with planning and enforcement.

Reporter : In 2006 you published a high influential paper about the

correlation between Bisphenol A and Prostate Carcinogenesis. How do you see the transformation from scientific research to practical policy?

Shukmei Ho: Political and industry policy makers need to trust their scientific colleagues when making decision that can affect millions around the world.

When we first reported about the impact of Bisphenol A in 2006, the immediate thing actually happening was pretty good: Phthalate was banned although Bisphenol A was not. The Toxic Toy Bill was the first thing passed in California. That means no toys contain things like Phthalates is allowed for children under 3 years old. The government began to understand the long-term effect of such substance. Now, there are 13 states, though not the federal government, already have their own measures against Bisphenol A. The U.S. Environmental Protection Agency (EPA) has investigated Bisphenol A two times but still found statistics were not strong enough. They have maintained that there is no proven health effect. The U.S. Food and Drug Administration (FDA) is the same. It is still a big struggle. There are thousands of papers confirming the adverse health effect. European countries and Canada have already banned this chemical, despite it generates huge profit for the industry. FDA also say the evidence is not strong enough.

Reporter: What can scientists do under this kind of situation?

Shukmei Ho: I think scientists should team up with like-minded citizens. First, publication and media attention are the first steps. Public awareness and precaution is key to the success of pollution control. From the perspective of a common citizen, everyone is happy with cleaner air and blue sky. The appreciation of higher air quality is one of the driving forces of environmental awareness and environmental health progresses. Citizens can become more powerful at a certain level. If people refuse to buy a certain products, then very soon customer power will overcome the short-term interest.

Right now there is a group of scientists who are looking into label scanning software. People can scan a label to find out what chemicals a product contains. The consumers choose on their own. One such APP is called “Think dirty buy clean”. After you scan a bar code, it will give you a rating from 1 to 10. We can mobilize people to do that.

Reporter: APP, as you just mentioned, need big data to support its function. Big data is one of the hot words today in many fields. What’s your opinion of its value in environmental health?

Shukmei Ho: Big data help a lot. With all this APPs, you can trace people, and you can see how one’s health is associated with the ambient exposure. Application of big data in epigenetics or environmental health is a very hot area of research. Being able to analyze and process big data associated with health and clinical records in hundreds and thousands of hospitals for millions of people can create transformative ideals and new discoveries for epigenetic research and environmental health and medicine

Reporter: What’s your recommendation to Chinese environmental scientists with regards to transformation of bench research to practice?

Shukmei Ho: I think environmental scientists should focus more on applicable fields. For example, developing technologies that can measure exposure to a mixture of exposures with high sensitivity/specificity, and big data linking to clinical records and genomics and epigenomics in human populations, and devise measures to clean up the environment, process waste and produce green chemicals.

What’s more, I think environmental medicine will be a very important field for China in the coming decades. As the environment can cause long-lasting effects on human health and disease development, and China changes its environmental policies, disease patterns will change accordingly.

Catalytic & Supportive: The U.S. Role in Asia-Pacific Region

Reporter: JIN Yiming



Frank Jannuzi

Frank Jannuzi joined the Maureen and Mike Mansfield Foundation as President and Chief Executive Officer in April 2014. He previously served as Deputy Executive Director (Advocacy, Policy and Research) at Amnesty International, USA. Mr. Jannuzi is an international affairs policy and political expert who served Chairman John Kerry as Policy Director for East Asian and Pacific Affairs for the Democratic staff of the United States Senate Committee on Foreign Relations.

For the last seventy years, the United States has played a leadership role in Asia security through its hub and spokes security architecture. In the future, the U.S. role should be described as more catalytic to encourage the formation of effective, multilateral arrangements in Asia, and to promote dialogue and resolution of great power tensions, which is difficult for Asia to solve by itself.

Reporter: As you've mentioned before, *the United States is not an Asian country, but it is a Pacific power.* How would you define the United States' role in the Asia-Pacific region, a leader, a coordinator, or a defender? To what extent has the United States engaged in Asia-Pacific security issues currently?

Frank Jannuzi: For much of the last seventy years, the United States has played a leadership role in Asia security through its hub and spokes security architecture, but in the future, the U.S. role should be more described as catalytic, that is, the United States should encourage the formation of effective, multilateral arrangements in Asia to help address problems that are either transnational, like terrorism, piracy, epidemic and flu, or problems involving great power rivalries, which made it difficult for Asia to solve them by itself. The U.S. could play a supporting, catalytic role to help promote dialogue and resolution of great power tensions. This is my hope for the future.

Reporter: With regard to Japan, the new bilateral defense guideline has allowed Japan to take a much more assertive role in U.S.-led military operations in the Asian region and beyond. How would you assess its impact on other Asia-Pacific countries, especially for China? Will it evolve into a menace to its neighboring countries?

Frank Jannuzi: I believe the U.S.-Japan alliance poses no threat to any other country, and certainly not a menace to its neighboring countries. The changes in U.S.-Japan alliance mostly involve new Japanese obligations to assist the United States in certain scenarios. For instance, if North Korea launched a missile towards United States, in the past, Japan had neither ability nor authority to shoot down that missile, for Japan is not under direct attack. This is a ridiculous situation. If the U.S. and Japan are allies, then Japan should have the authority to use its military power to shoot down that missile, but until recently, it had no such authorities. Thus the changes in the U.S.-Japan alliance involve new commitments by Japan to have a reciprocal, and a more equal set of obligations to the United States. This in no way would make Japan a more aggressive nation, for the United States has always been committed to the defense of Japan, and that is not changed.

Reporter: How is that related with military expenditure?

Frank Jannuzi: The United States continues to spend an enormous amount on its military defense, but it's also fair to say that the U.S. wants its security partners to shoulder their fair share of military expenditures for common security purposes, and asks Japan to do more in the area of both regional and global security. But to keep that in perspective, China has been growing its defense budget about 15-17% every year for the last ten years, and Japan's defense budget has been shrinking for the last twenty years. Japan spends only about 1% of GDP on defense whereas China spends about 6%. Under the new defense guidelines, Japan will have a very tiny increase in its defense spending, and it simply will reverse a steady decline in their defense spending of the previous twenty years. So this should not be interpreted as a resurgence of Japanese militarism. Every time I hear my friends in Asia talk about Japanese militarism, I would remind them that Japan has no missiles, no aircraft carriers, no strategic bombers, no nuclear weapons. Clearly Japan poses no threat to a country like China.

Reporter: As for Korean Peninsula, I noticed that you've evaluated the possibility *whether United States can cause the collapse of North Korea* in your 1999's paper. Over the past two decades, how has the United State changed its position on the denuclearization on the Korean Peninsula?

Frank Jannuzi: Of course the status of war exists between United States and North Korea. We have an armistice disagreement, but we have no peace for seventy years, and if you read anything that North Korea publishes, you know they describe us always as an enemy. They talk about our hostile policy, they ridicule our leadership, and they denigrate our role in the world. They use very harsh words to describe us, but we don't usually use harsh words to describe North Korea.

To call them an enemy power is simply an accurate description of the status of war. We are still at war. This is a war that needs to be ended permanently, not just with an armistice disagreement, but also with a peace treaty. The United States doesn't have diplomatic relations with D.P.R.K., but we recognize them, we deal with them,

we accept them as a member state of United Nations. And the United States does not want to see the abolition of the D.P.R.K. through forceful means, the United States does wish eventually to have peaceful unification of the Korean Peninsula, and I would say this is also the wish of Korean people in North Korea and South Korea. By supporting the peaceful unification of Korea, the United States is taking the same position as the Korean people, north and south.

Now, North Korea should not be pursuing nuclear weapons. It is under United Nations multilateral sanctions, supported by China, for its behavior including its pursuit of nuclear weapons, its launch of long-range missiles, either action that is provocative as a threat to North Korea's neighbors, or their violation of international law and UN Security Council resolutions. I wish people would focus on that and encourage North Korea to respect UN Security Council resolutions that demand they stop their missile testing and nuclear testing. If they do that, the United States would be very happy to sit down with them, and try to negotiate both an end of the war, and normalization of diplomatic relations.

Reporter: In the past few years, China has been constantly involved in a series of disputes over South China Sea Islands and Diaoyu Islands (Senkaku Islands). With the rise of China as an emerging power, do you think China should use its strength to defend itself in the aspect of perimeter security?

Frank Jannuzi: First I have an enormous respect for what China has accomplished in the era of *The Reform and Open Policy*, and this has been of an enormous value, not just to the Chinese people, but also to the world. By alleviating poverty and contributing meaningfully to global economic development, China has been a very powerful force for good in the world over the last 35 years, and I hope that the next 35 years, China will continue to make investments in global economic integration and invest heavily in Latin America, Africa, and Asia. I support AIIB. There are enormous infrastructure problems in Asia, and I think AIIB can help especially if it follows good international practices in terms of transparency and compatibility,

so I welcome it.

I think the main thing China can do to alleviate concerns that do exist about how China will use its new power, is simply to try to find common ground with neighbors and the United States, and to build on that common ground. For instance, we are working together on climate change, terrorism and the Iranian nuclear challenge, and we can continue to work together there. Instead of focusing just on words, like “*China’s Peaceful Rise*”, the words have to be translated to reality. China is starting to do that, the new Silk Road Initiative and rail linkage is one example of trying to make this concept into reality, but we still need to do more. And I think that if we can build that common ground, it will reduce the suspicion that exists in Washington and elsewhere about China’s intentions.

There are people who are worried about how China will use its power, China has grown so big and so quickly, people are not confident that we can rely on China. The growth of the military expenditure is not very transparent, and people are uncertain about its purpose. The main way to reduce concern is simply through China’s actions, but right now the actions at South China Sea have made a lot of people in Washington concerned that China is attempting to develop the capability to enforce its territorial claim by military means.

Reporter: Would that possibly evolve into a conflict between U.S. and China at the South China Sea?

Frank Jannuzi: I think it’s very unlikely to lead to a direct conflict between the U.S. and China. The U.S. does not have a territorial claim in the South China Sea, although the U.S. ally Philippines does have a territorial claim in part of the South China Sea. I rely on China to resolve these kinds of disputes peacefully through dialogue, and China’s international reputation would be severely damaged if China use force to resolve these territorial disputes, as the territorial dispute is not really what matters here, it is more the symbolic implication about China’s responsible

membership of the international community. What Russia has done in Ukraine is deeply irresponsible, which has been condemned by many nations, including by China. So I hope we can rely on China to behave as a responsible international power, and resolve disputes peacefully through non-coercive methods.

Reporter: What about China-Japan disputes over Diaoyu Islands?

Frank Jannuzi: The same way. Japan always considers it to be Japanese territory, but those rocks have no strategic significance, it's only a question of honor. Nations should not go to war over such things like honor, although they do. The Greek historian *Thucydides* said that nations go to war for three reasons: honor, fear and interest. As for the case of Diaoyu Islands, the interest should lead to peace, since the islands have no strategic values. But the honor issue is very powerful, and should be resolved diplomatically between Beijing and Tokyo. If they cannot resolve it, they just have to be rational and set it aside. There are not resources under the seabed, and even if there were, the Diaoyu Islands do not command 200-mile territorial sea baselines under the *UN Convention on the Law of the Sea*. Even if China or Japan controls them, it's only a question of honor, and there is no interest involved here.

However, at South China Sea, there are interests. South China Sea is a much bigger area, the territorial implications are bigger, and the undersea resources are even greater, so there are more interests at stake. But Diaoyu Islands is only about honor, both of the two nations should be responsible, put their interest first, and put honor off the table.

Reporter: In your article, a prediction was that *the U.S.-China relationship will likely define the 21st century*. Then, in the age of Xi-Obama, what is your interpretation on the “new type of great power relationship” between the United States and China? How will it exert leverage on those Asian-Pacific affairs?

Frank Jannuzi: There are some things about the new model of great power relations that Americans and Obama definitely agree with, and the Americans believe that a rising China does not represent a zero-sum game for the United States, which involves a decline in the U.S. power. The U.S. has welcomed a rising China, and this would be good for the whole world. It is true that in the 19th century, there were a lot of great power rivalries, and a rising Germany was viewed by England as a threat. But today, a rising China does not have to be a threat, though there are some parts of the new model that United States doesn't really understand. *Xi Jinping* talks about "respecting full interests of each other", and this sounds like the U.S. and China should accept spheres of influence like the *Monroe style*, and that is not a concept the U.S. welcomes. I'm not sure what really *Xi Jinping* means, but I think there is still some lack of clarity in the United States about what China is exactly looking for. The United States does not want to suggest that the U.S. and China are the only two great powers, and I believe for *Xi Jinping* himself, he would probably support a multipolar world, and that's more consistent with China's behavior in the world. But, when he talked about the new model of great power relations, it seemed that it applied only to the U.S. and China, which causes a little confusion in Washington.

Reporter: How would the U.S. Presidential Election of 2016 influence Sino-U.S. relations in the future?

Frank Jannuzi: I guess one of the bad things about U.S.-China relations is that during the U.S. presidential elections, both American political parties have a very bad habit of blaming China for different problems. It is very common: Bill Clinton was very critical of the China policy of George Bush Senior, but after he was elected President, he changed his view and became supportive of good U.S.-China relations. Then 8 years later, George Bush Junior was very critical of Democratic Party for being too soft on China, but changed his position once he was elected. And in 2008, even President Obama campaigning against the Republicans, criticized them for not standing up for American economic interest with China, allowing China to have

a huge trade surplus, manipulate its currency and take all the American jobs. But when he became President, he largely supported strategic and economic dialogue engaging China.

Thus every four or eight years, it's very normal that unfortunately, the American politicians like to blame China for some problems, and I'm sure there would be some criticism of China in 2016. The Republicans would say that Obama has allowed China to expand its influence at the expense of United States, they would complain about the South China Sea that Obama was too weak, they would blame Hillary for not standing up enough for human rights in China, and they would accuse Hillary of not being tough enough against China. But if the Republicans win in 2016, they also will do business with China. They will treat China with respect, since this is the reality and we have to work together.

I think the next president will not make any dramatic change in U.S. policy toward China, but I do think that no matter who is elected, there would be a stronger request from the United States for China to respect plural laws, and to solve disputes through negotiation. As China becomes more and more economically powerful, the U.S. would expect China to be more and more respectful of international rules of trade, and there is a lot of room for improvement in areas like intellectual property protection, cyber security, and labor rights of the Chinese people. No matter who is president, there will be a lot of attention to try to encourage China to do a better job in those areas.

Reporter: Accordingly, in the next few years, what will be the keynote of U.S. policy in the Asia-Pacific region?

Frank Jannuzi: The basic U.S. policy has three components. 1) The first component is strengthening our traditional alliance relationships. This will be true whether it's democratic or republican president, they will continue to invest in our traditional allies: Japan, Korea, and Australia. 2) The second component is

supporting for regionalism and multilateralism. This includes TPP, ASEAN regional forum and our support for APEC, trying to strengthen these multilateral organizations to help Asia develop and integrate. 3) The third component is engagement with China, which some people say has two elements: positive outreach and hijack for insurance policy. No matter who is the president, our China policy will have both building in common interest, but also this kind of insurance policy hijack behavior in case China behaves against American interest. I think the next president will look at that balance of building common interest and insurance policy hijack, probably even more hijack than Obama, democratic or republican. There is a little more uncertainty about China now than in the past.

Reporter: Your reply stressed “American’s interest” that China might behave against, in detail, what is the interest of United States?

Frank Jannuzi: 1) The U.S. interest in Asia-Pacific is promotion of an economic integration and growth, which is, reducing tariff barriers, supporting foreign direct investments, and supporting the growth of trade. 2) In the security area, the U.S. interest is in supporting peace, specifically avoiding any great power conflict on the Korean Peninsula, and deterring any sort of military expansionism. I think it is also U.S. interest in supporting good governance, especially in countries like Myanmar where they are emerging from 30 years’ civil war, we want to support the growth and stabilization there; or in places like Vietnam, where we are trying to encourage them to have their own “*Reform and Open Policy*”. 3) Meanwhile, there is interest in working with China to reduce carbon emissions and prevent global warming. China can be a great partner in that effort, including Japan, we are three of the largest carbon emitters, and therefore we have a responsibility to work hard on this issue. 4) And also, we have specific interest in preventing nuclear proliferation, which means we need to make progress on the North Korea nuclear problem, otherwise the Asia could be very destabilizing as we might see other nations in the region, like Japan, South Korea, Indonesia and (the district of) Taiwan develop their own nuclear weapons.

Data Opening Should Be Run In Tandem with Improvement of Legal System

Reporter: XU Jiawei



JIANG Yuanfu

Secretary-General of the Committee of Experts on E-government, Director of the E-government Department, at China National School of Administration. While engaging in E-government applications and theoretical studies, he has hosted and participated in a number of national key projects of Soft Science, projects of the National Natural Science Foundation of China, and China-US joint researching projects. He is also one of the main organizers organizing China's E-government Forums.

At this stage, it should be noted that with the further steps of data opening, it should be accompanied with improvement of the legal system. What is needed to emphasize is that it should not only pay attention to specific ways of data opening, but also should attach importance to construction of the legal system.

Reporter: In recent years, the tide of big data is sweeping the globe. Here in China, Chinese government has also adapted to the trend to tap government management into the big data management and technologies. How do you see the development in terms of government use of big data to help improve governance in recent years?

Jiang Yuanfu: Modernization of governance is a major issue this and next Chinese governments are facing. Actually, it is also a great opportunity. Modern government is incorporated with two keywords: "Informatization" and "Ruling by Law". I think these are two most important features. Using data technology to help improve governance is a focus of government management informatization. But in China, it still has a long way to go. Whether be it for the current hot issues (mainly temporary problems), or for long-term, difficult and unresolved issues (mostly rooted problems), using data to boost governance is of great significance, that is to say, its role is indispensable to solve both the temporary problems and rooted problems.

Reporter: Since 2004, Shanghai municipal government has implemented the government information disclosure system, turning it becoming the nation's first provincial government to disclose government data to public. What do you think of this?

Jiang Yuanfu: Currently, data opening is a trend in globalization, and it is very important vehicle for Chinese government to create "sunshine government" or, in other words, "transparent government." In today's society, a lot of important first-hand data, such as statistical data, demographic data, legal person data, and traffic data, among others, are held and controlled by government agencies and state-owned enterprises, such as telecommunication corporations, railway corporations, and banks. To disclose publically these important first-hand data, it is not only the need to create "sunshine government" or "transparent government", but is also the need to upgrade public services, the need to upgrade the state's industrial restructuring and transformation, and the need to provide the basic materials for innovations of the whole society. After these data go public, many social organizations, such as private enterprises, can use these data to achieve a large number of value-added services. On the one hand, these value-added services will continuously provide a driving force for industrial restructuring and upgrading; on the other hand, for the issues that the government wanted to get it done but always failed to, such as the issues of medical services and people's livelihood, the

industrial upgrading may also help the government do a better job in these areas.

Shanghai, as a central city of China that always hopes to be a vanguard in the process of internationalization, it is a good choice for it to be the first to implement the open government data system. I have done some of Shanghai's big data researches, and also visited the relevant government agencies. I found they did well in this regard. Of course, at the same time, there are a lot of more things that the government should take to do in this regard. Shanghai also faces difficulties, such as the difficulties in inter-agency collaboration. For better management of a city like Shanghai, it is a long way to go, a long way from the early stage of data opening, to the stage of doing well. Shanghai's pioneering role in establishing the open data system in China I think is very significant. It is not only a major event in Shanghai, and also has an implication to the whole country.

Reporter: You mentioned that Shanghai still facing some difficulties/challenges such as inter-agency collaboration. Recently, it is also reported that due to the lack of motivation, and invisible barriers placed among government departments, it is in serious insufficiency in free data flow and data disclosure. What is the key in your opinion to break the barrier and establish the “governmental big data”?

Jiang Yuanfu: For this issue, personally my feeling is that most of the government's departments are open in their attitude towards data opening. However, it cannot do at will. Once a government decided to open data available for public, it must make clear who should take the responsibilities and rights of the data, through what procedures can the data be disclosed, and in what forms the financial data could be opened to public, in addition, the sensitive information or information involving privacy should be filtrated before disclosure. Currently, there are a lot of items in our legal system that is not clear. So, even if government departments, as data holder, want to open the data available to public, it is difficult to achieve as conditions are not ready. If we push the data to be available to the public when

conditions are not ready, it could cause repercussions in the communities and societies and result in follow-up issues and problems. Without clearly defined responsibilities and rights, it is difficult to make clear who should assume the responsibilities and liabilities. For example, data, no matter who owns and holds, would inevitably hold some flaws or problems. If it is not disclosed, no one knows the flaws and problems; but once disclosed, the flaws are exposed, and it would bring negative impact to the agency who disclosed the data to public.

As for data collaboration between government departments, it is not an issue of disclosure but an issue of share. This is first thing of all that needs to do. If the data cannot be shared between different agencies of a government, let alone to open it to the public. Now, the problem we face is not about willingness to open or share, but about responsibilities, rights, procedures, rules, etc. that are not clear enough in laws. On the other hand, if you want to disclose data to public after the legal system is well placed, it is also unrealistic. At this stage, it should be noted that with the further steps of data opening, it should be accompanied with improvement of the legal system. What is needed to emphasize is that it should not only pay attention to specific ways of data opening, but also should attach importance to construction of the legal system.

Reporter: You just mentioned about the privacy issues, how can the government take the lead in data opening while ensuring privacy, confidentiality and national security, so as to reduce the difficulty and cost of the public to access and use government data resources?

Jiang Yuanfu: For privacy protection, China currently is still in an early stage. Previously, seldom attentions were paid to in this regard. With the development of the Internet and massive accumulation of data, it now becomes a problem that seems increasingly critical. This problem should be seen from three perspectives: management, law, and technology. In terms of management, we should pay more and more attentions to this issue to form a normal system. In terms of law issue and

privacy protection, we ultimately need to rely on legislative solutions, especially judging from the long run. In terms of technology, it requires for an institutional environment where it encourages technological advancements, and requires putting in place of the technologies for use. For example, if it requires desensitization of some part of the information before disclosure in accordance with the relevant management requirements or laws, it would require technology to be deployed in place as soon as possible. These are the three basic points, and only when these three having been put in place, then data opening that is based on data privacy protection can really help create a data industry.

Reporter: In the "E-Government Survey 2014 - United Nations", it shows that China's E-government Development Index (EDGI) ranked No. 70, which is the best rank for China in the last five years. In your opinion, how do you evaluate the E-government development and progress made in China in recent years?

Jiang Yuanfu: The UN's EDGI index has developed for years. At the turn of the century, China's EDGI rose fast, and then declined in a period lasting about five or six years, and now begins to rise slowly. In fact, this objectively reflects the situation of Chinese E-government development. The rapid rise of the EDGI in early stage is because of China's rapid economic development, and rapid development of China's IT infrastructure and facilities as compared to other developing countries. That number of the EDGI indicator mainly reflects this development. The decline during the middle 5-6 years is because that although the infrastructure has developed rapidly, the United Nations E-government indicator began to focus on the use of E-government and provision of E-government services which include among others, collaboration across agencies and services for citizens and corporate. For these regards, China did not keep pace with in a few years, and made low and little progress. But after the five or six years of adjustment, we can also feel that this government pays increasing attention to the issue and the collaboration between governmental departments, and more emphasis on building

IT system to serve for the people's livelihood. The results made in these 2 years are remarkable, on this basis, China's position on the EDGI gradually improved. Overall, I think the UN's EDGI ranking is credible and reliable, and the actual situation of China's E-government development is generally fit to the EDGI index and the rank. From this process, we can see that China has different focuses in different stages.

Reporter: It has always been a saying "three-tenths depending on technology, seven-tenths on management" for E-government. In your opinion, what requirements do the cloud computing-based IT innovation and development have on the management of the E-government?

Jiang Yuanfu: Whether be it cloud computing or big data applications, it can be said that much would be the same in what governments should do in terms of E-government. The question now is how to achieve intensification effect in E-government construction, and how to achieve intensive operation with less cost, so that it can have a greater marginal effect. In regards to the technologies such as cloud computing technology, we can say it is still far from that it puts requirements on the overall management of E-government. But it should be said that the E-government should adapt to the development of technologies. Most importantly, the cloud computing itself should also achieve the intensification in construction and operation. To this point, the management of E-government, in particular in regards to the management of government IT projects, should make adjustments and need new ideas.

Reporter: Brian Ford of Yale University once said: "In the worst case, the cloud computing may be seriously collapsed, thereby threatening to any businesses depending on it." How do you see this potentially risk in cloud computing that could impact E-government platform?

Jiang Yuanfu: This is a technical issue, but more importantly, it is also a

management issue. To talk a bit further, this is a planning issue. With further development of E-government services, the demands for E-government infrastructure for the E-government management and service are constantly evolving. If the infrastructure goes wrong, the whole system will be impacted. The current generation of E-government infrastructure is very different to that of a few decades ago and a hundred years ago, the current one is the one that is constructed collectively, and centralized in operation and maintenance, with distributed applications. While the impacts of the previous ones are mostly local, the current one could impact entirely or globally. In the current period, it needs macro security considerations for the E-government system, such as backup and offsite backup for data and services, and should have relevant emergency plans. For example, when the 911 incident broke out, the physical collapse of the system happened instantaneously. Some of the enterprises had off-site data backup, and its recovery can be done in a short time, but some of the companies without such a backup was largely impacted to its business. In modern society in which E-government plays as a basic government facility, the government needs to pay great attention to this risk. And now, the government indeed attaches great importance to this. What needs to do is to further optimize of the program, such as off-site backup. Many governments are just conducting their backup plans. But now, it is important to make an appropriate concentration of the offsite backups. For a province, if different cities and different functional departments go to different places to build offsite backup center, it is neither unrealistic nor economical. The way more feasible is by appropriate concentration to realize the off-site backup. Overall, this issue needs a macro consideration, and overall planning.

Reporter: For private enterprises, Alibaba for example, had announced in March this year the launch of China's first big data product - the Ali Economic Cloud Computing--that is open to governments. What do you think of it?

Jiang Yuanfu: The government usually holds a lot of data. But today's society is in pluralistic era, many companies, especially large Internet companies, have

considerable data advantage. Government and businesses, to some extent, have a need to achieve a two-way opening of direct-sequencing data. Ali's practice is doing well. Large Internet companies need to work with government in terms of data disclosure. Generally speaking, Ali has got an upper hand. This is very important for the government governance. While for Ali, Baidu and other major Internet companies, this is also the room and opportunity for strategic growth of their businesses.

Chinese City Diplomacy Should Integrate Resources to Serve the Country's Overall Interests

Reporter: WANG Yanqi



Li Xinyu

Director of the Center of International Sister City Exchange of the Chinese People's Association for Friendship with Foreign Countries (CPAFFC) which is committed to promoting economic and cultural communications and exchanges among international friendship cities, and to promoting researches on city diplomacy strategy and relevant trainings.

People-to-people diplomacy is very important. It is an important complement to the official diplomacy. In many cases, it is undergone in the form of friendly exchanges between cities. City diplomacy should maintain a kind of flexibility and put together a variety of resources to serve the overall interests of the country.

Reporter: On the sub-forum, you had described in detail the interaction between China and sister cities of other countries around the world. In making and developing friendly cities, what specific forms of interaction between publics of different countries /regions exist?

Li Xinyu: Public interaction can be achieved through a variety of projects of economic cooperation and cultural exchange. For example, an exchange of folk art groups, a photo show such as the thematic photo exhibition called “Your City in

My Eyes", or a joint project between Universities by which people can make reciprocal exchanges and visits so to achieve interactions, for instance, the Federation of Universities built between Shandong Province of China and Gyeonggi of S. Korea that has helped achieve co-sharing of higher education resources and by which, students can participate in exchange programs in more than a dozen universities/colleges, or participate in summer camps, etc., and also, many Chinese students may go to South Korea universities to learn Korean, and vice versa, South Korean students may come here to learn Chinese, thus to achieve various forms of communication and exchanges.

Reporter: We noticed that the cities that get involved in developing foreign friendly sister cities are mostly distributed in the coastal southeast of China. In your views, what measures can CPAFFC take to promote China's western regions to engage in the cause?

Li Xinyu: The difference in the degree to develop friendly cities between Eastern and Western regions of the country generally reflects the overall development of China among different regions. In the past, the coastal provinces are more open and free in terms of policy than the west, so the coastal cities are able to take the lead to go out, going abroad to make international exchanges. But today, the strategy of China's Initiative of the One Belt and One Road, in fact, is conducive to promoting the development of friendly city relations between western China cities and cities of countries along the routes. In the past, China's cities were paired with cities of other countries for matchmaking, and during which, we learned a lot of technologies and experiences from them for our economic development. But today, we want to cooperate with countries lying west of China along the routes. And we will play more a role in supporting their economic development than a role to learn from them. Taking the exchange between Shaanxi and Donggan ethnic of Kazakhstan as an example, we found the story is very interesting. Two thousand years ago, apple tree cultivation could not be seen in Shaanxi, a region quite near to the central Asia, but in contrast it was very popular and mature in Kazakhstan. So

no doubt, Shaanxi today's apple trees and planting technology were actually introduced from Kazakhstan long time ago in history. But today, because of climate and others reasons, Kazakhstan apple industry is on the way to decline, while Shaanxi's grows healthily and produces very good quality apples. This is the reason and motive behind that the two sides begin joining hands to develop apple orchards in Kazakhstan. Through this joint effort, now Shaanxi has brought Apple trees, techniques and experiences back to the apple homeland, and the seemingly simple exchange has created direct and great benefit, welfare and fortune for many people who plant apple tree. Actually, there are a lot of stories of promoting foreign exchanges and economic cooperation across the Eurasia regions; this is just one of the countless cases.

Reporter: In the international politics and diplomacy, countries often fall into tensions. For China, what roles of city exchange and diplomacy would play in easing tensions between the countries?

Li Xinyu: I think city diplomacy is an embodiment of the characteristics of people-to-people diplomacy compared to the official diplomacy. It is also a window to showcase wisdom of the older generation of Chinese leaders. Chinese People's Association for Friendship with Foreign Countries (CPAFFC) was founded in the 1950's, and began promoting people-to-people diplomacy from then on. When the official diplomacy fell into tensions, usually, people-to-people diplomacy would still go on the track, and will never be interrupted. Actually they are interdependent relations with each other. People-to-people diplomacy is very important, it is an important complement to official diplomacy. In many cases, it is undergone in the form of friendly exchanges between cities. For example, when official diplomatic tensions arose between China and Japan, the people-to-people exchanges had never been cut off. This, indeed, plays a role to constantly enhance mutual understanding between the two peoples.

Reporter: In the process to promote Chinese city diplomacy and exchanges,

what resources in what areas can CPAFFC integrate them together, so as to collaboratively promote development of the city diplomacy?

Li Xinyu: First, CPAFFC has many branches in every province and municipality in the country, which are known as XX provincial CPAFFC or XX municipal CPAFFC. Second, we have cooperation with various domestic agencies and institutions. We accept guidance from our Foreign Ministry, but also collected a lot of nongovernmental resources. Overall, our outreaches are wide and far, and we have large room for cooperation. This characteristic is inherent in the people-to-people diplomacy. City diplomacy should maintain a kind of flexibility and put together a variety of resources to serve the overall interests of the country.

Reporter: In China's city diplomacy, what is the role that Shanghai plays? And what features has in Shanghai's city diplomacy?

Li Xinyu: As an international metropolis, Shanghai's location, economy and culture enjoy a strong advantage and extreme competitiveness in China and the world. In developing international sister cities, it brings together a variety of domestic and international resources, and has made remarkable expansion of sister cities. It has played a very good role model to carry out non-governmental diplomacy. For example, earlier this year, 68 members of the delegation of the Jewish Federations of North America (JFNA), who are very important figures in the North American Jewish communities, visited China. This is their first official visit to China, and it is quite rare for such visit we can see. During which, CPAFFC Shanghai has done very good job in reception that made the guests quite appreciated. Such achievement reflects unique advantages and charm of Shanghai in carrying out city diplomacy and international cooperative projects, whether be it large and small.

Reporter: You just mentioned the North American Jewish delegation, and we know that the Jewish people are very good at public diplomacy and public

relations. In your views, what can we learn from them in terms of our foreign relations development?

Li Xinyu: The Jewish people is very wise, and very united. When dealing with them, we discovered they are always dedicated to the jobs they do. For example, if they organize or participate in an activity, they will do it in detail, they would specify when, where, how of the processes. Actually, they are quite detail-oriented men. So in developing foreign relations, I think the Jewish perseverance and wisdom are something that is complementary to us. In order to get a thing done, no matter how difficult it will be, we should move it on and on. I think this is what should learn from in the cause we do public diplomacy.

Reporter: Finally, I would like to ask you about your impression on Shanghai forum.

Li Xinyu: I think Shanghai forum is a very good forum. Here, we can speak freely, and it is well arranged, whether be it of the forum process, the quality of guest speakers, or the whole arrangement. The theme of the forum combines of current hot issues and the topics we are studying. It is very interesting. Very grateful for the invitation that enables me to attend the forum.

Risks and Opportunities Hidden Behind the Melting Ice in Arctic

Reporter: ZENG Jiren



Jungho Nam

Dr. Jungho Nam has been working at Korea Maritime Institute (KMI) since 1996. His researches cover marine environment management, trans-boundary marine environmental affairs, marine science and technology application etc. He has contributed a lot to the marine policies of his government and also activities of global and regional environmental organizations such as PEMSEA, COBSEA, World Ocean Forum and Arctic Council etc.

Indeed there will be a lag in human recognizing risks. Arctic is remote in terms of both physical and emotional distance. Therefore we are not as conscious of future risks in arctic area as of current risk like offshore pollution. Public might be aware of the weakness of environment after experiencing some catastrophic events, but that's too late.

Reporter: The theme of the session you took part in is “Meeting on the Melting Ice: Asia’s Role in the Protection of the Arctic Ecosystem”. Could you briefly introduce the changes happening in arctic area today and their potential influence to human being?

Jungho Nam: Yes, arctic area is experiencing unprecedented changes, while there

are two sides of these changes: risk and opportunity. The risk is that ice melting is changing the eco-system in arctic area, say, degrading the habitat of animals like birds and polar bear. Besides, other human activities within arctic region are also causing damaging consequences like black carbon emission, noise, oil-spills and pollution. In addition, transferred issues from off-sites like the increase of water temperature and the acidification of ocean also happen.

Meanwhile, the changes in arctic area also bring human being many opportunities. For example, due to the ice melting, new shipping routes may arise. Both arctic countries, such as Denmark and Finland, and east-Asian countries especially Korea and China will be benefited. They will have alternative sea route to connect the eastern and western side of the Eurasian Continent. Besides, human beings may also be able to exploit the abundant petroleum resources and take fishing activities in arctic areas.

Reporter: In 2013, five Asian countries including Korea and China became the observers of the Arctic Council. What do you think is the motivation for non-arctic countries to join the Arctic Council and take part in arctic issues? And what can Asian countries do to contribute to arctic issues?

Jungho Nam: Apparently, economic preference takes priority in most people, companies and countries. The new shipping routes and exploitation of resources are luring. Many have strong interest in such issues than in other common issues like eco-protection, pollution etc. So apparently the primary motivation for non-arctic countries to join the Arctic Council is to get more economic opportunities from arctic matters.

But China and Korea are also prepared to do contributions to arctic issues, helping to protect the eco-system by providing scientific capabilities, surveys and researches by themselves. And I think establishing working groups in arctic area and carrying out more scientific researches are good ways for Asian countries to

engage in arctic issues.

Reporter: Then what do you think is the rights and responsibilities of arctic and non-arctic countries over arctic issues? And what's the difference between them?

Jungho Nam: Speaking of rights, arctic countries own many of the arctic areas, including their exclusive economic zone (EEZ). The arctic states have explicit and concrete rights to utilize resources and spaces within their jurisdiction. Other countries have no rights to violate or undermine them.

While the rights for non-arctic countries come from “connection”. This “connection” mostly includes migratory species like whales, harbor seals, sharks and birds. For example, due to the exploitation of energy resources in arctic, there might be some damage to the eco-system, like the damage of birds' habitat. So if bird's habitat is damaged by this kind of exploitation, the impact may come to other parts of the world, like China and Korea. This is a connection we can see and explain, and there are still a lot of hidden connections between arctic issues and welfare of non-arctic areas not known yet. Therefore, non-arctic countries have the right to prevent arctic countries from doing damage to arctic areas. This connection is where non-arctic countries' rights come from.

Thus, arctic countries have more responsibility to protect the eco-system within arctic, while other countries have the rights to push them to do so. But that doesn't mean non-arctic countries have right to intervene matters within jurisdiction area of arctic countries.

However, the recognition of this ecological linkage doesn't mean proper protection missions are allocated to arctic and non-arctic countries. Much more attention should be paid to the eco-protection of arctic.

Reporter: Speaking of raising public awareness, some says there is an inevitable lag before human beings taking action to mitigate the environmental changes. Maybe we are not able to realize the significance of the problem until some catastrophic events cause great loss. Do you agree with such opinions?

Jungho Nam: Indeed there will be a lag in human recognizing risks. Arctic is remote in terms of both physical and emotional distance. The perception on arctic issues is very low. We are not as conscious of future risks in remote arctic area as of current risk in real world like offshore pollution. Public will be aware of the weakness of environment after experiencing some extreme or catastrophic events, but that's too late. There is attention paid to protection now, but it's far from enough.

Reporter: Speaking of future risks, a research published on *Nature* in 2013 reported that the melting permanent frozen soil in arctic area may release great amount of greenhouse gases such as methane into the atmosphere, speeding up the global warming and causing irreversible losses. Do you think such loss is inevitable?

Jungho Nam: What you mentioned is also a focused research topic in Korea. Institutes are carrying on researches on this problem. Yes, the release of more greenhouse gases in arctic is happening, more than we expected. But due to the uncertainty of the problem and hidden connection between global environmental factors, we do not have enough information. We are lack of data to make precise prediction.

If you read the Assessment Report (AR) of the Intergovernmental Panel on Climate Change (IPCC), you will find AR4 published in 2007 reported the sea level rising by 59cm, while that number soon increased to 82cm the AR5 published in 2013. Obviously the sea level rising is speeding up, and we don't know what will be published in AR6. So even though the speeding up doesn't mean a high speed,

personally speaking, I think some great loss is inevitable.

But here I want to make two points clear. One is that the ice melting is a slow process; it won't vanish until 2050. Another point is that the main reason causing the melting is the global warming, rather than human activities within arctic area. Of course activities like exploitation will to some extent lead to melting, but as long as it's limited to certain places and seasons, the impact would be limited. It's much minor to the driving force of global warming.

Reporter: Then to regulate human behavior within arctic area, do you think international legislation or framework should be established?

Jungho Nam: That is a delicate issue. I think arctic countries may not agree to reach a conventional international framework. They want to take different stance over arctic issues. Since most area in arctic is governed by different countries and states, I think they don't want to build a new conventional framework.

Besides, it's also hard to make regulations to restrict the energy and shipping companies' activities within arctic area since we are still out of concrete evidence of human activity's impact on arctic area. But we can develop some management system. We call it precautionous approach to prevent catastrophic events from happening. We need to develop the environment impact assessment system as well. These are not regulation but some strategies based on our scientific technology and findings. There's slight difference between them.

Reporter: Then what kind of cooperation or joint effort by different countries can be made to better protect the eco-system in arctic area? And what's the potential difficulty in establishing or maintaining such cooperation?

Jungho Nam: I think the priority of international cooperation still goes to scientific aspects. Another suggestion is that we can establish the trans-boundary network of

protected area based on the ecological linkage.

Let's take the Conservation of Arctic Flora and Fauna (CAFF) as an example. One aim of CAFF is to protect birds. Some birds fly and migrate from Australia, through China and Korea, to arctic area. This is an ecological linkage. And protected areas are established in almost all the countries on these birds' migrating route by CAFF, such as there are protected areas for such birds' habitat in Korea. Alike, I think to establish a marine protection network by different countries might be helpful.

And the potential difficulty for such action would be that such network need to be established based on a real existing ecological linkage, while a political human network without concrete ecological linkage might not last so long as we expected, because there is no media to help to maintain the network. The real existing ecological linkage has the media, say, the birds, to link all the related countries, making it easier to maintain the network. However, the human network might be easy to establish but hard to maintain because there is no media. Different cultures, interests and policies may be the barrier for maintaining the network.

Reporter: After all, are you optimistic or pessimistic over the ice-melting problems and other issues in arctic? What's your overview on the future of arctic?

Jungho Nam: In regard of the ice-melting issue of arctic, I'm "a little bit" optimistic, because the ice melting is slow, and the new sailing route won't be used at least by 2050. That's far from today. The energy exploitation now is also limited because it depends on the extent of the ice melting.

Although personally speaking I do think some loss is inevitable, I still believe in human being and human power. I believe that human beings are capable of designing and developing strategies and measures to mitigate, or even eliminate the negative impacts of environment problems in arctic area.

Lessons From Europe: Where Should The Social Security Systems In China Go?

Reporter: WANG Danni



Michael Schmidt

Coordinator of Social Security Systems, Federal Ministry of Labor and Social Affairs



Arno Bokeloh

Coordinator in Social Security, now retired. Book: *Die soziale Sicherung der Frau im Rentenrecht: Rechtslage und Reformmöglichkeiten* (*The Social Security for Women in Pension Law: Legal Position and Reform Possibilities*)

It's a very good context in Asia, especially in China. It is important to have collaboration, cooperation, not protection.

Reporter: The EU has established itself as a leading role in collective social security system, however, the social security system in each EU member state is not completely the same, how did all the different systems collaborate with each other?

Arno Bokeloh: They are completely different, actually. All the different systems collaborate with each other, the role of EU provisions is to make sure the coordination is in order and to avoid disadvantages of people working in more than one member states. One of its mechanisms: advocating aggregation periods. If you have been working in Germany for 10 years and in France for thirty years, the periods will be aggregated, and after that, you can get the pension from both France and Germany. Periods of insurance are aggregated, this is one of the most important mechanisms of coordination. And there is also a provision called “full export of benefits in cash”, which does not focus in which Member State you live. For example, a person from Denmark, they normally don’t export at all, spent his retirement in Spain, this often happens, the European export regulations ask full export to all other member states, f.e. to Spain, to Italy, to Greece, or to Germany. The EU law prescribes where you are insured. It gives importance to the country where you work, this is also the country of insurance. Let me give you an example: if a person from Belgium lives in France, has the nationality of the Netherlands, and works in Germany, so he is insured according to German law. Only where his work in fact is carried out matters. This mechanism can avoid the disadvantages of migrant workers.

Michael Schmidt: The differences of social security systems in the countries in Europe are the results of historical development, and it’s hard to say if in the next 20 or 30 years they will be the same. So here we are talking about coordination, but not harmonization.

Reporter: What do you think is the hardest aspect in the negotiation process?
How did all the member states reach a consensus?

Arno Bokeloh: The Administrative Commission, which is a European Institution, discusses how to improve the coordination

Reporter: What role do the "fund"(ESF) and "institution" play in the collective social security system? Is it the basis for the collective system?

Arno Bokeloh: The fund does not subsidize the system, but it aims to promote unskilled people to work. But it would be a misunderstanding if you took it as subsidizing the system.

Michael Schmidt: It is another aspect of the European collaboration.

Reporter: The fund, (ESF) has intended to be an effective solution in reducing jobless rate, what might be the most plausible reason behind the current high jobless rate in EU member states such as Italy, Greece, etc?

Arno Bokeloh: That's the problem of the structure of the country, their economic structure.

Reporter: Then why don't these jobless people in Italy or Greece come to Germany to work?

Michael Schmidt: They are, actually, many people do so. They are entitled to work in Germany, France, or in Belgium, they don't need any special permission.

Arno Bokeloh: We have the internal market, and one of the most important elements of the market is the freedom of workers and self-employed. If you are a worker or self-employed person f.e. in Italy, and you do not have a contract there, you can just go in each other Member State and try to find a job.

Michael Schmidt: Because the situation in Germany is quite good, the unemployment rate is under 7%, 6.7% actually. But that in Italy can be 20%, and in Spain 25%, if the people had not chosen to work in Germany, the rate in these countries could be reaching 50% already. In the last 2 years, Germany has a net

immigration of 400,000 people, most of them came from the other European countries.

Reporter: As the influx of jobseekers from other parts of Europe into Germany, how does Germany government react to those problems?

Arno Bokeloh: Companies in Germany need skilled workers, such as IT Specialists. People from other parts in the Europe can come, and under certain conditions people from China or India can come, too. Those people will need a special permission. Highly skilled workers have good chances to get such a permission.

Reporter: What kind of social and political problems will be brought to Germany?

Michael Schmidt: You say what social political problems it will bring to Germany, well, there are a lot of new people in our country, it is a very big chance, and a very big challenge, too. Because the new people have to learn the language, but they bring to us new culture. I think it is more a big chance for Germany. Because Germany is a very multi-cultural and multi-national country, 16% of our people have international background. And I think the German government has done a lot of thing to get them engaged. It has signed many bilateral agreements with others, for example, out chief of the ministry of social security has meetings and memorandums with the Spanish government to reduce the unemployment rate in Spain. And help those new-comers with the job training and practice. This is the field Germany has advantage in, because it has the combination of theories in school and practices in companies.

Reporter: Will there be any social problems caused by this mechanism? Since I found the new job-seekers sometimes stay in the lower status in the society.

Arno Bokeloh: If they are unemployed, there are problems. We have free mobility for workers, but not free mobility for everyone. If they have no job in their home country, they can try to find one in Germany, but if they fail in it, they won't be subsidized.

Michael Schmidt: But actually, the young people from Italy, or Spain, who come to Germany to work, are very motivated. They want to work, they want to study. They want to do something, not to be unemployed. The problems are not for Germany, the problems are for the country they come from. The best people from Greece have come to Germany, leaving its homeland not enough specialists, and there will be economic problems caused by this.

Arno Bokeloh: I agree, the brain drain is a big problem. Let's say, a person from Romania, one of the poorest states in Europe. If a doctor from Romania comes to Germany, he can earn may be ten times as much as he would in Romania. But Romania needs the doctors probably. So it is a loss for Romania. And if they stay one time in Germany, they will never go back.

Michael Schmidt: And I know the situation is not only seen in Europe, also in other parts of the world. There are doctors from Africa who work in Germany, never go back.

Arno Bokeloh: Yes, and some states in Africa may have one doctor for 50,000 persons, Germany about one for 500, this causes problems to these states in Africa.

Reporter: Similarly, China has a high domestic labor population mobility, the influx cities such as Shanghai suffer serious pressure from immigrants from other area in China, what kind of experience can Germany give to China in terms of this question?

Arno Bokeloh: I would say, the social security is not the way to solve this problem. It is important to make the country more attractive. The trend to work in Shanghai, Beijing, Tokyo, or Seoul, I think it causes many problems. I think it is more important to build the infrastructure in the small cities.

Michael Schmidt: The problem is we have many immigrations from the countryside in China. I have been many times in China, there are 152 million people immigrant to big cities. The current situation is very difficult for them. For example, a worker, from Anhui province, come to Shanghai, they do it from very rational thoughts. Because the situation in Anhui province is not so good as it in Shanghai. The worker is not crazy. He earns more in Shanghai, and every month he sends money to his family in Anhui. It is very complicated to stop this situation. From the former time, in the 50s and 60s, people earn social security only from the place they come from. The workers from Anhui cannot get it in Shanghai.

Reporter: Yes, this causes many problems. And their children are not able to get enrolled into schools in Shanghai.

Michael Schmidt: Yes, if you do not change the situations in Shanghai, the problem will not be solved. In my presentation, I said about 75% of China's population stay in countryside, actually, more than 50% of them are living in big cities. In China, there are more than 100 cities which is more than one million people. And the people on the countryside are less and less. But in the last years, there has been a big reform in the social security systems, I do hope these reforms can change the situation in the next years.

Reporter: What will be the most challenging part for Germany regarding social security realm in the next decade?

Arno Bokeloh: The biggest problems for Germany are aging and the low birth rate. The more aging people, the more pensions and the low birth rate.

Michael Schmidt: I think most countries in Europe have this problem. And as Arno has said, the demographic change has result in all social security systems: in health, in insurance systems, and the pension systems. And more, it is a question of long term care. Because in Germany, you get a long term care if you become seniors. The long term care scheme was carried out in 1995, and beginning there were 1.6 million of our people in the program, and now we have 2.6 million, one million more in the past 20 years. And the perspective for the future, very realistically, we will have 3.6 million people in the program in the next 20 or 30 years. And in China, it's the same, the average age in China, 75 for women and about 70 for men. Now we have a lot of people who are in long term care in China, too. There are many problems, you have the result of the one child policy. The old philosophy from the Confucius, the eldest son cares for the old in the families. It has problems, because you will have only one son or daughter. You are very stressed because you are caring for two old parents, and sometimes the parents of parents. It is foreseeable in the next 20 or 30 years, the families will be more broken, like in western countries.

Reporter: Will the EU or the globalization help to alleviate or aggravate it? How?

Arno Bokeloh: There are many different opinions towards globalization, in my opinion, there is more chance for Europe for improving the economy. There are also dangerous aspects, I think the positive ones prevails the negative effects. I think the idea in Europe is a certain kind of globalization. We have one internal market in Europe, 50 years ago, every state operated for itself, now we can export without any problem. And globalization helps to alleviate our problems. We have agreements with the many states, f.e. for import and export and taxation. And in relation to the United States - TTIP. We have to be very careful, we have to keep our standards.

Michael Schmidt: It is a question of good negotiation, not a question of strategy. I agree with Arno totally.

Reporter: Globalization has engaged ever more actors in the problem solving process, it is no longer expectable for EU to consider its own problems only, how shall EU interact with other parts of the world, especially for Asia?

Arno Bokeloh: I think there are interactions already, beginning with the social security agreement with China.

Michael Schmidt: You know, China has two social security agreements with South Korea and Germany. The agreement with Germany was from 2001. With this agreement, people from VW (Volkswagen), it has factories in China, if they are sending its workers to China, normally, he has to pay taxes to the German system and the Chinese system. But that is a little bit crazy to pay double taxes. Now he will only need to pay the ones in China. Also, according to the agreement, Germany, we are very proud of it, has many specialists and scholars in social security system, if China would like some advice on its own social security system, Germany can send experts to China. It's a very good context in Asia, especially in China. It is important to have collaboration, cooperation, not protection.

The Interaction And Cooperation Between Europe And China Will Increase Steadily

Reporter: CHEUNG Choy-Fun



Niels Thygesen

Niels Thygesen worked in the Ministry of Economic Affairs of Denmark and delivered lectures as an associate Professor at the University of Copenhagen. Niels Thygesen continued his career as an economic Advisor in the field of treasury in Malaysia and later on he was the Head of Monetary Division of the Organization for Economic Co-operation and Development (OECD). Because of his high experiences and knowledge he continued as an emeritus Professor at the University of Copenhagen. Mr. Thygesen also became the Danske Bank Professor of International Economics.

The Chinese economy increases a lot and this leads to significant changes in the future. China does not only focus on the low cost sectors anymore but also start to improve the Human Capital and Research and Development departments.

Reporter: In the year 2013 you attended the International Monetary Institute (IMI) at the Renmin University of China and gave a speech. You talked about the problems of the Euro and that there need to be some actions now. Can you give us a short summary about this topic? Do you think that there is an improvement now after 2 years? Has anything changed?

Niels Thygesen: Today I can give you a brief update of what I did in the year 2013. Many things have happened since then and the question that always emerges is, what will be the outcome of this? Can the problem be resolved? I remain still somehow optimistic. I think some elements of the European Union have come in place. More time has been spent on European problems and finance issues in particular. We have the banking union which does imply some transfer safety rules on the European level, in an area which is politically very difficult. Furthermore there is the current crisis focused strongly on Greece. It should also become clear that 2 years ago for example several countries were in crises. All these countries have now – with the exception of the Republic of Cyprus - fortunately come back to the market. Spain has avoided getting into the real crisis. Greece is still a problem. We don't know what the final outcome will be, but Greece will probably be kept in the process. Politically there will occur some problems but it could be done. Economically it would be a disaster for Greece to leave the European Union; the rest of us may live with it but it is not necessarily a disaster.

Reporter: You also attended INET Hong Kong (Institute for New Economic Thinking) with the title "The Euro Zone Currency System: Catalyst or Wrecking Ball for the European Union?" What is your opinion about this topic? What is your advice to solve this problem in the most efficient way?

Niels Thygesen: It is right that I also attended INET (Institute for New Economic Thinking) in Hong Kong in 2013. That was at a time of great pessimism. It was on the same trip that I attended the International Monetary Institute (IMI) at the Renmin University of China. I don't think that the wrecking ball is there anymore. It has changed and I think that, and also see sight that Europe and China come together to find a better solution. But a new development that we are facing in Europe is the crisis in the Ukraine and our relations to Russia - a hot topic. While we are not ready for a solution, at least we seem ready to face the challenge. And that has to be a unifying element in Europe. The attention devoted to a common

external policy has increased and this reflects also on the ability of the European unit to solve their economic problems.

Reporter : In my research I found out that you taught seminars in International Economics and European Integration in Denmark. What do you think about the Asian development? Especially the internationalization and globalization are the main driving factors for the fast economic development in Asia. How big is the influence of the Asian economy in the global economy? Was it rather a fast or slow process?

Niels Thygesen: Of course, the Asian economies are proceeding much faster than the European ones. Like in my country (Denmark) and Germany the simple fact that causes completely different levels is that we are talking about development and it is impressive. “Normal” European countries grow 1-2 % a year. In China the economy still grows 7 % a year. No longer from increasing employment of relatively low-skilled labor - nearly all comes from higher productivity. Of course, other countries want to invest into China and build up further productivity growth in new sectors. That should also increase the important services in Asia. I think the next few years it will increase because we can do a lot by reordering and reallocating capital from the traditional industries towards a private sector with many examples of highly promising new technologies. Yes, I think we can continue for a few more years. And part of China can be more financially integrated with through the world. That also means greater efficiency. There will be an inflow of capital which does not have to be restrained and can be used to sustain a high rate of investment. You can’t say that “the Asian economy” is growing so fast; it is still primarily the Chinese economy which is growing in a way that counts globally. But the South-East Asian countries are developing quite well while India is becoming more important, though starting from a very low point. In short, it is necessary to distinguish between the Asian countries.

Reporter: What kind of trends for European companies and associations do

you see in the future because of the economic growth in China? China is one of the main forces for the internationalization of the value-added chain. Is this one of the reasons why European companies want to expand to China? Are there other very important reasons?

Niels Thygesen: Regarding the question, what kind of trend I see for European countries is that we see more European environment in China both in industry and trade and investment sectors. Some countries I think have been very successfully integrated in China. Germany is probably the main country in China. They have many business groups producing investment goods useful for the development of China. The relationship between Germany and China is very good and also the German economy is stable. I had lunch yesterday with the Danish ambassador in Beijing. He says Denmark is the only European country which is doing as well as Germany in terms of trade and investment performance here. We also have many of our major companies strongly represented in China; in facing the challenges of climate change for example, energy conservation and renewable energy become more important and Denmark has areas of strength here. China is regarded as an efficient producer in many areas; it doesn't matter as much as in the past that China is becoming more costly, because many European firms are supplying the Chinese market as domestic consumption rises. So European firms will continue to come here, with relatively advanced companies trying to recruit good Chinese staff. The Chinese are beginning to be well educated. The human capital is high, because the other sources have higher priorities in China now and the human capital is rising at a rate faster than what we can match in Europe.

Reporter : Especially the communication barrier between Asian and European countries is a big obstacle that the companies have to overcome to cooperate efficiently. Also the cultural difference can cause troubles. Have you had your own experience regarding this issue? Would you say the interaction between these two continents will lead to many problems or is the cultural and language barrier easy to overcome?

Niels Thygesen: Communication and linguistic barriers are a big problem. I was in Beijing a few days before coming to Shanghai, and I stayed at the Faculty Club of Renmin University, one of China's leading and most international universities with many foreign guest professors. But, even there the local staff didn't really speak English. The students did speak English to some extent, but also they had major problems. The English pronunciation for Chinese people is very difficult. It is, of course, at least as difficult for us to learn to speak Chinese. But I meet some friends from Denmark, now into graduate studies at Fudan here at the Shanghai Forum for lunch. They learned Chinese some years ago and they can speak really good Chinese; making the major investment linguistically is clearly rewarding. Otherwise I think the culture differences are not so important. Chinese people are well educated. They clearly have a good sense of humor, and they have a healthy curiosity; even when they do not quite understand each other because of the language they still try to understand and are quick at grasping the context.

Reporter: China is enlarging the Research and Development departments (R&D) and is no longer just focused on the low cost manufacturing. Especially the quality of the human capital in China increased tremendously. Would you agree that China has a great impact on the global innovation and technology development?

Niels Thygesen: The question reflects perfectly what I want to say. China is no longer just focused on low cost, but also on high added-value industries. Quality has improved and yes I think China has a great impact. You see some very successful Chinese enterprises in the high technology sector. And regarding to the speech this morning from professor Wu who spoke about finance and technology, it was very interesting and impressive how the Chinese take part in the modern technology embodied into mobile phones. It is often said that the Chinese have to become more creative, but they are already becoming that quite rapidly.

Shift To Human Capital-intensive Mode For Urban Innovation And Development

Reporter: ZHANG Xinrui



WANG Xiaojun

PhD in Economics of the Ohio State University; currently serves as Associate Professor at the University of Hawaii Economic Department and China Research Center (tenured professor). He is dedicated to the researches of monetary economics, transformation of China's labor market, and return on education investment.

We found that in 2000-2005 Shanghai and Beijing have shown a paradigm shift moving from the physical capital-intensive mode to human capital-intensive mode, and in between 2005-2010 this feature of human capital accumulation in the two cities became increasingly prominent, at the same time, Tianjin also began joining this trend (This study on human capital index is based on a five-year study period). This shift is very important, and is also closely linked to the sub-forum theme of 'innovation'.

Reporter: As we know the Sub-forum of the Shanghai Forum you participated is called "Strategy of Innovation-driven Development and the Construction of Innovation Nations in Asia," and I know that you have engaged in study of China's human capital over the years. Could you elaborate that what is the human capital accumulation meant to construction

of an innovation-oriented country?

Wang Xiaojun: In recent years, the calls for China's economic transformation has become compellingly louder and louder. A transformation of economic development mode means a transition to the Human Capital-Intensive mode from the Physical Capital-Intensive mode. Currently, China attaches increasingly importance to its human capital accumulation as we can see it from the country's various types of domestic policy planning and economic researches. Here, how to achieve accurate measurement of human capital has become an increasingly important issue in the country. The traditional methods to estimate human capital in China are too rough and inaccurate. According to the traditional methods, they will generally select factors such as average schooling years of the country/regions' labor force, proportion of senior middle school graduates in the total population, or the proportion of college graduates in the total population. However, these factors are not further classified against the huge population in accordance with such important attributes as region, age, gender, urban and rural areas, nor it established a convincing link with income levels.

In order to obtain more precise human capital index, starting in 2008, I participated in the creation of the China Center for Human capital and labor Market Research (CHLR) of the Central University of Finance and Economics that was sponsored by Professor Li Haizheng. The Center has an iconic project funded by the National Natural Science Foundation of China, that is, construction of China human capital index and measurement System. This project uses the income approach to quantize China's human capital. The approach as a new calculation method was suggested by world renowned economists, mainly Jorgenson and Fraumeni, and thus called JF Approach. What is very different from the traditional methods are it is based on the basic economic theory as the starting point, and the data requirements are loosed to some degree forestry employment in practice.

Reporter: Then, what are differences of the income approach in terms of its

principle and specific operation comparing to the traditional methods?

Wang Xiaojun: The Principle of the income method is actually very simple. Here, we may make a comparison between the human and physical capitals. Specifically to say, how do we estimate the value of a machine? One method that is easy to come out of our minds is we take the estimated future income generated by this machine, and discount the income according to a certain ratio to the present, then we get a present value of the machine. The same method is also true for human capital. For an ordinary person, for example, me as an individual laborer, how much is my human capital worth? That is the present value generated from a discount based on the future income that I would make before I retire.

Reporter: specifically, how to estimate future earnings of a person?

Wang Xiaojun: We use the method called the Age Earnings Profile. It is a theory of the Population Economics that is applied widely in practice. Based on the theory, we can conduct estimations of wages for each bracket of ages. The input data used in the model is the data of every part of the population as categorized by province and by educational level, plus a macro-economic growth rate and a discount rate. To ensure correct setup and operation of the model, the Centre hired Ms. Fraumeni, the founder of the income approach and a renowned scholar, as a technical adviser.

As I just said, the key in the measurement is that all of the data is required to be categorized by province, age, education, gender, urban and rural areas. This means enormous workload we should bear. So far, we have successfully obtained the national time series data as of 1985-2009 covering 28 provinces, and now at the level of province, we have basically formed a panel data. During this process, my students of the previous two school years have made great contributions. Despite many difficulties, what we do is something that has not been done by others, so we can be counted the first person to try tomato.

Reporter: Would the human capital index estimated under this system be compared to the one that is calculated based on a real investigation?

Wang Xiaojun: Our entire project does not involve investigation. We adopt all existing data. Population wise, we need only macro data, which are provided free by the National Bureau of Statistics (NBS). In addition, we also need micro income data, which comes mainly from existing databases, such as CHIPS. After properly treated, these microscopic data will be used to operate the age-income model. So, the combination of macro and micro data used in the model is one of the characteristics of our project. In addition, because in calculation of our human capital index we use the actual value that excludes inflation rather than use the nominal value, so it is comparable in the time series. We also conducted a price adjustment for data of different regions, so our data is also comparable among difference regions- this feature is scarce; in these two years, more and more researchers begin to adopt our results.

Reporter: So for the annual estimates of the human capital indexes obtained, did you do any further analysis and make any conclusion?

Wang Xiaojun: Yes of course we did. Every year we analyze the data and publish a research report, which covers data comparison of different provinces, trend analysis of the time series, contrastive analysis to the physical capital, and comparison of the regional GDP indicators, etc. We get conclusions that in some provinces, it is Human Capital Intensive mode, and others are Physical Capital Intensive mode. In a same province, for example Hebei, we will get both the accumulation rates of human capital and physical capital, and conduct contrastive analysis.

Reporter: For the accumulation rate of human capital and physical capital, does there any apparent trends appeared over the years?

Wang Xiaojun: Yes. We found that most provinces of our country pay close attention to the accumulation of physical capital, and overlook the accumulation of human capital. As of 2000, our country's main economic motivation is still aimed at accumulation of physical capital, but after the year of 2000, it started an interesting change. We found that in 2000-2005 in the cities of Shanghai and Beijing, there has shown a paradigm shift moving from the physical capital-intensive mode to human capital intensive mode, and in between 2005-2010, this feature in the two cities became increasingly prominent, at the same time Tianjin also began joining this trend (The study on human capital index is based on a five-year study period). From the chart I drew, you will see the obvious trend of Shanghai and Beijing moving to the left since 2000, and since 2005, Tianjin joined the echelon. Unfortunately, other provinces still remain the rightward trend, that is to say they are still on the track continuing the physical capital intensive mode. So it can be said, the most developed regions in the country have been already in the human capital intensive paradigm. This shift is very important. It is also closely linked to our sub-forum theme of "innovation". Speaking of innovation, the most important is accumulation of advanced human capital. When I started to study and analyze the data, I did not envision such a result, but later I found the results are very interesting, very suitable for this forum, especially suitable for the sub-form for further discussion.

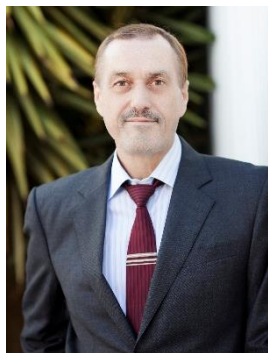
Reporter: You mentioned the leftward movement in Shanghai, Beijing and Tianjin, does it mean that it takes place at the cost of other regions which are moving rightward?

Wang Xiaojun: This is a good question. It is linked to my other research ideas. I have been considering such an issue long. For example, Anhui and Jiangxi are geographically near to the economic powerhouses of Jiangsu, Shanghai and Zhejiang, but they are not able to take a ride on the latter's wind. Why? It involves the issues of brain drain and brain gain. Especially, this is much prominent in the relationship between Anhui and Shanghai, as many people leave Anhui Province to Shanghai, this is undoubtedly a serious brain drain for Anhui, while for Shanghai

it is purely a brain gain. This phenomenon is quite common to see. If we look at education level, we might intuitively feel the average education level of a large city's immigrants should be lower than urban residents. But through the 2010 census data analysis, I found that in Metropolitans such as Beijing, Tianjin, and Shanghai, the result is true so, but in other areas it is just not necessarily the case. For example, for immigrants from Hunan to Hubei (here we lack of data support), the educational level of the majority of immigrants in fact is higher than the local residents, this is just opposite to the phenomenon happened in large cities we see above. So, it is hard to say that the brain drain and brain gain play a role in contributing inter-regional imbalance. By far I got no further studies to the question, but only got a roughly preliminary result. I intend to address this question and write a working paper in the future. Personally I am quite interested to study it.

R2P's Dimension And Its Impact On China

Reporter: QIU Shengdong



Colin Wight

Chair of government and international relations at the University of Sydney. Colin Wight's research interests originate in the desire to explore and understand the fragmented nature of International Relations Theory and to embed this understanding in wider intellectual and public debates. He is interested in all aspects of political violence and is currently completing a book on Terrorism, Violence and the State.



Toni Erskine

Professor of International Politics, Associate Director (Politics and Ethics) of the Australia Centre for Cyber Security of the University of New South Wales, Australia. Professor Erskine is currently an elected member of the Governing Council of the (American) International Studies Association (2014-2016) and is on its Executive Committee (2014-2015). She is working on a project that examines formal organizations (including states, multinational corporations and intergovernmental organizations such as the UN) as bearers of moral responsibilities in world politics.

R2P is a set of international principles agreed at the international level that have fundamentally changed the way we think about sovereignty. China is going to come under pressure to use its power for the good of the international community.

Reporter: What is ‘R2P’? Why the proposed ‘responsibility to protect’ is frequently couched in terms of a moral responsibility rather than (and sometimes as well as) a legal responsibility?

Toni Erskine: R2P refers to the responsibility to protect, and it is generally understood in terms of the consensus that was achieved at the 2005 World Summit, which marked the 60th anniversary of the United Nations. R2P, as it came out of this consensus in 2005 and was elaborated in the 2009 report by Ban Ki-Moon on *Implementing the Responsibility to Protect*, is presented as having three equal ‘pillars’:

- (1) The host state’s responsibility to protect its populations from genocide, war crimes, crimes against humanity, and ethnic cleansing.
- (2) The international community’s responsibility to assist the host state to fulfill its primary responsibility.
- (3) The international community’s responsibility to respond collectively in a ‘timely and decisive’ manner if the host state is ‘manifestly failing’ to protect its citizens (specifically from the four mass atrocities crimes just mentioned). There are both pacific and coercive means of responding; a coercive response is only to be considered if non-military responses have been exhausted, and, according to the 2005 consensus, must be authorized by the UN Security Council. In the 2009 elaboration of this consensus, both the coercive and pacific responses are articulated in terms of the language of responsibility.

Colin Wight: I would agree all of that, but I’ll give a slightly different answer. R2P is a set of international principles agreed at the international level that have fundamentally changed the way we think about sovereignty. Theoretically, it sets

in place a set of responsibilities that states have towards their own citizens, but also that states within the system have towards other citizens in the event of home state or host state being unable to fulfill their own responsibility; in which case the international community bears the responsibility when states can't or won't. It is a problematic question as to whether the responsibility is a duty or not.

Toni Erskine: Let's turn to the second question. Going back to all of the documents that have been central to understanding R2P, including the 2009 *Implementing the Responsibility to Protect*, paragraphs 138 and 139 of the 2005 *World Summit Outcome Document*, and the seminal 2001 report by the International Commission on Intervention and State Sovereignty, there is a prevalent understanding that the members of the international community have a moral responsibility to act in the face of gross human rights violations. This responsibility is often seen, I think, as a necessary corollary to the idea of fundamental human rights. An underlying assumption for both is the idea of our common humanity. There are certain things that we can't allow to have happen to fellow human beings. In other words, there is a very strong moral cosmopolitan sentiment underlying these arguments. If you look to scholars including James Patterson, Jennifer Welsh and Edward Luck, they all talk about R2P as a moral responsibility. Indeed, Ban Ki-Moon has declared that R2P as set out in the 2005 consensus represents a 'moral imperative'.

Perhaps the difficulty with speaking in terms of a legal responsibility to protect is that there is no consensus on the legal standing of R2P. Some scholars (albeit controversially) argue for the legality of coercive intervention without UN Security Council authorization in certain cases of mass atrocity; others (at the opposite end of the spectrum) maintain that such military intervention is illegal even with Security Council authorization. The claim that R2P is a moral responsibility is grounded in how unthinkable it is to allow genocide, ethnic cleansing, war crimes and crimes against humanity to take place. The language of legal responsibility quickly gets into very difficult questions of how certain means of protecting vulnerable populations fit with contested views on right authority and sovereignty

– and, indeed, questions of the status of international law itself.

Colin Wight: I think they are really good points and I agree with absolutely all of them. What I would just like to say is that although it starts as a moral problem it moves into the legal realm as a result of the involvement of the Security Council. Once the Security Council gets involved it enters into a more formal framework that goes beyond the moral imperative out of which it emerges. So you take this moral problem, and you move it to a kind of more structural or procedural framework. The problem is that all SC resolutions can be contested legally. Law is not self evident. Even domestic law needs interpreting as well. There's no such thing as this is the law without interpretation. All judges interpret the law. All laws have their interpretation because the law is embedded in language. If you do get Security Council approval, it can determine that there is a legal obligation for the members of the Security Council to make sure that resolution is followed through. And if that doesn't happen, then you are really throwing out of the validity of the UN system.

Reporter: Professor Colin Wight, you mentioned that there is sovereignty problem involved. However, China is sticking to the non-intervention principle. What suggestions will you give to Chinese policy makers regarding this principle?

Colin Wight: I think China's concerns are valid. They are not just China's concerns. There are lots of states that have the same sorts of concerns. All states want to maintain their own autonomy, or the non-intervention principle. But there are specific instances in which states might be allowed to intervene in the affairs of another state to stop human right abuses. The problem is that the international system has developed over time, and the norm of non-intervention has been intrinsic to the development of international system and R2P seems to be a threat to that. It's not that much of a threat at this point, because it still relies on Security Council approval. Essentially, because the way the SC structured, states like China,

if they want to, can maintain the principle of non-intervention, and exercise their veto. What concerns Toni, and me, is that if the international community has decided that there is a responsibility to protect, what if you can't identify an agent or a group of agents that is going to take ownership of that responsibility if the UN SC won't do it? I don't have a firm answer as to how you can deal with that problem. Take, for example, the Rwanda case. Most people look back at Rwanda and say the international community failed. It should have done something. R2P comes out of that failure. People want to know why it happened and why the international community failed. People want to put in place a set of structures, processes and procedures that would stop that happening in the future. The problem of the international system is that if the UN says no, who is going to stop another Rwanda. Toni and I both think you go to the SC, if the SC says no, then legally you have not got the right to intervene, but you might have a moral right still.

Toni Erskine: Just to follow on from Colin's really good points: It's not just China that is wary of non-consensual military intervention. If we go back to the 2005 World Summit consensus that we were talking about a moment ago, it was actually the American representative, John Bolton, who, during the final stages of discussion, introduced additional demands to the negotiations and objected to using the language of 'responsibility' in relation to coercive means of responding when a host state is manifestly failing to protect its own populations. In a previous draft, the member states of the UN accepted a 'shared responsibility' to take collective action, including under Chapter VII, when the host state failed to discharge its responsibility to protect vulnerable populations from mass atrocity. However, due to Bolton's objections, the language of responsibility with respect to coercive intervention was diluted and became the international community's 'preparedness' to take collective action on a 'case-by-case basis'. So, my point is simply that China is by no means that only state to back away from the idea that there is a *responsibility* to engage in non-consensual military intervention.

Reporter: Is terrorism included in the discussion of R2P? Why?

Colin Wight: No. There is no clear definition of terrorism. There're currently about 122 definitions of terrorism in the international system. There is no consensus on the issue at all. It all depends on how you define terrorism. If you define it very narrowly as I do, it doesn't come under mass atrocities, genocide, war crimes or the other R2P criteria. If you ask someone how much terrorism there is in the world, you need to ask him or her first what his or her definition is. There are some academics who define everything a state does as terrorism. In which case, there's an awful lot of terrorism in the world. I take a counter-view and think that we should very narrowly define terrorism. On my view, there's not much terrorism in the world. It is not something that has enough of a major impact human rights, or human well being, for us to deal with it under R2P. It is a minor problem for me. Smoking kills far more people than terrorism.

Reporter: In the past few years, Asia faced with several severe terrorism attacks, such as Chechnya's terrorism attack in Russia in 2004 and 2010, and the violent station attack in Yunnan, a southwest city in China, in 2014. For those cases, to what extent do you think do religion extremism and separatism contribute to those terrorism affairs?

Colin Wight: The problem with a lot of the debate on terrorism is that there is an attempt to boil it down to an essence. Scott Atran, for example, who is a senior anthropologist, argues that religion plays no role in contemporary terrorism. His argument is that what drives these people is not religion but sacred values. Basically, he says the Nazi had sacred values, the Soviets had sacred values, the west has sacred values (democracy and liberalism), and that what we fight over are sacred values. I think that's just a semantic distinction. I think religion clearly plays a role in much contemporary terrorism, but it's not the only thing. No social outcome is ever mono causal. It's not one cause. There has to be a reason why these people have been drawn towards radical forms of Islam. These have to do with political circumstances, economic circumstances and cultural circumstances. So I would say

religion plays a role, but it's not the only factor. But it would be foolish to say it doesn't play a role.

Reporter: Do Asian regional organizations (such as Shanghai Cooperation Organization) outperform international intervention in terms of peacekeeping operations and security governance in Asia?

Toni Erskine: Regional organizations in general are incredibly important in the context of R2P, whether we are talking about the Arab League or the African Union, for example. There are two reasons for this:

1. Regional organizations tend to have a better understanding of the local context in which the crisis is occurring, including its history, politics and culture. They are therefore (often) better able to generate trust amongst the populations threatened with mass atrocity.
2. They also, as a second point, have more legitimacy vis-à-vis the international community. This is incredibly important when we are talking about R2P, whether we are referring to cases in which a regional organization is part of what I call in my work a 'subcontracted coalition of the willing' (one that is authorized by the UN Security Council), part of a 'vigilante coalition for the willing' (where it is acting without such authorization), or, indeed, where the regional organization is acting on its own.

In the context of R2P, I think that having the participation of regional bodies is incredibly important for both of these reasons. (I should note that I understand that the SCO has explicitly opposed intervention into its member states justified in terms of protecting human rights – although can still play an important role in pillar 2 capacity-building and pillar three diplomacy, for example.)

Colin Wight: I think in the world today, whether you are talking about R2P or counter-terrorism, you need actions at all levels. You need actions at the local level,

the regional level and the international level. It is impossible to just tackle these problems today domestically. Regional organizations are crucial. If you can get a local solution, that's great. If you can't, look to the regional and then look to the international. But it's always specific to the nature of the regional solution. And this raises the issue of the relationship between the legality and capacity of the regional organization. Sometimes, you need the legal framework embedded in the international level, but the regional level is where the capacity is.

Reporter: Therefore, you kind of agree on China's President XI Jinping's saying at the 2014 CICA (Conference on Interaction and Confidence-Building Measures in Asia) Shanghai Summit that Asia's safety needs to be protected by Asian people?

Toni Erskine: I would agree with that, but with a qualification. There must be a safety net. A strict principle that would have Asia protected exclusively by regional bodies leaves no room for outside help if and when it is needed. What of the possibility of people in the region (in any region) not being safeguarded in certain circumstances? One could make a compelling argument for regions having primary responsibility for safeguarding their respective populations. However, this can't be the end of the story. Regional cooperation is incredibly important, and, as I noted above, regional organizations tend to do well in terms of both effectiveness and external legitimacy when it comes to protecting vulnerable populations. However, if regional actors are unwilling or unable to provide this protection, then, in certain urgent circumstances, there must be the possibility of some help from outside.

For me it follows that strengthening regional organizations is extremely important. If we look to the African Union, for example, well before the 2005 World Summit consensus, the Constitutive Act of the African Union set out in article 4(h) the possibility of military intervention in member states in cases of genocide, war crimes and crimes against humanity. What is important now is to promote capacity-building so that such regional organizations can actually act in these urgent

circumstances.

Colin Wight: I was going to mention Africa on that issue. The issue for me is that you should always try solving the problem at the best level to solve it. The local is preferable first, then the regional is preferable, and then the international, but they all have to work together. Regional solutions are certainly preferable, but sometimes you do face a capability issue. I do think the capability of Africa to solve its own problem is extremely limited by Africa's place in the international society. That's historical because of colonization etc.

Reporter: Professor Colin Wight, you mention in your speech China's R2P strategy is clever but not sustainable. Why? What recommendation will you offer to China's policy maker in terms of R2P as an emerging power?

Colin Wight: My concerns about the sustainability of China's current position arise out of the well-known phrase 'with great power comes great responsibility'. One of the things I think people misunderstand is that the US generally, as a society, is against military action. That seems to run counter to everything we see. America seems to be intervening in all parts of the world. But after Vietnam there was a marked reluctance on behalf of the US to get involved in major conflict abroad. 9/11 changed all that. After 9/11, I think any superpower that suffered that kind of attack would have done something. Afghanistan makes sense to me. Iraq was completely a mistake. I have studied this subject for a long time. I can make no sense out of Iraq: oil, personal relationships, Iraq makes no sense to me. The issue is that even after Iraq, the American public began to get very worried about American intervention abroad. The problem is when instances like Rwanda come up, the public, and this can be the global public, does put pressure on leaders to do something. So there's great pressure on America now, from Europeans, Canada, Australia and other countries that want America to take the lead when conflicts and human rights abuses emerge. America is reluctant to do that. I actually think Obama was very pleased when Russia and China said they would veto any actions of the

chemical weapons in Syria. Having laid down the red line in sand he did not think Assad was going to cross it. To a great extent, Obama faced a dilemma. He said that there was a red line and this meant he should act when it was crossed. When Russia and China said that they weren't going to support it, that let him off the hook. He didn't really want to act. He didn't want to send more American forces into situations where the US had no major interests. The problem China is going to face is that, as China rises, and when more of these cases arise, China is also going to come under pressure to use its power for the good of the international community. People across the world expect the great power to manage the system. Once China is fully recognized as a great power it will come under pressure to help sort out the problems of the system as they emerge. It's not always going to be possible I think, long term in the future, for China to opt out and say that we are going to hold to this notion of non-intervention. Part of the problem is that the notion of sovereignty is changing. I don't think states have become less important, but sovereignty is being eroded, and China is part of the change.

Rational View on the Power Game behind the Asian Infrastructure Investment Bank (AIIB)

Reporter: HAN Zheng



XING Guangcheng

Director of the CASS Institute of Chinese Borderland Studies, Professor and PhD Supervisor of the Graduate School of CASS. Director of the CASS Research Center of Shanghai Cooperation Organization (SCO). Receiver of the Pushkin Medal of Russia.

The Asian Infrastructure Investment Bank (AIIB) is an open, equal, and inclusive platform. The negativities due from the great power games between Russia and EU, the US& Japan and China should not be overhyped. We believe that with the spirit of mutual benefit, equality and solidarity, the factor that a few individual countries choose not join in will not affect AIIB development or impact it to achieve overall objective.

Reporter: We know that the Ukraine event has further intensified the tension between Russia and the EU & US. Now, Russia and several major powers of Europe have applied to join the Asian Infrastructure Investment Bank (AIIB). In your opinion, how would the estrangement and conflict impact the operation and development of the AIIB?

Xing Guangcheng: I believe that this impact would be very small. The rancor between Russia and Europe has come from the special historical evolvement and

realistic consideration. On many issues, especially in terms of geopolitical issues, they fall into conflict easily. But that does not mean that they cannot form cooperation in between. As an open and inclusive platform, AIIB emphasize Member States relationship more on cooperation than on competition, that is to say, the rancor between Russia and Europe generally could not affect AIIB's future operation and development.

Reporter: Some media believe that as Russia could be easily marginalized in the AIIB as its economy is fraught with factors of instability, impotent capital strength, and bad investment environment. What do you think of this view?

Xing Guangcheng: I do not agree with this view. Despite its current economic downturn and relatively weak financial strength as compared to China and the European powers, we cannot deny its important role in the AIIB. On the one hand, Russia, as the largest country in the world, has very rich reserves of oil and gas and mineral resources; on the other hand, the Russian economy as a whole is getting improved and moving towards a right direction. After it joined WTO in 2012, it has constantly adjusted its economic policies to improve economic environment. We should look at its economic problems with the light of its long term potential. In all, I still believe that Russia will gradually upgrade its domestic economic environment and improve its economy performance.

Reporter: Some say that no matter whether Japan would join the AIIB or not, its impact will not be large, and China should not care about Japan's membership in the bank. How do you see this view?

Xing Guangcheng: I think this question should be seen from twofold. If Japan would join the AIIB, indeed it is a good thing, however if not, it could not make any substantial impact to the Bank. As a multilateral international organization that already contains dozens of countries, it doesn't matter whether a country would

join or not as it will not cause large negative impact to it. For Japan's choices, we should understand its position. After all, it needs to consider the attitude of the United States, and weigh pros and cons.

Despite the factor that Japan's non-membership will not affect AIIB overall goal, operation and achievement, Japan by no means is a minor country that China can look down on its choice. On the one hand, Japan as an economic and technological power, its strong capital strength and its advanced system design capacities and technologies in many fields can produce a positive impact on the developments of Asia; on the other hand, the vision and goal for China to lead establishment of the AIIB is the hope that all Asian countries can cooperate together and seek common development. So, Japan's non-membership is clearly inconsistent with the best purpose of the Bank, and nor with China's initial vision.

Reporter: The AIIB is partly a reflection of China's growing power in international leadership. From your perspective, in such a context, what is the direction the political relations between China and Russia will go towards?

Xing Guangcheng: I think that the relationship between China and Russia will go closer and closer, and their cooperation in varied fields will be constantly strengthened.

After Russia has suffered repeatedly rebuffs in its original looking-west policy, now it has to consider to moving eastward. This strategic shift will make it seek more close relations with China. Judging from the general international situation, the two countries will make joint efforts to safeguard peace and stability of the region and the world, to establish a new international order, and to further promote equality and democracy in international relations. We should take a positive attitude with rational thinking to look at the political and economic exchanges between China and Russia.

To Enhance China's Status In The Global Value Chains Is A Long-term Process

Reporter: LIU Ximing



Yang Cuihong

Currently serving for the Academy of Mathematics and Systems Science of the Chinese Academy of Sciences, she is vice chairman of the International Input-Output Association, vice chairman of China Input-Output Association, and member of the editorial boards of the "Economic System Research" and the "Journal of Systems Science and Complexity". Her research covers the areas of input-occupancy-output technology, global value chains, economic forecasting, and macroeconomic analysis.

Processing trade, an import-turned-export trade model, is an inevitable thing for China to incorporate into the global value chains which are mainly dominated by multinationals. But so far China is more of a passive participation. So it makes sense to see that the country has been positioned at the low end of the global value chains over a rather long period of time. In recent years, lots of industries in China are showing a rise along the value chains, and in general, the value added of a trade unit is on the way to increase. However, even more industries of the country, for example some of the electronics, are still positioned in the low-end. Although the products marked with

"Made- in-China" are seen everywhere all over the world, main core technologies are still developed from advanced economies. To fundamentally reverse the trend, it is a long way to go for China.

Reporter: Nowadays, global value chain has become a focus of governments, academia, and international organizations. What is the current situation of Asia-Pacific economies in terms of their benefit distribution in the global value chains?

Yang Cuihong: Asia and Pacific region contains a lot of countries and economies. It includes both developed economies and developing economies. In fact, it is a microcosm that to some extent reflects the whole picture of the world. These developed and developing economies are widely distributed along global value chains. Some developed countries are often positioned higher. For China, due to its larger proportion of processing trade and lack of core technologies, so in general it is still positioned at the low or middle end of the global value chains, though its trade volume is very large.

Reporter: How can China change its low-end position in the global value chains?

Yang Cuihong: The processing trade in China has developed fast, particularly in the period after the reform and opening up. It can be safely to say that the processing trade is an inevitable thing for China to incorporate into the global value chains, which are mainly dominated by multinationals. But so far, our country is more of a passive participation. So it makes sense to see that the country has been positioned at the low end of the global value chains over a period of time. In recent years, lots of industries in China are showing a rising trend along the value chain, and in general, the value added of a trade unit is on the way to rise. However, even more industries, for example some of electronics, are still positioned in the low-end. Although the products marked with "Made- in-China" are seen all over the world,

main core technologies still come from advanced economies. To fundamentally reverse the trend, it is a long way to go for China.

What we should do then? Twofold: First, passive participation by which to enhance technological content of our products, thus to change our low-end position in the global value chains. And also, we can carry out independent research and development to increase China's proportions of high-tech products in the processing trade.

Second, take proactive measures to move up our positions along the global value chains. For example, the Belt and Road Initiative which is now very popular, its ultimate goal may be to form one or more new value chains. China could play a leading role in this Initiative. In essence, it is a proactive measure taken to enhance our position in the value chains. Specifically to say, it is to form multinational companies through our external investment activities that will help us establish our leading role in the value chains. Besides, for the proactive measures, we have begun taking actions in this regard. For example, China's investments in foreign countries are growing rapidly. By establishing our own multinationals, we can somehow form a portfolio of our own leading products, so as to enhance our own position in the global value chains.

Reporter: On the other hand, you also have pointed out: "Although the values added by the processing trade are low, it can play multiple roles to drive China's economic development. In fact it has played its part of important role to incorporate China into the global value chains, and will continue playing the important roles." Can you specifically talk about what important roles the processing trade plays in the economy?

Yang Cuihong: The processing trade has many positive impacts on the economy. First, the most direct role is it drives up China's export-oriented economy, while stimulating job creations. The number of jobs created by the processing trade is

quite impressive.

Second, it stimulates the development of China's other related industries. This is an intangible and positive impact.

Third, our technologies can get improved gradually. As we introduce technologies and equipment, we are required to hire operators and technicians who in turn will gradually grow up their techniques and skills. In essence, this actually is a process helping train a large number of export-oriented high-quality management personnel and technical personnel. Although, originally, processing trade began with the labor-intensive industries, such as garments OEM, and was relatively low-end positioned, with time going, the proportion of the capital-intensive and technology-intensive products is on the way to increase. In fact, what we have got improved is not only the technologies of a particular industry, but a spectrum of industries as a whole.

Fourth, it promotes adjustment of industrial structure. A large proportion of the processing trade is foreign-invested enterprises. At some industries, foreign-invested enterprises occupy a large proportion that can be as large as 80%, and play a very important role in the entire cycle of the processing trade. Motivation of foreign investments often comes from the comparative advantages we have, such as labor advantage. On the one hand, compared to other developing economies, China has a relatively high-quality labor force; on the other hand, labor costs here are generally low. After introduction of foreign investments, it effectively accelerated the optimal allocation of resources, which is effectuated due to the full use of the labor force. In addition, some industries need to form clustering so they can truly support the development of processing trade. This has also played an important role for optimization and upgrading of industries.

Finally, after we develop to a certain stage, it is surely we will not be satisfied with the industries that are still lowly positioned in the global value chains. Last year

when I was in France for a visit, a retired EU minister pointed out: "China may face more intense competitions. As we know that in the past, it mainly produced complementary products that developed economies reduce to produce or no longer produce; but as some of its clothing and electronic goods gradually got improved to the high-end, it has to start competition directly with competitive products from developed economies." In fact, his words essentially reflect the enhancement of China's industries along the industry chains. And this competition process also plays a very important role to enhance the global value chains.

Reporter: As you said the employment number the processing trade created is huge. Does it mean that, in the course of trade structural adjustment, it will inevitably produce a negative impact on employment?

Yang Cuihong: Not necessarily. Indeed, the processing trades can drive economic growth and employment growth. But in comparison, the job creation by it, in general, is far less than that by general trades, and in fact, even less than a third of the latter. So, in terms of export-based job creations, processing trade is not the major force to create jobs.

In scenario analysis of structural adjustment, one of the scenarios is that with decreasing in processing trade, the proportion of general trade would generally increase. Here, the compensation effect is actually positive.

Another scenario is changes will also happen in the proportion of trade in services, not only to the goods trade that combines both the processing trade and the general trade. The job creation by the service trade is not only higher than the processing trade, but far higher than the general trade. So, in short run, a structural adjustment may be negative in effect, but it is not necessarily so in the longer run. Therefore, we should pay attention to the prominent role of the service trade; in this trade, per unit of the export of high value-added services often generates higher value added.

Reporter: Last year, China for the first time proposed the topic of global value chains into the APEC cooperation agenda, and the Statistics on Trade in Value Added (TiVA), a brand new accounting method, has been paid more and more attentions. Do you think that compared to traditional accounting method to account gross flows of goods and services, what is the advantages the accounting measure has?

Yang Cuihong: The main advantage is it can provide a clearer picture to depict the distribution of trade advantage, trade volume and value chain of a country along the global value chains. For example, China's current total exports actually contain a lot of imports, that is to say, it contains the values that other economies created. In the gross-value statistical framework, it cannot break down which values are created by our own country and which are not. In particular, in countries like China and Indonesia who are with a higher proportion of processing trade, the inflated numbers massively existed. But now, if we use the method to measure TiVA, we will know the exact numbers we have, for example, if there are a thousand dollars in our export, maybe only six hundred US dollars belong to us, and the rest four hundred US dollars may come from other economies. According to the new measurements, we can more accurately understand where we stand in international trades, rather than face a misleading, foggy, very large figure.

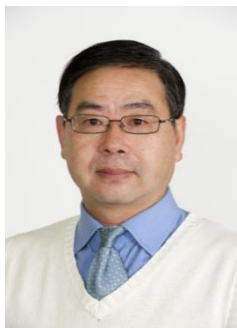
For a long period of time, the traditional measuring way to calculate gross trade has played an important role to measure the trade scale. Under which, it seems we have large export volumes in products like the electromechanical products, but in fact it brings us very little profit. Without understanding specific true figures behind scene, it is easy to make Chinese blindly optimistic, and mislead decision makers to make irrelevant policies for related industry.

Reporter: Last year in May, APEC trade ministers have adopted the "Strategic Framework on Measurement of APEC TiVA under GVCs". How would it impact the Asia-Pacific region, and the research work in China?

Yang Cuihong: It has great push for researches. The Academy of Mathematics and Systems Science of China is responsible for accounting of the TiVA (trade in value-added) and conducting the systematic research of related issues in our country which I also personally take part in. After adoption of the Strategic Framework, we very soon started taking actions. We first set up a core working group to promote construction of the databases of the APEC TiVA (trade in value-added). After that, we conducted the research on a lot of issues between APEC economies, including the economic ties, employment, transfer of carbon emissions, and transfer of energy consumption, through a variety of analytical methods. To finish the job, it requires us to build a large team. The Ministry of Commerce, General Administration of Customs, the National Bureau of Statistics, the SAFE and other agencies are involved, and we also gather together a number of outstanding researchers. In according our researches, we see the economic ties among some of APEC economies loosened in previous years. To observe the time series variation, it is helpful in analyzing and reasoning the loosening ties. As for how to promote effective cooperation among APEC economies, the database will play a more important role in the future.

Cyber Security Ultimately Is Military Security

Reporter: ZUO Xiaoyu



YOU Ji

Professor of Macau University, School of Social Sciences. Research Area: national security.

With deepening development of cyber technology, in the future the Cyber Army and Outer-space Force will not only become new combat forces, but also will become standardized combat forces, in parallel with traditional navy and air force. The expansion of cyberspace security has a very close link to military transformation.

Reporter: “Strengthening the Army by Cyber Force” is the slogan that is often mentioned in today’s world. Can the Cyber technology solve most present security problems that military faces?

You Ji: As it is well known, the development of cyber technologies began with the military needs. In the last century, the United States gradually expanded its military cyber-networking technologies to the civilian and the business through the market, evolving and resulting in a revolutionary force we see today. It has changed fundamentally to people's daily life, and even becomes the most basic pattern of interpersonal relations. In this case, it is a military origin that turned cyber to be massively used in economy, society and culture. But we need to make clear that, although compared to cyber defense capabilities, the commercial and civil use is more extensive and with higher profile today, still, the core of cyber is of military.

In fact, the core of the cyber security is military security. If there is no reliable defense cyber network as the first line of defense, the civilian cyber network will be very fragile. So, it is a strong military cyber-security that provides the Great Wall that is indispensable to the security of civil network.

Reporter: From the national cyber security strategy point of view, to win the "war without smoke", how long should China go to fill the gap to a military cyber power?

You Ji: Compared to developed countries, our military cyber technology still exists with a gap. In the last decade, China's cyber technology has developed very rapidly and fast, and is gradually narrowing the gap. The basis of a military cyber is the civilian electronic and information technology. The reason that China military cyber technology lagged behind in a period of time is because of overall weakness in basic electronics industry and Internet technology in the country, and that in turn is due to the fact that the cyber technology originally was born in the West. Now through substantial money and manpower input, the electronic technology in China now has come up to a leading position in the international community. Although still there is a large gap to the United States, in some key areas, these disparities are generally eroded to less a "generation gap". If we can make it to less than a generation gap, then the US overwhelming military cyber capabilities against its adversaries can be undermined gradually to a comparative advantage, and major clashes between the great powers may not occur because of the relative balance of technologic powers that ensures mutual destruction. Because if there is no overwhelming advantage by a major power, to take a military action a country would have to take into account the cost of the action. In most cases, the US would think twice before taking actions. So for China in terms of national security, the shortcut is to rapidly develop our asymmetrical capabilities to confront adversary forces, not just we should have a new generation of aircrafts and submarines that are tangible combat platforms, but more importantly is to have an effective and intangible means, including cyber offensive and defensive system that are both

military and civilian compatible. For the last five years, what makes Americans feel nervous and anxious is China has made a significant leap forward in its capability of both tangible and intangible weapons.

Reporter: On April 27, China's first cyberspace Blue Book “China Cyberspace Development Report (2015)” was published. In consideration of China’s establishment of a national network team, organizing the World Internet Conference, and proposal of double- seven (7 bottom lines for abiding by laws and national interests of domestic cyber networks, and 7 consensuses for Cyberspace to benefit mankind) strategic initiatives, what are your opinions on top-level design of the cyberspace governance?

You Ji: National top-level design and cyber capability are conflicting concepts to some degree. As we just said, the rapid rise of China's military cyber capability is based on the capability enhancement of its civil electronics industry. Here, there is a dependent relationship: without strong basis of civil electronics industry, it will be impossible for development of military cyber technologies. In Chinese this phenomenon or relation is called “water without a source, or a tree without roots”. The dialectical unity of top-level design and civil technology development is that, the basic civil electronic industry and the IT industry serves as the main industry, but as it is market-oriented, it is impossible to achieve a perfect national top-level design. The horizontal market competitive pattern will drive agents to make revolutionary breakthroughs in innovation capability, thus it renders out a driving force for leapfrog development of the military cyber as a whole. IT industrial development will provide selectivity, reality and possibility for planning top-level military capacity. Vice versa, the top-down design of military cyber also sets up high technical standards and requirements for the civil industry, pushing a hand to promote the main industry to develop. So this is an interdependent relationship. On the one hand, we emphasize government’s appropriate input and intervention into the innovation or private areas, so to the best degree to play out private capital and innovative capabilities. On the other hand, we can turn private innovations into the

practical capabilities - whether be it used for military or civilian- that is, in other words, to turn the power of knowledge into the achievements of high information technologies. No technical capability, no basis for national top-level design. Vice versa, no top-level design, it is difficult to get the cyber products into military capabilities. This is a complementary, independent relationship. National top-level design is very important, but it could not bring us with innovative designs, by the opposite, it could devise out imperfect or even fault designs. So, it is a complex interaction that requires careful studies.

Reporter: How can civil technology powers communicate with the top-level designers?

You Ji: Shanghai forum as a platform facilitates very good communications. As scholars, we generally can sketch out some long-term trends in our speeches at the forum, particularly the keynote speech on big data by Professor Hui Zhibin which provides policy-makers a new way of thinking and brainstorming, and a new inspiration for design. Based on the international prospective forecasts, policy makers can make targeted planning, and this is the essence and significance of Shanghai Forum. Unfortunately, as a representative of the industry, Huawei's cyber security office didn't send a person to the Forum. Combining civil and academic forces is very important. My speech is a forward-looking forecast, and is relatively theory-based; while the Big Data research by Professor Hui Zhibin is more practical and operation-oriented that provides a richer, more detailed stuff for overall direction of the top level design. Russian scholars and American scholars present at the Forum made framework depictions from the perspectives of international scale and concepts. It could be used or implemented for the government policy making and management of the cyber networks, including governance of the government network system and governance of civil Internet interaction. Such speeches can be very good references. We hope we can make greater use of the platform-- Shanghai forum, to communicate and exchange with the industry elites.

Reporter: Global cyberspace order has developed from the beginning of spontaneous presence to present stage's conscious adjustment. At the "turning point" of cyberspace governance, can you talk about your predictions on the future of global cyberspace order?

You Ji: This is a complex issue. The US has dominant advantages in cyberspace power in today's world. If the US is willing to use the technological advantage to benefit the mankind, then mankind will get benefited. But if it uses it to attack, repress or retaliate against other countries, it could lead to a further militarization of the Internet technology, resulting in increasing tensions in inter-state relations, and resulting in higher possibility of confrontations between countries because of the US cyber hegemony. The relatively eased environment currently could therefore fall into a more violent conflict. For example, should the US insists to prosecute the six PLA armymen discussed in the forum, it obviously would not be conducive to a healthy development of bilateral relations between it and China. We hope that peaceful use of cyber technology can become a principle that can be widely accepted worldwide, allowing it to better serve to the mankind.

Public Health Calls For Public Participation

Reporter: TIAN Yunru



YU Hongjie

MD, Chief Physician, and PhD Supervisor; Currently serves as Director of the National Institute for Communicable Disease Control and Prevention, the Chinese Center for Disease Control and Prevention. And concurrently serves as a member of the Advisory Group of the Global Action Plan for Influenza Vaccines (GAP AG), and a member of the Panel of Influenza Vaccine of the WHO Strategic Advisory Group of Experts (SAGE).

In the current global context of economic and social integration, people move so frequently that it is impossible to block cross-border epidemics and disease importation is thus inevitable. If we can quarantine it and treat it in timely manner, it could not cause a major public health hazard. Here, for this issue of disease importation, our biggest concern is that imported cases would cause local massive outbreaks. So we will not put efforts to go blocking disease importations that could be imported sporadically, but instead to put efforts to block local massive outbreaks.

Reporter: You had mentioned in a previous interview that the Ebola virus had been found as early as the 1970s, but due to no commercial interests, the vaccine development has made no progress. So, in your opinion, should public health problems be solved based on market forces?

Yu Hongjie: Vaccine development and commercialization are two different concepts. We can say that governments have always played a role in guiding development of vaccines. The research and development of vaccines, including the Ebola vaccine, has previously been dominated by the US government.

But in terms of commercialization of vaccines, it is always driven by the market. The impact of the commercial interests on vaccine development is for sure. If an epidemic outbreak is just limited in a small vicinity of population, the demand for the vaccine will be smaller. In contrast, many infectious diseases, such as influenza, are out-breaking perennially worldwide, so the influenza vaccine development is generally successful.

There is a big gap between vaccine development and clinical application, as it needs a series of clinical trials and experimentations before clinical application. In the Ebola vaccine development process, there have been no clinical trials, because there is greater correlation between clinical trials and severity of the outbreaks. However, vaccine research against Ebola has never stopped since 1976 when the virus was found the first time, but because of no commercial interest, the researches made no success. Today, after the massive outbreak of the Ebola, clinical trials are accelerated, and have got some achievements.

Reporter: Public health is not just a medical issue but also a social problem. You had mentioned before, for older people the chance to contract H7N9 virus is higher than the other groups, because they got the habit to visit live bird markets. So, do traditional lifestyles have negative impacts on some epidemics intervention?

Yu Hongjie: Yes, older men go more often to live bird markets, and are more exposed to influenzas, so the odds for them to get infected are higher. Indeed, certain habits and lifestyles will worsen the spread of some infectious diseases. For

example, Chinese people like eating fresh taste and tend to kill live poultry, and people of West Africa are customarily to touch dead body at funeral. These certainly are risk factors for outbreak of infectious diseases. Thus, as time goes on, people need to change these bad habits and traditions. But this is a long process that will consume very longtime to get it changed. We cannot make it overnight.

Reporter: You had warned seasonal risks of H7N9 to be out-breaking once again in upcoming falls and winters. Shanghai was ever a hardest hit area of this bird flu. So do you have any advice for people in Shanghai to take prevention methods?

Yu Hongjie: In fact, Shanghai has done a terrific good job. It closed live bird markets from the start of each Spring Festival and re-opened until the end of April, so the incidence in Shanghai is also on the way to decline. Our advice is to gradually and thoroughly abolish live bird markets in big cities, boycott the habit to kill birds for fresh food, and build a centralized slaughter house just like what Beijing did that is essential for prevention of H7N9.

Reporter: Just at the forum, Professor Jiang Qingwu mentioned that the epidemic prevention and control experience of Hong Kong and Macao can be some of good lessons we can draw. In fact, in Hong Kong, a place near to Guangzhou geographically, dengue outbreak there is not as massive as that than in Guangzhou, in your opinion, what are the reasons behind?

Yu Hongjie: Why the dengue was massively broken out in Guangzhou last year, while it didn't in places that are similar with Guangzhou in terms of ecology and densities of population and mosquito? We cannot fully answer this question today. Scientifically speaking, we have no justifiable answer sufficiently to explain yet, but we believe the result is resulted from multi-factors, certainly not just one individual factor playing behind.

Reporter: So now what is obvious factor we can see?

Yu Hongjie: It should be said that the density of mosquitoes and the weather condition are the major factors, particularly the kind of mosquito, called *Aedes albopictus*, is the main media to communicate dengue in the country. Correspondingly, our measure and policy now is mainly focused on control of mosquitoes. However, the mosquito control requires multiple levels of cooperation and collaboration. Although various levels of controls are led and guided by the government, the specific implementation, however, calls for individuals' participation. *Aedes* mosquitoes is an indoor parasitic, in other words, they are mainly grown in residential houses. People in southern China are fond of culturing things like flowers, trees, fish and insects, so water spots inside the rooms are places that can easily breed parasitic mosquito. In this case, we need people to take active measures to clear indoor parasites. Of course, some handbooks or manuals publicized by the government are helpful for the efforts.

Reporter: You just mentioned in the speech that now there are two new factors that may affect public safety. One is the increasing density of population, and the other is the long-distance air travel that has become a daily lifestyle in today's society. Then, how can we effectively block the impact of imported cases that could cause public health issues arising?

Yu Hongjie: In the current global context of economic and social integration, people move so frequently that it is impossible to block cross-border epidemics and disease importation is inevitable. If we quarantine it in time and treat it timely, it could not cause a major public health hazard. Here, what we concern most is that imported cases would cause local massive outbreaks. For example, dengue fever breakout is imported overseas. When the time, weather, temperature, and density of mosquito come right, it would cause local outbreak. So we will not put efforts to block disease importation that could be sporadically imported, but put efforts to block local outbreaks with different strategies to treat different case of epidemic.

Shaping a Free, Rational, Conversational And Consensus-oriented Cyber Opinion Ecology

Reporter: XU Ye



ZHANG Zhi'an

Professor, PhD Supervisor and Dean of Communication and Design, Director of Internet and Governance Research Center, Sun Yat-sen University. Serves concurrently as a Paper Reviewer for the "Communication and Society" (Hong Kong), and the "Mass Communication Research" (Taiwan). Research areas cover news production sociology, journalism practitioner, and new media and society.

Today, there is structural defect in our public opinion expressions. This deficiency mainly reflects on that when in discussions most users don't focus on public issues, but drift to express their emotional, irrational views away from the issues. These expressions are mainly mobilization based self-interest, or judgment based on emotion, rather than the rational thinking based on facts. The kind of expression that we really need is a public governance-based discussions and sharing on which we can reach social consensus.

Reporter: How do you assess the idea of Internet governance and the current Internet governance in China? What are the progresses it made and the challenges it faces?

Zhang Zhi'an: China now attaches great importance to Internet governance, and

has made certain progresses in the past two decades that are valuable.

The first progress is the concentration of powers. In terms of the governance body, we have changed the somehow disordered pattern that was riddled by a multiple governing bodies in the past. In that pattern, it was the Ministry of Industry and Information Technology, the State Council Information Office, and the State Administration of Radio Film and Television who took the responsibilities to regulate the Internet, but with low efficiency. Now the State has set up the Cyberspace Administration of China which, with the major administration power designated to it and strongly backed by the Office of the Central Leading Group for Cyberspace Affairs, is the only administration empowered with both of sufficient administration/management power and a certain legislative power, thus totally changing the pattern of a multiple governing bodies.

Another is to promote the rule of law of the Internet. Internet is not a space outside the legal world. It indeed needs of standardization and order. For example, the Country pays particular importance to manage cyber rumors, protect online privacy and fundamental rights of citizens, and protect intellectual property rights on the Cyber space. To promote legislation for cyber management, this is a progress made by China.

A challenge here is that as power is too concentrated, how we can avoid monopolization, officialism and power centralization when in the exercise of the power. In addition, for the sake of social stability, local governments manage the Internet still showing with a certain feature of rule of man, even bullying to a certain degree, in the process of advancement of the legal system. And also, even though we are now pushing cyber legislation, it is still insufficient and imperfect in certain areas in our legal system, which results in difficulties for enforcement, for example, despite government's emphasis on cyber IP protection, most people do not want to resort to legal means due to high cost in the specific implementation process; despite the emphasis on online privacy protection, but still there are a lot of human

flesh search and moral judgment cases on Internet, still it is easy to violate privacy of individual citizens on Internet. Currently, it is very difficult to enforce and protect the rights.

Now the question which is worth exploring is whether it is possible to protect "The Right to be Forgotten" in China. On May 30th, 2014, Google launched in Europe a service for users which can meet users' demands to remove contents from the search results if the contents they think are objectionable. Within just four days since the service launched, Google received 41 thousand individual applications. As the Internet and social media goes popular, more and more people go into the "panopticon". Whether citizens can claim public Internet companies to "Delete" and whether China can have such laws in place to protect the Right to be Forgotten, we still have a long way to go.

Reporter: Some say that for Internet governance of our country, we can largely rely on the market by which a reduced, service-oriented government can be built upon. How do you see it in your opinions? And some even proposed to rely on the various private organizations and trade organizations as a governing body. In your view how do you think about this model? And which mode should China adopt?

Zhang Zhi'an: Cyber management should be varied in different countries. What China needs now is common participation. But it seems our governance model is still the one largely dominated by the government with limited public participation. Although companies have a certain influence, their voice is still relatively weak; in addition, social organizations participation is also very limited. Should Chinese government per se want to shift gradually from an Omnipotent Government to a Limited Government, its policies especially those public interest related policies, should be shifted from the one that is top-down, relatively closed and relatively power led, to the one that is more open, equitable, diversely participated, and interactive.

China may not simply copy a mode from other countries. But it should adopt a mode that is more based on rule of law, open and governance-oriented, and depending on different areas, to choose governing bodies. For example, China's cyber legislation is basically led by the government and the NPC, but when it comes to the areas of Internet policy and the Internet industry development policy, it should be fully devolved to the market and enterprises. In terms of citizen information and privacy protection, it should listen to public opinions and views and learn from the practice of developed countries. And in terms of cyber moral standards and ethical quality of Internet users involving cyber information content, it should turn it to the social community to make judgment. The more difficult part is the cyber media management. Because in China, the media is part of the ideology, so our cyber media management is also, to a considerable extent, incorporated into in the management system of traditional media.

Reporter: What kind of Cyber opinion ecology should China have to promote a sound and healthy governance?

Zhang Zhi'an: China needs a cyber opinion ecology that is fully free, rational, and conducive to public dialogue and consensus. This is one of the important preconditions for development of Chinese society. There are three main criteria for Cyber opinion space.

First, it's freedom of speech. People should be fully allowed to say, speak and express on public affairs. Otherwise, it is impossible to form a so-called opinion interaction and the consensus that most people could reach to hold. To make everyone fully express without fear is an important prerequisite.

Second, it's public and rational dialogue. This kind of expression is neither the one in which you and I gabble, just like a dialogue of the deaf, nor the one you say on the Wechat and I say on the micro-blogging and he says in the mainstream media,

without listening to each, nor the government states official opinions on the CCTV News Simulcast while general public express opinions on the micro-blogging, that keeps the society divided and fragmented, and nor the one in which top ten people's opinions on Wechat that affect thousands of people following behind them. But instead, it is the one that based on basic facts we examined to carry out a rational expression. If we cannot interact, if we always say without listening, it is extreme and emotional. Most people are selective to contact information; public opinion is polarized. This is very bad.

Third, it's formation of consensus. We are particularly concerned about a torn social value. No party seems to want to listen or learn from the other. What we express and discuss on the Internet falls into great divisions, as figuratively speaking in Chinese—falling into “a ground of feathers”, and finally no way to form a real social consensus, thus hindering the rational development. Today, there is a structural defect in our cyber opinions. This deficiency mainly reflects on that when in discussions most users do not focus on public issues, but drift to express their emotional, irrational views away from the issues. These expressions are mainly mobilization based self-interest, or judgment based on emotion, rather than fact-based Rational Thinking. The kind of expression that we really need is a public governance-based discussion and sharing on which we can reach social consensus. No consensus, it cannot really provide a basis of values and attitudes for the so-called public governance. So we think today's cyber opinion place in China is not rational, but unhealthy.

We should strive to promote consensus, at least it is necessary to facilitate elites to reach consensus. To form such opinion ecology in China, it depends largely on the growth of rational citizens and protection of freedom of speech, depends on whether the serious media can survive and develop in the opinion fields to become an important public space, and also depends on education and the civic literacy of next generation of young people.

Reporter: What are the effective foreign governance models and mechanisms that China can learn from?

Zhang Zhi'an: What is worthy to learn for our Internet governance is to have a holistic strategic arrangement. For a country to form the overall architectural design to govern Internet, it must have arrangements on macro, meso and micro levels. For example, the US National Internet governance system that is with an overall strategic plan includes at least three capabilities: First, the top-level design capability which mainly refers to paying importance to the national strategy and to conducting the national system design; the second is the collaborative capabilities, which means to establish a management system in which the government, businesses, multiple main think tanks and associations can participate in; the third is socializing capabilities, which means to set up a co-sharing mechanism in which exchange of the information can be conducted between citizens, companies and organizations. Internet governance is part of the national governance structure, and both are highly homogeneous. We rarely see that a government which takes the way of power politics will take an open attitude towards to Internet governance.

In addition, the protection of privacy and the right of freedom of expression should be the baseline for all of the Internet Governance. Internet Governance should not be carried out at the expense of the right to criticize and the right to express of the normal public, and it should not ignore the protection of privacy, fame and related rights of the public. In many cases, it may exist in a conflict between privacy of citizens and national security, and the government may easily take the reason of national security as its ground to weaken the protection of citizens' privacy. Actually, it should have a very clear boundary placed between the two.

Reporter: In terms of Chinese Internet governance, what kinds of roles should Shanghai take?

Zhang Zhi'an: Shanghai has done a lot to study and explore Internet governance.

For example, the reconstruction of cyber opinion fields, especially its efforts to improve its capability to guide the public opinions on the mobile Internet; positive reforms implemented by Shanghai United News Group; the introduction of *The Paper*, *Shanghai Observer* and other new media platforms; quitting some of the press from the market; and structural adjustment of the old and new media; as well as the Government supports given to serious mainstream media to allow them cover news with a relatively free degree. These efforts are the active attempts to shape and improve the influence of the mainstream media in the opinion fields, and to actively bridge the official opinion fields and public opinion fields.

However, in the fields of the intelligent government and mobile government, particularly in the opening-up of government data, Shanghai got lots of things to do. Many European and American cities have their own government data channels through which public data involving people's livelihood (non-privacy) can be available to the public, so that the public can be better aware of critical information of urban governance. For this aspect, Shanghai can learn a lot from them.



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