令和 6 年度

中国短期海外調査

報告書

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一橋大学経済学研究科長・経済学部長
佐藤主光

一橋大学経済学部は 2013 年度からグローバル・リーダーズ・プログラム（GLP）を実施しています。その狙いは英語などで優れたコミュニケーション能力を持ち、経済学の専門知識と分析スキルに基づいて国内外で活躍できるリーダーの育成にあります。

GLP の活動の柱の一つが短期海外調査であり、例年、中国と欧州において実施してきました。現地での調査に先立って学生たちは中国、もしくは欧州について学ぶゼミを履修します。このうち中国ゼミについては今年度、尹国花先生にご担当頂きました。短期海外調査については 2020 年に始まった新型コロナウイルスの感染拡大で 2022 年度までは現地を訪問することができず、現地とはオンラインによる交流に留まっていました。その新型コロナ禍がようやく終息したこともあり、昨年度から国際間の交流が再び活発になり、GLP の中国短期海外調査も再開できました。今年度も北京、上海の大学及び現地企業を訪問させて頂いております。現地企業・団体の活動を理解する他、現地の学生との交流は GLP 学生にとって自身の視野を広げる有意義な機会になったかと存じます。無論、学生の安全な引率と現地での円滑な調査に向けて、尹国花先生、現地調査に帯同頂いた辛孟軻さん、グローバルオフィスのスタッフの皆様のご尽力がありました。改めて感謝申し上げます。北京・上海の現地調査には一橋大学中国交流センターの賈申さんにも同行頂きました。こうした支援なしには現地調査の実施はなかったかと存じます。また、北京・上海で対応頂いた関係者の皆様のご協力にも深く御礼申し上げます。

無論、海外調査の主役は参加した学生たちです。大学や現地企業への訪問の他、観光の時間も満喫し、海外留学とは違う形での学生たちの成長が垣間見えたようでした。言語の壁もあったかと思いますが、それも貴重な経験です。1 年間とはいえ中国について様々な知見を得たことが本報告書の学生レポートからも分かります。日本と中国との間では現在、安全保障面で緊張感が高まっています。であればこそ、現地の中国の人々との交流を通じて、政治とは違う実際の中国の社会と人々（特に若い世代）を知ることの重要性も増しているように思います。今回、調査に参加した学生たちが今後、グローバルに活躍するとともに、日本と中国の人材交流の懸け橋として成長することを期待して、冒頭のあいさつとさせて頂きます。

耳聴為虚,眼見為実

特任講師　尹国花

最近マスコミで話題となっているものの一つに、中国のAI企業であるDeepSeekがある。DeepSeek の登場は人工知能（AI）業界にとって大きな転機となっており、中国発の大規模言語モデル（LLM）として先進国のAIと競争できるレベルに達している。中国国内の技術革新のスピードを考慮すると、今後さらなる発展と競争力の向上が期待される。2024 年度の渡航はこうした中国の技術発展を自らの目で確かめる貴重な機会となった。

2024 年には、前年と比較して中国渡航ビザ申請の手続きも簡略化され、さらに年末には商業・貿易、観光、親族訪問、交流・訪問を目的として中国に渡航する際、30日以内の滞在であればビザが免除されるようになった。コロナ禍以降、停滞気味であった日中交流が再び活気を取り戻すのではないかと期待している。毎年のことではあるが、学生たちは渡航前に大きな不安を抱えることが多い。マスコミや周囲から聞く「中国の怖さ」に対する懸念は容易には拭えず、ゼミ内でいくら中国について調査し議論を重ねても、いざ渡航を控えると家族や親友からの心配の声に影響を受けることもある。「耳聴為虚,眼見為実」という中国のことわざがある。耳で聞いた情報は不確かだが、目で見たものは確実であるという意味である。情報が溢れ、AI 技術が急速に進歩する中、正しい情報を自ら見極めることはますます重要になっている。現地での交流・調査を通じて、変化し続ける中国を直接見て比較することは大きな意義を持つと信じている。また、発展している部分だけでなく、依然として改善が必要な点にも目を向けることが大切であり、今回の渡航を通じて多様な視点から社会を捉えることができた。

ところで、グローバルリーダーの育成は、現代社会において極めて重要な課題である。急速に変化する国際環境の中で、多様な文化や価値観を理解し、異なる視点を持つ人々と協力する能力は不可欠である。学生たちはゼミで自らの興味・関心に基づく課題を見出し、日中交流・中国の年金制度・人口・女性の地位・教育制度や受験問題・SNS事情・漁業・不動産・ペット事情・EV自動車・キャッシュレス決済・AI産業など、幅広い分野について調査を行った。こうした事前調査が現地での体験と結びつくことで、より深い理解が生まれ、国際的な視野を広げる貴重な機会となったと考える。学生の皆さんの今後の活躍を期待している。

最後に中国短期海外調査の円滑な遂行にご尽力いただいた北京・上海の関係者の皆さま、グローバルオフィスならびに一橋大学中国交流センターの皆さまに、心より感謝申し上げる。

A Comparative Analysis of the Social Insurance Systems in Japan and China

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1. Introduction

Public awareness of Japan's aging population has steadily increased over the decade, and the need to address the problem has been acutely felt across the nation. Naturally, the social insurance system and its future have been a controversy among the citizens. In Japan, all registered residents aged twenty to fifty-nine must enroll in the National Pension System and pay the premium of 16,980 yen per month. In addition, company workers are obliged to enroll in the Employee's Pension Insurance and must pay the monthly income-based premium. Today this pension system has been a heavy financial burden for the younger generations, and there are fears that the current system may not be sustainable for another fifty years. Likewise, China is facing the problem of aging population, causing concern that the demographic crisis potentially threatens the country's social insurance system to collapse.

What solutions can effectively alleviate the negative impact of population aging on the social insurance systems in both countries? To find an answer to this question, this paper examines the current situation of the social insurance systems in China and Japan and attempts to predict the future outlooks for both based on previous studies. The paper also investigates the social security and pension systems of other nations and explores whether they can provide alternative models for a sustainable social insurance system for an aging society.

2. The Basic Structures of Social Insurance Systems in Both Countries

This section focuses on the basic structures of the insurance systems in Japan and in China. In Japan, largely two types of insurance are available: the social (or public) insurance and the private insurance. The former is a system run by public organizations such as the national and local governments, and the latter is the products provided by private insurance industry.

The former, public insurance system is supported by the four pillar as follows: the Employees' Health Insurance (健康保険, *Kenkō-Hoken*), the National Health Insurance (国民健康保険, *Kokumin-Kenkō-Hoken*), the Employees' Pension (厚生年金, *Kōsei-Nenkin*), and the National Pension (国民年金, *Kokumin-Nenkin*). The first program, the Employee's Health Insurance covers employees' diseases and unexpected accidents, and the premiums are shared evenly by the employees and the employers. The dependent family members of the insured employee, too, are under the coverage of this program without paying the premium ("Employees' Health Insurance System and Employees' Pension Insurance System, 2024). The second program, the National Health Insurance is

a policy designed for the self-employed, and they must pay the premiums by themselves. Third, the Employees' Pension covers company workers just as the Employee's Health Insurance does, but the purpose is to provide the benefits for the old-age pension, the disability pension, and the survivors' pension. old-age pension, disability pension, and survivor's pension. Finally, the National Pension is another type of public pension scheme, but it provides a wider coverage than the Employee's Pension does. In this paper, the discussion of Japan's social insurance system focuses attention on the National Pension.

As previously mentioned, the National Pension provides basic pension benefits to all the registered residents, affecting the lives of people of diverse age groups. People aged from 20 to 59 are obliged to enroll in this scheme. The scheme is under the jurisdiction of a government agency, and the pension premium is reconsidered and revised each fiscal year. The premium for the fiscal year 2024 is 16980 yen per month.

Next, let us turn now to China's insurance system In China, as in Japan, both social (or public) and private insurance is available. As for the social insurance system, the social insurance law stipulates that it consists of five types of mandatory insurance schemes, which include the Basic Pension, Medical insurance, work-related injury insurance, unemployed insurance, and maternity insurance, as well as one more fund-called Housing Provident Fund. This structure of the whole system is called "Five Insurances and One Fund (五险一金)." Among these five schemes of China's social insurance system, this paper mainly focuses on the Basic Pension Insurance.[1] It is a crucial scheme to ensure financial security in old age and is divided into three main categories. The Public Servants' Pension system is mandatory for all public servants, ensuring that government employees have pension coverage upon retirement. Next, the Urban Employees' Pension system is a compulsory scheme for urban workers, much like the Employees' Pension Insurance in Japan. This scheme is vital for workers in urban areas, providing them with old-age, disability, and survivors' benefits. Lastly, the Urban and Rural Residents' Pension system is designed for non-employed urban residents and rural residents, but the enrollment in this scheme is voluntary. This flexibility allows individuals who are not full-time workers to receive pension benefits if they choose to join the scheme.

3. The Future of the Social Insurance Systems in Both Countries

This section mainly discusses the future of the social insurance systems in Japan and China.

As for Japan, the National Pension is likely to be in jeopardy unless the premium is revised. According to an analysis by Ataigawa (2010), under the current pay-as-you-go scheme, it is difficult to ensure the stable operation of the country's welfare pension including the National Pension for the following reasons. There are largely two types of financing schemes for public pension systems:-the pay-as-you-go scheme and the funded scheme. Under the former, the pay-as-you-go scheme, the

[1] Hereinafter referred to as "Pension system".

pension benefits of the elderly generation are financed by the financial resources contributed by the working-age population of younger generations. The funded system, on the other hand, is one in which pension benefits for the elderly are financed by the financial resources accumulated by the pensioners themselves during their working years. The following is a summary of Ataigawa's provisional calculations of pension benefits under these two schemes (2010, pp. 6-8).

If we suppose that the rate of wage increase is equal to the investment return on the pension provided, the future scenario under the funded scheme is likely to be as follows:

LPA = (The average length of the pension reception period of an insured person)

LPS = (The average length of the life expectancy of a surviving wife after the husband's death)

SPR = (The payout ratio for a survivor's pension)

TPP = (The total pension benefit payment per year)

APP = (The actual pension benefit payment per year)

PP = (The total annual pension premiums)

SA = (The total salary of an insured person during his working years)

If we assume that the insured person receives the pension benefits for forty years, the values of these variables are as follows: LPA = 15 years, LPS = 10 years, and SPR = 3/4. If two-thirds of TPP is financed by the national treasury expenditure, and the income replacement rate is around 50%, the following equation holds:

$$TPP = 15APP + 10 \cdot \frac{3}{4} \cdot APP, \frac{2}{3}TPP = 40PF, \frac{1}{2}PP = SA$$

$$\frac{2}{3} * \frac{22.5}{40} * \frac{1}{2}APP = SA$$

$$\frac{SA}{APP} = 0.1875$$

This ratio signifies the insurance premium rate. Since this ratio is determined on an individual basis, population aging is unlikely to affect it. Thus, the pay-as-you-go scheme will not pose a problem for the sustainability of Japan's pension system.

Currently, Japan's pension system is run under the pay-as-you-go scheme. Assuming that the same scheme continues to be adopted, the future scenario for the Employees' Pension will be as follows.

The old-age population ratio is the value which is obtained by dividing the elderly population by the working-age population. If the letter α represents this value, the following equation holds for α, the elderly population, and the working-age population.

$$TPP * (Number\ of\ elderly\ population) = PF * (Number\ of\ working\ age\ population)$$

$$TPP * \alpha = PF$$

Suppose that half of the national pension is financed by the national treasury, and that two-thirds of TPP is equal to APP. If the income replacement rate is set around 50%, the following equations are given:

$$TPP * \alpha = PF, \frac{2}{3}TPP = APP, \frac{1}{2}PF = SA$$

$$SA = \frac{1}{2}\alpha * \frac{3}{2}APP$$

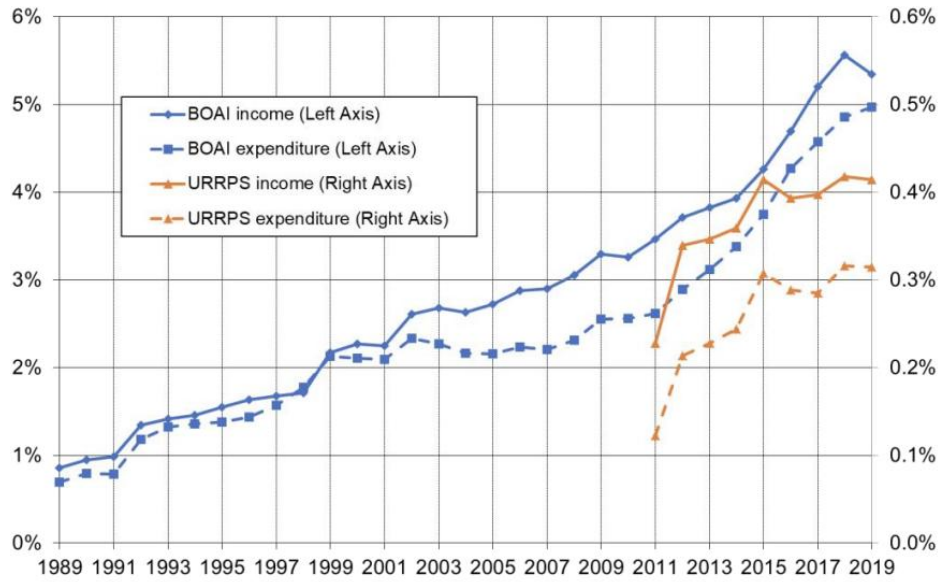
The ratio of the post-retirement pensioners to the pension insurance members is estimated to be 55% in 2030 and 86% in 2055, meaning that SA/APP will be 18.48% in 2030 and 29% in 2055 (Ataigawa, 2010, pp. 7-8). The increased financial burden will not be carried by retired individuals but will be imposed on the younger generations. The implication here is that as the aging population continues to grow, the burden on pension insurance members will increase.

As for China, its pension system is likely to face a crisis due to the following factors. According to Yang (2021), without reform, the current public pension system of China will not be sustainable. The proportion of the elderly aged 65 or over will double between 2010 and 2030. In addition, the dependency ratio of the Basic Old Age Insurance (BOAI),[2] which measures the number of pension recipients relative to the number of active contributors, has increased significantly over the past three decades. More specifically, it rose from 19% in 1990 to 39% in 2020 (Yang, 2021, p. 13). According to *China Pension Actuarial Report*（中国养老金精算报告）*2019-2050* published by the Chinese Academy of Social Sciences (CASS), this ratio is expected to rise even further, reaching 60% by 2035 and an alarming 81.8% by 2050 (as cited in Yang, 2021, p. 13). Due to the accelerating population aging, China's public pension fund will reach to its limitation in the very near future (Yang, 2021, p. 13). Based on the CASS's pension report, Yang says, "Although the income of BOAI funds is larger than its expenditure for most years since 1989, … the accumulated balance of BOAI funds will soon reach to the peak in 2028 (around 4.5% of GDP) and then decreases, [and finally,] by 2035 it will be exhausted" (Yang, 2021, p. 13). Fig. 1 below is a graph cited from Yang's discussion about this risk:

[2] Hereafter referred to as "BOAI. "

Fig. 1

Income and expenditure of China's pension system (% of GDP)



Note. Cited from "Towards Equity and Sustainability? China's Pension System Reform Moves Center Stage," by L. Yang, 2021, *World Inequity Database*, p. 15.

Furthermore, Chén (2005) points out a fundamental flaw in the current pension system. At the start of the current form of pension system, the Chinese government did not establish a fiscal policy to secure a financial source dedicated to paying the pension to the elderly of pensionable age. Instead, the government redirected the social pooling fund into their pensions. This approach placed a burden on the working-age population and private companies. Consequently, both the individuals and companies currently enrolled in the system today are carrying an undue financial burden (Chén, 2005, pp. 70-71).

Additionally, the legacy of Mao's policies remains influential. the legacy of Mao's policies remains influential According to Li, "The long-term challenge for China is to recognize that the proper pension system is one that eventually keeps the balance between economic growth and social justice, not by means of government intervention, but by the market mechanism itself (2004, p. 33)." To establish a more appropriate and sustainable social insurance system, the Chinese government needs to reconsider its distance the business community.

Thus, Japan's National Pension and China's Basic Pension are both facing formidable challenges and need to tackle them. However, whereas the challenges for Japan stem from a single factor, the aging of the population, China needs to address not only population aging but also the fundamental structural deficiencies in its pension system.

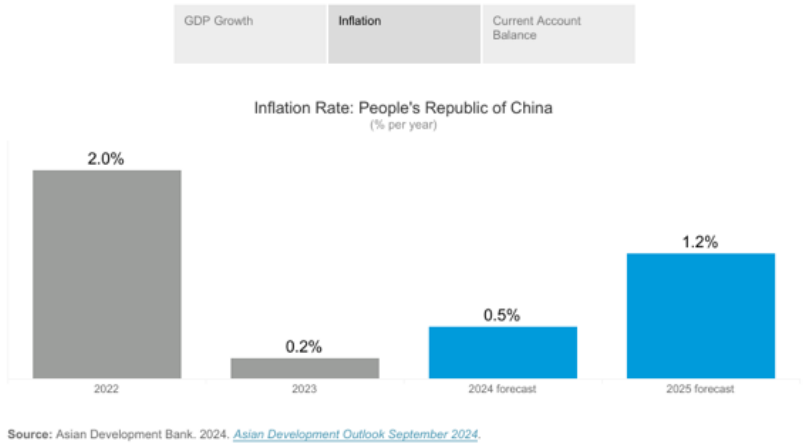
4. Solutions Suggested by Social Insurance Systems of Other Countries

As mentioned in the previous sections, from a structural perspective, the Japanese social insurance system is more stable and sustainable than the Chinese counterpart. In this light, Japan and other countries may suggest alternative solutions that contribute to the reform of China's social insurance.

As one example, the "macroeconomic slide" mechanism of Japan's pension system will be worth mentioning. This mechanism was introduced in 2004 as a measure to automatically adjust the level of pension benefits in accordance with the decrease in the number of the insured (i.e. the working-age premium payers) and the extension of the average life expectancy. Most primarily, the implementation of this mechanism aims to achieve long-term stability of the financial resources by adjusting benefits while reducing the burden on the working-age premium payers. This measure will be applied until the time when the future revenues[3] exceeds the future expenditures,[4]and, therefore, the long-term financial stability is ensured. According to Usuki (2022), however, the end of the application of this measure is expected to be later than planned. This section discusses the potential risks in applying this scheme to China. Characteristically, the "macroeconomic slide" takes effect only when price and wage growth rates have exceeded a certain level, and this is the reason why the adjustments have been delayed in Japan.

Fig. 2

Inflation Rate: People's Republic of China (% per year)



Note. Cited from *Asian development outlook: September 2024*, by Asian Development Bank, 2024.

In the case of Japan, the rate of real price and wage growth was lower than theoretically

[3] The sum of the insurance premiums and the investment revenue from the reserve funds.

[4] The sum of the pension benefits paid to the existing pensioners.

predicted, and it is possible that China is placed in the same situation. As the graph above (Figure 2) provided by the Asian Development Bank shows, China's inflation rate in 2025 is estimated at 1.2% per year. Regarding the macroeconomic slide mechanism, low inflation and economic stagnation negatively affect its effectiveness. In China, in particular, the social insurance system is practically run by provincial governments, so some provinces in rural areas will face a harder situation. On the other hand, the Chinese government excels the Japanese counterpart at prompt implementation of political measures. For these reasons, it will be safe to say that in China, the macroeconomic slide is likely to take effect more swiftly and with less risk of delay than in Japan.

From a comparative perspective of China and the U.S., Dong and Cui (2010) has suggested several points that the Chinese government should take into consideration as the administrator of social insurance system. First, the U.S. social insurance system is fundamentally administered by a single agency under the control of the federal government; meanwhile, that of China, as mentioned before, is administered by provincial governments. Not limited to the administration of the social insurance system, China's local governments have direct control over the lives of their residents, including the regulation of their freedom of travel between provinces. In addition, in the U.S., there are government subsidies that aim to reduce social inequality across states. Matching grants and block grants are the major grant programs available at present.

Finally, it should be once again emphasized that both Japan and China are facing population aging, and their social insurance systems need to resolve the intergenerational imbalance of the benefits and the undue burden on the working-age premium payers. As for Japan, Ataigawa (2010) argues for the need to secure the financial resources by lowering payment and raising the premium, as well as increasing pension benefit rates. The same is true for China. Both governments need to tackle population aging by taking these measures.

4. Conclusion

The social insurance systems in both Japan and China are facing serious challenges due to populations aging. On the one hand, Japan's system is more improved by the adoption of measures such as the macroeconomic slide mechanism; yet it still fails to achieve financial sustainability and equal financial burden shared across generations. Similarly, China's social insurance system too is facing major structural problems, including the administrative decentralization of the system, the "empty accounts" problem, and the rapid increase in the dependency ratio.

To address these challenges, both nations can learn not only from each other but from other countries which have alternative models for social insurance. In China, in particular, the adoption of the centralized governance similar to the U.S. model as well as the implementation of the schemes such as the macroeconomic slide mechanism will enhance the sustainability of the country's social insurance system.

Finally, the most fundamental solution lies in striking a balance between sustainability and social equity. The governments of China and Japan both need to act more proactively to ensure the future stability of their social insurance systems, and this paper proposed several solutions that can contribute to the structural reform of their current systems.

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China's Soaring Youth Unemployment: Factors and Solutions

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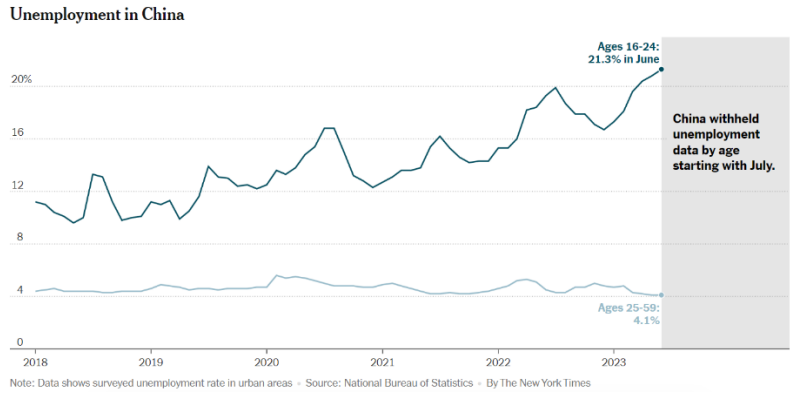
1. Introduction

In recent years, youth unemployment has been soaring in China and posing a serious problem to the society. Landing a decent job is becoming increasingly hard for even new university graduates with sufficient academic skills and degrees or young people who are freshly entering the job market. This paper examines youth unemployment in today's China from the perspectives of the current situation, causes and potential solutions.

2. The Current Situation of China's Youth Unemployment

This section will focus on the current situation of job scarcity in China. The youth unemployment has been a serious challenge for China int the last five years. As Figure 1 (below) provided by the National Bureau of Statistics shows, China's official unemployment rate in the 16–24 age group in urban areas exceeded 21% as of 2023, the highest recorded level in nearly two decades, and it has steadily continued rising every month this year. Compared to the national average unemployment rate, which stands at around 5%, the youth unemployment rate is strikingly higher. On the other hand, according to the Japan Research Institute, during the same period, Japan's youth unemployment rate was 4.2% (Sano, 2023, p. 1), highlighting the significantly higher youth unemployment rate in China.

Fig. 1



Note. Cited from "China Suspends Report on Youth Unemployment, Which Was at a Record High," *The New York Times,* by C. Fu, 2023.

On the other hand, the unemployment rate among 25-to-59-year-olds in June was 4.1%, indicating that job shortage is a problem conspicuously serious among young people in China. Moreover, it is even harder for college graduates to find employment that can match their majors and degrees. The situation is particularly concerning because young people, especially university graduates, usually considered an index of the future of the nation's labor market. Unable to find work related to their degrees, many students are now choosing to go on to graduate school to avoid entering the workforce immediately. As a result, post-graduate students are increasing. Among undergraduate students, it has now become a trend to post zombie-like photos (such as Fig. 2) on social media platforms after they have attended the graduation ceremony. Known as "zombie style" poses, their attitude is considered to signify Chinese youth's profoundly sarcastic rejection of societal expectations.

Fig. 2

Note. Photos from "小紅書" (*Xiaohongshu* or *RedNote*), a Chinese social networking platform.

The vogue of such notions as "tangping" or "lying flat" on the Internet is also attributable to the problem of job shortage. "Tangping" (躺平), or "lying flat" in English, is a social phenomenon in China that has gained significant attention since 2021. This concept describes a mindset or lifestyle where individuals, especially young people, intentionally step away from the heavy societal pressures to achieve conventional success, such as climbing the career ladder, earning high salaries, getting married, buying a house, or attaining social prestige. Instead, they embrace a simpler, less demanding way of life, prioritizing personal well-being and mental health. They often choose to limit their involvement in work and societal expectations, opting for a laid-back approach and doing only what is necessary to get by. In other words, those who choose to lie flat deliberately remain idle and do not work or engage in any economic activities. As a consequence, the scarcity of youth employment has seriously affected the lives of not only the young but also their parents.

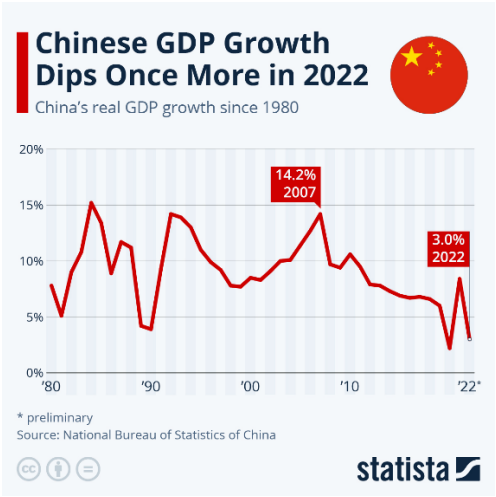
3. The Causes of China's Youth Unemployment

There are three major factors contributing to the current situation of the youth unemployment in China.

3.1. Economic Slowdown

One crucial factor is the recent slowdown in China's economic growth. China has experienced a rapid economic growth over the past few decades, but its growth rate has slowed down in recent years. As Figure 3 shows, Chinese GDP growth rate temporarily fell in 2020 due to the COVID-19 pandemic, but it rebounded to 8.5% in 2021 along with the recovery from the COVID-19 shock; nevertheless, in 2022, the rate dropped significantly again to 3.0%.

Fig. 3



Note. Cited from "Chinese GDP Growth Dips Once More in 2022," *Statista,* by K. Buchholz, 2023.

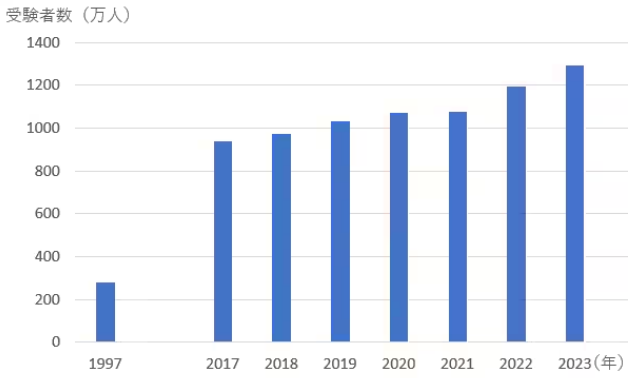
This sharp decrease of GDP growth has been driven by various factors, including the intensification of the U.S.-China trade war, the "Zero-COVID" policy implemented as a pandemic countermeasure, real estate regulations, semiconductor shortages, and the impact of the Russian invasion of Ukraine. The impact of the COVID-19 was particularly significant. The "Zero-COVID" strategy implemented in 2020 negatively affected the country's economic activity. For example, the COVID-19 pandemic led to temporary closures of businesses, layoffs, and disruptions to supply chains. During the three years from 2020 to 2022, repeated lockdowns and mandatory quarantines disrupted economic activity and dampened labor demand. Moreover, some economists expect that China's GDP growth for 2025 will slow to 4.4% (Ye, 2024); and according to the latest survey conducted by *Nikkei Asia*, the downward trend is likely to continue for 2026 with 4.1% as the projected growth rate. In response, Chinese companies have halted recruitment, resulting in a further reduction of job opportunities and particularly affecting young job seekers.

3.2. Mismatch Between Education and Job Market

A second cause is that the structural mismatch between education and the labor market has been escalating due to the growing aspirations of young graduates in China. One major factor behind this is the increase in both universities and university graduates in the country. The number of universities has nearly tripled from about 1,100 in 2000 to more than 2,800 by 2023. In addition, university education is becoming more common in China, and university graduates are on the rise. University applicants has increased too. As of 2024, a record number of 13.42 million examinees sat for the national college entrance examination called Gaokao across the country. The number of examinees has exceeded 10 million for 6 years consecutively. Along with this increase, the number of new university graduates has kept rising as well, reaching the 10 million marks for the first time in 2022, with an estimated 11.7 million this year, surpassing the 11.58 million figure for 2023.

Fig. 4

Changes in the number of examinees for Gaokao examinations



Note. Cited from "The Growing Number of Chinese University Graduates and the Challenges of Employment Mismatch, *JB Press*, by Y. Kato.

While the rate of students entering universities and vocational schools in China has been increasing, "employment mismatches" have become the norm, where university graduates are unable to find suitable jobs, even though there are jobs available. In China, industries such as information and communications technology (ICT), automobiles, and finance are among the most desirable industries for university graduates because of their high salary levels and promising prospects. According to *AFPBB News*, "the five largest employers (by industry) of Chinese new graduates in 2021 were education, manufacturing, IT, finance, and scientific research and technical services, sharing respectively 15.1%, 14.5%, 13.1%, 8.5%, and 7.4% of the employment of this group, or accounting for 58.6% combined" ("Employment Trends in China," 2022). However, in these industries, there is

an imbalance between the limited number of job openings and the very large number of job applicants, indicating the problem of excess supply of labor.

On the other hand, in contrast to the job preferences of college graduates, many companies are in need of the workforce for their factories, stores, and other workplaces. For example, merchandise salespeople, delivery workers, and restaurant hall staff are in serious shortages. However, only a small percentage of college graduates seek employment in these sectors. Thus, there has been a mismatch between the skills acquired in college and those demanded by employers, which has resulted in an increasing number of the Chinese youth working in fields irrelevant to their college majors or being unable to find jobs. Reflecting this situation, the word "爛尾娃" has begun to be widely used to refer to young people who cannot find a job that suits them. Originally, this term referred to the vast amount of unfinished construction projects that have piled up in the real estate sector. Recently, however, social media uses the term to mean the country's job-seeking but unemployed youth. This mismatch in the job market has posed two challenges to Chinese society: the high unemployment rate among young people with tertiary education and the growing labor shortage in low-wage industries.

4. The Chinese Government's Measures to Tackle Youth Unemployment

The Chinese government is enforcing various measures to tackle the problem of unemployment among young people, and this section will focus on the three primary attempts.

4.1. Youth Unemployment Subsidies

First, the Chinese authorities have unveiled a series of subsidies to promote the employment of college graduates and other young job seekers. In June 2024, the Ministry of Human Resources and Social Security under the Chinese government promulgated the "Notice on Employment of and Entrepreneurship by University Graduates," stating that it would grant subsidies to the companies that hire new and former graduates and other unemployed young groups (young job seekers of legal working age). The government also decided to provide the subsidies to increase recruitment events held on university campuses, suggesting a target of holding such events once a week in urban areas with large numbers of college graduates (Matsuda, 2024). As other examples of the government subsidies to strengthen youth employment support, the following two will be worth mentioning: one is the subsidies from the Social Insurance Fund for flexible workers who have difficulty finding work and university graduates who have not been employed over the past two years; the other is the special loans to support platform companies (Cheung, 2022).

4.2. Employment Creation

The Chinese government increased civil service employment in 2020. However, in the 2023 application round, there were 7.7 million applicants for 200,000 government job openings (Chen &

Cherry, 2023). In 2022, subordinate organizations of the Communist Party provided 100,000 job opportunities, but it was not effective enough to help 10.76 million college graduates land a job. The promotion of "rural postings" was another example of ineffective measures, and the encouragement of university graduates to join housekeeping industry has failed to attract many applicants.

4.3. Alternative Solutions

Despite the package of measures implemented by the government to date, unemployment has continued to plague China's youth. Therefore, this section suggests some alternative approaches. Considering that many Chinese people get a job in Japan, Japan's employment system will serve as a good model for China. First, it is worth noting that the average hourly wage in Japan is significantly higher than that in China: as of 2021, an average worker in Japan is paid about 850~1,000 yen per hour, while its Chinese counterpart is paid only 22~45 yuan or 440~921 yen. Given this, raising the minimum wage will effectively boost employment in China. Chinese students' motivation for surviving the fierce competition and enrolling in university is to land a high-paying job after graduation. If China's minimum wage is raised, it will be conducive to higher salaries in many sectors, eventually giving young people a wider choice of occupations and alleviating the problem of youth unemployment. In addition, social prejudice against manual labor and other low-paying occupations is a contributing factor to China's high unemployment rate; so, the government should improve working conditions and wages for these occupations and eliminate the prejudice against them. Better wages and safer working environments will change the widespread negative perceptions about low-paying jobs.

5. Conclusion

The rising youth unemployment in China is a complex problem caused by economic slowdown, and the mismatch between education and labor market demand. The challenges young people face in finding a job and securing employment not only affect their personal lives but also have far-reaching implications for the nation's economy and social stability. The Chinese government has implemented a package of initiatives including the subsidies for youth employment support, the increase of new civil service positions, and the promotion of employment in rural areas; nevertheless, these measures have not been successful enough to fundamentally solve the country's youth unemployment. In this light, the employment systems of foreign countries will present an alternative model for China. In particular, given that under Japan's employment system, the government's employment policies and the flexibility of the labor market have complementarily lowered the youth unemployment rates, the Japanese model can have some practical implications for China. To tackle youth unemployment, it is vital for the Chinese government to address the structural problems in the country's labor market by improving working conditions, raising wages, and eliminating social prejudice against low-paying

occupations. In addition, the government should also make more efforts to correct the imbalance between labor supply and demand by aligning the curricula of tertiary education with market needs and diversifying job opportunities for university graduates. If the Chinese government aims to reduce youth unemployment and secure a more stable and prosperous future for the country's younger generations, it must take a holistic approach to youth employment involving policy reforms, social and cultural transformation, and more effective economic strategies.

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A Comparison of Economic Growth Models from a Macroeconomic Perspective: Japan after WWII vs. China after the Reform and Opening Up

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1. Introduction

Modern economic growth and technological advances have made our lives richer and more convenient than ever before. However, the current economic prosperity created not only material wealth, but also new social problems such as income inequality and environmental destruction. In general, economic growth is caused by some key factors such as technological innovation, investment, and labor quality; on the other hand, the effects of economic growth differ between countries and time periods. For example, in the case of Japan, the period of post-war high economic growth led the nation to a mature economy; in contrast, China's economic growth was rapidly strengthened by the policy of reform and openness.

A comparison of the processes of economic growth in China and Japan will give us interesting insights into the major factors of sustainable economic growth. This paper, therefore, aims to explore the development of Japan's post-war economy in comparison to China's economic reform and openness based on the theory of macroeconomics and propose some solutions to economic stagnation in both countries.

2. Macroeconomic Theory

This paper relies on two macroeconomic models, and they should be briefly introduced first. The Solow growth model is used to examine how capital accumulation, labor input, and technological progress contributed to economic growth. Endogenous growth model is used to assess the roles of innovation, education, and policy decisions in long-term economic growth.

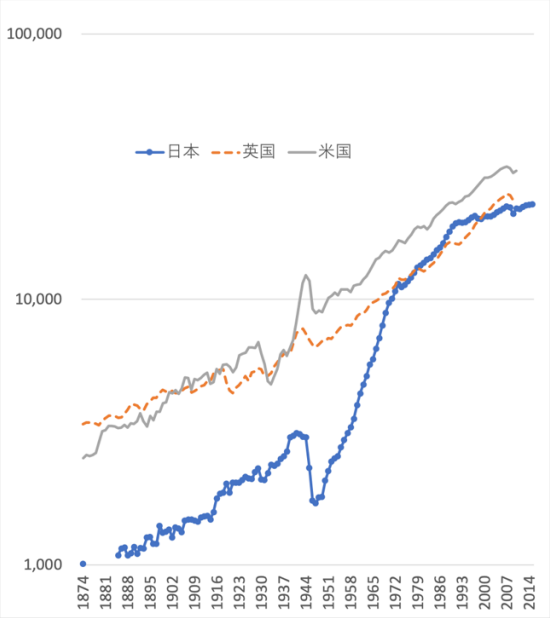
The Solow growth model is useful for analyzing Japan's high economic growth from the 1950s to the 70s because capital accumulation and technological advancement are remarkable features of the period. On the other hand, China's rapid growth is characterized by its distinctive technological development after the reform and opening-up policy; therefore, Endogenous growth model will be more practically applicable. Thus, capital accumulation, labor input, technological advancement, and policies for sustainable long-term growth are the major factors indispensable for the discussion of the rapid economic growth in both countries today.

3. Labor Input

As shown in Fig. 2, before WWII, economic activities in Japan overwhelmingly depended on primary industries. The role of the primary sector steadily decreased, but it still accounted for about 45 percent of

Japan's industry around 1940. However, Fig.3 tells us that it was the period when the nominal added value increased temporarily due to WWII and Japan's GDP per capita increased sharply. After the defeat in WWII, Japan was placed under the occupation by the Allied Powers led by the United States from 1945 to 1952. During the first phase of the US occupation, Japan was a large textile exporting country. However, the outbreak of the Korean War in 1950 became a turning point in the history of Japan's economy, giving the country a new role as the bastion of pro-capitalism/ anti-communism in East Asia. As Fig.2 indicates, the labor input in Japan's primary industry sector began to drop when the Korean War broke out. During the same period, Japan's secondary sector increased. Fig.3 demonstrates that the nominal added value in the primary sector decreased from 1950 onwards. Moreover, the share of total labor and nominal added value in the secondary sector increased while the country's GDP per capita kept rising from 1950 to 1970. These figures prove clearly that Japan's economy has seen a major shift of labor input from the primary sector to the secondary industry.

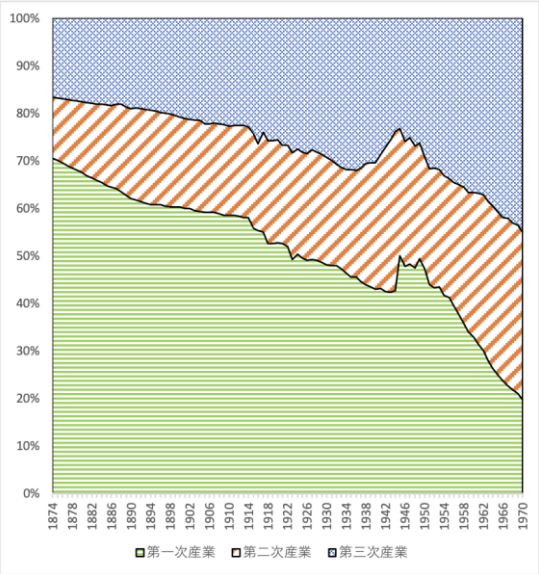
Fig. 1



GDP per Capita of Japan, the United Kingdom, and the United States

Note. Cited from *Structural Change, Capital Deepening, and TFP Growth in Japan: 1885-1970*, by K. Fukao, T. Makino and T. Settsu, 2019. (https://hermes-ir.lib.hit-u.ac.jp/hermes/ir/re/30372/DP692.pdf)

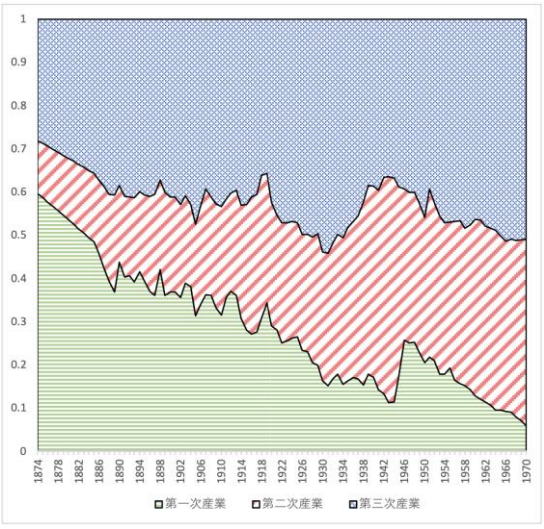
Fig. 2



Total Labor Input by Industry in Japan

Note. Cited from *Structural Change, Capital Deepening, and TFP Growth in Japan: 1885-1970*, by K. Fukao, T. Makino and T. Settsu, 2019. (https://hermes-ir.lib.hit-u.ac.jp/hermes/ir/re/30372/DP692.pdf)

Fig. 3



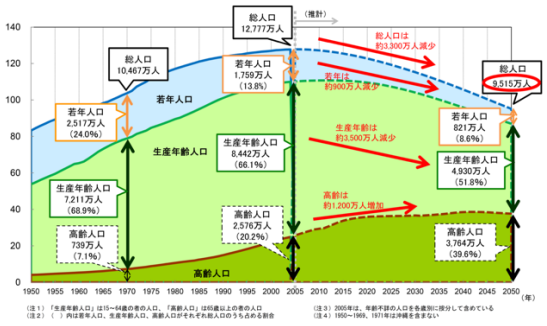
Japan's Share of Nominal Value Added by Industry.

Note. Cited from *Discussion Structural Change, Capital Deepening, and TFP Growth in Japan: 1885-1970*, by K. Fukao, T. Makino and T. Settsu, 2019. (https://hermes-ir.lib.hit-u.ac.jp/hermes/ir/re/30372/DP692.pdf)

Furthermore, in 1950 onwards, there was an increase in Japan's population, especially people in the working age group, as a result of the baby boom from 1945 and 1950. As Fig. 4 indicates, there

was a time lag between the increase in the working-age population the GDP growth. Therefore, the increased population is unlikely to be the deciding factor for Japan's post-war high economic growth. One thing, however, is certain: labor input and the changes in the industrial structure correlate with GDP growth.

Fig. 4

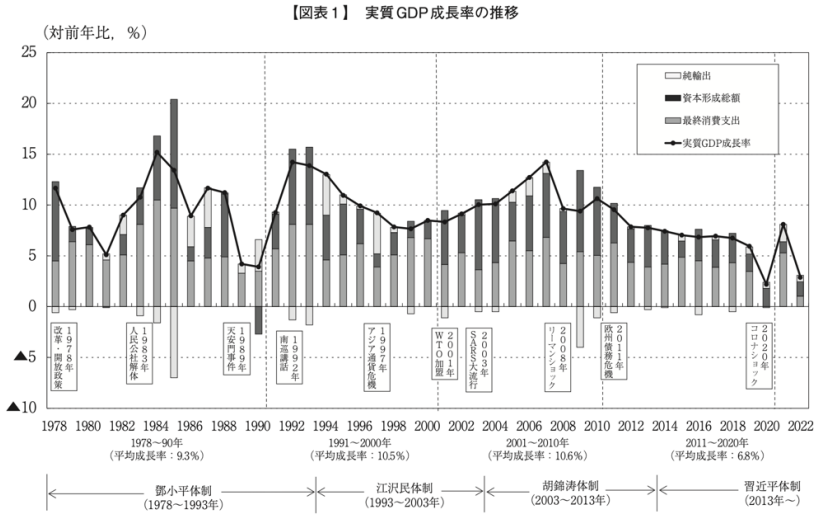


The Changes in Japan's Total Population

Note. Cited from *Long-term trends in total population in Japan*, by Ministry of Internal Affairs and Communications, Government of Japan, n.d. (https://www.soumu.go.jp/main_content/000273900.pdf)

Turning to China, as Fig. 6 demonstrates, the ratio of the working-age population started to rise immediately after Deng Xiaoping's implementation of the reform and opening-up policy in 1978, which paralleled the increase in the GDP growth rate per capita. It should be noted here that China's working-age population grew only after its GDP per capita increased, which looks quite identical to what took place in Japan's economy during the post-war high growth period. This will again indicate that the increased working-age population played only a limited role in China's economic growth, and primary factors must lie somewhere else. Here, the endogenous growth theory, will be worth citing because it considers that economic growth is fundamentally generated from factors internal to the economy—such as education and investment in R&D (research and development) —rather than the quantifiable increase in the working-age population.

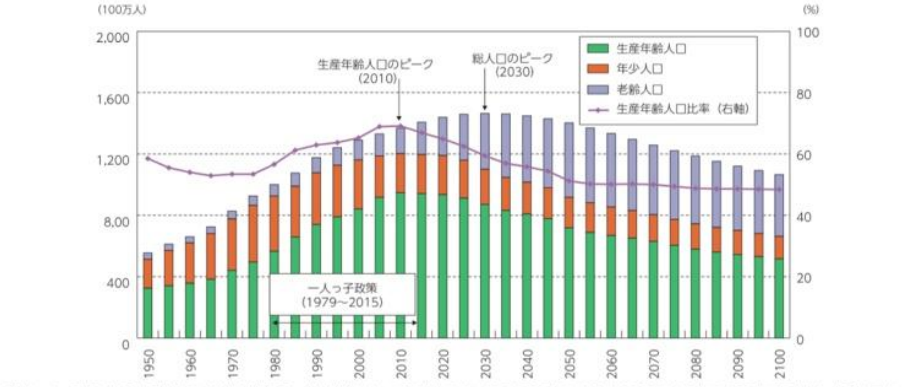
Fig. 5



The Changes in China's GDP and Its Growth Rate

Note. Cited from "Public Finance Monthly Report" by Ministry of Finance, Government of Japan, n.d. (https://www.mof.go.jp/pri/publication/zaikin_geppo/hyou/g855/855_1-4.pdf)

Fig. 6



The Changes of China's Total Population

Note. Cited from, Part 1, Chapter 3: Global economic trends and initiatives for medium- and long-term economic growth. In *2022 White Paper on International Trade*,

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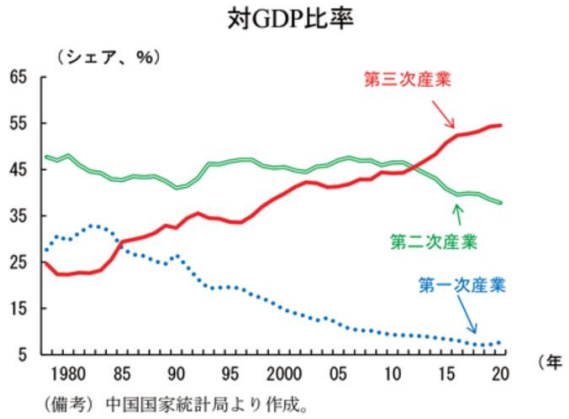
(https://www.meti.go.jp/report/tsuhaku2022/2022honbun/i1240000.html)

Moreover, as Fig.7 shows, China's industries underwent structural changes over the last decades. In 1970, the secondary sector grew rapidly into the country's major sector. As of 1980, the value added

of the primary sector accounted for 30% of China's total GDP, but it has reduced to less than 10% by 2020; meanwhile, during the same period, the tertiary sector doubled its contribution to the country's total GDP. Fig.5 and Fig. 7 jointly indicate that the tertiary industries overtook the manufacturing industries in 1995, when the GDP per capita started to rise. These structural changes in China's industries reflect China's GDP growth more accurately and faithfully than the increase of the working-age population does, thus endorsing the view presented earlier in my analysis of Japan's high economic growth.

Fig. 7



The Changes in China's Industrial Structure

Cited from "Global Long-Term Trends 2021 Edition" by Cabinet Office, Government of Japan, n.d.

(https://www5.cao.go.jp/j-j/sekai_chouryuu/sa21-02/s2_21_1_1.html)

4. Technological Advancement

This section discusses the role of technological advancement in economic growth, but before moving on to this main task, it is helpful to define the concept of total factor productivity, or what is commonly referred to as TFP. TFP is the portion of the increased output that cannot be explained by measured inputs such as land, labor, and capital. For example, the inputs in question include technological improvements, intangible capital accumulation, worker's skills and so on. While capital and labor can be considered as quantitative factors of production, TFP measures the qualitative factors of productive efficiency.

As shown in Fig. 8, the rise of TFP was the primary driver of productivity growth in Japan, accounting for 60% to 80% of factors of total development. According to Fukao et al. (2019), "during Japan's high economic growth period (1955-1970), the improved labor quality increased the annual labor productivity by 0.82%, while the extended working hours per worker had a negligible effect" (p. 15). Additionally, Jorgenson, Nomura, and Samuels (2016) noted that during the same period, the capital improvements in quality raised TFP by over 1% (as cited in Fukao et al, 2019, p. 15). This

indicates that the crucial factors of the growth in Japan's TFP were the qualitative enhancement of both labor skills and capital management, along with the country's high literacy rate (99% in 1950) and expanding opportunity in higher education (Fig.9).

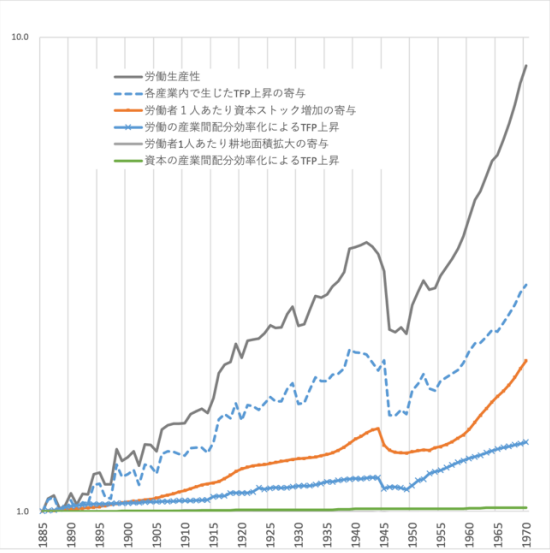
Fig. 8

	労働生産性の上昇率	労働者１人あたり資本ストック増加の寄与	労働者1人あたり耕地面積拡大の寄与	TFP上昇率	各産業内で生じたTFP上昇の寄与	労働の産業間配分効率化によるTFP上昇	資本の産業間配分効率化によるTFP上昇	労働者数の増加率	実質GDP成長率	人口増加率	人口1人あたり実質GDPの増加率	労働者・人口比率の上昇率
	a=b+c+d	b	c	d=e+f+g	e	f	g	h	i=a+h	j	k=i-j	l=h-j
1885-1899	1.75%	0.29%	0.00%	1.47%	1.19%	0.27%	0.00%	0.56%	2.31%	0.94%	1.36%	-0.38%
1899-1913	1.80%	0.62%	0.03%	1.15%	1.02%	0.12%	0.02%	0.46%	2.26%	1.21%	1.04%	-0.76%
1913-1926	3.02%	0.84%	-0.03%	2.21%	1.72%	0.46%	0.02%	0.69%	3.72%	1.26%	2.45%	-0.57%
1926-1940	2.82%	0.81%	-0.04%	2.05%	1.69%	0.32%	0.04%	1.02%	3.84%	1.17%	2.66%	-0.16%
1940-1945	-2.46%	-0.76%	0.01%	-1.71%	-0.60%	-0.78%	-0.33%	-2.19%	-4.65%	0.04%	-4.68%	-2.23%
1945-1950	-3.93%	-0.74%	-0.04%	-3.15%	-3.46%	0.33%	-0.01%	4.26%	0.33%	2.89%	-2.56%	1.36%
1950-1955	4.52%	0.80%	-0.04%	3.76%	2.87%	0.80%	0.09%	2.15%	6.67%	1.41%	5.26%	0.74%
1955-1960	6.14%	1.51%	-0.08%	4.71%	3.33%	1.22%	0.17%	2.19%	8.33%	0.91%	7.43%	1.28%
1960-1965	7.20%	3.10%	-0.06%	4.16%	2.92%	1.03%	0.21%	1.78%	8.98%	1.01%	7.97%	0.76%
1965-1970	9.46%	3.33%	-0.05%	6.18%	5.47%	0.63%	0.08%	1.86%	11.32%	1.08%	10.24%	0.78%
明治期：1885-1913	1.77%	0.45%	0.01%	1.31%	1.11%	0.19%	0.01%	0.51%	2.28%	1.08%	1.20%	-0.57%
大正･昭和戦前期:1913-40	2.92%	0.83%	-0.04%	2.13%	1.71%	0.39%	0.03%	0.86%	3.78%	1.22%	2.56%	-0.36%
高度成長期：1955-70	7.60%	2.64%	-0.06%	5.02%	3.91%	0.96%	0.15%	1.94%	9.55%	1.00%	8.55%	0.94%

The result of growth accounting analysis in the Macroeconomy.

Note. Cited from *Structural Change, Capital Deepening, and TFP Growth in Japan: 1885-1970*, by K. Fukao, T. Makino & T. Settsu, 2019. (https://hermes-ir.lib.hit-u.ac.jp/hermes/ir/re/30372/DP692.pdf)

Fig. 9



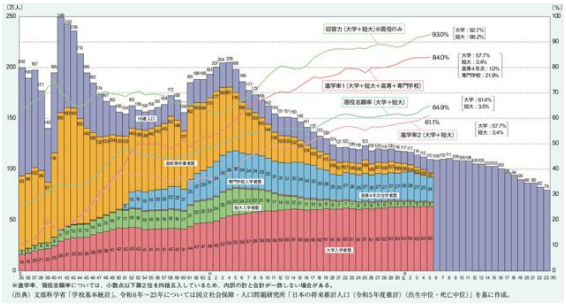
The Cumulative Contribution of Production Increases and TFP Increases to Macroeconomic Labor Productivity Growth.

Note. Cited from *Structural Change, Capital Deepening, and TFP Growth in Japan: 1885-1970*, by K. Fukao, T. Makino & T. Settsu, 2019. (https://hermes-ir.lib.hit-u.ac.jp/hermes/ir/re/30372/DP692.pdf)

Let us now examine how Japan during its high economic growth period achieved the qualitative

enhancement of labor and capital. In my opinion, education is one of the main contributing factors. Japan's high literacy rate and the workforce with specialized skills and knowledge were the foundation of the higher productivity of the country's economy. Fig.10 illustrates the rise in the high school and university enrolment rates among the population aged 18 since 1960. It is estimated that as of 1950 more than 30% of the Japanese population aged 18 were high school graduates; the figure rose to about 50% by 1960. *The White Paper 2023* by the Ministry of Education, Culture, Sports, Science and Technology found that as of 1950, Japan had an adult literacy rate of 99%. This fact indicates that during the high economic growth period, Japan had a youth population with basic education, who were ready to grow into a workforce with specialized skills and knowledge.

Fig. 10



The Correlation between the Population Aged 18 and the Higher Education Enrollment Rate in Japan

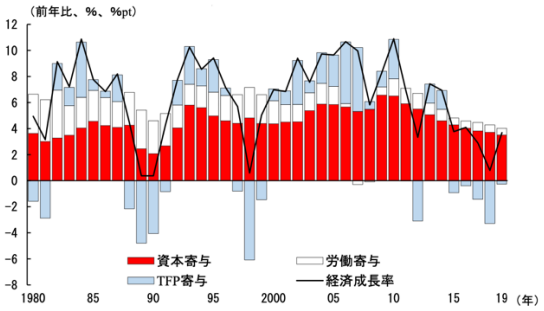
Note. Cited from *White Paper on Science, Technology, and Innovation 2023*, by Ministry of Education, Culture, Sports Science and Technology, 2023.

(https://www.mext.go.jp/b_menu/hakusho/html/hpab202001/mext_02820.html)

Fig.11 illustrates how labor, capital, and TFP contribute to China's GDP growth rate. As the figure indicates, capital was the main contributing factor. On the other hand, TFP made a smaller contribution than capital, or worse, it occasionally made a negative contribution.

These characteristics are peculiar to China's GDP growth and not found in that of Japan, for the two economies had different industrial structures. China focused on the quantity of products while Japan emphasized the quality of products. However, it is pointed out that China's growth might be facing the problem of overinvestment. Before the reform and opening-up, it was said that China would soon stagnate because it was sustained mainly by human capital and energy resources while neither technological progress nor TFP were making any substantial contribution. However, since 2000, TFP has been one of the key factors that fuel China's economic growth, and the growth rate remained over 6% from 2000 to 2010. This change was most typically observed in 2007, when TFP accounted for about 40% of the factors of the country's economic growth, and the growth rate stood at more than 10%.

Fig. 11



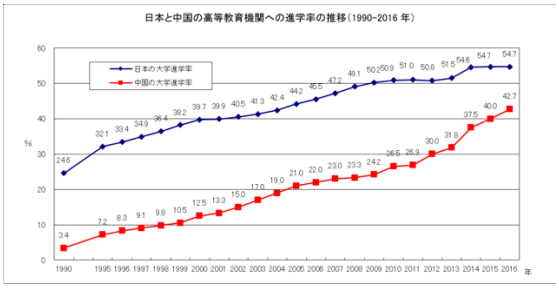
Accounting for China’s Growth (The contributions of labor, capital, and TFP)

Note. Cited from *The current status and outlook for China’s economy*, by Takashi Hanagaki, 2024 (https://www.esri.cao.go.jp/jp/esri/workshop/forum/240126/pdf/240126_siryo04.pdf)

In the case of China, a key source for the contribution of capital is foreign investment. To invest in China, foreign-owned companies are typically required to form joint ventures with Chinese companies. Despite the high costs of such partnerships, China's workforce, which is more abundant and cheaper than in other countries, is attractive enough for foreign capitals. For example, in 2004, Nippon Steel formed a joint venture with China’s Baoshan Iron & Steel in Shanghai and provided its advanced steelmaking technologies to China’s steel industry. With this as the start, foreign investments in China gradually increased, contributing significantly to the country’s industrial growth. As a result, many Chinese firms are now focusing on manufacturing products for export.

Today, China’s industries have been transformed from a labor-intensive sector to human-capital-intensive one. A primary reason behind this is the rapid increase in the enrollment rate in tertiary education in China. As Fig.12 demonstrates, as of 2016, 42.7% of the country’s high school graduates went on to university, while the rate was only 3.4% as of 1990. These figures prove the rise in the working population with professional skills and knowledge in China’s labor market today.

Fig. 12



Recent trends in tertiary education enrollment rates in Japan and China: 1990-2016

Note. Cited from "Recent trends in tertiary education enrollment rates in Japan and China: 1990-2016," by Science Portal China, n.d. (https://spc.jst.go.jp/data/techoverview2016/3/3_05.html)

5. Capital Accumulation and Investment

This section discusses capital accumulation and investment during Japan's high economic growth period. Fig.13 shows the changes of the ratio of gross capital accumulation to GDP in Japan. In this figure, it is noted that in the twenty years from 1950 to 1970, the ratio of both gross private savings and gross private investment to GDP significantly increased from 15% in to 35%.

Then, how did these two factors affect Japan's high economic growth? According to the Solow growth model, higher capital accumulation increases the investment in the next period. This model has two fundamental equations: one for production function and the other for capital growth.

The first equation describes how the changes in the level of output is affected by the changes in capital, productivity, and labor. The second one represents the assumption that the growth in the capital stock over a period equates the balance between the investment and capital loss within the period.

Moreover, large capital accumulation brings about an increase in the investment in the future period. Therefore, large capital accumulation raises both investment (sY_t) and the accumulation in the next period (K_{t+1}). Thus, the production (Y_{t+1}) in the next period is monotonically increasing with respect to K_{t+1}.

$$\mathrm{Y_t} = \mathrm{F}(\mathrm{K_t}, \mathrm{A_t L_t})$$

$$\Delta \mathrm{K}_{t+1} = s\mathrm{Y_t} - \delta \mathrm{K}_t$$

K_t: The capital stock in the present period

$\mathrm{L_t}$: The labor in the present period

$\mathrm{Y_t}$: The output in the present period

$s \in (0,1)$: The rate of capital accumulation

A_t: Total factor productivity

$\delta \in (0,1)$: $T\mathit{he}$ capital $-$ $T\mathit{he}$ depreciation ratio

Fig. 13

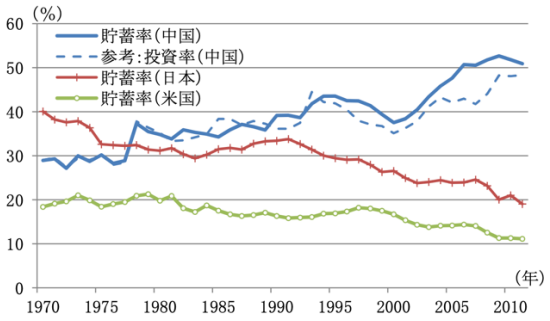
The Change of Capital Accumulation Rates (% Of GDP)

Note. Cited from *Structural Change, Capital Deepening, and TFP Growth in Japan: 1885-1970*, by K. Fukao, T. Makino and T. Settsu, 2019. (https://hermes-ir.lib.hit-u.ac.jp/hermes/ir/re/30372/DP692.pdf)

However, K_t is diminishing returns of capital. Therefore, if K_t significantly increases, the rate of increase in Y_t per unit of K_t slows down. Unlike what was indicated in Fig.1 cited in Section 3, not only the capital accumulation but also the total factor productivity (A_t) are decisive factors here.

Figure 14, which is originally provided by *World Development Indicators* and adapted by Hasumi (2014, p. 31), since the reform and opening-up, the capital accumulation rate in China has increased and remained higher than in other major developed countries. Once China's capital formation rate per GDP used to fluctuate at around 35%, but it has recently increased to 42%. According to the National Bureau of Statistics of China, stock of capital, which is part of investment, has continuously increased at an accelerating rate, averaging 9.3% per year before the reform and opening-up (from 1952 to 1978), 10.0% from 1979 to 1998, and 13.5% from 1999 to 2007. One factor behind the country's high investment rate is the widespread concern about the underdevelopment of its social insurance system including the pension system and medical insurance system. Even those citizens who earn sufficient salary deposit it in a bank instead of spending it. However, given that consumption is GDP minus capital accumulation and governmental expenditure, an abnormally high level of capital accumulation can potentially increase GDP, but it also reduces the consumption level. In other words, the benefits of economic growth do not reach the household budget.

Fig. 14



The Capital Accumulation Rate in Japan, the United States, and China.

Note. Cited from-Ryo Hasumi, Investment, capital and economic growth: The correlations implied by growth models, *Economic Prism*, vol. 124, p. 31, 2014.

(https://www.sangiin.go.jp/japanese/annai/chousa/keizai_prism/backnumber/h26pdf/201412402.pdf)

6. The Future Economic Outlook for China and Japan

We are now ready to consider what is the future economic outlook for China and Japan.

As Fig.4 cited in Section 3 indicates, Japan's population is expected to shrink to 92.03 million, or three-fourths of its current size, by 2050. In addition, Fig.13 and 14 show the steady decrease in Japan's investment rate. In other words, two of the important factors of economic growth are losing their driving force.

Among numerous potential strategies to stimulate economic growth, the following two will provide highly effective solutions for Japan. First, Japan should accept many more foreign workers. This plan is inevitably controversial given the overall negative public perception about the increase of foreign residents in Japan—such as a potential threat to the safety of local communities, a potential rise of the crime rate, or the concerns over the costs of education policies for immigrants. Nevertheless, this will be one most effective way to solve the country's labor shortage.

Another practical solution is to promote the investments in basic and technological. Such research can promote innovation and increase industrial productivity, which, in turn, compensate for Japan's shrinking workforce. Given Japan's technological advances in fields such as AI, robotics, and renewable energy, there is a very good chance that this solution will have a successful outcome.

Unless carefully planned and implemented, these strategies will not produce desired outcome; still, Japan urgently needs to find how to ensure sustainable economic growth. In light of this situation, the effective application of these strategies will be a highly promising solution.

Turning to China, it too is facing the challenge of aging population combined with the declining birthrate. Considering that China's economy relies on labor-intensive manufacturing, these demographic challenges are quite severe. Moreover, unlike Japan, whose economic growth has been stunted by underinvestment, China is facing the problem of overinvestment. If the Chinese market

turned into a bubble**,** the investors in Chinese companies and real estate will be exposed to the burst of the bubble. Thus, China's economy is currently highly unstable.

The major hindrance to China's economic growth is overinvestment. If China seeks economic balance, it needs to address overinvestment and redistribute the benefits of economic growth to households. As household income rises, real income available for the purposes other than investment and consumption increases too. This, in turn, can improve corporate profitability and boost nominal income. Thus, given that China has the world's largest population and a huge number of business enterprises, its total investment will rise.

7. Conclusion

This paper has examined the economic growth of China and Japan by focusing on its major contributing factors: accumulation (investment), labor input, and technological advancement. Japan's post-war economic miracle was first ignited in the 1950s by technological advancement, TFP, and capital accumulation. Subsequently, the population growth followed spurring it. On the other hand, in the case of China, what first occurred after the reform and opening-up policy was a rapid increase in population and capital accumulation, while TFP and technological advancement finally began to increase after 2000.

A comparison of the two countries' economic growth processes has revealed several differences. Japan emphasizes human capital and seeks to develop TFP, while the foundation of China's economy has been its abundant labor force.

The economic challenges facing the two countries are different, too. However, they will be able to solve their problems by taking advantage of their respective areas of expertise, Japan by leveraging its advanced technological capabilities, and China by tapping the potential of its labor force.

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Economic and Ethical Perspectives on China's Panda Diplomacy

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1. Introduction

Can panda diplomacy be economically profitable and ethically acceptable simultaneously? Panda diplomacy refers to China's diplomatic strategy of gifting or leasing giant pandas to foreign countries as a gesture of goodwill and strengthen friendly relations with both allies and competitors. Due to its universal appeal and rarity as an engendered species, pandas are expected to wield its "soft power" to improve global attitude toward China as well as help the country gain competitive edge over other nations.

Panda diplomacy greatly contributes to the country's foreign currency earnings via the income from the large lease fees for the animal as well promotes the expansion of the Belt and Road initiative. Meanwhile, in exchange for paying the substantial rental fees, the host countries can gain economic benefits, i.e., the increased revenues primarily from the panda-related merchandise sales and foreign visitors and tourists, in particular, from China. However, this practice has also sparked ethical debates in recent years. Critics express moral concerns about the welfare of pandas as well as suspect the actual economic benefits of hosting pandas.

Given the current controversy, this paper attempts to present economic and ethical perspectives on China's panda diplomacy. Sections 2 and 3 examine the economic benefits brought by panda diplomacy both to China and abroad; Section 4 places is focus on the analysis of the potential conflicts between economic benefits and ethical principles and values in panda diplomacy.

2. Economic Benefits of Loaning Pandas

This section examines how panda diplomacy generates economic benefits for China from two perspectives: foreign currency earnings and the expansion of the Belt and Road Initiative (BRI).

1) Foreign Currency Earnings

China generates foreign currency by leasing pandas internationally. The history of panda diplomacy dates back to 1941, when pandas were gifted to other countries without any associated costs. However, following the adoption of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1973, which aimed to regulate and protect wildlife trade, a rental fee system was introduced in 1984. This system was designed to support panda conservation and research activities. Since then, the rental fee has been set at approximately $1 million per panda per year. As of 2024, around 64 pandas have been leased to 20 countries, generating an estimated

annual foreign income of $64 million for China.

Furthermore, the rental fees for pandas are exceptionally high compared to those for other animals. According to a survey conducted by *Toyo Keizai*, aside from pandas, the most expensive animal to keep at the Ueno Zoo is the polar bear with the annual cost reaching 37.08 million yen. Although polar bears are classified as "Vulnerable" on the IUCN Red List of threatened species, rental fees are not incurred for keeping them. Despite that, compared to polar bears, the cost of raising and feeding pandas is about 4 times higher. This will indicate that pandas are recognized as a species of immense value and influence worldwide.

Additionally, recipient countries such as the Netherlands, Germany, and Denmark have constructed Chinese-style panda enclosures, in close cooperation with Chinese architecture and construction companies. Other panda-related commerce and trade, such as bamboo exports and vaccine administration and personnel dispatch, have also increased China's foreign currency earnings.

2) Expansion of the "Belt and Road" Initiative

The leasing of pandas is also considered to contribute to the Belt and Road Initiative (BRI). Launched in 2013 by Chinese President Xi Jinping, the BRI aims to establish logistics routes connecting China with Europe via overland and maritime corridors, while promoting infrastructure development and economic cooperation along these routes. The initiative typically includes two major routes: the overland Silk Road through Central Asia and Russia to Europe, and the Maritime Silk Road through the Malacca Strait and the Suez Canal to Europe. In recent years, the BRI has expanded to include six overland corridors and two maritime routes (Figure 1).

Fig.1

The "Belt and Road" Initiative Map

（出所）廣野美和「一帯一路という課題」廣野美和編「一帯一路は何をもたらしたのか：中国問題と投資のジレンマ」（勁草書房、2020年）、7ページ

Note. Cited from "What Is China's 'One Belt, One Road' Initiative? An explanatory note (1): Six Overland Corridors and two maritime routes," by M. Hirono, 2024, *ShiRUto.* https://shiruto.jp/global/5449/

Within the framework of the BRI, China has used panda diplomacy as a token of goodwill. Pandas are currently housed in 21 countries, with notable recipients in recent years since they were dispatched to Belgium and Malaysia in 2014, South Korea in 2016, and Denmark and Russia in 2019 (Figure 2). A comparison of Figures 1 and 2 reveals that the panda-hosting countries are also those nations that are strategically important for the BRI. Since 2014, under Xi Jinping's administration, the selection of panda destinations has reflected China's diplomatic strategies, including the emphasis on the partnership with Europe and Southeast Asia within the BRI and the cooperation from South Korea address the threat of North Korea's nuclear arsenal.

Fig. 2

A Chronology of Panda Diplomacy, 2006-2021

名前	性別	誕生年	死亡年	メモ
ベイベイ（貝貝）	雄	2015	—	米ワシントンDCのスミソニアン国立動物園のティエンティエン（添添）とメイシァン（美香）の間に誕生。習近平訪米に合わせ命名式典。19年、中国へ
シャンシャン（香香）	雌	2017	—	上野動物園のシンシン（真真）とリーリー（力力）の間に誕生。22年、中国へ返還予定
シャオシャオ（暁暁）	雄	2021	—	上野動物園のシンシン（真真）とリーリー（力力）の間に誕生した双子の１頭
レイレイ（蕾蕾）	雌	2021	—	上野動物園のシンシン（真真）とリーリー（力力）の間に誕生した双子の１頭
ユウヒン（優浜）	雌	2012	—	和歌山アドベンチャーワールドで誕生。17年、中国へ
トウヒン（桃浜）	雌	2014	—	和歌山アドベンチャーワールドで誕生した双子の１頭
オウヒン（桜浜）	雌	2014	—	和歌山アドベンチャーワールドで誕生した双子の１頭
ユイヒン（結浜）	雌	2016	—	和歌山アドベンチャーワールドで誕生
サイヒン（彩浜）	雌	2018	—	和歌山アドベンチャーワールドで誕生
フウヒン（楓浜）	雌	2020	—	和歌山アドベンチャーワールドで誕生
シンホイ（星徽）	雄	2009	—	14年にベルギーのペリダイザ動物公園に来たつがいの１頭
ハオハオ（好好）	雌	2009	—	14年にベルギーのペリダイザ動物公園に来たつがいの１頭。16年にティエンバオ（天宝）、19年にバオディ（宝弟）、バオメイ（宝妹）の双子を出産
シンシン（興興）	雄	2006	—	14年にマレーシアのネガラ動物園に来たつがいの１頭
リャンリャン（靓靓）	雌	2006	—	14年にマレーシアのネガラ動物園に来たつがいの１頭。15年にヌァンヌァン（暖暖、17年に中国に返還）、18年にイーイー（誼誼）、21年にシェンイー（昇誼）を出産
ローバオ（楽宝）	雄	2012	—	16年に韓国のエバーランドに来たつがいの１頭
アイバオ（愛宝）	雌	2013	—	16年に韓国のエバーランドに来たつがいの１頭。20年にフーバオ（福宝）を出産
シンヤー（星雅）	雄	2013	—	17年にオランダのアウエハンツ動物園に来たつがいの１頭
ウーウェン（武雯）	雌	2013	—	17年にオランダのアウエハンツ動物園に来たつがいの１頭。上野動物園のリーリー（力力）の妹。20年にファンシン（梵星）を出産
ジャオチン（嬌慶）	雄	2010	—	17年にドイツのベルリン動物園に来たつがいの１頭
モンモン（夢夢）	雌	2013	—	17年にドイツのベルリン動物園に来たつがいの１頭。19年に双子のモンシァン（夢想）とモンユェン（夢円）を出産

In April 2024, a new panda arrived at Madrid Zoo in Spain, and an agreement was reached to send another panda to the San Diego Zoo in the U.S., marking the first new panda lease to the country in about 20 years. Analysts suggest this move is aimed at improving relations with the U.S. and Europe

while to advance the BRI further. However, tensions with Western countries, particularly following the outbreak of the Russia-Ukraine war in February 2022, have strained China's international relations. Under the circumstances, pandas are increasingly being seen as an important ambassador to mitigate the international tensions and promote goodwill among nations.

Pandas have also contributed to softening Western attitudes toward China. For example, in 1972, two pandas were gifted to the U.S., where they were warmly welcomed by President Nixon and his wife. Similarly, in 2023, when the panda Yuan Meng returned from France to China, French President Macron and his wife accompanied the panda to the airport, a gesture that received significant media attention. Rodolphe Delord, the director of Beauval Zoo in France, remarked during a visit to China with President Macron that "pandas are a symbol of friendship between France and China." Such events underscore the important role pandas have played as ambassadors of goodwill in fostering positive relations between China and Western countries.

3. Economic Benefits of Hosting Pandas

This section examines the economic benefits gained by panda-hosting countries from two key perspectives: the revenues from panda-related products and the increase in tourist arrivals from China.

1) The Revenue from Panda-Related Product Sales

One of the key economic benefits of panda hosting is an increase of the national revenue from the sales of panda-related products. In this respect, the panda hosting in Japan provides a typical example. The popularity of pandas first took off in Japan when they appeared as an original animation character in the film called *The White Snake Enchantress* released in 1958. Later, the popularity soared in 1971, when the media covered Emperor Showa interacting with pandas during his visit to Europe and sparked a panda boom nationwide. Since then, pandas have continued to be adored by the Japanese public, with the sales of a wide range of products from stuffed toys to confectionery.

According to a survey conducted by NHK, Japan's public broadcaster, the panda Xiang Xiang, born at Ueno Zoo in 2017, generated approximately 53.9 billion yen (around $500 million USD) in revenue in three and a half years. This figure includes the revenue from zoo admissions, local businesses located at and around the zoo, and the sales of panda-related merchandise. While the revenue declined in 2019 and 2020 due to the temporary impact of the COVID-19 pandemic, it revenues would have been even higher under normal circumstances.

An analysis by *Jabara* (2022) suggests that the economic benefits of panda hosting is largely brought by the adorable appearance of the animals. Their charm captures people's hearts, leading to the massive sales of panda-related products and the acquisition of regular zoo visitors.

2) The Increase in the Tourist Arrivals from China

Studies indicate that countries hosting pandas attract significantly more Chinese tourists than others. In addition, it is reported that the figure increases further after three years since the arrival of the pandas. The phenomenon can be attributed to China's government measures to encourage outbound travel to those countries which the government considers as "friendly" to China (Arlt, 2006, as cited in Okafor et al., 2021, p. 57). Thus, hosting pandas enhances the host nations' appeal to Chinese tourists and helps build stronger cultural bonds with China.

According to a synchronized model, countries housing pandas experience an average 35% increase in inbound tourists from China, with the figure rising to 40% after three years. This increase stimulates the tourism sector of the host nations, creating economic benefits for related industries such as hotels, restaurants, and the retail business.

When comparing regional impacts across the 22 countries (and special regions such as Hong Kong and Macau) hosting pandas, the benefits were found to be greater in Europe and North America compared to neighboring countries like Japan and South Korea. Regardless of location, the symbolic value of pandas has been shown to enhance inbound tourists from China.

Considering the above, the economic benefits of hosting and housing pandas is not limited to short-term effects but extends into long-term business opportunities in tourism and other sectors in the local economies.

4. Criticisms of Panda Diplomacy

1) Ethical Issues

Panda diplomacy raises concerns about animal welfare and the commercialization of pandas. Treating endangered species such as pandas as commodities for economic gain is viewed by some people as an ethically questionable practice. Critics argue, for example, that the artificial environments in which pandas are kept during their loan periods, as well as the stress of long-distance transportation, impose significant burdens on the animals, and potentially conflicts with the principles of animal conservation.

The Chinese authorities indicate that panda diplomacy is a form of conservation effort; however, undeniably it has been employed as a diplomatic strategy or a tool for economic gain, which some argue is a deviation from the fundamental principles of animal protection. However, it is worth noting that the rental fees paid for panda loans are frequently allocated toward conservation efforts for endangered species native to China, thus indirectly contributing to animal welfare. Additionally, the recipient countries often contribute to research and breeding efforts for pandas, which should also be taken into consideration.

2) Skepticism about Pandas as an Economic Booster

The economic benefits of hosting pandas in recipient countries are viewed with skepticism by

some critics. Pandas are typically provided under ten-year lease agreements, and even when breeding goes successful, the ownership of the offspring remains with China, requiring eventual repatriation. Critics argue that this arrangement results in only temporary returns on investment, making it unlikely to generate long-term value.

Moreover, the practice of hosting pandas entails significant costs, including high rental fees paid to China, the construction of specialized facilities, and the employment of skilled caretakers. These expenses mean that profits are not always guaranteed. For example, in Japan, the outbreak of the COVID-19 pandemic significantly reduced inbound tourism, leading to increased costs without the expected economic returns.

Over-reliance on pandas as a tourism strategy has also been criticized for potentially hindering the utilization of other tourism resources and increasing vulnerability during crises. In 2012, for instance, when a panda at the Ueno Zoo showed signs of pregnancy, local communities prepared events and merchandise as part of a revitalization campaign. However, the panda cub died a few days after birth, rendering the plans and expenditures futile. This serves as a cautionary example that hosting pandas does not necessarily ensure economic success.

5. Conclusion

In conclusion, panda diplomacy can be considered to possess significant economic and political value. It provides China with sustained foreign currency revenue and supports the strategic expansion of the "Belt and Road" Initiative, as well as offering the recipient countries economic benefits such as increased revenue from panda-related sales and a rise in tourists from China. Thus, viewed from an economic perspective, panda diplomacy plays a crucial role in generating both economic and diplomatic benefits to both China and host nations.

As mentioned earlier, this practice invites moral concerns about animal welfare as well as questions about the sustainability of its economic advantages; nevertheless, it also contributes to global wildlife conservation efforts. Panda diplomacy should not be used as a mere instrument for short-term profits for China and the recipient nations; instead, it should serve as a means of fostering long-term trust between China and its allies and competitors and achieving a balance between wildlife protection and sustainable international cooperation.

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China's National University Entrance Examination (the *Gaokao*): Key Features, Advantages, and Disadvantages

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1. Introduction

Recently China's national university entrance examination, known as the *Gaokao*, has been attracting the international media coverage because of its competitiveness and intensity. Also dubbed also as "the world's toughest" collage exam (Gan, 2023), the test has placed many Chinese students under undue pressure, affecting their mental and physical health. What social factors are behind this competition? How does it compare to the Common Test for University Admissions in Japan? What impact does it have on students and their parents?

To find the answers to these questions, this paper attempts to identify the characteristic features of the *Gaokao* system, examine the social background to it, and finally consider the advantages and disadvantages of taking this exam.

2. Key Features of the *Gaokao*

This section considers the major characteristics of China's national university entrance examination, or the *Gaokao,* and compares this system with its Japanese counterpart, the Common Test for University Admissions.

The *Gaokao* is a three-day exam held in June annually. As for the examination subjects, Japanese, mathematics, and foreign languages are required for all students, while physics, biology, history and geography are the elective subjects. In this respect, this examination system is not very different from Japan's Common Test. However, similarities end here.

Japan's Common Test is a standardized exam in which every test-taker answers the same questions. China's *Gaokao* too is a nationally standardized exam, yet some provinces can have more autonomy in designing the exam questions, resulting in slight regional differences in difficulty or specific topics covered. The most important feature of the *Gaokao* is that it does not allow students to take the exam multiple times in the same year, so it is commonly called "one-short" exam. This makes a strong contrast to the Japanese system, where most national and public universities take two-stage test process as follows: the Common Test is given in the first stage, but the test scores are used mainly for preliminary eligibility screening; the second, often more important, stage is individual academic tests independently created and administered by individual universities, and serves as the primary determinant of admissions. In addition, in Japan, some of the largest and established private universities such as Waseda and Keio University allow candidates to apply for multiple faculties or departments, thus giving them multiple opportunities to take the entrance exams in the same year. In contrast, the *Gaokao* is fundamentally the single primary determinant of university admissions,

making the competition tougher and the acceptance rates extremely low.

Another point to note is a structural problem with the Gaokao, which tends to give urban students a significant advantage in university admissions. Figure 1 shows the ratio of successful university applicants by province in 2023. As the table indicates, admissions are given overwhelmingly to urban areas such as Beijing and Shanghai, while the acceptance rates to China's prestigious or "key" universities are noticeably low among rural students. Thus, China's Gaokao system structurally give a significant advantage to urban students. In contrast, such urban-rural gap in tertiary education is nonexistent in Japan.

Fig. 1

The ratio of successful university applicants by province in 2023

Province	Number of examinees (ten thousand people)	Number of successful candidate (people)	Pass rate
Beijing	5.4	550	1.01
Shanghai	5	220	0.44
Guizhou	46.5	140	0.03
Yunnan	38.9	100	0.02

Note. Created by the present author.

Then, what are contributing to the intensifying competition in China's university entrance exam? One primary factor is the massive number of candidates: in 2024, a record high of more than 13.42 million students registered for the *Gaokao*, surpassing 12.9 million the previous year.

Another factor is the limited enrollment capacity of universities, or the limited number of places available for university courses and programs) in China. Take, for example, the enrollment rate at Beijing University. Figure 2 shows the breakdown of the total number of the new Beijing students in 2023. The chart indicates that only about 40% the successful candidates were admitted based on their exam scores, whereas the remaining 60% were accepted according to the quota policies based on students' special skills and individual talents and achievements including extracurricular activities. It should also be noted that in 2023, out of the 12.91 million applicants, only 1 in 3000 were granted admissions to Beijing.

Fig. 2

Types of the quota systems and the number of successful candidates, 2023

School quota	Number of successful candidate	Ratio (%)
General quota	2119	41.7
Scientific talent quota	890	29.5
Quota for recommendations	194	6.4
Math talent quota	100	3.3
Physics talent quota	100	3.3
National Specialized Program quota	277	9.2
High school program quota	114	3.8
Athletic talent quota	67	2.2
Artistic talent quota	16	0.5
total	3877	100

Note. Created by the present author.

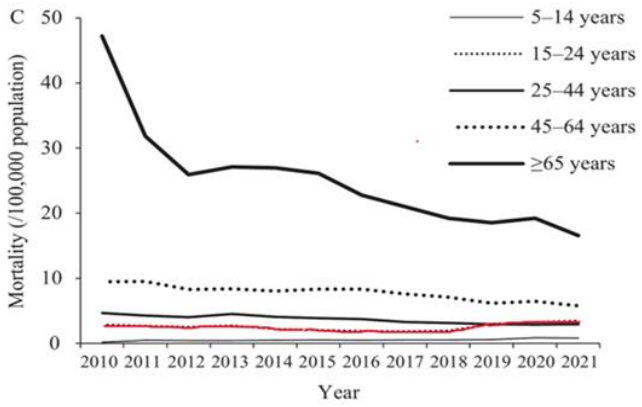
3. Disadvantages of the *Gaokao*

One of the most serious problems is the increased pressure on students, especially, young children, and it is closely related to China's one-child policy. The policy was a population control initiative implemented from 1979 to 2015, with the aim to limit the number of children a couple can have up to one and thus prevent domestic food shortages. Under this policy, however, many parents placed excessive expectations on their children, placing them under undue pressure.

Figure 3 below demonstrates the suicide mortality rate in China by age group (Zhao et al, 2023, p. 506). The graph indicates that the rate is decreasing annually for those aged 25 and older, while there is a gradual increase among the age groups of 24 and younger. From these figures, it will be reasonable to assume that the recent rise in suicide in China is closely linked to the problem of mental stress on students primarily caused by the heavy academic burden and pressure, parents' high expectations, and fierce competition with their peers.

Fig. 3

Suicide mortality rates in China by age group from 2010 to 2021



Note. Cited from "Vital Surveillances: Suicide Mortality by Place, Gender, and Age Group—China, 2010-2021," by M. Zhao et al., 2023, *China CDC Weekly,*5(25), 506.

4. Advantages of the *Gaokao*—from a Rural Minority's Perspective

The discussion in this section is largely based on the field research by Howlett (2023), where he reports his ethnographic research on the *Gaokao* conducted between 2011 and 2013. The main feature of his report is a senior student named Zeyu, a son of a pig farmer with ethnic minority background in China's southeastern Fujian Province.

In terms of Zeyu, for rural residents in general, the disciplined study to prepare for the *Gaokao* is compared to a "struggle" or the only way to "change fate" or "destiny" (Howlett, 2023, p. 22). In short, in rural China, the *Gaokao* is the only hope that helps people to get out of the poverty and instability of rural life of simple labor and farming. In China, even today, people of rural backgrounds are often treated as "the second-class" citizens in the social hierarchy based on the long-established household registration system. Zeyu says that academic achievement in high school gives him an opportunity to achieve mobility from rural to urban China and good jobs there. In other words, academic performance prior to the test taking at the *Gaokao* is vital for gaining social prestige and better access to health care, welfare, retirement benefits, and education.

In addition, it should be noted that China's education system follows the so-called 6-3-3 model: 6 years of elementary school, 3 years of junior secondary school, and 3 more years of senior secondary school. In other words, it is no exaggeration to say that the entire first 12 years of education are dedicated to the preparation for the *Gaokao*. About 80% of the applicants are granted admissions to a university; however, simply gaining a place at any university is pointless for many. The crucial importance for them is to be admitted to one of the universities listed on "Project 985" launched by the Chinese government in 1998.

As of today, China has given different status to the universities across the country and grouped them into several categories: the group “211,” the group “985,” and others. The “211” project refers to a group of 112 universities in which the government has invested about US$2.2billion (as of 2022) to enhance their research standards. On the other hand, the “985 Project” launched in May 1998, by designating only 39 universities on the “211” list as the most prestigious institutions. In addition, since 2016, yet another project has been underway as an alternative to the existing two projects. The new initiative is run under revised selection process policies, reviewing the university list every five years and accepting smaller but distinctive departments as candidates.

Returning to the story of Zeyu, his *Gaokao* scores did not reach the standards for the admissions to any of the institutions on “985” list; still, he was successful enough to meet the cutoff score for the first-tier universities. He could have taken the *Gaokao* again the following year and aim at the enrollment at one of the “985” institutions. However, knowing that it was an unaffordable option for his family, he settled to attend a first-tier school and found an office job in Xiamen. In a sense, he accepted his “fate” as a son of a rural farmer. Although he did not achieve perfect success in the *Gaokao*, doubtlessly he changed his destiny through the exam. Including Zeyu, many people with rural agricultural backgrounds still suffer educational, financial, and social disadvantages under the current hierarchical social system of China. In light of this, for those who are socially disadvantaged, the *Gaokao* may be the only legitimate means to resist the existing social system.

5. Conclusion

This paper has examined the key features of China’s university entrance exam in comparison to its Japanese counterpart and discussed major factors and impacts of the intensifying competition among the *Gaokao* examinees. In addition, the discussion about the advantages of this exam placed a special focus on rural farmers’ perspective.

From a Japanese perspective, the intensity and competition in the *Gaokao* places excessive stress and burden on students and their parents, and therefore, will need urgent reform. On the other hand, from the perspectives of Chinese people, especially those of farmers and ethnic minority groups, this exam can be considered the only means of overcoming unfair disadvantages caused by the country’s age-old household registration system. Viewed this way, it is undeniable that the *Gaokao* system has some positive implications in China today. Thus, it will be too simplistic to try to assess if this system is “right” or “wrong.” One thing that is clear, though: the government and Chinese society need to take proactive actions to free children from the overheated competition and an unhealthy obsession with prestige and success.

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A Comparison of English Education in China and Japan

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1. Introduction

Since several years prior to our field study in China, I had had several opportunities to interact with Chinese students. When I was in high school, I had good conversations with some Chinese students at a social event held by the school. Now, in our music club in college, I have a friend who is from China and attending Tsuda University. From these experiences, I came to have the impression that the average English level of Chinese students was higher than that of Japanese students. Then during our stay in China this summer, I had discussions in English with several students from Shanghai University of Finance and Economics and Beijing Normal University, and I was impressed by the level of their advanced English discussion and presentation skills. I believe that Chinese students' high proficiency in English can be attributed to the development of China's English education in recent years.

This paper-aims to trace the historical developments of English education in modern China and Japan, compare the advantages and challenges in both systems, and finally, suggest possible solutions to their major challenges.

2. The Historical Development of English Education in China and Japan

First, English education in China traces its history to 2001, when it was decided that English language should be officially incorporated into the curriculum as a compulsory subject for third graders and above in elementary school. According to the statistics provided by China's Ministry of Education, as of September 2005, 100% of elementary schools in Beijing, Shanghai, and Tianjin had basically introduced English education for first graders and above. It is also estimated that by now English-language education has been offered in most elementary schools throughout the country, except for those in remote rural areas, although there are regional disparities in educational standards. China's compulsory education consists of nine years, including six years in elementary school and three years in junior high school. During these nine years, English is taught as a compulsory subject. In high school, English is also emphasized as a compulsory subject because it is one of the subjects covered in university entrance examinations.

On the other hand, the history of English education in Japan began with the adoption of the "Courses of Study" (the official curriculum guidelines set by the Ministry of Education, Culture, Sports, Science and Technology of Japan) in 1998. With the new guidelines, "integrated study time" was newly established and English activities started to be provided as part of the curriculum for

international understanding. A survey conducted in 2007 showed that 97% of elementary schools in Japan offered activities of this type.

However, in the beginning, these English lessons were conducted differently in each region and school, and this lack of uniformity needed to be improved. To address this problem, the "Courses of Study" in 2008 stated that foreign language activities-should be provided for one hour per week for the students in grades 5 and 6. Following this transition, foreign language activities were made compulsory in grades 5 and 6 in 2011.

The goals of foreign language activities at that time were to help students acquire language skills and cross-cultural understanding, foster a positive attitude towards global communication, and cultivate the basic communication skills by familiarizing students with the basic sounds and expressions of foreign languages.

With the full implementation of the new "Courses of Study" in 2020, English activities, but not English as a formal language subject, became compulsory for third graders. The goal of this expansion was to develop children's dispositions and abilities that can form a good foundation for effective communication by engaging them in language activities in English. The same guidelines also added reading and writing instruction to the English education for fifth and sixth graders.

3. A Comparison of English Education Systems in China and Japan

There are both similarities and differences between the English education methods in China and Japan. One of the similarities is the emphasis on English as an examination subject for university admission. In both countries, English classes in middle and high schools focus on grammar, reading, and listening because they are the skills that are tested at university entrance exams. A degree from a prestigious university is believed to be a minimum requirement for a successful life, especially for a high-paying profession. Therefore, learning English is crucial for students in both countries to achieve wealth and affluence in life.

Another similarity lies in the language instruction method. Both China and Japan have been promoting the employment of native English speakers as assistant language teachers (ALTs) to help students improve communicative English skills.

On the other hand, the most significant difference is when students start learning English as a compulsory subject. In China, English as a compulsory subject was introduced to the curriculum in 2003, and most schoolchildren take their first English lesson in third grade in primary school. However, in large cities such as Shanghai and Beijing, students begin learning English at an earlier age, when they are in first grade. Characteristically, China offers an integrated teaching system from first grade through to twelfth grade.

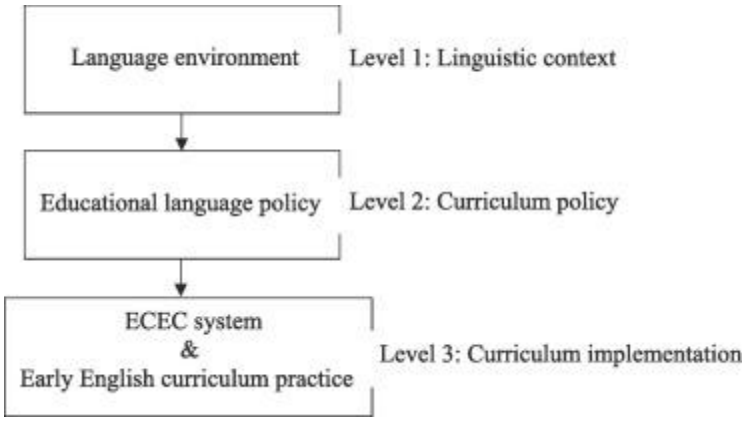

Fig. 1

Three-level Analytical Framework for Integrated English Language Education

Note. Cited from "Two Countries, One Policy: A Comparative Synthesis of Early Childhood English Language Education in China and Australia," Children and Youth Services Review, 118, 1-10, by L. Liang, H. Li, & A. Chik, 2020.

In contrast, in Japan, students learn English in earnest from middle school, and it was in 2020 that elementary school introduced it as a compulsory subject for third graders and above. Currently, English lessons in elementary school aims to teach only simple words, greetings, singing, or games. However, in junior high school, students are required to learn ten times more words than in elementary school. This drastic increase of the learning material has created a large discrepancy between English lessons in elementary school and those in junior high school. Some junior high school students feel overwhelmed by the significant increase of learning materials, or, worse still, they lose their motivation to learn English.

Another major difference is found in the types of teaching methods used in the two countries. In China, English textbooks are written entirely in English in principle, and many teachers from elementary to university levels conduct classes consistently in English. In addition, some schools adopt a teaching method called an "immersion method," and teach subjects such as physical education exclusively in English, aiming to "immerse" (or "soak") students in "a language bath." This method helps students feel comfortable with making mistakes and encourages their active participation in the classroom activities. In fact, immersion students scored significantly higher than the non-immersion students on the English word recognition, vocabulary, and oral language measures in the experimental study by Chinese researchers.

Measure	Grade	Immersion Students			Non-Immersion Students		
		M	*SD*	*N*	*M*	*SD*	*N*
English Oral Interview	1	19.80	6.00	25	6.46	4.37	26
	2	23.97	7.66	31	3.93	3.02	30
	3	30.00	5.63	36	8.34	6.69	35
English Phonological Awareness	1	12.32	2.73	25	12.27	3.26	26
	2	15.32	2.83	31	13.67	5.00	30
	3	16.39	1.60	36	15.48	2.45	35
English Letter-Name Recognition	1	7.52	8.03	25	4.81	7.93	26
	2	18.52	8.46	31	7.10	7.94	30
	3	17.56	5.30	36	17.77	7.51	35
English Word Identification[a]	1	7.92	5.39	25	4.69	4.19	26
	2	13.90	5.85	31	6.13	5.16	30
	3	14.44	4.25	36	13.57	4.35	35
English Graded Word List	1	2.52	3.07	25	.54	.90	26
	2	7.68	6.18	31	1.53	4.00	30
	3	6.50	4.68	36	5.43	4.85	35
English Vocabulary[b]	1	9.44	3.75	25	4.19	1.63	26
	2	12.19	7.71	31	4.37	3.61	30
	3	15.61	8.04	36	5.14	3.82	35
Chinese Character Identification	1	26.32	11.15	25	26.04	15.06	26
	2	51.74	9.47	31	48.03	12.00	30
	3	60.36	5.85	36	60.31	7.23	35
Chinese Phonological Awareness	1	11.56	4.22	25	8.85	4.30	26
	2	13.87	4.30	31	12.57	4.82	30
	3	14.89	3.14	36	15.91	3.48	35
Chinese Phoneme Deletion	1	15.40	1.04	25	13.92	4.35	26
	2	15.55	.89	31	15.37	1.16	30
	3	15.44	1.18	36	15.63	.81	35
Chinese Vocabulary[c]	1	113.7	22.71	25	101.81	20.96	26
	2	134.65	19.41	31	127.03	127.03	30
	3	138.55	16.86	36	138.37	138.37	35

[a]Wide Range Achievement Test-3.
[b]Peabody Picture Vocabulary Test.
[c]Chinese Peabody Picture Vocabulary Test—Revised.

Fig. 2

Mean Scores and Standard Deviations for All Tasks for the Immersion and Non-Immersion Groups

Note. Cited from "Early English Immersion and Literacy in Xi'an, China," *The Modern Language Journal*, 91, 395-417 by E. Knell, et al., 2007.

On the other hand, in Japan, English classes are normally conducted in Japanese, and immersion methods are not widely used. Therefore, Japanese students are often not very strongly motivated to speak or discuss in English, and they have limited opportunities to improve their English communication skills.

These differences in the teaching approach between the two countries is directly reflected in the English test score. Figure 3 below ranks Asian countries in terms of the average TOEFL iBT scores earned by all examinees in 2023. The average score of the Chinese examinees was 86 points, by far outstripping the Japanese counterpart who averaged 73 points.

Asia					
Afghanistan	25	25	19	24	94
Azerbaijan	19	20	22	20	81
Bangladesh	21	23	22	22	88
Bhutan	16	18	21	20	75
Brunei Darussalam	*	*	*	*	*
Cambodia	18	20	21	21	81
China	23	22	20	21	86
Christmas Island	*	*	*	*	*
Cocos (Keeling) Islands	*	*	*	*	*
Hong Kong	22	23	23	22	90
India	24	25	22	23	93
Indonesia	21	22	21	21	85
Japan	19	18	17	18	73
Kazakhstan	20	20	15	18	74
Korea, Democratic People's Republic of	20	21	21	21	83
Korea, Republic of	22	22	20	21	86
Kyrgyzstan	21	22	19	21	83
Lao, People's Democratic Republic	15	16	20	19	69
Macao	22	23	22	22	89

Fig. 3

TOEFL iBT Total and Section Score Means—All Examinees (in Asia) Classified by Geographic Region and Native Country

Note. Cited from *TOEFL iBT: Test Score Data Summary 2023*, by ETS, 2023.

4. The Effectiveness of English Education in China and Japan

As described in Section 3, because of the integrated language curriculum that is consistently adopted from elementary to high school, China's English education appears to be more effective than that of Japan. The data given in Fig. 1, where Chinese examinees scored 87 points while Japanese counterpart lagged behind with 73 points, can be a testimony to the effectiveness of China's English education.

However, China's education is still facing a major challenge: regional disparities. There is good evidence in the latest edition of "the EF English Proficiency Index" (2023) released by the English First (EF), an international education company which annually attempts to rank countries by the equity of English language skills among the EF test takers. According to the index, the regional gap in English proficiency score in Japan stands at 55 points, ranging from the highest score of 428 in the Chugoku

region to the lowest of 483 in the Kanto region. In China, on the other hand, the regional gap is wider at 81 points, ranging from the lowest score of 421 in Guangxi to the highest 502 in Zhejiang. Generally, schools in urban China often have a good educational environment, dedicated English teachers, and appropriate educational facilities and resources; as a result, they can offer effective English classes using innovative methods. However, in rural areas, where there is a chronic shortage of competent English teachers, English courses are frequently taught by the teachers without appropriate language teaching skills or who are not fully qualified. When taught by incompetent or unqualified teachers, the educational goals cannot be fully achieved, nor can the quality of English education be improved. For these reasons, the regional disparities in China's English education must be corrected urgently.

5. Conclusion

In conclusion, English education in China is generally more effective than in Japan primarily because it follows an integrated instructional curriculum that runs through elementary, middle, and high school levels. However, regional disparities in the quality of English education are much wider in China, and the measures to address these problems are still insufficient. China's urban schools have advantages such as dedicated English teachers, suitable facilities, and the introduction of the latest teaching methods, and they teach English by the "immersion" method where English is consistently used in the classroom communication. On the other hand, in rural areas, where there is a shortage of English teachers, English is often taught by teachers who have not been trained in English teaching or teachers of other subjects. It is obvious that English instruction by teachers with low English proficiency and little language knowledge is detrimental to the achievement of class goals and the quality of class contents. The reduction of rural-urban disparities is the most urgent priority for China's English education.

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Digital Governance in China and Japan

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1. Introduction

In a world where digitalization is advancing in every aspect, its impact has also reached the realm of public administration, reshaping how governments operate and interact with their citizens. Despite being neighbors in East Asia, Japan and China have taken completely different paths in digitalization, and this divergence is equally evident in the realm of digital governance in both countries.

First, this paper describes the history and current state of digital transformation in China and Japan, focusing on the differences in the approach adopted by each. The primary purpose of the paper, however, is to conduct a comparative analysis of the challenges and opportunities that lie ahead on their journeys to digital transformation. To achieve this goal, the paper will use both qualitative and quantitative methods as well as refer to prior studies that are available.

2. Digital Governance: Concept and Scope

According to Chen et al. (2008), digital government is defined as "the application of information technology to government processes in order to improve services to constituents" (p. xvii). Over the past few decades, digital government, or e-government, has lacked a strict definition, as it is a relatively new concept that various researchers and governments have explored in terms of its scope and implementation methods. However, at its core, it revolves around integrating digital technologies into government operations to enhance efficiency, transparency, and service delivery.

As countries around the world, including China and Japan, increasingly incorporate digital technologies into their political systems, this topic of digital governance has been becoming more important than ever before. The era when digital governance was an unknown, experimental, and unconventional idea is over, and reliable information and resources are now widely available to anyone interested in examining what approaches China and Japan has taken to this issue. The sections that follow will examine the history, current state, and impacts of digital governance in each of the two nations.

3. Digitalization in China

China has proudly proclaimed that it is a global leader in the digital industry, emphasizing the integration of digital technologies into its political and administrative systems. This is verified by the country's 12th, 13th, and 14th Five-Year Plans, which have strongly prioritized the development and application of digital technologies to enhance administrative efficiency and strengthen governmental control.

In 2014, the Central Cyberspace Affairs Commission was established under the direct control of President Xi Jinping. This commission oversees China's digital governance framework and cybersecurity policies, reflecting the strategic importance of digitalization in the country's governance model. To advance digitalization, the Chinese government has introduced a series of significant initiatives. One of them is, for example, the expansion of e-government services, which allow citizens to complete various public procedures online. Another major initiative is the enactment of robust data protection laws, such as the Data Security Law and the Personal Information Protection Law, which aim at monitoring and regulating the behavior of individuals and businesses. Moreover, the Social Credit System, designed to evaluate the trustworthiness of citizens, businesses, and other domestic entities, is a cornerstone of China's vision for digital governance. While these measures aim to enhance administrative efficiency, protect data, and maintain social stability, they have also raised concerns within the international community regarding potential infringements on privacy and the expansive reach of state control.

4. Digitalization in Japan

Japan took a significant step toward digital transformation with the establishment of the Digital Agency in 2021. Key initiatives include the introduction of the My Number Card system, which assigns unique identification numbers to individuals to streamline administrative processes~~,~~: and the digitization of various administrative procedures to enhance efficiency. Additionally, Japan has made efforts to abolish outdated "analog regulations" that mandate paper documents and in-person procedures. Characteristically, Japan's digital transformation strategy prioritizes the improvement of administrative efficiency and the enhancement of citizen services. In this respect, they fundamentally differ from those of China, which emphasize the promotion of the centralized governance and administration.

However, Japan's digital transformation has faced several challenges. According to the opinion survey conducted by the Digital Agency, as of July 2024, only 24% of the 10,000 respondents "trusts the government's digital services," and merely 28% "considers that Japan is successfully adapting to the digital age" (Digital Agency, 2024). These figures reflect the Japanese public's general aversion to digitalization. Furthermore, the public's concerns about digital privacy and their reluctance to embrace digital technologies have significantly retarded the pace of Japan's digital transformation as well as seriously limited its scope.

5. A Comparative Analysis

A comparison of the Chinese and Japanese approaches to digital transformation highlights the key distinctions between the two, which fundamentally stem from the political and cultural contexts unique to each. China's approach characteristically focuses on the rapid and decisive implementation

of measures, the development of dynamic and integrated systems, and the enhancement of governance and administrative efficiency. Conversely, Japan takes a more cautious and incremental approach, because of its strong emphasis on data privacy and security concerns.

While China has achieved swift progress in deploying its digital strategy, Japan has been relatively slow, partially due to its prioritization of data privacy and the general public's trust in digital transformation. Looking ahead, China's primary challenge will be how to balance its centralized political control with adherence to the international data privacy standards, whereas Japan must employ effective measures to accelerate its digital transformation without undermining the citizens' trust in digital systems.

Quantitative data further illustrates the contrasting trajectories of digitalization in China and Japan. In terms of the adoption of online government services, 90.2% of internet users in China have used these services, compared to only 69% in Japan. This indicates a noticeable lag in the adoption of digital government services in Japan.

Regarding the online implementation of administrative procedures, China has achieved full digitization, with 100% of basic administrative services available online across all provinces. In contrast, only 32.3% of standard administrative procedures in Japan have been digitalized, highlighting significant regional disparities in the scope of digital implementation.

Moreover, stark differences are seen in the level of user satisfaction as well. In China, over 85% of users report high satisfaction with e-government services, while in Japan, only 29% express the same level of satisfaction. This difference may be attributable to the Japanese public's general discomfort with digitalization; alternatively, it may indicate that the public's awareness of the need for digital services is high, but the penetration of such services is still low in Japanese society.

6. An Analysis of China's Digitalization Based on Key Studies and the Latest Data

This section analyzes the progress of China's digital economy and its impact on the country's political governance and social structure. The analysis is fundamentally based on a previous study titled "Digital China: Policy Initiatives, Progress, and Challenges" written by Ito (2022), which illustrates how China has utilized digital technologies to drive economic growth and strengthen social governance. In addition, the latest data will be cited to highlight the contrast between the current state of digitalization in China and Japan.

6.1. The Correlation Between Digitalization and Economic Development

Ito demonstrates a strong correlation between China's economic development and the adoption of digital technologies (Figure 1) and points out as follows:

> With a GDP per capita of around $8,000 on the horizontal axis in 2017, China (CHN) is positioned as a middle-income-level country, but the use rate of payment through the internet is

relatively high. Meanwhile, Japan's (JPN) GDP per capita is around $40,000, but its ratio of internet payment is lower than other countries with the same level of economic development. (Ito, 2022, pp.106-107)

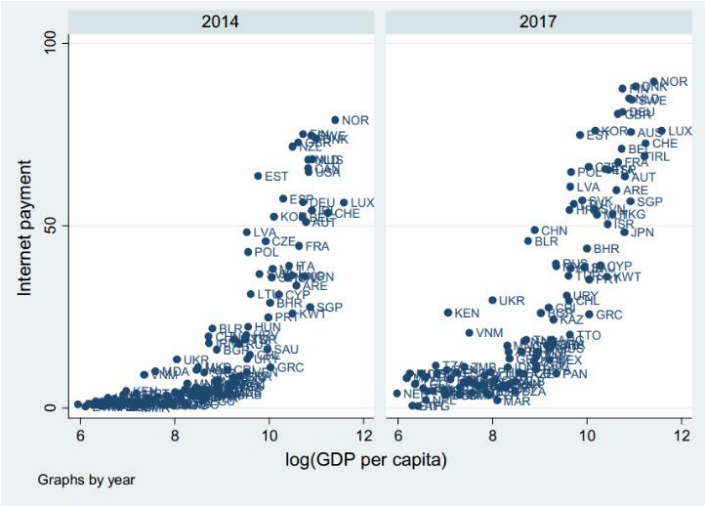

Figure 1: Relationship between GDP per capita and Internet Payment Usage

Note. Cited from "Digital China: Policy Initiatives, Progress, and Challenges," by A. Ito, 2022, *Digital Economy and Its implications in Asia*, 106.

6.2. The Relationship Between Digitalization and Political Freedom

Another topic concerning the digitalization of Chinese society is the theory of digital Leninism and surveillance society.

Another topic taken on by Ito is the relationship between political freedom (or "Voice and Account") and digital progress (2022, pp. 107-108). According to him, between 2014 and 2017, this relationship globally shifted from a "J-shape" to a "U-shape," indicating that digitalization advanced even in countries under authoritarian regimes including China, which have lower levels of political freedom (Figure 2). To explain this shift, Ito refers to the theory of "digital Leninism," which claims that "the authoritarian regime intends to build a surveillance society using IT." Based on this theory, he observes that "digitalization coexists with an authoritarian regime," suggesting that China's digitalization needs to be evaluated from "the perspective of digital authoritarianism" (2022, pp. 107-108).

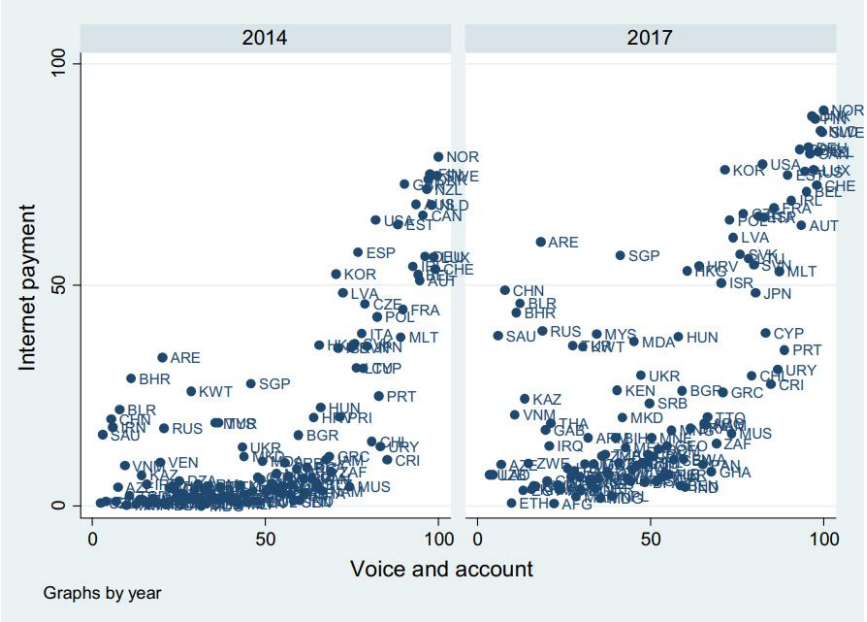

Figure 2: Relationship between Freedom of political speech and Internet Payment Usage

Note. Cited from "Digital China: Policy Initiatives, Progress, and Challenges," by A. Ito, 2022, *Digital Economy and Its implications in Asia*, 109.

6.3. Data Replication Using the Latest Data Released in 2021

What follows is the results of data replication obtained by applying the analysis approaches explained in the previous subsections to the latest data released in 2021.

6.3.1. Economic Development and Digitalization

As the graph in Figure 3 shows, the differences in digitalization between China and Japan, which was already apparent in 2017, is even more pronounced in 2021. The regression line based on GDP represents the average benchmark for digitalization progress. China significantly outperforms this benchmark relative to its GDP level, highlighting its advanced position in digitalization. By contrast, Japan lags behind, remaining in a group with notably lower rates of digitalization relative to its GDP, a trend that has become more distinct since 2017.

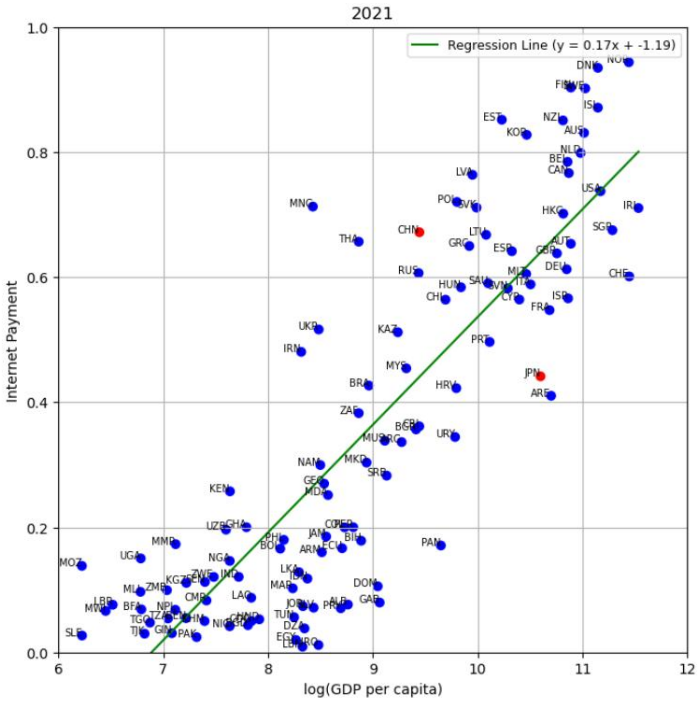

Figure 3: Relationship between GDP per capita and Internet Payment Usage in 2021

Note. Created by the present author based on the data originally released in the World Bank's *Global Findex Databas*e (2021) and *World Development Indicators* (2021).

6.3.2. Political Freedom ("Voice and Account") and Digitalization

Figure 4 below indicates that by 2021, countries with lower "Voice and Account" scores have made greater progress in digitalization, reinforcing the global trend of "digital Leninism" mentioned in Section 6.2 above in reference to Ito's analysis (2022, pp. 107-108). China, in particular, has moved further to the upper left of the graph compared to 2017, staying in the position as the most prominent example of "digital Leninism." However, it is worth noting that while the data in 2017 showed a "U-shaped" distribution, this shape has dissolved by 2021, suggesting that digitalization has progressed in some countries regardless of the level of political freedom. This shift indicates that the relationship between digitalization and democratization is more ambiguous than previously assumed.

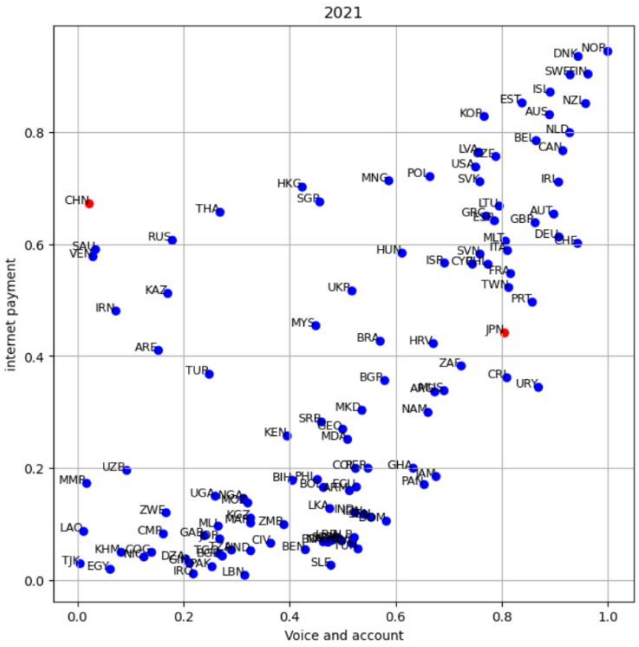

Figure 4: Relationship between Freedom of political speech/transparency and Internet Payment Usage in 2021

Note. Created by the present author based on the data originally released in the World Bank's *Global Findex Databas*e (2021) and *World Development Indicators* (2021).

7. Conclusion

In conclusion, the digitalization strategies of China and Japan are strongly influenced by their distinct political, cultural, and social contexts. China's strategy is characterized by its prioritization of efficiency and centralized political control, whereas Japan emphasizes data privacy and security as key pillars of its digital transformation. These differences are also reflected in public sentiment, with Chinese citizens expressing high satisfaction with digital government services with contrast to its Japanese counterparts, who are notably dissatisfied.

Currently, China's primary challenge lies in balancing its centralized political control with its adherence to global standards for privacy and data protection. On the other hand, Japan will need to accelerate its digital transformation as well as alleviate widespread public concern about data privacy and security.

The experiences of both countries provide valuable lessons for other nations navigating their own paths toward digital transformation. Furthermore, these lessons not only matter to policymakers across the globe but also have the potential to promote mutual learning between China and Japan. As digitalization continues to advance worldwide, achieving a balance between innovation, privacy, and security will remain a critical challenge for all nations.

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China’s Energy Policy: Its Current Situation and Future Outlook

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1. Introduction

Energy has always played a central role in the development of humans as a species: they cooked and boiled food with fire in ancient times and created more sophisticated products by using steam power and electricity as the Industrial Revolution progressed. Today, the vital importance of energy for human activities is most typically demonstrated by China, where after the introduction of the opening-up policy, the economy expanded dramatically in tandem with a hugely increased demand for energy and electricity. While these changes have brought affluence to the life of ordinary citizens, they also caused some challenges such as global warming, environmental destruction, electricity shortage, and more. As a result, many developed countries have taken some measures to tackle these problems. This paper attempts an economic and historical analysis of the challenges for China’s energy policy and the government’s measures against them. The paper also briefly looks at new and emerging problems in China’s energy sector and suggest a future prospect.

2. Challenges in China’s Energy System

2.1. CO_2 Emissions and China’s Coal Reliance

It is obvious that China's current energy supply is unsustainable. Firstly, China is the world’s largest carbon dioxide (CO_2) emitter, heavily contributing to global warming. The International Energy Agency (IEA) reported that as of 2023, China’s CO_2 emissions were over 12 times larger than those of Japan and about 5 times larger than those of the United States, the second largest emitter after China. Though China's per capita CO_2 emissions are smaller than those of the United States, the amount has been increasing recently due to the country’s social and technological development (Figure 1). One primary reason for this is the nation’s dependence on coal energy. In the early 2000s, about 75% of its total energy was generated from coal power plants, and coal still accounts for over 60 % of the total energy consumption (Figure 2). This situation is attributable to the large production of coal in China: in 2022, the country’s total coal supply was 97 million TJ, which is by far the largest in the world and accounts for over half of global consumption (IEA, 2024). China’s coal imports too are rising in recent years. Reuters reported that in 2023, the imports rose by 61.8% higher than in 2022, making the largest increase recorded. The Chinese government reinstated 3 to 6% tariffs on coal imported from countries that have not signed a bilateral free-trade agreements (FTAs); yet the demand for imported coal rose due to lower prices (Howe, 2024, para. 1-4). This overall situation indicates that China remains heavily dependent on coal energy.

2.2. Regional Imbalance in Electricity Supply and Demand

Moreover, there are regional differences in electricity generation and consumption. The urban areas in eastern and southern China have considerable electricity demands but lack the generating capacity to meet them. Meanwhile, the country's north and west are a region of vast deserts and plateaus, where abundant energy resources are effectively used to generate far more electricity than the local population consumes. In addition, the Japan Electric Power Information Center (JEPIC) reported that almost 80% of China's coal reserves are located in the west and the north. Thus, western and northern China is rich in energy resources of diverse source types. This supply-demand imbalance is one of the reasons for the electricity shortage in the urban areas.

2.3. China's Electricity Curtailment

Another problem in China's power system is electricity curtailment due to the country's underdeveloped power grids. This problem is particularly pronounced in the renewable energy sector, where the capacity of the power grids is insufficient to fully accommodate the power generation, and therefore, needs future improvements. For example, Qin, B et al. reported that during 2015 and 2017, China's wind power was curtailed by an average of 13%, and solar power by an average of 9% (Qin et al., 2024, p.9, Fig. 6). Cui et al. criticized that one of the main reasons for electricity curtailments is an unplanned increase of energy plant construction. They are hugely constructed in low-energy-demand areas, leading to excessive supply. These constructions are concentrated in areas with low energy demand, resulting in oversupply. Furthermore, the lack of policy incentives for large-scale and long-distance energy transmission has made the problem of supply-demand energy imbalance remain at the provincial level (Cui et al., 2020, "The Causes and Contributing Factors of Renewable Power Curtailment" Section). These problems are barriers to the efficient use of electricity in China.

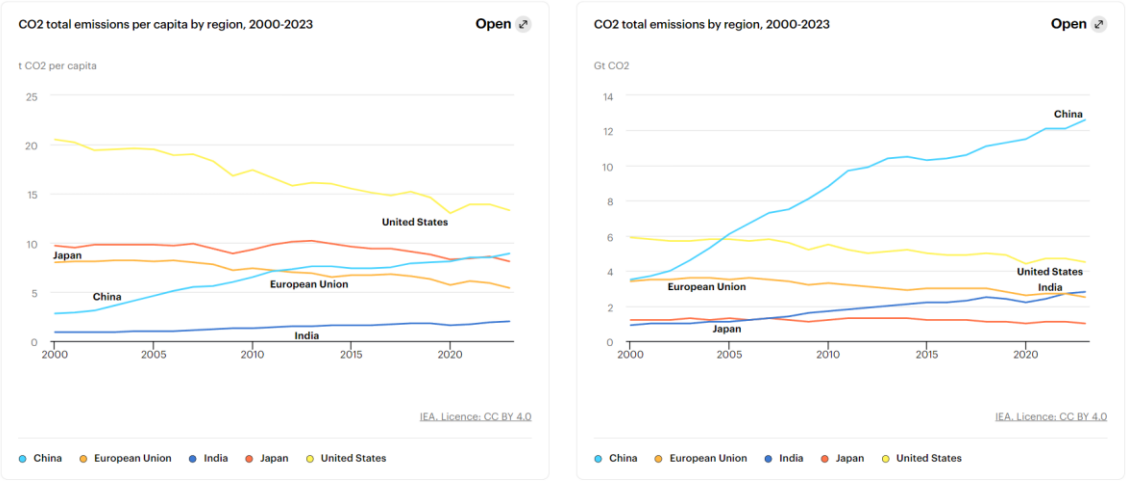

Figure 1. The amount of CO2 emissions by country, 2000-2023

Note. Cited from "The Changing Landscape of Global Emissions" *CO2 Emissions in 2023*, by IEA 2024.

3. Implementation of Government Measures

3. 1. Renewable Energy Policy

China has endeavored to implement numerous renewable energy plants in the last thirty years. Initially, these implementations aimed at addressing not only environmental issues but also energy shortage problems. According to Shi (2009), China started its first renewable energy program to tackle serious energy shortage in rural areas in 1996, when over 120 million rural residents had no access to electricity and over 900 million citizens nationwide had only limited access to it. So, as for rural areas, the government initially promoted the energy sources that were most easily available in each region. Later, the government's 10th and 11th Five-Years Development Programs for Renewable Energy promoted gradual improvement in the country's rural energy supply. These programs served as an important turning point that marked the beginning of the replacement of fossil fuel energy with renewables such as hydro, biomass, wind, geothermal, and tidal wave energy. Since 2006, a series of laws on renewable energy have been enacted and have contributed to the expansion of sustainable power supply. These laws have allowed the government to implement feed-in tariffs (FITs), tax concessions, subsidies, and more. Thus, China successfully built renewable energy plants at relatively low costs. Since then, the installation of renewable energy plants has dramatically increased as Figure 3 shows. Along with this trend, the government announced more ambitious renewable energy targets (Shi, 2009, pp. 96-101), raising its target of the renewable energy share of total energy consumption from 7.2% in 2005 to 16% in 2020.

In 1998, the share of wind energy was limited to 0.03%, and that of solar energy was less than 0.01%. However, in 2023, 9.36% of the electricity production was brought by wind power, and 6.18% was by solar. These data show that the share of wind and solar power generation capacities became

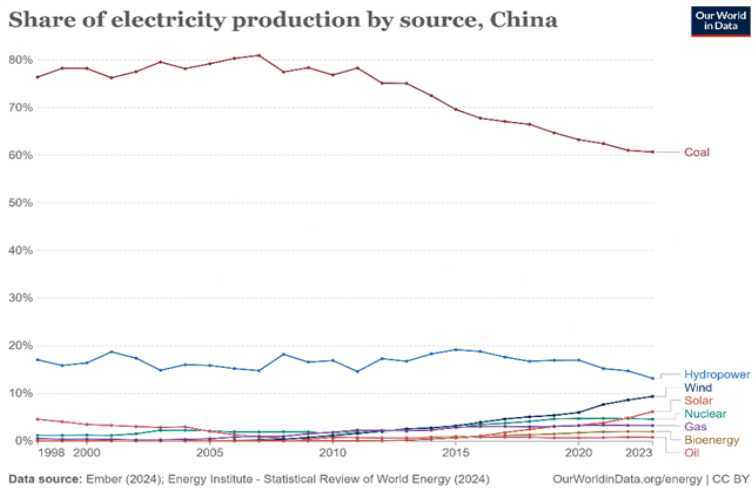

Figure 2. Share of electricity production by source in China

Note. Cited from "Share of Electricity Production by Source, China," *Our World in Data*, by Ember and Energy Institute, 2024.

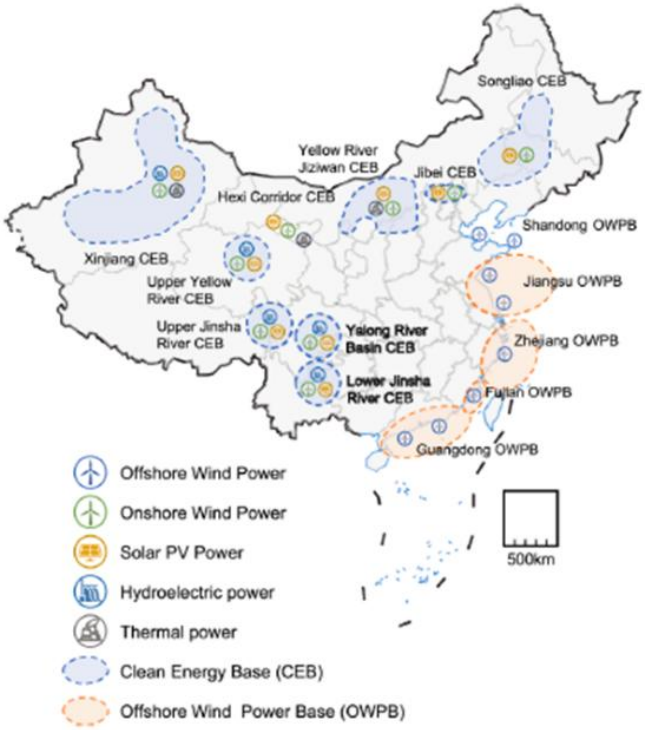

Figure 3. Clean energy base distributions in China

Note. Adopted from Qin, B (2024), Fig. 2, showing ones from 14th five-year plan

more than 300 times larger after implementing the government's measures (Ember, 2024, Fig2). Considering that the total electricity supply has skyrocketed in the last twenty years, China has built wind and solar energy plants at an unprecedented pace.

Regarding China's solar module manufacturing industry, the vast demands in China and the FITs implemented by the government provided immense business opportunities. Naturally, numerous manufacturers entered the market and promoted the market share competition, so the introduction cost of solar modules was reduced to about one-tenth compared to that in the launching period of the industry. The lowered implementation cost was almost equivalent to the cost of coal power production in some regions of China. Simultaneously, it promoted Chinese solar module manufacturers to enter foreign markets, where they can effectively utilize the FITs to make more substantial profits. According to GlobalData (2021), as of 2021, 7 of the world's top 10 large-scale solar manufacturing companies were Chinese owned. As these examples suggest, the Chinese government has implemented effective measures to promote the country's renewable energy industry, and successfully boosted the domestic economy and increased the global influence of Chinese companies as well. In addition to the solar module industry, Chinese companies are also strengthening their presence in the global buttery market.

However, major problems remain. Firstly, the increase in the renewable energy capacity does not necessarily mean the reduced reliance on the coal-fired power generation. Naturally, renewable energy supply is unstable because it is subject to weather conditions and other unpredictable factors; therefore, energy generation companies cannot abandon the option of coal power generation to ensure continuous energy supply. In 2021, intending to address electricity shortage, the government enacted measures to promote coal production and resume inactive coal mining operations; since then, the stable supply of electricity has been the government's major priority.

Moreover, the construction of new renewable energy power plants can pollute the local

environment. The construction of dams for hydropower facilities has been especially controversial. For example, as Jiao (2017) points out, while the Chinese government's serious commitment with renewable energy lagged behind, criticism by environmental NGOs and some experts caused several dam construction projects to be suspended. As the Chinese government clearly announced its policy to promote hydropower to fight global warming, numerous dam construction projects were conceived and launched by the local governments, but these projects lacked deep political perspective on the risks of environmental destruction and negative impacts on local citizens. Later, this problem grew more serious along with the development of China's energy-intensive industries such as steel and cement manufacturing. Thus, in 2016, Yunnan Province announced that it would restrict the operation of all of the existing small hydroelectric plants located along the Nujiang River to protect the ecosystem in the region. This is one example of municipal government actions against environmental pollution. However, the central government did not change its pro-renewable energy policy, which resulted in new dam construction plans by several local governments (Jiao 2017, pp. 248-256).

In 2020, President Xi announced China's energy goal of reducing its carbon dioxide emissions below zero by 2030 and achieving carbon neutrality by 2060. This stimulated the country's renewable energy industry, and some projects in solar and wind power sectors were launched. In addition, in the 14th five-year plan released in 2021, China stated that it would aim to increase the share of primary energy consumption from non-fossil sources to 20% by 2025.

By explicitly stating its positive stance on renewable energy, the Chinese government has been successfully taking action to combat global warming as well as boosting the domestic economy by promoting domestic companies. Currently, in China, especially in its solar power sector, the number of renewable energy generation plants is expected to increase mainly due to their lower operational costs. Furthermore, there are some other issues to consider: the tradeoff between the stable electricity supply and the renewable energy policy, negative impacts on the ecosystems in the regions where renewable plants are located, in particular, along-rivers, and others. The government needs to make more efforts to address these contradictions in its policies and pursue the best possible solutions.

3. 2. Transmission of Electricity

In 2000, when the 10th Five-Year Plan was released, the "Western Development" project launched aiming to adjust the imbalance in the region's power supply. This project consists of a group of subprojects including the following: "The West-East Gas Pipeline" project to send the gas produced in the west to the east, and "The South-North Water Transfer" project to carry the water from the south to the north, and "The West-East power transmission" project. The "West-to-East Power Transmission" project is the major one among these subprojects, and it focuses on the adjustment of interregional imbalance of electricity demand and supply in China by transmitting electricity from the regions rich in coal and renewable resources to the economically developed regions. The State Grid Corporation

of China (SGCC) played a key role in this project. As a company under the direct control by the government SGCC holds the most important position in China's power grid infrastructure, as well as sharing a central role in China's electricity supply with another major power company, China Southern Power Grid Company (CSG), which manages the power grids in the south.

The "West-to-East Power Transmission" project comprises of the construction of three power supply routes: the northern, the central, and the southern routes. The northern route transmits the power generated in the upper reaches of the Yellow River to Beijing and Tianjin. The central route transmits power from Sichuan, Chongqing, and Hubei to Shanghai, Jiangsu, and Zhejiang. The southern route is a transmission network connecting Guizhou and Yunnan to Guangdong and its neighboring regions, and extending to Thailand as well. The first two routes are under the management by SGCC, and the southern route by CSG.

During the 11th Five-Year Plan, SGCC invested over RMB 47.2 billion in the construction of 39 new power grids and 36 new power plants. The company also launched the world's first power transmission plan using the 1000kV ultra-high-voltage (UHV) transmission lines. Aiming to promote the transmission of renewable energy, this plan commissioned two major energy transmission companies to build 16 new ultra-high-voltage transmission lines, which have reached a total length of 32,000km so far. SGCC also invested RMB 500 billion in power grids annually from 2022 to 2024. As a result, the problem of power curtailment is gradually being solved in recent years. As Figure 4 suggests, the curtailment rate of solar and wind power in 2015 was over 10%, yet it reduced to about 2% by the 2020s. Moreover, the technology of ultra-high-voltage transmission has been applied to the infrastructural construction for the "Belt and Road Initiative," helping the government achieve its primary goal of the development of comprehensive power grid networks. Thus, aided by the massive investment and the latest technology, "the West-to-East Power Transmission" project significantly contributed to the development of China's power grid infrastructure As noted above, China's electricity is supplied on regional bases by one of the two state-owned companies, namely SGCC and CSG; currently, however, this has polarized the country's power grid system, creating a barrier to an integrated management of the nation's power transmission infrastructure. While both of the companies are the management bodies of the construction and operation of power transmission within their own supply areas, they have little interest in creating a trans-provincial, nationally unified transmission system. As the enterprises founded and controlled by the state, SGCC and CSG have a strong relationship with the central government. As a result, they have substantial influence in the pricing of power transmission rather than acting as the subordinate departments that follow the government's pricing policies. In addition, China's electricity power corporations are essentially required to sell its product only to either SGCC or CSG, these transmission companies can easily improve their profits by raising their prices. This situation creates little incentive to build a transmission system that works across corporation boundaries. Thus, the supply-and-demand power imbalance is adjusted only internally by each power grid company.

Moreover, municipal governments and local economies can sometimes prevent free energy transmission. China's municipal governments have the authority to adjust the energy transmission prices across municipal regions, which means that they can have cross-regional transmission negotiations. However, their attempts can fail due to the conflicts of mutual interest. For example,

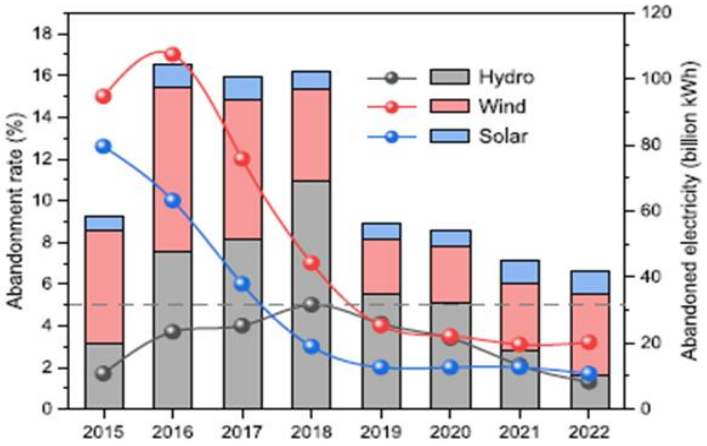

Figure 4. The curtailment rate in China, 2015-2022

Note. Cited from "Challenges and Opportunities for Long-distance Renewable Energy Transmission in China, *Sustainable Energy Technologies and Assessments,* 69, by B. Qin et al., 2024.

according to Deng (2016), in 2000, there was a cross-provincial transmission plan between the provinces of Yunnan and Guangdong, but it ended in failure. At that time,-Yunnan had many small hydrogen plants despite its low electricity demand, so it proposed to sell electricity at 0.2 yuan/kWh to Guangdong, an emerging industrial province. On the other hand, electricity in Guangdong was 0.7 yuan/kWh per unit, but the province rejected the offer by Yunnan because it had a plan to expand its facilities for natural gas-fired and nuclear power generation and needed to prioritize the increase of provincial tax revenues and the promotion of new employment. Consequently, Guangdong failed to offer a low-cost electricity option for its residents, to the detriment of their social benefits. In response to this situation, the central government intervened in 2001 and made the two provinces reach an agreement on the inter-provincial power transmission. As this case exemplifies, the prevailing view in China is that individual municipal governments should take the responsibility for the generation and transmission of electricity within their own administrative zones (Deng, 2016, pp. 19-21; 25).

As to the possibilities of inter-regional electricity trade by 2030, J. Xu et al. (2020) have suggested three different scenarios: the first scenario assumes "full regional connections with unrestricted electricity flow"; the second one supposes that "the inter-regional electricity trade barrier [is] caused by the imperfect electricity market mechanism in China"; and the third one considers that "the separation of the power grid between CSG and SGCC exists." If China realizes the first scenario, or, the creation of a complete, and unrestricted regional electricity transmission system, it is estimated

to produce about 632 billion RMB in net savings. Meanwhile, the net savings would be 355.6 or 326.1 billion RMB in the first two scenarios, where barriers to inter-regional or inter-company electricity trade remain. This difference in cost reductions is good evidence to the efficiency enhanced by the inter-provincial energy transmission. On the other hand, the creation of inter-provincial electricity trade does not benefit all provinces equally. Under the full regional power connection, the power generation capacity and the power consumption efficiency in Guandong will significantly decrease (J. Xu et al., 2020, p. 5; Fig. 4,7, & 8; p. 8).

4. Conclusion

In conclusion, China is facing problems of massive coal consumption, regional imbalance in energy generation, and power curtailment. These problems are not only interconnected but can cause other problems such as environmental destruction and electricity shortages. So far, the Chinese government has implemented effective measures to tackle these issues from two perspectives: the promotion of renewable energy and the development of transregional power transmission system. Overall, they have been successful enough to alleviate the problems and also promoted economic growth in the renewable energy sector. However, challenges still remain, and new problems have arisen too. First, renewable energy needs to address challenges such as rising cost, underdeveloped technologies, and the need for the tradeoff between the stable energy supply and the environmental impacts. Next, regarding "the West-to-East Power Transmission" project, a barrier to inter-regional power trade remains because of the separation of the power grid systems between the two major transmission companies. Among these problems, those that are related to cost, technology, and the environment will eventually be resolved by the advancement of science and technology. However, there are other types of problems that cannot be solved by scientific approaches only: conflicts over dam construction among local governments, companies, and the central government, the tradeoff between energy security or environmentally friendly energy generation, and the transregional electricity trade. Therefore, it is important for the central government to firmly establish its policies and attempt to build a consensus among all parties involved in China's energy problems.

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The Lying Flat Movement in China

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1.Introduction

These days, the word “lying flat” has been commonly used in TV broadcasts, print media, and the Internet worldwide. Called “tang ping” in Chinese language, this movement has been considered a social problem in these media mentioned above, which is most typically symbolized by the videos of young people literally “lying flat” on the street demonstrating their indifference in economic and social ambitions.

However, should the lying flat movement be treated as a social problem at all? And if it should be, what dimensions of the phenomenon are especially problematic? Through exploring these questions, this paper attempts to understand the social and cultural implications of the lying flat attitude in Chinese society.

2. My Personal Views Gained in China

Before turning to the analysis of the lying flat movement, I would like to share my experience that gave me a new perspective on this phenomenon. In September 2024, I visited China and had an opportunity to exchange opinions with some students of Beijing Normal University. It was a very precious occasion for me because I could have a glimpse into Chinese students’ views on the phenomenon.

When I asked a question, “What do you think about the phenomenon called lying flat?” students at the local university frowned and said, “Actually, we are not fond of it very much.” It was a great surprise for me because I assumed that Chinese students would generally have positive opinions on it.

After this conversation, a question occurred to my mind: “Why did my assumption differ from reality?” Beijing Normal University is widely recognized as one of the best universities in China, and to be admitted to this university, students need to study hard with a significant financial support from their parents. This would mean, I thought, that the students of Beijing Normal University are expected to be winners in a harsh social competition and that their parents are wealthy and have negative views about lying flat. So, for both the students and their parents, choosing the lying flat lifestyle is not a preferred option. To understand this issue

Hitotsubashi students and students of Beijing Normal University

more deeply, it is necessary to explore diverse perspectives of people of different social classes and income levels. Thus, my observation gained during my stay in China gave me the theme for this paper, and the discussion that follows will examine this problem.

3.What Is Lying Flat?

There are various definitions of lying flat. An article in *The Tokyo Shimbun*, for example, says that it is *"*a state of mind mainly seen among young people who are tired of the harsh competition of university entrance examinations and the pressure for getting a job, [and who] tend to show no interest in consumerism or marriage*"* (Ishii, 2024). According to another article in *Reuters*, it refers to those people who earn only a minimum amount of money to maintain their minimalist lifestyle. Yet another definition provided by BBC regards it as the act of "taking a break from relentless cycle of overwork*"*(Davidovic, 2022).

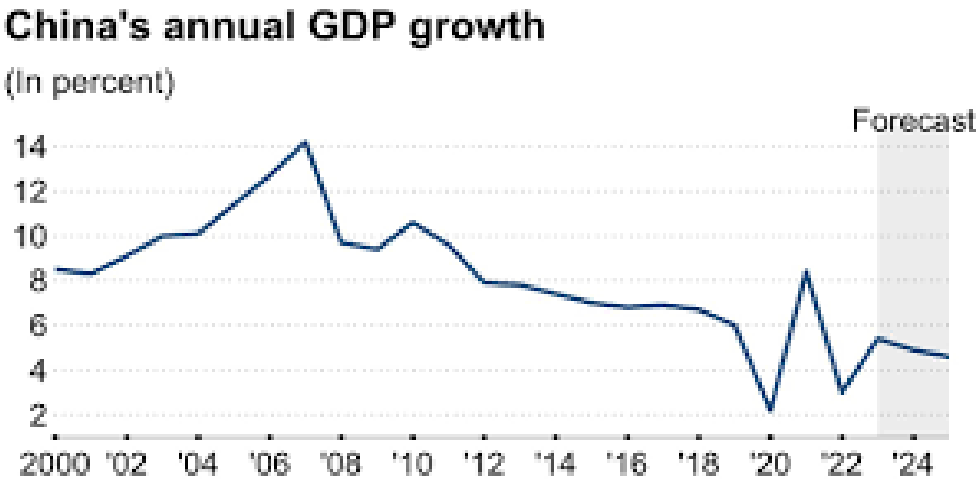
As the wide difference among only these three examples suggest, a precise and strict definition of this movement seems nearly impossible. However, at least one point is clear: those who choose lying flat is people give a lower priority earning money and surviving the harsh social competition than "ordinary" people do. A common misunderstanding of lying flat is identifying it with the attitude of NEETs (Not in Employment Education or Training). However, they are fundamentally different. As mentioned earlier, a precise definition of lying flat is not available, so the argument could be debatable; nevertheless, the proportion of the "lying flat youth" who do not work at all seems rather small.

4.What Factors Are behind the Lying Flat Phenomenon?

There must be countless causes behind lying flat as a social phenomenon; therefore, this section focuses on four primary factors of this the phenomenon.

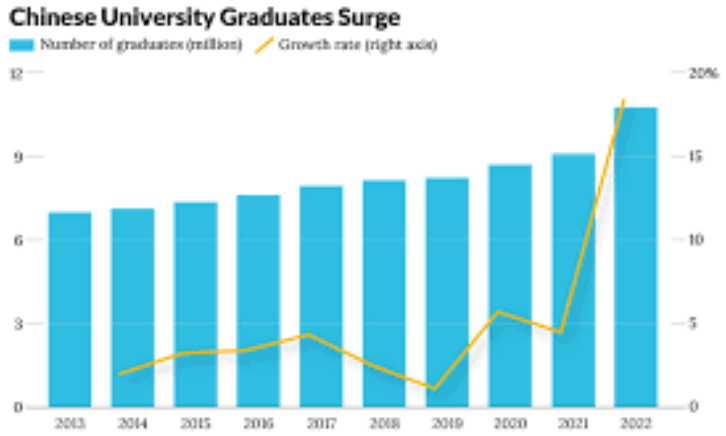
Firstly, high unemployment rate is one of the main factors of this phenomenon. According to a graph by *Nikkei* (Figure1), China's economy has been slowing down in recent years. On the other hand, as Qiaojia and et al. indicate (Figure2), there has been a constant rise in the number of university graduates in China-at an increasing rate in recent years. This is a situation where there are too many candidates for limited number of job openings, and the implication is that people who have worked hard to enter and graduate from university cannot get a job which deserves their strenuous efforts. In light of this, the mindset of lying flat can be an inevitable option when young people cannot find their purposes of life in high income or career advancement.

Fig. 1



Note. Cited from "China Economists Expect 5.4% GDP Growth in 2023," *Nikkei Asia*, by K. Ihara & F. Cheung, 2023. (https://asia.nikkei.com/Economy/China-economists-expect-5.4-GDP-growth-in-2023-survey)

Fig. 2



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Second, the opportunity to be successful and wealthy is not equally shared among Chinese people. In China, if one wants to become rich, having a degree from a top university is a requirement because it is a society which emphasizes educational background. According to the table below (Fig. 3) available on the World Economic Forum's website (Armbrecht, 2015), most of the top universities in China are located in urban areas. More specifically, 8 out of 10 top universities in China are in the country's largest cities such as Shanghai, Beijing and Hong Kong. However, students from rural areas

face difficulties in attending urban universities. The primary reason stems from the household registration system unique to China, which divides all citizens broadly into either urban or rural residents. This system was adopted in the 1950s to ensure stable food supply in urban areas, but today it is a barrier to excellent rural students who aim to enroll urban universities of their choice. This is not to say that rural students are never be admitted to urban universities, but to be successful candidates, they need to score higher than urban students on entrance exams. In addition, the tuition fees are not affordable for low-income parents who are engaged in rural agriculture. As shown in Fig. 4 cited from Meihan et al. (2021), the average per capita disposable income of rural residents is significantly lower than that of urban residents, which clearly places rural students at a disadvantage. Recently, the unfairness in the household registration system was partly alleviated by the government. However, along with the enormous economic disparity, this system has also contributed to inequality in educational opportunities and negatively affects students' potential to succeed in life. For example, unequal opportunities in society can make rural students lose their motivation to study hard and improve.

Fig. 3

Top 10 Chinese universities

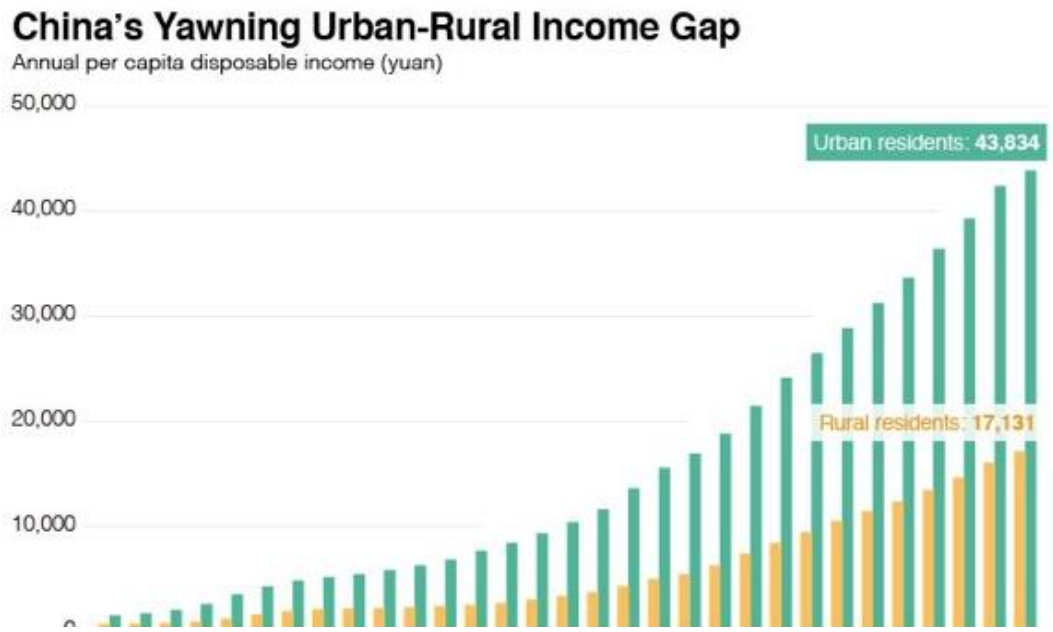
According to Times Higher Education

WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD

University	THE ranking
University of Hong Kong, Hong Kong	43
Peking University	48
Tsinghua University	49
Hong Kong University of Science and Technology	51
Chinese University of Hong Kong	129
City University of Hong Kong	192
Fudan University	193
University of Science and Technology of China	201-225
Hong Kong Polytechnic University	201-225
Nanjing University	251-275

Note. Cited from "What Are the Top 10 Universities in China?," *World Economic Forum*, by A. Armbrecht, 2015. (https://www.weforum.org/stories/2015/09/what-are-the-top-10-universities-in-china/)

Fig. 4



Note. Cited from "In Depth: China's Long March to Become a Consumer-driven Economy," *Caixin Global*, by Luo, M. Yu, H. & Cheng, S. , 2021. (https://www.caixinglobal.com/2021-03-26/in-depth-chinas-long-march-to-become-a-consumer-driven-economy-101680899.html)

The third reason for this phenomenon is suggested by an interesting study in psychology by Zheng et al. Briefly, it argues that an individual's self-perception called personal relative deprivation (PRD) makes people question the fairness in society. PRD can be defined as "a subjective feeling in which people feel resentment and anger when comparing themselves with others because they subjectively believe that they have been unfairly treated or have not received what they deserve" (Smith et al. as cited in Zhen et al., 2022). As a negative consequence of disadvantaged social comparison such ad PRD, increasing number of people have lost their belief in social fairness and motivation for climbing the social ladder while choosing to lie flat. Just as the unfairness of the country's household registration system has encouraged the lying flat movement, people's disbelief in social fairness too harmed their self-improvement intention and resulted in the rise of the lying flat mindset among the youth.

Finally, there is yet another important reason that is easily overlooked. As mentioned above, the negative consequence of excessive interpersonal comparison can make individuals feel PRD. It is also assumed that considerable number of people choose to lie flat as an expression of their aversion to the rigid social inequalities and pessimism about their future. There is not much evidence or data to to prove this hypothesis, but an article on *Reuters* by Chan (2024) identifies Chinese youth's pessimism about the corporate rat race as a factor behind the attitude of lying flat.

5. Is Lying Flat a Social Problem?

As shown in the previous section, some people choose to lie flat because of their pessimism about social unfairness in China. However, lying flat is not always an option for pessimists only; rather, there must be a different group of people who are in a "privileged" environment but still choose to lying flat simply because they do not like participating in harsh competition. The difference thing between these two should be not be overlooked.

For this reason, people who are lying flat should be divided into two groups. Even if a clear distinction is not possible, a classification will make the phenomenon more understandable. One group of those who choose lying flat are compelled to do so as the negative consequence of their pessimism about unescapable unfairness in society, and their attitude can be classified as "passive lying flat." The other group consists of those who are willing to choose lying flat even if they understand it entails some restriction on their lifestyles, and this attitude can be called "active lying flat." Between these two categories, especially passive lying flat should be regarded as a social problem because it is directly affected by various social factors including the unfairness in China's household registration system.

On the other hand, this does not apply to those who choose active lying flat because their option is entirely voluntary and not compelled by any social factors. Their attitude can even be regarded as a form of rebellion against harsh competition in Chinese society. It is doubtless that their lifestyle is detrimental to China's economic growth, so the government and the business sectors may be deeply suspicious of them. However, in my personal view, the lifestyle of lying flat—be it negative type or active—should not be criticized because people should have the right to choose whatever lifestyle they like. Rather, the problem is Chinese society's obsessive assumption that a good life is obtained by pursuing money and promotion at work while giving a low priority to personal lifestyle choices. This obsession may even worsen the problem of PRD, resulting in a vicious cycle in which "criticism against lying flat contribute to the rise of lying flat phenomenon."

6.Conclusion

As discussed above, it is practically impossible to define the lying flat movement comprehensively. However, it will be reasonable to regarded it as a lifestyle selected by those people who give a lower priority to earning money and surviving the harsh social competition than "ordinary" people do. The major factors behind this phenomenon in China are the high unemployment rate in recent years, the urban-rural disparity, unfairness in the social system, and the negative consequence of PRD. The "passive" lying flat attitude may reflect a combination of other social problems peculiar to China, and therefore, it will pose a problem to society whereas those who "actively" choose to lie flat should not be considered as a social problem because their choice is voluntary. Rather, the problem lies in the

social assumption that everyone should consider wealth and successful promotion at work as primary goals in life. This notion is nothing but an assumption commonly believed and not a universal truth.

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China and Other Nations at the Forefront of Space Development

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1. Introduction

Travelling to outer space has always been a dream of mankind. Ever since the successful Moon leading of Apollo 11 in 1969, humans have always been fascinated by the idea of outer space exploration. The immense popularity of science fiction stories about outer space is another indication of the human desire for space travel. Various themes of these stories-such as the encounters with aliens, space war, space travelling, and the robots working in outer space-are not mere fantasies today thanks to the strenuous efforts made by the people involved in space development and the related areas. Above all, research and advanced in astronomy, physics and chemistry have contributed to the breakthrough in space development in the last eighty years.

Space development attempts to extend the scope of human activities beyond the Earth into outer space through technology. It includes not only building and operating artificial satellites and robotic spacecrafts that literally work in outer space but also launching rockets or other devices that related to main technologies. Characteristically, space development is an industry sector which involves stakeholders ranging from government agencies to private companies. In the dawn of space development, the research and development of space technology were mainly carried out by developed countries such as the U.S. and the U.S.S.R, and they organized space development industry to command and control their space missions. However, in the last twenty years, many private companies have entered the space development sector causing radical changes there.

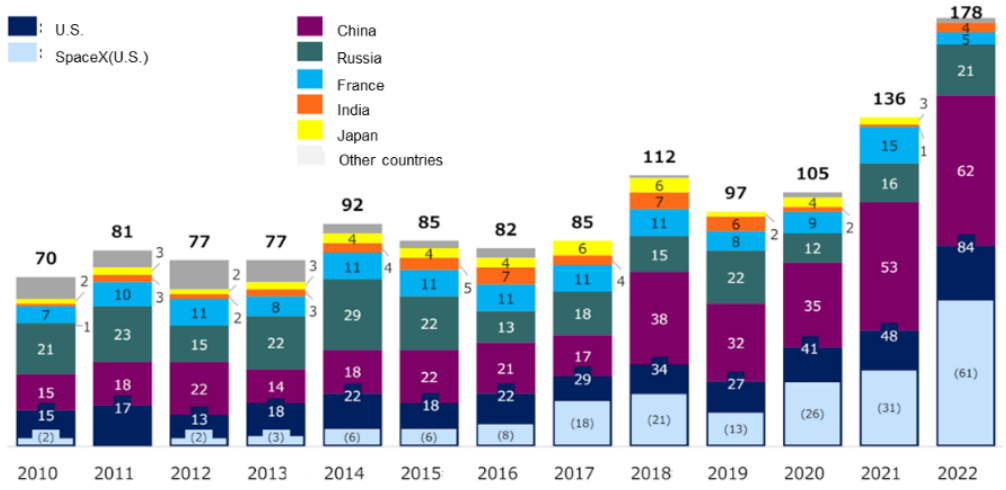
Focusing on some of the leading nations in space development identify the major risks posed by this sector and workable solutions to them, and finally propose a vison of sustainable space development that can contribute to humanity in the 21st century.

2. A Comparison of Space Programs in China and Japan

The history of space development has undergone considerable changes since the 20th century. The first great stride in space development were made by the U.S. and the USSR during the WW Ⅱ. About fifty years later, in the 1950s, China and Japan embarked on their space programs around the same time, and they have been leading players in space exploration since then. Nonetheless, the main goals of the two nations' space programs significantly differ: Japan focuses on academic space research and exploration while China aims at the development of space technology for military purposes. The strengths of their programs are very different, too. With its world-class aerospace technology, Japan has been a major component supplier to space manufacturers worldwide. Meanwhile, China takes advantage of its abundant natural and capital resources and has heavily

invested in its rocket engineering and space development sectors.

Fig.1 The Number of Annual Space Launches by Country (2010-2022)



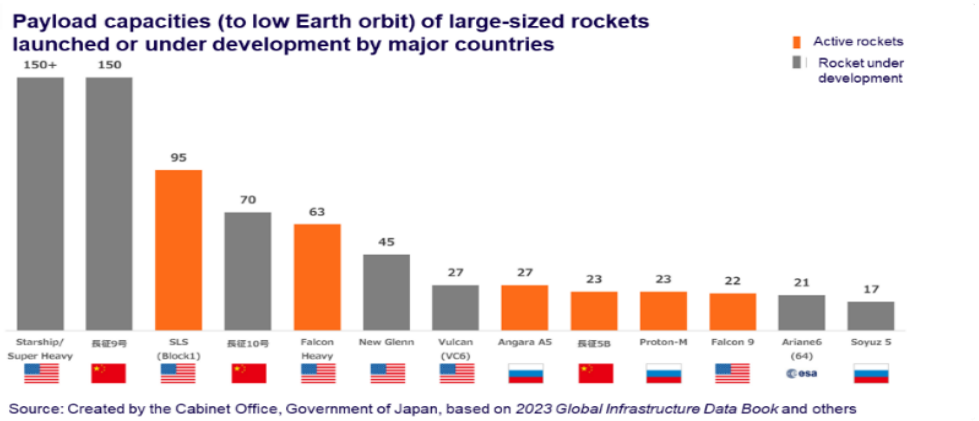
(Unsuccessful launches are not included)

Note. Cited from *A View on the Environment Surrounding Space Transportation and Its Future,* by Secretariat for Strategic Promotion of Space Development, Cabinet Office, Government of Japan, 2023, p. 2.

Figure 1 represents the number of large-scale rocket's launches and its transition since 2010 up to 2022. In 2022, following the U.S. with 84 launches, China recorded 62 launches. As of 2010 China's launches were a mere 15, but it had grown into a leading country which accounted for 1/3 of the total global launches by 2022. It is a growth at a higher rate than any other countries, China is likely to eventually take over the U.S. if this trend continues.

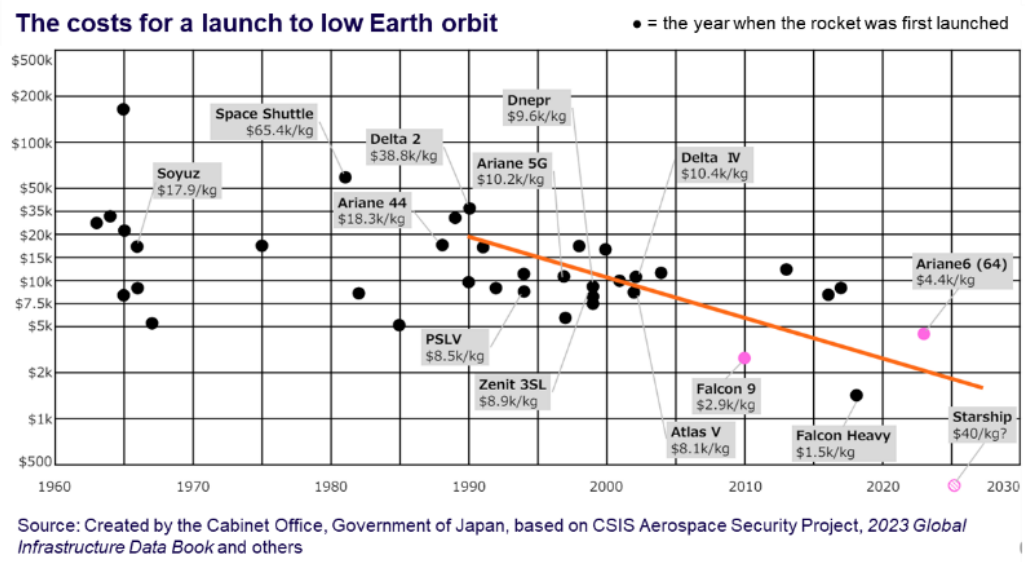
Compared to China, Japan's launch is less frequent. And that can be explained that there happened the shift in Japan's role in world-wide rocket industry. (How is this sentence liked to the previous one?) Japan entered this sector as the launcher of rocket; however, due to the limited financial(?) resources and economic recession, the country redirected its focus to the development of rocket parts to export to other countries such as the U.S. and China.

Fig.2



Note: Created by the Cabinet Office, Government of Japan based on *2023 Global Infrastructure Data Book* and others.

Fig.3



Note. Created by the Cabinet Office, Government of Japan, based on *CSIS Aerospace Security Project*, *2023 Global Infrastructure Data Book* and others.

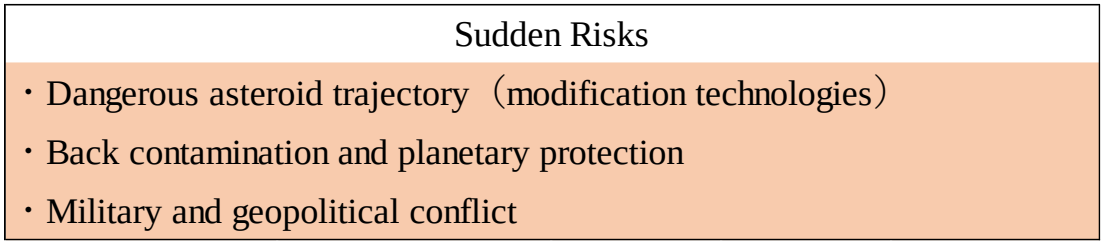
The reasons for this upward trend in rocket launching can be analyzed into 2 points. Due to technical development, the capacity of the payload has become larger and the cost of launching has declined. They made rocket launching efficient and reasonable and enable leading countries launch many times. Also, a new technology, which is already introduced in Space X (private company in the U.S.), makes it possible to reuse parts of used rocket. Those up-and-coming technologies implicate the future growth in rocket launchings.

3. Major Problems with Space Development Today

Space development today is facing various technological problems, ranging from spacecraft manufacturing, rocket launching into outer space and launcher activating. As for the major problems with space development, there is a concise list provided by Hamilton (2022). According to him, potential risks of space development are divided into the "sudden risks" and the "gradual risks." By following his categorization, this section explains types of risks and the responsibilities of China and Japan for causing those risks.

The "sudden risks" are loosely defined by Hamilton as "[those] risks [which] are triggered when some particular type or quantity of activity occurs and the consequences are felt over a relatively short amount of time." This category includes "[d]angerous asteroid trajectory-modification technologies" [b]ack contamination and planetary protection," and "[m]ilitary and geopolitical conflict."

Fig. 4



Note. Adapted from "Space and Existential Risk: The Need for Global Coordination and Caution in Space Development" by C. Hamilton, 2022, *Duke Law and Technology Review*, 21, p. 28.

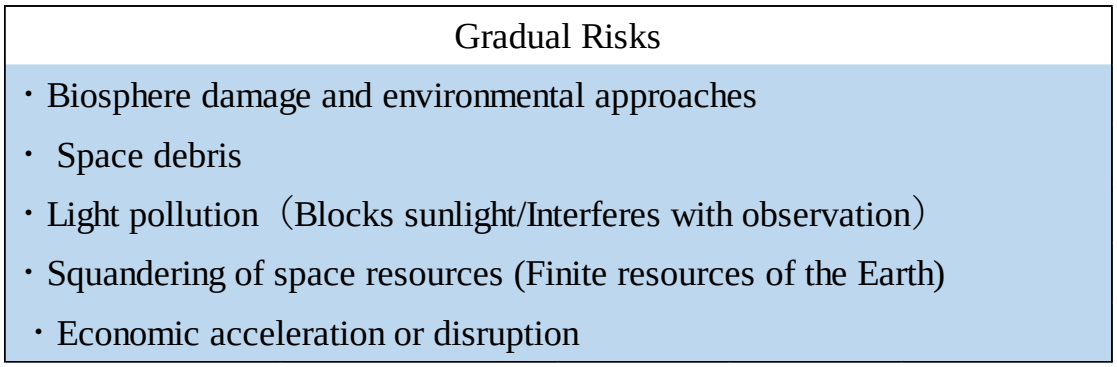
Asteroid trajectory-modification systems are developed in order to protect the Earth from serious collision with asteroids or comets. In 2013, in Russia, a meteorite fall damaged the city of Chelyabinsk, injuring more than 1000 people. Scientists have developed ways to blast or lure meteors away from the Earth's orbit and protect its surface. However, the estimated risk of natural collision between asteroids with the Earth is relatively small (almost 95% of asteroid falls is harmlessly burned up in the atmosphere without crushing into the Earth's surface). However, this technology can possibly pose other types of risks. One of them is the risk that the artificial modification of asteroid trajectory can cause the collisions among asteroids. In addition, the rocket launches needed for this technology can exacerbate the problem of space debris. For these reasons, Hamilton warned the potential risks of this technology and suggested a need for international restrictions on its usage (p. 31). However, the grave concern of Hamilton and other experts is not shared by some countries including China, where in 2022, the government announced the beginning of asteroids trajectory-modification system's experiments.

“Back contamination” is another serious problem, which is defined by NASA’s scientists as “[the] contamination of the terrestrial biosphere with organisms or materials returned from outer space that are capable of potentially harmful terrestrial activity”. The space craft launched into outer space could bring back harmful substances to the Earth and damage the current state of the terrestrial environment. In order to avoid the risk of back contamination, some aerospace exploration agencies including JAXA (Japanese Exploration Agency) participated in the invention of the “anti-back contamination” system. For example, JAXA mainly focused on the technologies for the detection of harmful substances and the protection of satellite lens. One point that is noticeable about this system is that it was a collaboration of innovative technologies and devices created by multiple countries.

Third, defense and security challenges are another controversy about today’s space development (Hamilton, 2021, pp. 32-36). One reason behind this is the absence of international regulations to control the excessive competition in space development both for military purposes. The difficulties in rulemaking lie in the complexity of the space development industry. Typically, any space program is a cooperative mission undertaken by a broad range of stakeholders from government agencies to private companies, so the responsibilities are distributed to multiple players rather than centralized on one. This means that even when an accident has happened, no player is required to take the full responsibility for the damage. Moreover, this situation motivates several countries to take self-defensive actions such as the armament of spacecraft and the establishment of the space force, accelerating the global competition over the supremacy in space. For example, in April, 2024, Chinese authority announced the reorganization of its space force, attesting to this trend. Supposing the U.S and other rival countries as its hypothetical enemy, China’s new space force has now a cyber information department. Under these circumstances, there is an increasing risk of armed conflicts in outer space even in the near future.

Next, “gradual risks” are defined as “those whose consequences scale up (e.g. linearly or exponentially) with more activity” (Hamilton, 2022, pp. 27-28). Compared to sudden risks, the risks of this type can be alleviated relatively easily if long-term measures are implemented appropriately. Gradual risks include “space debris problems,” “light pollution problem,” “squandering space resources,” and “economical acceleration or disruption” (Hamilton, 2022, pp. 40-54).

Fig.5



Note. Adapted from "Space and Existential Risk: The Need for Global Coordination and Caution in Space Development," by C. Hamilton, 2022, *Duke Law and Technology Review*, 21, p. 40.

Among others, "space debris" is the problem most widely known. It refers to pieces of microscopic junk generated not only by the accidents of active satellites but also the collisions of unused satellites or other space devices. Scientists are seriously concerned about the harmful impact of space debris, and NASA scientist D. J. Kessler is one of them. According to his theory, once the density of space debris has risen critically high, it inevitably causes an endless chain of collisions between pieces of debris, each of which generates more debris. In 1996, for instance, an unused US rocket Pegasus XL, which had been floating in outer space, suddenly exploded and scattered a vast amount of space debris. In the same year there was another serious collision between the debris objects, which are presumably the pieces from the rockets launched by European countries and other active satellites. These two major accidents heightened the stakeholders' awareness of the need for the mitigation of space debris and promoted the development of international cooperation on this matter.

Second, "light pollution" is a problem which is rather unfamiliar to general public (Hamilton, 2022, pp. 45-47). However, this problem can seriously affect the future of space exploration. Light pollution is caused by satellites moving in orbit, which radiate light or reflect sunlight. These lights hinder the view from telescopes—whether they are landed or extraterrestrial—resulting in the impediment to accurate space observations. Space observation is indispensable for humanity to understand the origin of life and envision a possible future. It is also helpful for humans to collect specific data and to search for habitable planets. Light pollution hinders space scientists in their scientific research on the future of humans.

Third, "squandering space resources" and "economical acceleration or disruption" are closely related issues (Hamilton, 2022, pp. 51-54). Because the number of stakeholders in space development has swollen in the last 70 years, the competition for space resources and economic gains from them has been increasingly fierce. Unlike other industries, space industry is distinctly a

“winner-takes-all” industry. Once innovative space technology is invented, it beats other existing rivals and attains supremacy. Thus, the intensification of the competition in the space industry inevitably accelerates the market monopolization, which, in turn, prompts more countries to invest in scientific experiments in the space environment. However, those experiments (including rocket launching and device manufacturing) entail enormous monetary and environmental costs. If the current practice in space industry and development is allowed to stand for a long term, it can harm the Earth’s environment and exhaust its natural resources, especially petroleum and natural gas because they are used as the main fuels used for rockets. Adding to these resource problems, the production of space devices requires special techniques and so much time and cost, making rocket launching a highly costly enterprise. This situation where monetary costs of launching rockets are getting reasonably accelerates the booms of experiments lowers the hurdle of using disposable rockets leading to endless damage on environment.

4. Solutions to the Current Challenges and Suggestions for Global Space Governance

The final section concludes this paper by proposing the solutions to the risks and problems discussed in the previous section and some ideas for the improvement of global space governance.

Solutions to potential risks in space development involve a wide range of fields, and a comprehensive examination of them all is beyond the scope of a brief paper like this. Therefore, the discussion here will focus on two aspects: he establishment of an international legal framework and the institutional strengthening of the global space governance organizations.

Fig. 6

Problems in rule-making of space development
= Complexity of stake holders
・Existence of private cpmpanies ・Few participations in rule making

Note. Adapted from “The Artemise Accords: Interpretation and Assessment in Light of Existing Law,” by S. J. Renshaw, 2023, *CICLJ,* 13 (1), p.6.

The problems for today’s space development fundamentally stem from the lack of international legal framework. Currently, no agents (no countries or companies) are supposed to be legally responsible for the problems, nor is stipulated what space activities deserve what legal penalties. Obviously, several obstacles remain in the path of an international agreement on space governance. One of them is the complexity of stakeholders involved in space programs and activities.

In general, the primary actors in international law-making are the countries concerned. Presently, however, the global space sector is nearly an oligopoly controlled by a few developed countries and private companies. What measures, then, would be effective in correcting these problems? To find answers to this question, it is useful to examine the problems from two perspectives.

One is how to control the dominant influence of a small number of large private companies in the global space sector, and the other is how to create a legal and regulatory framework that is fair and just to the nations that have not participated in space activities. Currently, private spaceflight companies, including SpaceX as the most successful example, are playing the leading role in this sector. In light of this, without appropriate restrictions on them, the global space activities will only accelerate recklessly, contributing to a range of risks discussed in Section 3. Nonetheless, since the decisions by the existing international organizations are not legally binding, their authority to control these private companies is inevitably limited. Therefore, national governments should intervene and take responsibility for governing the activities of the private companies in their own domestic space markets. On the other hand, international organizations, such as the United Nations Office for Outer Space Affairs (UNOOSA), should set global standards and urge national-level authorities to comply them.

Another problem is that rulemaking in this field is monopolized by a small number of players. As mentioned earlier, space industry is an oligopoly or a “winner-takes-all” market, which naturally makes truly fair decision-making virtually impossible. To improve the current situation, a rule-making system should be built to gather opinions from the countries that are not involved in space programs or industry. Such an attempt may seem futile in the face of heated competition in the global space market; however, a third-party perspective can help interested parties avoid being narrow-minded and diminish the potential environmental and military risks. Thus, even those countries which are not involved in space exploration are obliged to participate in the discussion on global space governance.

In order to address the problems mentioned above and make space development more beneficial to humanity, it is important to reexamine distinct roles performed by different stakeholders including the United Nations, national governments and private companies. For example, the UN Office for Outer Space Affairs hosts international forums where all countries, regardless of whether they are involved in space exploration or not, can exchange information on an equal footing. The UN should increase the frequency and format of this type of session and encourage the participation of those countries affected by specific issues. The UN should also increase their efforts to bridge the gap between nations in the progress of space development by sending engineers, prompting the information exchange and providing a database system to make space development information more widely accessible. It will also be effective to establish an international organization to monitor and control nation-level space projects, modeled after, for example, the way IAEA serves to strengthen the global nuclear safety and security framework. Such an organization be able to have an objective

perspective on the global space industry and suggest helpful guidelines.

As to the relationships between governments and private sectors, the former should take the reins of the latter while ensuring the freedom of exploration and use of outer space for the benefit of all enterprises. Following the guidelines set by the UN, national authorities should understand their positions within the global space industry first, and then enact and enforce their own laws and regulations.

The global space industry has been rapidly evolving; however, a strong and flexible governance structure has not yet been established. So as to attain this ideal way of space development and to make this industry safer and more beneficial to humanity, lots of countries needs to transnational cooperation and coordination each other centering among on leading countries including China, and Japan, and other advanced nations in the field will be of paramount importance.

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The Changing Landscape of China's E-commerce Market

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1. Introduction

In recent years, Chinese consumer's purchase experience has rapidly shifted from in-store shopping to e-commerce shopping. Though this shift is a worldwide trend, as the world's largest E-commerce market, China is undertaking a radical transformation in its wholesale and retail industries at an incredible speed.

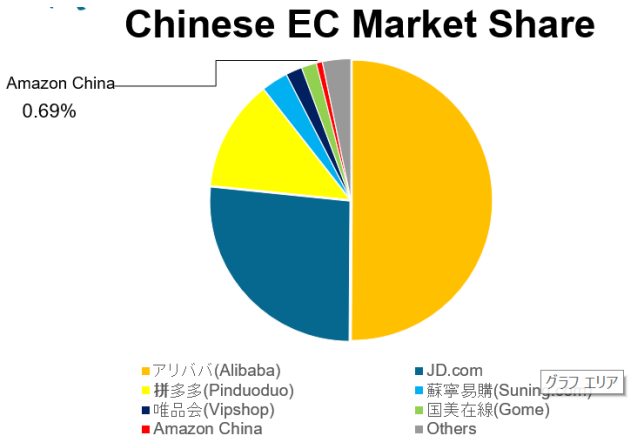
The purpose of this paper is to examine the current state of China's e-commerce (hereafter EC) market and find the reasons for its rapid evolution. To achieve this goal, the paper compares China's e-commerce market to that of Japan, identify the key features of the two, and finally consider the future of online retailing and shopping in China.

2. E-commerce Markets in China and Japan

First, to understand the current situation of China's e-commerce market, the pie graph in Figure 1 will be useful. The graph represents China's e-Commerce market share in 2019. Alibaba Group is the largest player, holding more than half of the entire market share. The second largest player is JD.com, followed by Pinduoduo. Together, these top three retailers account for about 90% of the E-commerce market in China.

Fig. 1

China's E-commerce Market Share, 2023



On the other hand, Amazon China's share is noticeably small. Amazon is by far the largest e-

commerce company in the global market; however, in the Chinese market, Amazonis only the seventh largest with a market share of only 0.69%. Thus, local retailers are overwhelmingly dominant in China's e-commerce market. For example, major e-commerce platforms such as Alibaba's Tianmao Mall (formerly Taobao Mall) offers products and services optimized for Chinese consumers.

Next, Figure 2 below has listed the largest e-commerce markets in the world by country. China is by far the largest in the world and has continued to grow rapidly over the last few years. This remarkable growth is even more striking when compared to the U.S., the world's second largest e-commerce market. As of 2018, China was three times as large as the U.S. market; by 2019, however, it reached has grown quadruple its US counterpart. Thus, China now has a huge EC market dominated by local companies, and the market growth is likely to continue at a remarkable pace.

Fig. 2

The Largest E-commerce Markets in the World by Country, 2018-20

Figure 3 below shows the changes in Japan's EC market size from 2014 to 2023. In only one year from 2022 to 2023, the market grew by about 10%. Although this growth rate is never small, it is by far below the rate of its Chinese counterpart. Characteristically, Japanese e-commerce market is relatively stable, that of China is a much larger in terms of both size and growth rate. Differences between the two markets are also found in consumer behavior. Online shopping is widespread among Japanese consumers, but their purchasing behavior is generally cautious. On the other hand, based on our interviews during the field research in China, online shopping seems the only option for the majority of young consumers. The differences in EC market size and growth rate probably reflect diverse social variables such as population, level of economic development, and consumer behavior.

Fig. 3

Changes in Japan's EC market size from 2014 to 2023

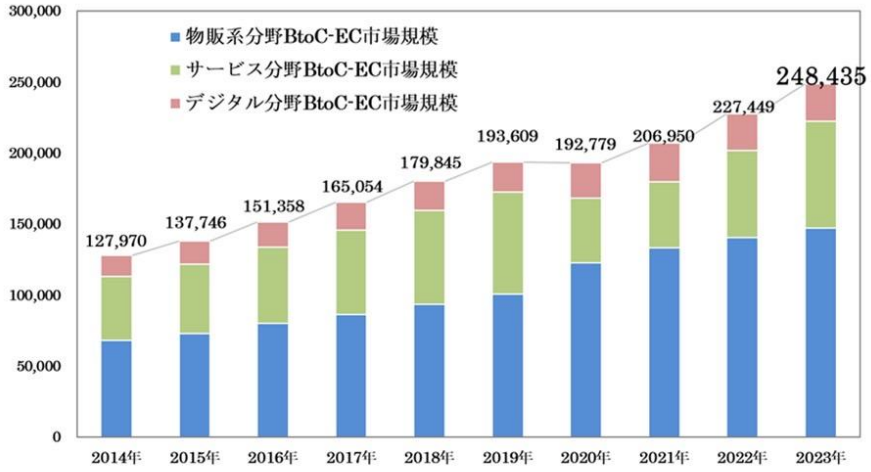


Figure 4 below shows the top 10 e-commerce retailers in Japan in 2023. According to the calculations based on the market size given by Figure 3 mentioned earlier, the largest market share holder in the Japanese market is Amazon Japan at 12%, followed by the other 9 companies almost equally dividing the rest of the share at less than 1%. The implication here is that the Japanese e-commerce market is much more polarized than that of China.

Fig. 4

The Top 10 e-commerce retailers in Japan, 2023

順 位		社 名 サイト名		前期実績 EC売上高 (百万円)	前期実績 増減率 (%)	今期見込み EC売上高 (百万円)	主要商材	決算期
1	◎	アマゾンジャパン amazon.co.jp		3,209,700	26.5		総合	12月
2		ヨドバシカメラ ヨドバシ.com		209,948	▲ 1.8	—	家電	3月
3	◎	ZOZO ZOZOTOWN		183,423	10.4	200,700	衣料品	3月
4		ヤマダホールディングス ヤマダウェブコム		150,500	4.4	—	家電	3月
5	◎	ビックカメラ ビックカメラ.com		143,400	—	—	家電	8月
6		ユニクロ ユニクロオンラインストア		130,900	3.1	—	衣料品	8月
7		オイシックス・ラ・大地 oisix		115,176	1.5	126,500	食品	3月
8	◎	ニトリホールディングス ニトリネット		91,100	28.3	—	家具	3月
9		ジャパネットたかた Japanet senQua	※	84,600	—	—	家電	12月
10		上新電機 Joshin-インターネットショッピング		75,552	▲ 0.4	—	家電	3月

China's e-commerce market has been developing at a remarkable speed and scale and growing beyond China. On the other hand, the market is overwhelmingly dominated by a limited number of domestic companies, posing a barrier to new entrants from abroad. Given that China's domestic e-commerce retailers have been immensely successful in meeting the domestic market needs, it will be highly challenging for foreign retailers to break into the Chinese market. There are some potential disadvantages to Chinese consumers: the lack of innovation and radical transformation in the existing sales practices and services.

Japan's e-commerce market, on the other hand, is smaller in size and growing at a slower pace. Besides, as mentioned earlier, it is a highly polarized market too and therefore has much potential to invite foreign new entrants as well as introduce new and different sales formats. Unlike China, the Japanese market has neither strong economic growth nor a large consumer population; nevertheless, the business environment is much more open and subject to competition with foreign entrants, so it has a sufficient potential to expand in the future.

A major factor that differentiates the e-commerce markets in China and Japan is the penetration rate of cashless payments. In China, cashless payments are very common at most stores in urban areas, and some stores do not accept cash at all. The prevalence of cashless payments in China is closely linked to the development of the country's e-commerce market and online shopping, where cashless payment options are indispensable. Even if the common statement that "Chinese people do not trust cash" is an inaccurate generalization, the Chinese government has strongly promoted the introduction of digital payment options, giving the country an advantage over other countries in this respect.

Next, let us examine the reasons for the rapid growth of e-commerce in China. There are three primary factors. One is the Chinese government's restriction on internet access. As Figure 5 below shows, internet access to major social media services such as Google, YouTube, LINE and Twitter is either unavailable or restricted in China. When the internet control took effect, Google and other Western providers were gaining share in the Chinese market; however, fears of potential cyberattack have led most of these providers to withdraw from China.

Fig. 5

The Restriction on the Internet Access in China

The internet control by the Chinese government primarily aims at protecting national security, but it has also worked to the advantage of Chinese IT companies, allowing them to monopolize the domestic e-commerce market. Thus, the rapid growth of China's e-commerce was possible because of the government measures for national safety.

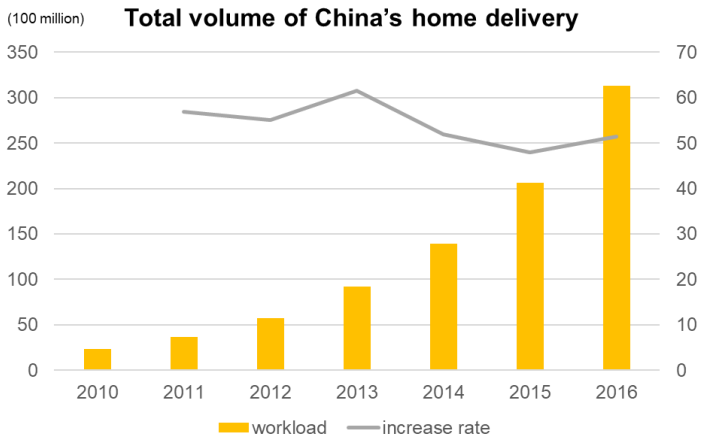
Another factor is China's large population. China's population exceeds 1.4 billion now. Given that the country's internet penetration has reached 77.5% as of 2024, China is a highly profitable e-commerce market that offers vast quantities of personal data. The availability of large amounts of personal information is a great advantage for business enterprises, giving them access to data on purchasing behavior by age group, spending patterns by region, and much more. The larger the sample size, the more reliable the data; therefore, China provides a business environment in which online businesses are better positioned to develop new platforms, products, and services. In addition, some experts point out that Chinese consumers do not have serious concerns about the security of their personal data.

In China, for example, there has never been a serious controversy about the Resident Identity Card. However, in Japan, the introduction of the individual document officially called "My Number Card" caused heated debate among the public. In China, the Personal Information Protection Law took effect only three years ago in 2021; however, until then, there was no legal protection of personal data. As these examples suggest, the security of personal data may not be a cause for deep concern among the Chinese public. Easy access to purchasing information of individual consumers must have contributed to the rapid development of China's e-commerce market.

As a third factor, the increasing growth of home delivery industry in China will be worth mentioning. Figure 6 below shows the volume of business handled and the annual growth rate of China's home delivery industry from 2010 to 2016. As can be seen, the business volume increased at a rate of more than 50% annually in these five years; and in 2022, the annual home delivery volume exceeded 100 billion pieces. This rapid growth of this sector is attributable to enhanced business efficiency by combined use of AI and big data technologies. From the perspective of e-commerce industry, the rapid development of home delivery was immensely beneficial, especially for its business operation in rural areas, increasing the number of online shoppers outside of urban areas.

Fig. 6

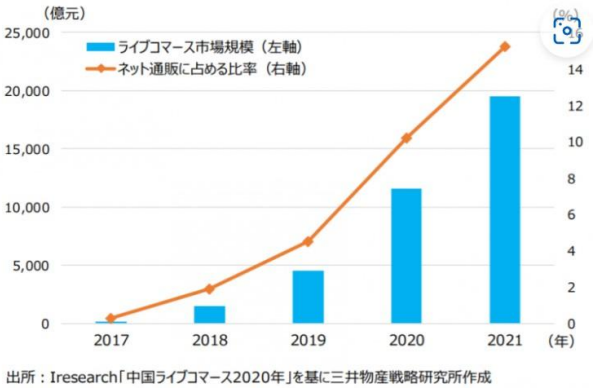
The Total Business Volume in China's Home Delivery Industry, 2010-2016



Finally, "live commerce," the newest form of online shopping that is emerging in China, should be briefly mentioned. Live commerce refers to live streams on social media where charismatic influencers (known as *wanghong* in Chinese) sell products and services as they communicate with consumers in real time to sell products and services. Consumers can ask questions and buy products during the live streaming, and this interactive experience often effectively promotes consumers—especially young consumers—to purchase products.

Fig. 7

Live Commerce in China (Market Size and Growth Rate), 2017-2021



出所：Iresearch「中国ライブコマース2020年」を基に三井物産戦略研究所作成

Figure 7 above shows the market size and growth rate of live commerce in China from 2017 to 2021. It shows significant growth year after year: as of 2021, live commerce sales accounted for 15% of total online shopping sales in the country. Thus, China's e-commerce has continued to invent new

forms of shopping experiences. In fact, during our filed research in urban China, live commerce were taking place in stores and businesses almost everywhere, reminding us of the immense popularity of this sales strategy among Chinese consumers.

3. Conclusion

Just as online shopping is rapidly replacing in-store sales in China, the development of online shopping will not stop in Japan. Since the Japanese government is aware of the benefits of cashless payments, including reduction of social costs and promotion of transparency in financial transactions, it will implement more measures and initiatives to promote digital payment systems even further, spurring the development of online shopping too.

China has strong logistics support and a large population, making it easy to take advantage of data analysis through the development of AI. Therefore, the development of the country's e-commerce market is expected to continue. On the other hand, China's e-commerce market is nearly monopolized by several major retailers, posing barriers to new entrants from abroad. Without new companies entering the market, monopoly by the existing major retailers will continue, which will consequently hinder innovations in China's e-commerce industry.

Unlike China, Japan is a country with a stagnant economy and a small population, so the e-commerce market is expected to grow at a slower pace. However, the barriers to new foreign entrants are relatively low, and the business environment is flexible enough to let new sales formats emerge and develop. Even without advantages such as a strong economy or a large consumer population, a market with free and healthy competition will provide the foundation for the future development of Japan's e-commerce industry.

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A Comparison of Childcare Systems in Urban China and Japan

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1. Introduction

As the birth rates are notoriously declining in China and Japan, the governments of both countries have introduced new policies to make the society a better place for raising children and increase the child population. However, many problems remain unresolved, particularly in childcare systems.

This paper examines the differences and similarities between the childcare systems in China and Japan. However, given the large disparities between urban and rural China, this paper will focus specifically on urban China only. It also aims to suggest what needs to be done to improve the childcare systems in both countries.

2. The Historical Development and Current Situations of the Childcare Facilities in Japan and Urban China

The historical development of the childcare systems in Japan and China reflects the long-term social and economic transitions in each country.

2.1 The Childcare Facilities in Japan

The spread of childcare facilities in Japan is attributable to the country's post-war high-growth period, when the migration of the workforce and the shift to nuclear families made more traditional forms of childcare obsolete. However, the establishment of kindergartens and day nurseries dates to earlier times.

2.1.1 Prior to WWII

As for kindergartens, the first facility of this kind in Japan was established in 1875 with the aim of educating preschool children. The childcare program provided in kindergartens was similar to the elementary school curriculum. As they spread across the country, the Japanese government enacted the first comprehensive regulations for kindergartens in 1899.

On the other hand, Japan's first nursery was founded by the government in 1887 as a simplified form of kindergarten. It aimed to support those parents who have difficulties in raising children due to lack of time or money.

2.1.2 During WWII

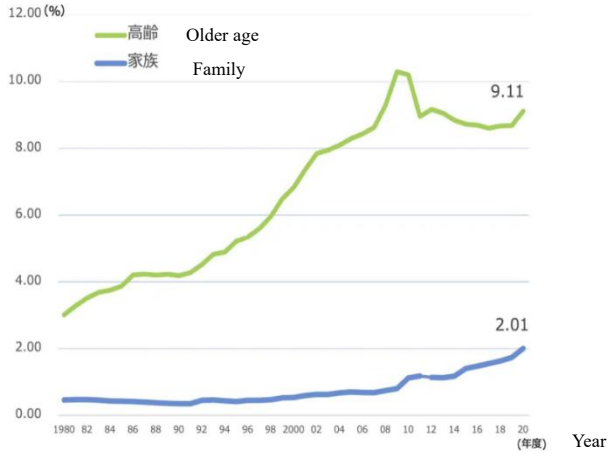
World War II exposed Japan's previous childcare services to dramatic change. Kindergartens were militarized, and shrines and temples provided daycare nursery services to meet the increased demand.

2.1.3 After WWII

After World War II, under the guidance of the US occupying forces, Japan established two types of childcare facilities: one was kindergartens as the educational facilities for young children and the other was day care centers as the institutions that provide homely care for infants without parental supervision. These facilities were supervised by different governmental ministries: kindergarten were under the jurisdiction of the Ministry of Education (currently the Ministry of Education, Culture, Sports, Science, and Technology or MEXT) while day care centers were under that of the Ministry of Health and Welfare
(currently the Ministry of Health, Labour, and Welfare or MHLW). Then, in 2006, in addition to the existing two types of facilities, the Japanese government newly established certified *kodomoen* as a hybrid of the two, introduce a new tripartite system to support the education and care for young children up to age 6.

Furthermore, in 2015, yet another new initiative called "Community-based Childcare Services" launched aiming to provide attentive care for a small number of children aged 0-2 in a homely application of "The New System for Supporting Children and Childcare." As Figure 1 shows, there has been a gradual increase in government spending for family benefits, indicating improvement in Japanese childcare policy.

Fig.1



Note. Cited from "International Comparisons of Public Spending on Education," by National Congress of Parents and Teachers Associations of Japan, December 12, 2024. (https://zen-p.net/sg/g371.html#gsc.tab=0).

2.1.4 The Current Situation

Japan's social security system is currently facing several problems. Among them, along with pensions, medical care and long-term care, the declining birthrate is identified as one of the priorities, and the improvement of the childcare system is being promoted as part of this effort. Besides, the white papers on health, labor and welfare have annually listed the measures to reverse the declining birthrate at the top of its policy agenda, indicating the Japanese-government's commitment to this problem and the improvement of the existing childcare system as a solution.

In 2021, in order to prepare for the population decline in the future, the government announced a decision to shift the focus of its childcare policy from the reduction of the children on daycare waiting lists to the provision of high-quality childcare.

In 2023, the Child and Family Agency was established as an administrative organization as a command center for childcare policies, on a mission to promote the welfare of children and families, to support the improvement of their health, and to protect the rights and interests of children. The agency has so far formulated the guidelines and measures to seamlessly support children's development during infancy. As of 2024, it plans to revise the official children-to-teacher ratio set for day care for four- and five-year-olds aiming to alleviate shortages of child caregivers.

2.2 The Childcare Facilities in Urban China

2.2.1 Before the foundation of the People's Republic of China in 1949

The origin of pre-school education in China dates back to the late 19th and early 20th centuries, when the Japanese childcare system was introduced. The first kindergarten in China was founded in 1902, 30 years before the establishment of the first nationally uniform standards for kindergartens in 1932. However, during the Second Sino-Japanese War or the War of Resistance against Japanese Aggression (1937-1945), kindergartens ware forced to adopt a highly politicized curriculum. The war also led to the foundation of boarding nurseries in the 1940s.

2.2.2 From the foundation of the People's Republic of China in 1949 to the 2000s

During the1950s and the 1960s, the Chinese government introduced the nursery systems of the former Soviet Union.

Since then until today, kindergartens in China have been the institutions of early childhood education for 3- to 6-year-olds. Unlike kindergartens, on the other hand, nurseries are non-educational facilities that specialize in daycare for 3-year-olds and younger. However, since 1999, under the trend of "integration of nurseries and kindergartens," nurseries have been decreasing, while kindergartens have shifted to comprehensive educational institutions for children aged 0-6 years.

On the other hand, during the period of state-owned enterprise reform from the early 1990s, most of the state-owned welfare facilities were sold to the private sector and no longer under government control. In addition, under the one-child policy, the government emphasized home-based childcare, requiring parents to learn child psychology and pedagogy, and did not implement effective measures to support childcare. Consequently, the birthrate fell, which naturally led to a significant decrease in the demand for and the number of early childhood education facilities.

Other factors that have been detrimental to the development of the childcare system in China include the widespread employment of babysitters by ordinary families due to low labor costs, as well as the tradition of grandparental involvement in early childcare for grandchildren.

However, China's economic growth in the 2000s brought changes to early childhood education in the country. As the nation's standard of living rose, parents' enthusiasm for the education of their only child grew too, thus encouraging the proliferation of early education institutions in China, especially urban areas. In response, in 2010, the Chinese government announced its commitment to the promotion of preschool education in "The Outline of the National Medium- and Long-term Education Reform and Development Plan" (2010-2020). This is also thought to have contributed to the spread of early education in China. Along with the growing demand for early education in China, childcare facilities have come to play the role of early education institutions.

2.2.3 The Current Situation

In recent years, China has been making efforts to improve its childcare system, but its attempts

have not always been successful. For example, by the end of 2023, 4.77 million childcare facilities, including community-based and home-based childcare facilities, had opened nationwide, bringing the number of childcare facilities per 1,000 people to 3.38, yet the number is still not sufficient.

A survey conducted by China's local health authorities has revealed that more than 30% of families with children under the age of three are currently in need of childcare services, while the national nursery admission rate averages only 7.86%. According to the National Health Commission, the government announced a plan to increase the number of childcare facilities per 1,000 population to 4.5 by the end of 2025, hoping it will be an effective measure to combat the declining birth rate. In terms of China's public spending per preschool child, the spending is on the rise from RMB 6951.49 in 2017 to RMB 9505.84 in 2021, which may be evidence of the government's sustained commitment to the improvement of the childcare system.

2.3 A Comparison of the Childcare Systems in Japan and China

Sections 2.1 and 2.2 have examine the historical developments of childcare systems in Japan and urban China and this section attempts to compare the two to find out their similarities and differences. First, it is fair to say that China's childcare system developed under the influence by the Japanese counterpart. The two systems also share a history of exposure to the effects of war and the recent move towards institutional unification. On the other hand, one significant difference between the two is that the development of China's childcare system in China halted by the lack of the government support since the privatization of state-owned enterprises. Furthermore, in China, childcare facilities are focusing on providing educational classes, whereas in Japan, childcare primarily intends to meet the growing demand for nursery care services caused by the decreased role of community-based mutual support in urbanized areas as well as the lack of childcare time in dual-earner households. A further difference is that the Chinese government places a high priority on increasing the total number of childcare facilities nationwide, while the Japanese government aims to provide more equitable access to high-quality childcare for all infants regardless of their parents' employment status. Despite these subtle differences in priorities, commitment to the expansion of childcare capacity is common to both governments.

3. Challenges and Future Directions in the Childcare Systems in Japan and China

Leaving now the examination of the development and current statuses of childcare systems in Japan and China, this section now turns to the problems currently facing the childcare systems in both countries and discusses the prospects for them.

3.1 Japan

The primary problem in Japan's childcare system is the shortage of childcare workers. Figure 2

shows the average annual salary of childcare workers in Japan compared to the average of all workers. As the graph indicates, unlike in the other industries, the salaries for those in the childcare sector do not increase as they grow older. Figure 3, on the other hand, shows Japan's legal standard for the number of infants to 1 childcare worker. The number differs according to age group, but it is generally extremely low for all age groups from 0 to 3.

However, recently, some childcare facilities have introduced robots, AI, and ICT to reduce the burden on childcare workers. Examples include digital monitoring of children's physical condition and digitalization of record-keeping and work planning. One preschool reported that the elimination of printing reduced the total cost of paper and printing by about 300,000 yen per year, and that the abolition of manual daily report recording and the adoption of digital means of communication brought about a 40% reduction in work time.

Fig. 2

Age	Childcare workers(yen)	Average(yen)
20~24	3.208.800	2.730.000
25~29	3.825.300	3.890.000
30~34	3.856.300	4.250.000
35~39	4.094.200	4.620.000
40~44	4.250.300	4.910.000
45~49	4.262.200	5210.000
50~54	4.222.800	5.370.000
55~59	4.629.300	5.460.000

Annual salaries for childcare workers in Japan compared to the average for all workers

Note: Cited from *2022 Basic Survey of Wage Structure,* by. Ministry of Health, Labor and Welfare of Japan, 2023. (https://www.e-stat.go.jp/)

Fig. 3

Age	Number of children supervised by one worker
0	3
1-2	6
3	15
4-5	25

The legal standard for the ratio of infants to 1nurseing worker

Note: Cited from "The Staffing Arrangement Standards in Japan's childcare as of 2024," by Hoikushi Bank, January 16, 2024. (https://www.hoikushibank-column.com/column/post_1313)

3.2 China

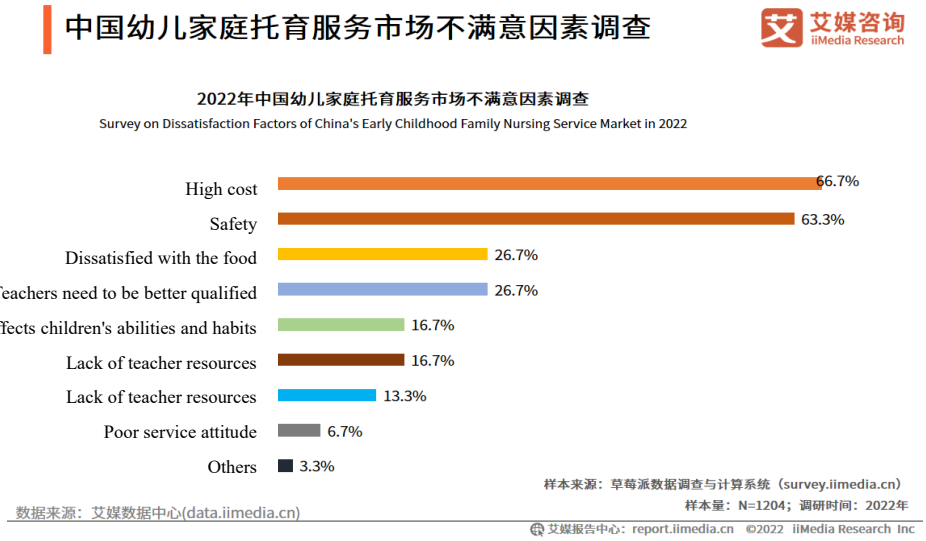
The problems with childcare in urban China include the high cost and low quality of care services. As mentioned earlier, the demand for childcare facilities in China is very low due to the following factors: The one-child policy has reduced the number of children per family; grandparents have traditionally provided kinship care for their grandchildren; and the country's cheap labor has made the employment of babysitters quite affordable to the average family.

As a result, the government has not yet set any appropriate regulations or standards for daycare centers, which has caused parents' dissatisfaction with the existing facilities and their services. Figure 4 shows the results of a survey on parents' dissatisfaction with the current state of childcare facilities. As the graph indicates, parents are most seriously concerned about daycare fees and safety issues, attesting to the underdevelopment of the public childcare system in China, as discussed in the previous section.

For example, until the 1980s, nursery workers in China were not basically required to have special qualifications, higher education, or a high level of expertise. However, safety standards were raised by some new measures including the requirements to make lunch menus public. Nevertheless, considering that the survey shown in Figure 4 was conducted in 2022, this revision has not improved the childcare sector significantly enough to change parents' negative perceptions. To make the revised regulations work more effectively, the government would need to establish licensing requirements for childcare facilities and ensure the improved safety of childcare environment.

Due to China's falling birthrate (shown in Figure 5), privately-run kindergartens are currently facing a prolonged struggle to enroll enough children. To provide universal access to high-quality and affordable childcare services, the government should continue to increase the number of public kindergartens and nurseries. Needless to say, the construction of new facilities will be a long-term project; therefore, as a short-term solution, the government should also introduce child subsidy programs to pay support allowances to households raising children.

Fig. 4



A survey on Chinese parents' dissatisfaction with the current state of childcare services

Note: Cited from "Childcare Industry in China," *Catalyst-crossing,* by X. Qiu, January 25, 2024.(https://catalyst-crossing.com/china/contents/what-the-infant-care-industry-needs)

Fig. 5

Changes in China's birthrates

Note. Cited from "The Reality of China's Aging Population," by *NHK,* March 14, 2023.

(https://www3.nhk.or.jp/news/special/international_news_navi/articles/feature/2023/03/14/30026.html)

3.3 A Comparison of the Challenges in the Childcare Systems in Japan and China

The discussion so far has revealed problems with the working environment for childcare workers in Japan. Given the labor shortage in Japan's job market in general, childcare services will need a digital transformation and make their operational model manageable by fewer workers, for example

by proactively using ICT. The comprehensive introduction of ICT in childcare will be significantly costly; however, some of the digital technologies that have already been used in other fields, such as health monitoring devices and document generation software, will be applicable to childcare setting too.

In China, on the other hand, the public childcare system is still underdeveloped. Given the country's declining birthrate, the Chinese government must develop an integrated public childcare system and create a supportive environment both parents and children. As to private childcare facilities, they should comply with the government regulations and provide services that are safe for children and accessible to parents.

4. Conclusion

The childcare systems in Japan and China have developed over roughly the last century and gradually altered along with social, economic and demographic changes. In addition, the two nations are currently facing the common problem of declining birthrates, but the policy measures they need to implement are naturally different. Furthermore, considering the growing demand for early education in recent years, both governments need to exert themselves to expand access to affordable, high-quality childcare.

To help childcare facilities in Japan run more efficiently, working environment for childcare workers needs to be reformed. The introduction of AI will be another solution because it will reduce human workload-and the needs for human workforce.

As to childcare in urban China, the government needs to implement measures to establish public childcare as a comprehensive system. It is also the Chinese government's responsibility to develop a supervision system for childcare facilities and to inform parents of the usefulness of public childcare. If these measures are fully implemented, a better childcare environment will be created for both the providers and users of the services.

In recent years, there has been a growing need in both China and Japan to expand the boundaries of traditional childcare and integrate childcare and early childhood education. Given this situation, a comparative perspective on the childcare systems of the two countries will continue to be important for improving childcare in both countries.

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A Comparison of the Four of the World's Most Medically Advanced Countries: China, Japan, Germany, and the U.S.

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1. Introduction

In 2020, a historic epidemic spread from China to the whole world. Its name was COVID-19. During and after the pandemic, there was a dramatic increase in the demand for medical products including vaccines, medicines and other medical products and technologies essential for testing and treatments. In short, the epidemic radically transformed the global healthcare landscape, resulting in the rapid market expansion and the innovations in research, development, and manufacturing. Besides, it is not only COVID-19 that should be considered: a global demographic trend of declining birthrates and aging populations is another factor behind the recently increased demand for medical products, particularly in developed countries.

Under these circumstances, medical technologies in the U.S. and China have made notable advance. They are known as the four of the world's most medically advanced countries, where the research and development of the latest medical technologies are taking place. Among these four, the U.S. is especially known for having the most advanced technology in the world; meanwhile, China's strength lies in its possession of both technological capabilities and enormous production capacity.

This paper compares China with the other three countries mentioned above and aims to find out the primary factors behind the advantages of China's medical technology research and development. The paper will also present a prospect for the future of China's medical technology.

2. China's Potential to Grow into the World's Largest Healthcare Market

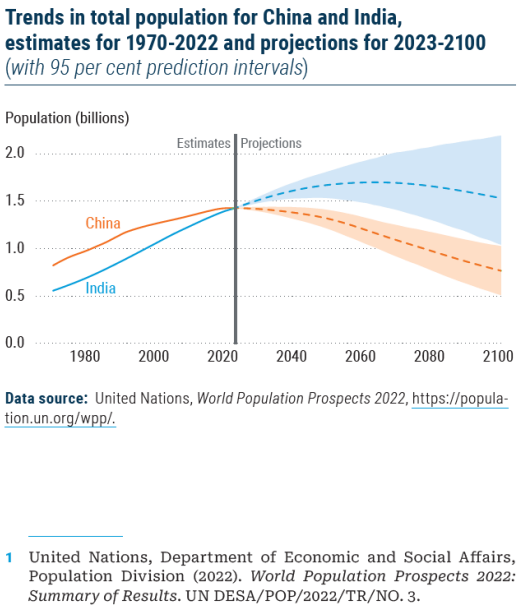
China has significant potential to become the world's largest healthcare market because of the following three factors peculiar to the county: the rapid development of the advanced medical technologies, the steady increase in its medical exports, and the country's large population. What follows is a more detailed examination of each of these factors.

First, the rapid development of China's medical technology sector has enhanced the quality of medical services and products available in the country. According to the survey conducted by China National Bureau of Statistics (2022), the total market size was estimated 1.5 trillion US dollars in 2021, doubling in five years from 2016. Besides, the market growth rate rose from 10% in 2019 to 15 % in 2021. These data suggest a dramatic expansion of the healthcare market in China. In addition, compared to other developed countries, labor costs are lower in China, which has allowed the country's medical companies to achieve total cost reduction. As to the second factor, there is a steady increase in the global demand for China's medical exports. Lastly, given that China has the world's second

largest yet rapidly aging population, its domestic healthcare market will continue to grow further. Thus, the combination of these circumstances has given China vast potential for growing into the most lucrative healthcare market globally.

Second, the steady increase in China's medical exports in recent years shows an interesting latest trend. Before and during the COVID-19 pandemic, Chinese products had an enormous presence in the global healthcare market. In particular, during the pandemic, China became the world's largest exporter of medical products, with an estimate of 105 billion dollars in 2020, approximately 2.8 times as much as 2019. Furthermore, in the first half of 2020, China held the largest share of the global healthcare market at 28.7%, followed by the U.S. with only 14%. However, the latest trend indicates that a gradual change is taking place in the global market. Although the pandemic provoked a sudden surge in demand for medical products, the market demand declined in the post-pandemic world, leading to the lower prices of medical products. For these reasons, China's total exports of medical products are decreasing compared to 2020, but its share of the global market remains high.

Third, China's large population creates a substantial domestic market, driving significant demand for goods and services. While it is globally reported that China's one-child policy, implemented from 1979 to 2016, resulted in the country's low birth rate and declining population (Gorvett, 2023; Hays, 2024), its total population is still the second largest in the world after India. The two graphs below (Figures 1 and 2) provided the United Nation (Department of Economic and Social Affairs, Population Division, the United Nations, 2020, Chapter 1) show the trends and projections of population changes in China and India. According to these data, in 30 years from now, India is projected to surpass China as the world's most populous nation, but China will still have the world's second largest population following India very closely. Therefore, China will remain a large market for medical products for at least the next several decades.



1 United Nations, Department of Economic and Social Affairs, Population Division (2022). *World Population Prospects 2022: Summary of Results*. UN DESA/POP/2022/TR/NO. 3.

Fig. 1. Trends in total population in China and India

Fig. 2. Top five populous countries from 1970 to 2050

Note. Cited from *World Population Prospects 2022: Summary of Results*, by Department of Economic and Social Affairs, Population Division, the United Nations, 2022. https://www.un- ilibrary.org/content/books/9789210014380

3. China and the Other Leading Healthcare Markets in the World

While the rapid development of medical technology in China is attracting global attention, other countries with leading healthcare industries such as Japan, Germany, and the U. S. are threatened by the rapid catch-up by China as an emerging major contender in the global healthcare market. According to the graph in Figure 3 cited from *Statista* (2024, September 17), as of 2023, the U.S. accounts for 44.4% of the global pharmaceutical market, while Japan and Germany have only 4% respectively. What is notable here is that China has increased its share to 7%. The former three nations still maintain highly advanced medical technology and healthcare industries, but they are obviously being overwhelmed by the rapid development of their Chinese counterparts for the several reasons described below.

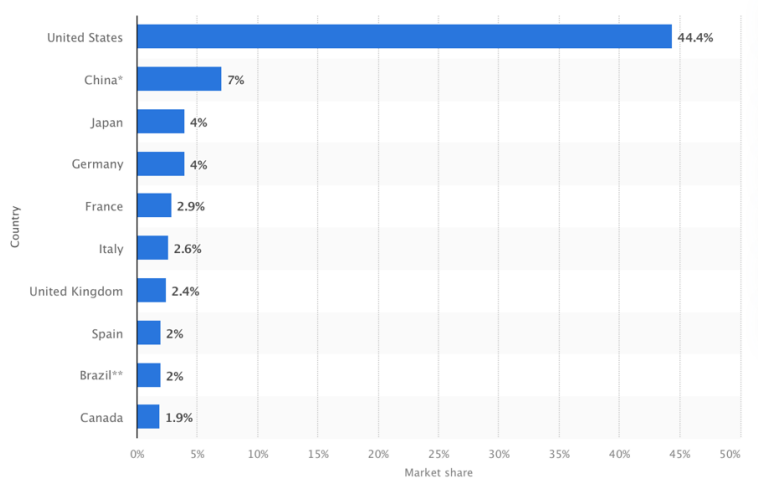


Fig. 3. Market share of leading 10 national pharmaceutical markets worldwide in 2023

Note. Cited from *Statista*, 2024, September 17. https://www.statista.com/statistics/245473/market-share-of-the-leading-10-global-pharmaceutical-markets/

One major reason for the slowdown of the healthcare industries in these three countries is the limited growth in the size of their domestic markets. In Japan, the aging population creates a significant demand for advanced medical devices and treatments, but the overall population is decreasing. This reduces the potential for long-term growth of the healthcare market. According to the statistics provided by the Japan External Trade Organization (JETRO-Australia, 2020), the size of the Japanese Health Tech market is gradually expanding; however, as the graph in Figure 4 cited from the same statistics shows, medical and nursing care cost in 2025 is estimated to remain at the same level as in 2024. These figures indicate that the market is saturated and gradually shrinking. Similarly, compared to China, Germany's healthcare market size is smaller because it has a smaller number of potential customers. Even in the U.S., with its large population, its market growth is constrained because healthcare services cost high, limiting the average consumer's access to healthcare in general. In China, in contrast, the rapid growth of the middle class is is driving the increasing demand for advanced medical devices and healthcare services.

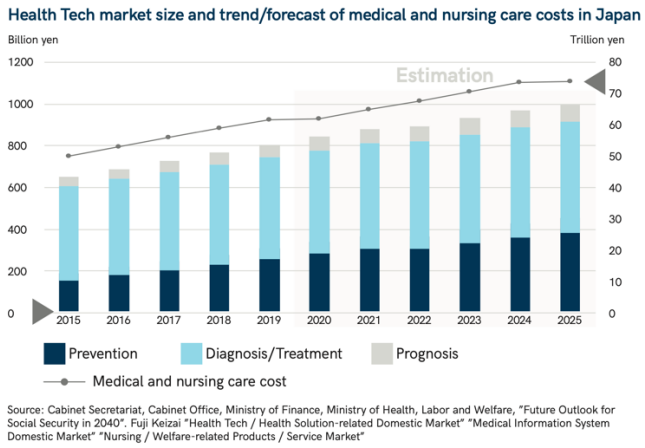


Fig. 4. Health Tech market size in Japan

Note. Cited from *Health Trends in Japan*, by JETRO-Australia, 2020.

https://www.jetro.go.jp/ext_images/australia/banners/Health_Factsheet_f.pdf

Another factor is the high costs of research and development in the healthcare industry. Japan, Germany, and the U.S. invest heavily in medical innovation, but the costs of maintaining facilities and enticing top companies and research institutes to relocate to specific localities have continued to rise. Often, these costs also hinder established companies from maintaining and improving the quality of their research. Furthermore, these countries have strict regulatory standards for the healthcare industry, making the development and approval of new treatments and medical devices slow and costly. Meanwhile, China's lower labor and production costs have promoted cost-effective technological innovations by its healthcare companies.

Despite these challenges, Japan, Germany, and the U.S. still maintain a high level of healthcare technology and services. One important factor behind this is that these countries have long-established medical research institutes and the world's leading universities, which keep these countries' research competence and productivity at a high level. Nevertheless, the rate of breakthrough innovations has slowed down compared to several decades ago, when the global competition was less fierce.

In contrast, the rapid development of China's healthcare sector is driven by its government's strong support for innovation and its ambition to become a global leader in medical technology. So far, the government has enforced various political measures including large investments in research, partnerships with international companies, and the recruitment of talented researchers from abroad. As a result, for example, China has made significant advances in areas such as gene editing, AI-driven diagnostics, and the development of affordable medical devices. While these achievements are noteworthy enough, they have also resulted in intensifying the global competition with Japan, Germany, and the U.S.

In summary, the slowdown in the medical technology development in Japan, Germany, and the

U.S. can be attributed to the small size of their domestic markets, high cost of development and facility management, and a lack of fierce domestic competition. However, these countries have still maintained a high standard of healthcare technology and have continued to lead the globe in many fields in this sector. As China catches up to these countries, the global competition for medical innovations is clearly intensifying. In response to these changes, Japan, Germany, and the U.S. need to explore new strategies to promote the research and development in their healthcare sectors again.

4. Criticism of China's Rapid Rise in Medical Technology

Some critics argue that the rapid development of China's medical technology raises humanitarian concerns, but such claims are not entirely based on facts.

One common criticism is that certain practices in Chinese medical research and development are ethically unacceptable. For example, according to some of the media coverage, China's medical technology research is making a rapid progress by cruel–animal experiments and human testing, particularly in ethically sensitive areas such as gene editing and clinical trials. However, it is important to note that ethical dilemmas in biomedical research are not unique to China. Similar criticisms have been directed at other nations, including Western countries, where unethical medical experimentation was conducted in the past. In addition, it is worth noting that China has been making sustained efforts in recent years to improve its regulatory frameworks to meet the international standards for these concerns.

Some other critics point out that China's medical technology sector is heavily depending on the technology transfers and professional expertise from abroad, especially the West. In fact, the three leading global companies in the medical industry, i.e., GE Healthcare, Philips, and Siemens (a group of companies commonly referred to as "GPS" in the industry), have their production facilities and research laboratories in China. Moreover, they argue, the partnerships with international companies have provided Chinese companies with access to knowledge and technologies overseas. For instance, joint ventures in China often require foreign companies and investors to share proprietary information as a condition for entering the Chinese market. While this practice raises concerns about national security in the technology sector, it is also a reflection of the globalization of technological innovation. Many Western companies enter into such agreements in order to take the opportunities to break into China's rapidly expanding healthcare market.

Moreover, China's capacity to adopt and adapt technologies from foreign countries and companies has been vital for its technological advancement. Intelligence leaders of the West often accuse Chinese companies of stealing intellectual property in technology from its foreign counterparts and thus, undermining trust and fairness in international competition. However, there is historical precedent for this type of strategy. The U.S. and many other countries now referred to as "developed nations" once used similar strategies to achieve rapid industrialization. Nothing will

illustrate this better than the fact that during the Industrial Revolution in the late 18th century through the 19th, many countries made rapid technological advancements by emulating British technology and industry. China's case is no exception. There is, however, a notable feature: the central government lays a proactive role in the strategic promotion of technology transfer and development and thus helps the country's medical technology industry quickly overtake the leading countries in the field.

It is indisputable that China's advancements in medical technology have profound impact both domestically and globally. The development of medical devices and AI-powered tools by China has significantly enhanced the potential of healthcare. Furthermore, China's innovations in the advanced medical areas such as gene therapy and regenerative medicine will contribute to global medical research and promote international collaboration as well. From a Western perspective, the practices and strategies of China's medical technology remain controversial; nevertheless, its significant contribution to the advancement of global healthcare is hard to ignore.

5. Conclusion

This paper has attempted to compare China's medical technology industry with its major competitors in the world: Japan, Germany and the U.S. From what has been said above, it should be concluded that among the four, China has the most productive medical technology industry with the largest domestic market. Chinese healthcare companies are trying to introduce more sophisticated technology by strategically building alliances with its European and American competitors. Thus, China's healthcare technology is predicted to grow further in the future. Meanwhile, from an ethical perspective, some critics oppose the use of animals in scientific research projects. However, it seems reasonable to assume that the development of research collaboration between China and the West will increase China's awareness of the ethical concerns regarding animal rights and encourage the data disclosure concerning the animal experimentation in Chinese projects. Thus, ethical problems in the medical research in China's institutes and laboratories will eventually be alleviated. Given these factors, there is no doubt that China is currently the most influential player with advanced technologies and competent companies in the global medical technology market.

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China's Singles Day: Can Profitability and Sustainability Coexist?

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1. Introduction

In recent years, large shopping events have become a global trend, attracting millions of consumers and creating huge sales. These events are no longer limited to traditional holidays. Instead, they now take place on new "special days" that appeal to a wide audience. As these events grow bigger, they are supported by well-organized campaigns using the latest digital technology, making it easy for people to buy products. China, with the world's largest e-commerce market, holds one of the biggest shopping events on November 11, called Singles Day. Singles Day has far surpassed other popular shopping days, like Black Friday and Cyber Monday, in both popularity and sales. It not only affects Chinese consumers' behavior but also influences global shopping trends and highlights the importance of advanced technology and logistics in e-commerce.

By examining Singles Day from multiple perspectives such as its origin, its characteristics as a shopping festival, and its logistics systems and use of advanced technologies, we can understand what makes these shopping events so appealing and what systems and strategies have helped them succeed. On the other hand, though Singles Day provides for individual shoppers an enjoyable and exciting experience, it also has large impacts on the environment, consumer behavior, and China's logistics systems.

As Singles Day has expanded, it has also faced new challenges and higher consumer expectations. Therefore, this paper examines Singles' Day from both business and consumer perspectives and considers what it will take for today's online shopping events to maintain their appeal while balancing economic profitability with social and environmental sustainability in the future.

2. The Origin and History of Singles Day

Singles Day, or "光棍節 (Guānggùnjié)" in Chinese, is an unofficial holiday on November 11 to celebrate being single. November 11 was chosen because the numeral "1" looks like a "bare stick (or a bare branch)," which in Chinese refers to a bachelor (or an unmarried man) who does not add branches (children) to the family tree. Furthermore, the four "1" s can suggest a group of single people. Singles Day was originally celebrated among the university students in Nanjing in the 1990s, but it later became increasingly popular across China. In 2009, Alibaba, a major e-commerce company, took advantage of the day to start a big discount sale targeting single consumers and launched a half-price sale on its online shopping sites, such as Taobao and Tmall. Since then, other

e-commerce companies have followed. Thus, Singles Day grow into an opportunity for large-scale online product sales, attracting the attention of many e-commerce companies not only in China but also around the world.

Similarly, Valentine's Day in Japan provides an important marketing opportunity. It is a romantic holiday celebrated worldwide on February 14, and in most places both men and women send cards, flowers, or some special gifts to people they love. However, in Japan, Valentine's Day is known as a day when women buy specifically chocolates or not only their boyfriends, husbands, or partners but also for their friends or co-workers. This custom was first started by one chocolate manufacturer, which took the advantage of the holiday for the sales promotion of its products, and this market strategy widely spread among Japanese confectionary brands over the last half-century.

Thus, Singles Day and Valentine's Day in Japan share a common trait: both are annual events which provide highly profitable opportunities for retail businesses. And this can be adapted to all events, suggesting that the creation and discovery of new events has no small impact on marketing.

3. The Economic Impacts of Singles Day

Singles Day has a significant economic impact. In 2023, China's total consumption during the Singles Day period (from October 31 to November 11) reached 1,138.6 billion Chinese yuan (approximately 23.6 trillion yen), according to data from Syntun and Bain & Company (as cited in Wakasugi, 2023). Originally conceived as a one-day sales event, Singles Day achieved approximately half its current sales volume even in its early years, surpassing any other shopping event worldwide. To give a clearer sense of scale, Japan's total BtoC e-commerce market size for the entire year of 2023 was 24.8 trillion yen, as reported by the Ministry of Economy, Trade and Industry. Notably, the sales during Singles Day alone account for roughly 95% of Japan's annual e-commerce transactions, underscoring its profound influence on consumer behavior and global trade.

The economic activity generated by Singles Day also entails a substantial volume of logistics operations. During the same period in 2023 (from November 1 to 11), China's State Postal Administration reported the delivery of 5.264 billion parcels. These figures not only demonstrate the scale of consumption but also reflect the immense logistical demands required to support such an operation. Such an extensive economic and logistical endeavor would not be feasible without advanced technological and logistical systems.

To further understand the impact of Singles Day, it is essential to examine the event from a logistics perspective. The massive shopping on Singles Day means a huge volume of parcel delivery. Therefore, an efficient transport and warehousing system is indispensable. In this sense, China's smart logistics system and the 4th Industrial Revolution technology play a crucial part in this shopping festival. In the words of Director-General for Policy Coordination, Cabinet Office (2017), the 4th Industrial Revolution is defined as the latest technological developments that include, for example,

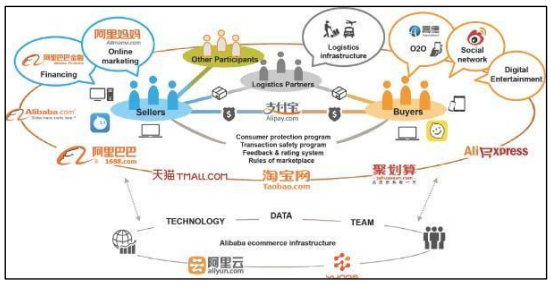
innovations such as IoT, AI, the analysis and utilization of big data, and advanced automation (p.73).

Alibaba spent a year developing its entire logistics system before it launched its first Singles Day sales event in 2009. Their logistics system consists of a series of processes including the analysis of customer needs, demand forecasting, and post-event management. The creation of this kind of effective system is generally attributed to the successful field integration synergies created among Alibaba's major affiliates shown in Figure1.

Since its foundation in 1999, Alibaba has continued to increase its affiliate companies, and it is still expanding its business into diverse areas including online shopping platforms, search engines, online payment systems, financial services, advertising, social commerce, and cloud computing. According to Alibaba, Singles Day is "a day to test the its affiliate companies' advanced technologies, logistics systems, services, comprehensive operations, and management capabilities," and this shopping event provides a great opportunity for the company's system upgrade (as cited in Song, M, 2020).

Thus, Singles Day represents systems and technologies essential to the success of today's shopping sales.

Fig. 2



Alibaba's Affiliate Companies

Note: Cited from "The Characteristics and Implications of the Largest E-commerce Day in the World, China's Singles Day" by M. Song, 2020.

4. Singles Day Today: Emerging Trends and Challenges

According to data provided by Syntun and Bain & Company (as cited in Wakasugi, 2023), while China's total consumption during the Singles Day period has been steadily increasing, the rate of increase compared to the previous year has been declining since 2022, and this can indicate that the shopping frenzy is gradually fading away as shown in Figure 2. Wakasugi (2023) points out that the challenges Singles Day is facing are primarily attributable to China's economic recession. There is good evidence to support her opinion. For example, China's total retail value of social consumer goods (retail sales) increased by only 3.3% year-on-year in the first nine months of 2024. Compared to the previous year's increase of 7.2%, the growth of China's total retail sales itself is declining. In addition, the real estate crisis and the rising youth

unemployment have accelerated this decline in purchasing power, which has caused the increased competition in pricing and cost efficiency.

Then, what strategies and operations will effectively increase the sustainability of Singles Day? Regarding this question, Li et al. have found that the large-scale sales promotion and the social interaction among the participants positively affect consumers' emotional satisfaction including their trust in Alibaba and e-commerce retailers and their pleasure of shopping which eventually enhances their continued participation behavior (2020, Section 3.2). Li et al. also point out that a fair trading environment is another factor that can increase consumers' purchase intention (2020, Section 3.4). The social interaction here refers to the consumer experience that takes place through the "communication, recommendation, and imitation" (Li et al., 2020, Section 2.4) among the participants during the shopping festival. Therefore, to ensure consumer satisfaction, what matters is not only to provide a spectacular large-scale promotion (Li et al., 2020, Section 3.1) but also to build a fair-trading environment where consumers can perceive fairness in price, procedures, and other transactions (Li et al., 2020, Section 3.1). On the other hand, as some critics point out, Singles Day has now grown into a weeks-long event that begins in mid-October and culminates on November 11, and such an extension of the sales period has actually decreased consumers' willingness to buy, requiring Alibaba and the retailer's extra effort to address this problem.

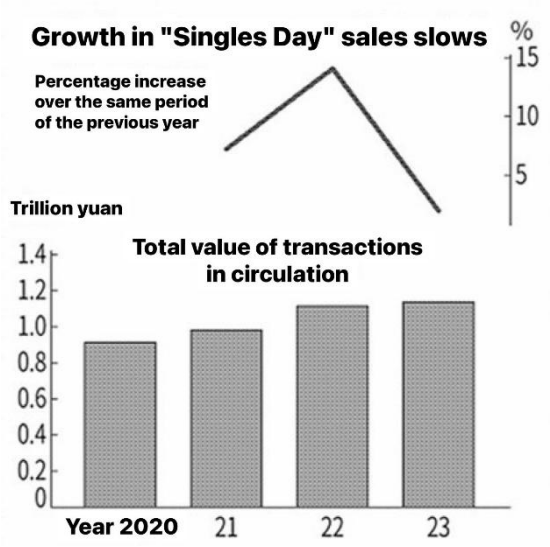
While Singles Day has been a catalyst for effective marketing strategies, the steep rise of product return rates has been troubling e-commers retailers in recent years. During and after the sales period in 2024, the return rate of women's clothing reached a record high, and the social media posts on this phenomenon attracted a vast audience (Wakasugi, 2024). This problem stems from the tolerant return and refund policies in China's e-commerce sector, which allow easy returns and, as a result, has induced shoppers to return purchased items immediately after trying them on. In addition, this consumer behavior has been spurred by another sales practice observed during the Singles Day period: many retailers offer additional discounts to the shoppers who purchased more than a minimum number of items during the sales period.

Sub-standard quality of products has been another problem, and this includes the large difference between the product photos advertised in online shops and the actual products that customers receive. The problem of sub-standard products is linked to another debate about large-scale sales in general: they are blamed for encouraging consumers' impulse buying and their tendency to discard purchased products instantly, which in turn leads to increased waste and environmental problems.

Singles Day is also facing some other challenges as China's economy slows down and purchasing power weakens; therefore, to keep Singles Day marketing as successful as ever, Alibaba and e-commerce retailers will need to build a trustworthy trading environment and make efforts to promote sustainable consumption. In addition to large-scale flashy promotional campaigns, a fair retail environment based on the trustworthy social interaction among the participants is the key to

increasing customer satisfaction and participation. On the other hand, to solve other issues such as the rise of product return rates and environmental impacts, retailers must establish improved management systems for providing accurate product information to customers. Will Singles Day lose its luster or maintain its sensational appeal? The answer depends on whether China's e-commerce industry can achieve sustainability that can balance the needs in economic, social, and environmental dimensions.

Figure 3



Transaction Value and Year-on-Year Growth Rate of Singles Day 2023

Note: Cited from *China's "Singles' Day" sale fizzles out, transaction value increases only 2%; Chinese brands make great strides with focus on cost-effectiveness* by T. Wakasugi, 2023, November 19, *Nikei Veritas*, p. 6.

5. Conclusion

Originating as a small celebration among college students, Singles Day soon spread across China and eventually developed into a large-scale shopping event that attracts worldwide attention. Its development demonstrates the economic benefits of integrating events and product sales. Unlike other traditional annual events and festivals in China, Singles Day is neither an official holiday nor culturally or traditionally relevant, but it has successfully offered exciting customer experiences. What provides the foundation for this success is China's latest technologies, such as smart logistics systems and the innovations of the fourth industrial revolution technologies, as well as the synergies created among Alibaba's affiliate companies. Above all, the large-scale sales promotion and the flexible marketing are the most salient features that differentiate Singles Day from conventional shopping events. With their technological and logistical strengths, Alibaba's affiliate companies made Singles Day an appealing event where consumers can have an elevated purchasing experience.

In other words, because of these innovations, Singles' Day focuses on directly satisfying the individual customer's pleasure of purchasing, and this is one large difference from more traditional holidays and festivals, where shopping is only a part of the celebration.

However, Singles Day has also been facing new challenges. In addition to China's economic downturn and reduced purchasing power of customers, the problem of sustainability in today's e-commerce marketing is an increasingly primary concern from social, economic, and environmental perspectives. As I have discussed, problems such as the recent rise of e-commerce returns and the enormous waste generated in consequence are typical examples. To address these challenges, a series of solutions as follows will need to be adopted: the improvement of the synergy among Alibaba's affiliate companies, the optimization of logistics technology, the development of a fair-trading environment, and the enhancement of social interaction among the participants. A strong commitment of China's e-commerce industry to these solutions will eventually create a more efficient system and improve the sustainability and social contribution of Singles Day.

Singles Day has served as a model that makes us consider how a business should respond to the contemporary demand for sustainable activities from economic, social, and environmental perspectives. In the future, China's e-commerce industry will be increasingly expected to provide the types of shopping events that not merely provide consumption opportunities but can generate both economic profits and social benefits.

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吉林大学交流会記録

記録：頼　佑樹

１．実施日

2024 年 7 月 17 日(水)

２．内容

7 月 17 日に、一橋大学の第 3 研究館 3 階研究会議室にて訪問にいらっしゃった吉林大学の生徒さんたちと交流会を行いました。会議室では 4 グループに分かれて、それぞれのテーマに関して発表してもらい、その後一橋の生徒側からの質疑の時間という流れで行いました。

具体的な 4 グループの発表内容としては、以下の通りでした。

・ China’s New Vehicle Industry: The Development and Challenges

・The East Asian Model: Theory, Facts and Effects

・The Risk and Social Awareness of Mobile-pay

・Mystery Boxes from Economic Perspective

特に自分のテーマがオンラインショッピングであったので、個人的にはモバイル決済に関する発表が印象的でした。事前に調べていた通り、モバイル決済の普及率は非常に高く浸透の速さに驚かされました。現地で生活している吉林大学の生徒も、日本に来て中国のモバイル決済率の高さを改めて感じたと言っていました。また、中国の EV 車の普及に関しても興味深い内容でした。EV の普及率から、モバイル決済同様やはり浸透度の高さおよび速さが印象に残りました。中国車がどんどん台頭している一方で、国内の充電器の普及率の低さを問題点としてあげており勉強になりました。特に山村地域は今後も普及させることが難しそうですが、仮にこれらの問題が解決されれば日本にも EV 車が広がる契機となりうると感じました。また、彼らの中には国内車への信頼度は実際のところあまり高くないと話している方もいて、内外での捉え方の違いを感じました。

３．所感

発表が終わった後はグループ内で自由に交流する時間が設けられ、様々なことを話しました。彼らに日

本の観光地やグルメを教えた一方で、9 月に自分たちが訪問する中国についても同様に彼らに教えてもらいました。現地の話の中で、もっとも衝撃を受けたのは彼らのスケジュールです。多くの生徒が毎日朝から夜まで授業があるそうで、日本の大学、特に一橋とは大きな違いがあると思いました。

全体として、中国渡航前に中国に関して様々なことを聞けたり、中国で実際に生活している人たちの考えを知れたりして学びの多い貴重な機会となりました。

上海宝山鋼鉄集団有限公司見学記録

記録：野村　亮太

１．実施日

2024 年 9 月 2 日(月)

２．内容

二日目の午前に宝山鋼鉄という製鋼企業を訪問した。粗鋼の生産量が世界第一位の企業である。目的地について、はじめに訪れたのは歴史博物館だった。鉄の長期的な不足に悩んでいた中国。1977 年に上海に製鉄製鋼所を作る構想ができるところから、78 年の鄧小平の来日と君津製鉄所の視察や日本スチールの技術協力、鄧小平の上海工場建設視察など、製鉄製鋼所が実際にできて稼働するまでを写真や実際の物品を見ながら学べた。

歴史館を見た後に実際に製鋼をしている工場を見学した。真っ赤になって薄く伸ばされて出てくる鉄の塊がベルトコンベアに乗せられて流れてくる。その赤い塊が流れてくるたびに、私たちがいる 2 階の端の通路にまで熱気が伝わってくる。その塊に水がかけられて普段見慣れた鉄の色になってくる。工場内は 50 度にもなるらしく、汗だくになって工場を出た。まさに工業の基盤となる現場を見られて、興味深かった。日本の製鋼所も見学して比較してみたいと思った。

工場を出た後は敷地内の動物園を回った。なぜ動物園があるのか。鉄工業はかなりの大気汚染のリスクと共にある産業である。そこで、園内に環境変化に敏感な動物をあえて住まわせ、動物が安全に暮らしているところを示し、工場の環境配慮をアピールしようという発想である。園内の様子は、地上に架けられた橋のようなものの上から見る。暑さもあいまってあまり動物達にとって良い環境に思えなかったが、たくさんの種類の動物が飼育されているようだった。

３．所感

最近、この宝山鋼鉄が日本製鉄との長年の合弁事業を解消した。元々日本製鉄からの技術協力を受けて創業を開始し、長年兄弟のような関係が続いていたが宝山鋼鉄の質と量の製鉄技術の向上や中国経済の成長により状況が変わった。宝山製鋼はもはや日本の技術を必要としなくなっており、日本製鉄も他の日本企業と同じく中国を魅力的な世界の工場としてはみなくなっていった。日系の自動車メーカーが中国での業績を伸ばせなくなっているのも日本製鉄の撤退の理由の一つだ。代わりに日鉄はインドやアメリカに事業を広げようとしている。このような節目の時期に宝山鋼鉄にいけたことは少し感慨深いと思った。変化する日本と中国の力関係の象徴を見せつけられたような企業訪問だった。

上海米哈游网絡科技股份有限公司(miHoYo) 訪問記録

記録：宮原　堪爾

１．実施日

2024 年 9 月 2 日(月)

２．内容

今回の中国短期海外調査の中で行った、中国のビデオゲーム開発会社である上海 miHoYo ネットワークテクノロジーの訪問について記録します。miHoYo は、2011 年頃に 3 人の大学生によって立ち上げられ、日本のアニメ、漫画文化を基調にしたモバイルゲーム開発を行ってきました。現在では、「原神」、「崩壊シリーズ」といった著名なタイトルをはじめとする数々の作品が世界中のユーザーから支持を獲得しています。

上海にある miHoYo 本社を訪問した際、最初に印象を受けたのは、そのビルの前に設置された、巨大でポップなロゴです。今回の海外調査では様々な企業を訪問する機会がありましたが、他の企業のほとんどは厳かで重厚な雰囲気を纏っており、それは中国の都市全般に感じることでしたから、miHoYo が親しみやすい社風であったことには安心しました。建物内に入ると、近未来的な雰囲気の装飾がされたエントランスが広がっており、自社 IP を使ったカフェなども併設されていました。一般の方々も多く訪れており、また、社員の方がとてもカジュアルな格好で出勤していく姿も見かけられ、他の企業とは違うユニークな社風を体験することができました。そのカフェの飲み物を提供していただいた後、社員の方が miHoYo の取り組みについて説明してくださいました。その中で最も印象的だった内容は、近年 miHoYo がその作品の中に積極的に中国の文化を取り入れているということです。世界中にプレイヤーがいる miHoYo の作品でそうした取り組みが行われることで、例えば春節や端午節のような中国の伝統的な行事に対する認知が高まっているというのは、素晴らしいことだと思いました。エンタメ企業だからこそ、文化的な部分で社会的責任を果たしていくという意図があるのではないでしょうか。説明が終わった後は、展示を見る時間が設けられ、壁一面に並ぶ様々な受賞トロフィーや彼らのマーチャンダイズを見て、今後 miHoYo や他の中国企業がエンタメ分野に与えていくのであろう影響を想像させられ、期待に胸が踊りました。

上海如水会懇親会記録

記録：古山　百華

１．実施日

2024 年 9 月 2 日(月)

２．内容

9 月 2 日に、上海で働いていらっしゃる一橋 OB・OG の方々と親睦を深める会を開催しました。中華料理を楽しみながら、中国で実際に生活している方ならではの体験や苦労話、仕事へのやりがいを話していただけました。初めは中国語を学ばず英語のみでコミュニケーションをとろうとしていたが英語がほぼ通じないため、中国語を独学し始めたことや、中国では交通機関がとても安価であるため日本でタクシーを利用すると金額に驚くなど、中国ならではの興味深いお話がたくさんありました。

また、どのように残りの大学生活を過ごすべきか、大学院に進むべきか、どのような企業に向いているかなどのアドバイスをしていただきました。こちらの円卓には、日本語を学んでいる 19 歳の中国人の女の子も如水会に参加しており、中国の大学生活の様子などについて話しました。日本語が非常に上手で、日本に興味を持った理由や日本人に対する印象などについて、語り合うことができ貴重な体験となりました。

将来、海外で働きたいと考えていたため、実際に海外で働く生活について詳しく知れてとても勉強になりました。

上海申和熱磁電子有限公司訪問記録

記録：竹野　柚貴

１．実施日

2024 年 9 月 3 日(火)

２．内容

上海申和熱磁電子有限公司の事業に関する説明を伺い、その後、質疑応答の機会をいただいた。訪問を通じて伺ったお話を以下にまとめる。

上海申和熱磁電子有限公司は、1992 年に株式会社フェローテックホールディングスの子会社として設立されたグローバル企業であり、特に日本と中国に大きな影響力を持っている。創業者は、日本留学を通じて技術を学んだ後、同社を設立し、中国市場に適応した研究開発を進めてきた。

優れた技術力と緻密な品質管理体系により半導体業界で急浮上している会社であり、半導体研究開発を中心として開始した事業は、その関連産業全ての分野に拡大している。特に、真空シールで約 65%、サーモモジュールで約 35%の世界シェアを誇り、パワー半導体基板分野においても、参入から数年で世界第2位のシェアを獲得するまでに急成長しているとのことである。フェローテックの製品は部品装置から生産設備まで多岐にわたる。石英・シリコン・セラミックスといったマテリアル製品や真空シール・サーモモジュールの製造といった強みに関連し、医療器具分野においては内視鏡や血液分析装置、工場用洗浄設備分野においてはトンネル式洗濯機や回転ドライテーブル機、自動車工業分野においては温度調節シートやカーオーディオ・カーナビゲーション、そのほか家電製品分野や太陽光発電分野、電子工業分野の製品にそれらの技術や部品が応用されている。よって、同社の技術が私たちの生活に大きく寄与していることがわかる。

また、現在は特に生命科学分野にも注力しており、PCR 検査キットや関連機器の開発に大きく貢献しているほか、DNA 検査や薬品、ペット医療など、さらに広範な分野で発展を遂げている。こちらについて、半導体に使用される純度の高い非金属部品の研究開発において重要である温度制御が、高温環境での分析が必要な医療系の分析などにも必要とされていたことや、材料関係における得意分野を応用分野に拡大したといった参入の理由も伺うことができた。

また中国への輸出規制に関する質問に対し、規制の影響で進行速度は鈍化しているものの、土台をかため、

その技術が本当に必要とされているものであるのかや、環境バランスを考慮する機会をもちながら、落ち着いて事業を進めていきたいといった回答をいただいた。

３．所感

半導体関連事業を手がける会社という事前知識のみで見学に伺ったが、現在では生命科学系の研究開発においても大きな成果をあげているというお話を伺い、同社が手がける事業領域の広さに驚かされた。

また、説明や質疑応答を含む交流において、大変丁寧にご対応いただき、心から歓迎されていると感じた。特に「マーケットを世界全体とし、国際的な交流を大切にしているため、しっかり準備をした。皆さんとの交流を嬉しく思う。」という言葉が印象に残っている。さらに、「中国は 90 年代日本の勤勉さを見習って発展してきた。多くの分野で日本を追いかけてきたが、日本も中国の急速な発展に驚き、刺激を受けてきた。」という発言から、他国への尊敬と協力を重視した姿勢を感じ、ビジネスや技術発展に対する考え方を学ぶ貴重な機会となった。

上海財経大学討論会記録

記録：伊藤　亜起

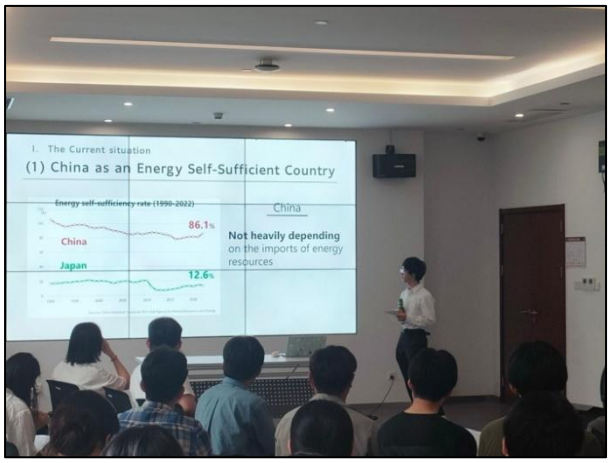
１．実施日

2024 年 9 月 3 日(火)

２．内容

今回の討論会では上海財経大学から約 20 人、一橋大学から 14 人の学生が参加し事前に準備していたトピックについて発表・意見交流を行なった。上海財系大学は 1917 年に創設された「南京高等師範学校」の商科が前身であり、1985 年に現在の「上海財経大学」の校名となった。主な特徴としては中国で最初の商科専門大学で経済管理学部を中心とし、同時に法学・文学・理学などの学部を有する総合重点大学として発展している。全国の財経大学で、最初に博士学位授与を認められた大学院を持つ大学の一つでもあり 1996 年に国家「211 プロジェクト」の重点大学に入選した。

討論会に参加した上海財経大学の学生の約半分は第二言語として日本語を選択しており日本語ですべての発表を行なった学生もいた。日本文化や日本経済に関心の高い学生がいろんな学部から集まって今回の討論会に参加していた。一橋大学生 14 人は個人の興味に基づいて中国に関する発表内容を決定しており、上海財経大学の学生 10 名ほどが私たちのトピックと同じ内容で発表を作成していた。



私たちが用意した発表内容は、日本と中国の保育制度比較や中国の経済政策、日本と中国の英語教育比較などである。発表資料作成においては春夏の授業で具体的な統計データや文献を用いた推敲を行い、繰り返し発表練習を経て本番に臨んだ。発表内容のみならず、パワーポイントの見やすさや誤解のなさを意識した資料作りに励んだ。結果として学生一人一人が自信を持って発表することができた。

また、中国の学生と日本の学生が同じトピックについてプレゼンテーションを行なったが個人によって内容や考察結果が異なりグローバルな視点を実感することができた。討論会後には学生間で相互に会話する機会があり、文化や学校生活、キャリアプランについて交流を行なった。

３．所感

今回の討論会が私にとって海外の学生に英語でプレゼンテーションを行い交流する初めての機会だった。事前に英語のスクリプトの推敲や発表練習をしていた甲斐あり本番はスムーズに完遂することがで

きた。中国の学生の中には日本語でプレゼンテーションを行った方もいて、入念に事前準備をして今回の討論会に参加してくれたのだと感動した。反省点としては、発表内容が中国関連に偏りすぎた点が挙げられる。日本人学生は中国に関するトピックを各自が選択し発表したが、日本との比較をはじめとした日本に関する内容をもう少し含めることで議論がより発展したと考えられる。討論会後の交流では中国文化や中国の学生の日々の過ごし方などプライベートなことも話せてとても有意義な時間を過ごすことができた。今回の討論会を経て英語でプレゼンテーションを行う際のポイントや課題を見つけたり、海外の学生と意見交換を通して見識を深めたりすることができ、一生の思い出となった。

上海自由行動記録

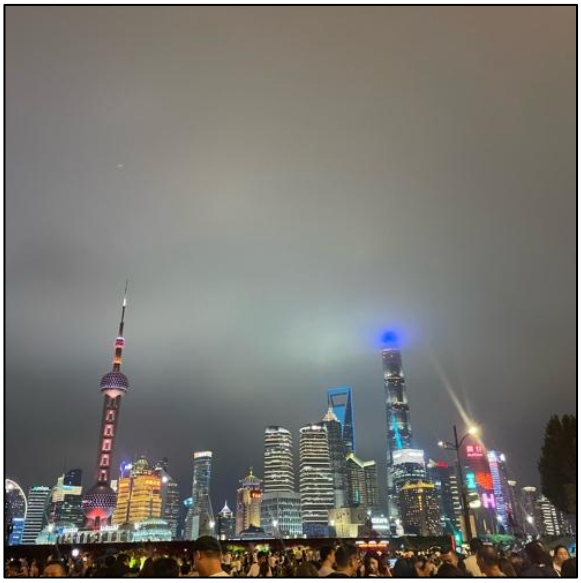
記録：関野　瑠花

１．実施日

2024 年 9 月 1 日～5 日

２．内容

・外灘



この一帯は 19 世紀後半から 20 世紀前半にかけての租界地区（上海租界）であり、当時建設された西洋式高層建築が建ち並んでいる。租界時代の行政と経済の中心であったことから現在も官庁と銀行が多いが、ジョルジョ・アルマーニやカルティエなどの大型旗艦店や、租界時代のレトロな雰囲気を売り物にしたバーやレストランなどが建物の中に入るようになり、お洒落な街並みに変貌しつつある。

中国ではなく西洋にいるのかと錯覚するほどに長距離にわたり西洋式建造物が並ぶ外灘は、歩行者天国となっていた幅広い道が大勢の人で埋め尽くされるほど多くの観光客で賑わっていた。鮮やかにライトアップされた外灘の通り道から見られる上海タワーをはじめとする高層ビルは、写真スポットとされているようだった。

・豫園

20 世紀初頭の、上海に列強が租界を造っていた時代、城壁に囲まれた豫園を含む一帯は、上海一の繁華街として栄えていた。その後、豫園の敷地半分が分割され、当時の面影を残す商業エリアとして開発。細い路地に明清の時代を再現した朱色の建築が並び、伝統工芸品やお土産、飲食店などのショップがひしめく、古き良き上海が残る観光スポットとして知られている。

屋台やお土産用のお店が多く立ち並んでいるほか、川沿いや建物にライトアップが施されているなど、「映え」が意識された設計であった。実際、自身を被写体に回りの風景とともに撮っている観光客が多くみられ、撮影スポットには列がみられるところもあった。

・上海ディズニーランド

2016 年 6 月 16 日にグランドオープンした上海ディズニーランドは上海ディズニーリゾートの中に位置するテーマパークであり、中国本土では唯一のディズニーランドである。リゾートの面積は約 390ha と東京都の宴席の約 1.5 倍の広さを誇り、メインキャッスルは、高さ約 60m でディズニー史上最大であり、すべてのディズニープリンセスを象徴する世界初の城である。

メインアトラクションが停止中であったこともあり、かなりすいている印象を受けたが、現地の人によ

れば平常時は優に 4 時間以上待つアトラクションもあるというため、かなり人気であることが伺える。パレードが日本と異なり、中国風にアレンジされていたり、アトラクションにも中国の街並みが出てきたりと、「中国」のテーマパークを体験することができた。

・田子坊

もともとフランス租界があった場所で、上海独特の異国情緒が感じられる。田子坊は、昔ながらの住まいが立ち並ぶ住宅地だったが、2000 年ごろからアーティストのスタジオなどが入るようになり、自然発生的にショップやレストランが増え、次第に洗練されたスポットへと変わっていった。路地は迷路のように入り組んでいて、その中に、アートやファッション、ショッピング、そしてグルメなどのショップがひしめき合っている

上海で訪れた他の最先端を感じさせる観光スポットとは異なり、古い町並みも感じることができた。路地はかなり狭く、商店が隙間なく並んでいた。頭上はアーケードのようにおおわれているところもあり、町全体が商店街のように感じられるほど、広範囲にわたりお店が続いていた。

３．所感

中国の渡航は初であり、身近に日本人として中国に渡航履歴のある人はおらず、渡航前は自由行動がどのようなものになるか、想像できず、不安があった。しかし、どのスポットでも恐怖や不安を感じることはなく、逆に現地の人には助けてもらうなど、充実した自由行動時間を過ごすことができた。上海は、中国の大都市であることも大いにあると考えられるが、不足した日用品は近くのコンビニで十分に補え、トイレについても、ショッピングセンターや観光地までいけば比較的きれいな状態で使用することができた。交通はタクシーがかなり安いこと、アプリで中国語を話さずに出発地から目的地まで頼めることもあり、頻繁に利用した。様々な面で想像以上に快適であったことは上海現地に行って強く感じたことである。

「歩歩高」訪問記録

記録：大浦　暖人

１．実施日

日時：2024 年 9 月 6 日（金）

２．内容

北京で子供用スマートウォッチ開発業において大成功を収めた「歩歩高」に訪問しました。最初に人事課の方にオフィス内を案内してもらい、会議室にて企業の紹介を受け、社長様との質疑応答を行いました。

オフィスは人事部門、ネット物販部門、カスタマー部門に分かれており、中国のオンライン物販サービスや SNS のショート動画を通じてプロモーションを行う部署もありました。中国特有のライブ配信を使った物販である、ライブコマースの現場にも立ち会うことができました。会議室では、企業の創設から具体的な製品について詳しく説明を頂きました。

「歩歩高」が開発した子供用スマートウォッチである「小天才」はアップルウォッチに比べ安価であるが性能面でも申し分ないレベルのスマートウォッチであり、一人っ子政策を背景に子供への保護意識が強い中国では大ヒットとなった商品です。「小天才」には３D 化された位置情報機能や子供の健康状態を計測し異常時に通知する機能が備わっており、親世代が安心して持たせることのできるデジタル端末として人気です。また、運動データの計測も可能であり子供同士の競争心を煽る仕組みも内蔵されていることも「小天才」のヒットの理由となったとおっしゃっていました。

商品のプロモーションに意欲的に取り組んでおり、SNS 広告だけでなく、小中学校でのインターネットリテラシー講演会の実施、海外でも人気な映画やアニメとのコラボレーション商品の販売など、様々なターゲット層へのアプローチをかけています。企業の今後の展望として、スマートウォッチだけでなく子供向け製品全般のトップブランドとなる事、東南アジアや欧米にも進出することを挙げていました。

３．Q&A

Q：「歩歩高」では創業時はゲーム機の修理を行っていたと調べたのですが、どうしてスマートウォッチの開発に転向したのですか？

A：中国では、子供の教育に熱が高まる中でゲーム機の需要はかなり落ち込みました。代わりに、修理業で培った技術力を応用し情報通信に力を入れた商品を開発することとなりました。ちなみに、技術力の背景には日本の任天堂の技術があります。

Q：「歩歩高」がターゲット層とするのはどの層ですか？

A：500 元～2000 元での購買を目安としています。

「AppleWatch」はあまりにも高くて買えませんが、「少天才」は一般的なスマートフォンの購入と同じ感

覚で購入ができるような価格設定を心掛けています。

Q:「歩歩高」では新たな商品を作る予定はありますか？作るとしたらどのような商品ですか？
A:5～12 歳をターゲットとした様々な商品を開発したいと考えています。特にイヤホン市場がかなりホットで、「ながら聴き」がブームとなる中国では子供にもイヤホンを持たせる家庭も少なくはなく、多くの価値が見いだせる市場と言えましょう。さらに、少子化が進む中で高齢者向けのスマートウォッチ開発にも進出してみたいという動きもあるかもしれません。

Q：子供用スマートウォッチ「小天才」は、中国ならではの子供愛というニーズに合致した商品ですが、海外進出にあたり何か障壁はあるのですか？
A：中華圏である東南アジアには国民性の類似が見られるので、商品の浸透は早いと考えられます。一方でヨーロッパ市場には競合が存在し、中国ブランドが足枷となりシェアの獲得に難航しています。現在のヨーロッパ市場では「歩歩高」のブランド力を底上げすることを目標としています。最後に、アメリカ市場について。アメリカ市場での成功は世界での成功と等しいとされるほど大きな目標です。「歩歩高」の創業者はアメリカ市場において OPPO の販売で成功しており、そのノウハウを活かしアメリカでの成功を目指していきます。

Q：スマートウォッチのモデルを子供の年齢に合わせて変えているとおっしゃっていましたが、具体的にはどのような変化があるのですか？
A：小学生から中学生になるにあたって子供は大きな心理的な変化を経ていきます。「歩歩高」ではこの変化に対応するために、デザイン面や内臓アプリケーションの改良に努めています。キッズコンテンツを減らし中高生向けのコンテンツを増やしたり、スマートウォッチの見た目をシンプルなものにしたりなど、中学生たちのニーズに合わせた製品づくりを行っています。

Q：スマートウォッチとスマートフォンの 2 台持ちを想定して販売を行っているのですか？
A：中国では学校側がスマートフォンに対して厳しい規制をかけています。そのため、そもそも子供にはスマートフォンを持たせないという選択をする家庭が多く、代案としてスマートウォッチを持たせるというニーズが生まれつつあります。

Q：学校での導入はありますか？
A：学校単位で販売することは行っていません。需要が生まれるのはあくまでも親なので、各家庭が選択して購買する商品となっています。ただ、学校での講演会を行うことで間接的に宣伝を行ったり、教師が親に宣伝したりすることもあります。生徒、親、学校のスムーズな連携のためにかなり役に立つ技術として教育現場からもスポットライトを当てられる製品となっています。

４．所感

そもそもスマートウォッチを持ったことのない私にとっては「子供用スマートウォッチとは何ぞや」と

いうところからスタートした今回の訪問でしたがオフィス見学や製品の解説を受けることでかなりショックを受けました。他の企業訪問でも、中国の技術力の高さには驚かされましたが、勢いのあるユニコーン企業である「歩歩高」からは高度なマーケテイング戦略と「子供向け製品市場で世界を獲る」という野望を見ることができました。

隣国である中国が頑張っているなら日本も負けてられないと強く感じた訪問となりました。

北京師範大学訪問・交流会記録

記録：浜崎　天佑

１．実施日

日時：2024 年 9 月 6 日(金)

２．内容

9 月 6 日に北京師範大学に訪問をした。北京師範大学は 1902 年に設立された最も古い師範大学で、当初は教育者の養成を目的としており、長年に渡り中国の教育を牽引してきた大学である。当大学の主な研究分野は教育学、心理学、環境科学、人文社会学であり、文系大学としての役割を持つ。キャンパスは北京の方西部にあり、隣には北京郵電大学が立地している。実際にキャンパスを訪れてみると、校門の警備が厳しく、顔認証や身分証明書の提示をしないと大学には入れないようになっていた。一橋の生徒は 2 グループに分かれて別の講義棟で現地の学生さんと交流をした。まず、お互いが事前に用意したプレゼンを発表し合い、その後に質問の時間をとり、自由討論をした。北京師範大学の学生さんの発表は全体的に日本の文化に関するものであった。日本のアニメと社会的性別に関するようなトピックや、日本の文学作品に関するトピックが印象的であった。

自由討論と質問の時間の後は、もう片方のグループと合流してキャンパス内にある図書館を案内してもらった。図書館の内部は師範大学の歴史をまとめたコーナーや自習室、声を出して良い自習室などの設備が充実しており、本の貯蔵数も 400 万冊を超えている。図書館の訪問後はキャンパス内を通りながらレストランに移動した。見た限り、放課後はグラウンドやちょっとしたスペースで球技をしたり、ダンスをしたりして部活動や遊びをしていた。また、キャンパス内には八百屋、レストラン、薬局や銀行など日常生活をサポートするお店が揃っており、寮もキャンパス内にあった。

中華料理屋に到着した後は二卓に分かれて、料理を食べながら英語でコミュニケーションをとった。私がいた卓では日中それぞれの大学生活や文化について交流した。

BOE テクノロジーグループ(京東方)見学

記録：天野　広大

１．実施日

2024 年 9 月 9 日(月)

２．内容

本レポートでは、中国短期海外調査において訪問した BOE テクノロジーグループ(京東方科技集団)に関して訪問記録を残します。BOE 社は、液晶モニターの分野で世界的に大きなシェアを保っており、2022 年も世界シェア 1 位を獲得し、世界に存在するモニターの 4 分の 1 が BOE 製というほどです。ですが単なるモニター産業という視点に限らず、幅広い分野に BOE 社の技術が活用されていることに今回の訪問を通して気付かされました。

やはり主力技術はモニターとなっており、右に添付された画像のように大きなモニターをはじめ、折りたたみスマホの液晶やフリッカー現象を防ぐモニターなどの紹介もありました。他にも、裸眼なのに 3D に見える液晶などの技術にも驚かされました。

技術の応用も多様で、教育や医療、日常生活にモニター技術が活用されていました。例えば、黒板にチョークを用いて書いた内容がモニターに反映されるものや、人間の体の状態を視覚的に表現するためのモニター等も紹介されていました。

同じく、センサーの技術を用いて、医療や工業、インフラ整備、電子製品を開発しているとも紹介され、医療のデジタル化に貢献していることも新たに知ることができました。

３．所感

この企業に訪問する以前はモニター技術が当たり前なもので深いことを考えていませんでしたが、普段も利用している技術よりもハイレベルな技術を目の当たりにし、驚きました。また、他の企業を訪問した際にも感じたことですが、中国の規模の大きな会社は幅広い分野での活躍を求める傾向にあるとも感じました。根幹にあるのは一つのモニター技術ですが、それが様々な分野に応用され、活躍している様は興味深かったです。

中国商務部国際貿易経済合作研究院（CAITEC）訪問記録

記録：下坂　一悟

１．実施日

2024 年 9 月 9 日(月)

２．内容

北京にてシンクタンクである中国商務部国際貿易経済合作研究院(以下:CAITEC)を訪問し、実際にそこで勤めている職員の方にプレゼンテーションをしていただき、質疑応答も行いました。

プレゼンテーションでは、主に中国が行っている海外支援についての話をお聞きしました。歴史を遡ると、中国の海外支援の歴史は深く、旧ソ連の海外支援のモデルを参考に 1950 年から海外支援と逆に海外からの支援を受け入れることを同時に始めました。1956 年から北朝鮮に、そしてその後はアフリカ諸国へと支援の輪を広げていきました。1964 年には当時の周恩来首相が「対外援助 8 原則」を発表し、今でも基本原則として運用しています。また、2013 年には習近平国家主席によって「一帯一路」が発表されました。これはかつて中国と欧州を結んだシルクロードと似た経済圏を構築することを目的とし、周辺諸国へのインフラ整備などの支援を行うことで途上国の経済成長だけでなく中国側の経済成長にもアドバンテージがあります。現在は 2700 億元以上の予算をかけ、95 カ国、主にアジアやアフリカの途上国を支援しています。

近年は単なる技術支援などだけではなく、技術のローカライズを 1 つの目的にして海外支援を行っています。単に中国企業や政府がインフラを整備するのではなく、その技術を地元企業や政府に伝え、自分たちの技術として昇華できるようにサポートを行っています。他にも人的支援や災害時の緊急支援など支援の形はさまざまであることを研究員の方に説明していただきました。人的支援においては、年間 1 万人以上のアフリカからの留学生を受け入れており、アフリカの発展に大きく貢献しています。災害支援においては、日本と同様に外国で大きな災害が発生した場合に救助隊を派遣できるようにしてあり、政府とは無関係の NGO として活動しています。2023 年に起きたトルコ・シリア地震では現地に真っ先に駆けつけた海外の救助隊となりました。

このように、中国という大国ならではの規模の海外支援が行われており、途上国において中国の持つ高度な技術を現地に適応させて技術レベルを上げていくといったローカライズが行われていることをこの

訪問で説明していただきました。

３．所感

実際に現地の研究員の方にお話を聞いてみると、渡航前に抱いていた中国の海外支援のイメージとは大きく異なる印象を受けました。つい最近まで日本政府の ODA を受けていた中国に対して、渡航前はそこまで高度な海外支援は行っていないだろうと考えていました。中国企業による高速鉄道の建設などは日本でもニュースになったので知っていましたが、営利目的で行っていると思っていました。しかし、実際にお話を聞かせていただき、技術を現地の人々が使えるように、すでにある伝統技術などと合体させたりすることでローカル化していました。私はそこまで地域のことを考えて支援をしている事実に衝撃を受けました。一方で、教育の側面からみると、現地で教育支援として中国語を教えているとおっしゃっていました。中国語はほとんど中国でしか使えず、英語などより多くの国で話されている言語の方が良いのではと感じましたが、一帯一路計画からするとシルクロード沿いの支援している周辺諸国に中国語を広めることでより経済圏の拡大につながるという考えもできると実際にお話を伺って思いました。

北京如水会懇親会記録

記録：中嶋　駿

１．実施日

2024 年 9 月 9 日(月)

２．内容

9 月 9 日、18 時 30 分から庭院江南菜建国門店にて、北京如水会の方々と GLP の学生、中国交流センターの「中国行こう」に参加された学生との懇親会を開催しました。北京如水会からは、日本人会の 7 名と留学生会の 4 名にご参加いただき、学生 32 名と引率の先生 6 名、そして現地の中学校に通う一橋大学志望の中学生 1 名も交え、計 4 卓を囲んで交流を深めました。

会場はゼミ生以外にも多くの学生が参加しており、非常に賑やかな雰囲気の中で始まりました。幹事の方の挨拶に続いて、ビールやコーラで乾杯を行いました。伝統的な中華料理が多数並び、参加者はそれぞれ好みの料理を少しずつ取りながら、最後まで中華料理を楽しむことができました。

また、OB・OG の方々からは、現地の銀行や企業でのお話を伺う機会を得ました。日本では聞くことのできない貴重なお話が多く、特に中国の経済開発区における技術の進歩や無人タクシーについての話は、現地に住んでいるからこそ知ることのできる内容であり、非常に興味深く勉強になりました。さらに、中国で働く立場だからこそ見える日本人と中国人の積極性の違いについても伺うことができ、大変参考になりました。

ゼミ生の中には 2､3 年生が多く､就職について考える時期に差し掛かっている学生も多いと思います。そうした中、働き方についてリアルな話を直接聞けたことは、大きな経験になったのではないかと思います。特に、今回の懇親会が行われる前に、上海の企業訪問や自由行動、北京での企業訪問なども終えていましたが､これらとはまた異なった､中国系ではない企業での中国勤務に関するお話を伺えたことは、新鮮であり、将来について考える良いきっかけとなりました。

OB・OG の方々との交流は、私たちにとって非常に貴重な経験となりました。お忙しい中、時間を割いてくださった北京如水会の皆様に、心より感謝申し上げます。本当にありがとうございました。

北京自由行動記録①

記録：今　祥吾

１．実施日

日時：2024 年 9 月 5 日～9 日

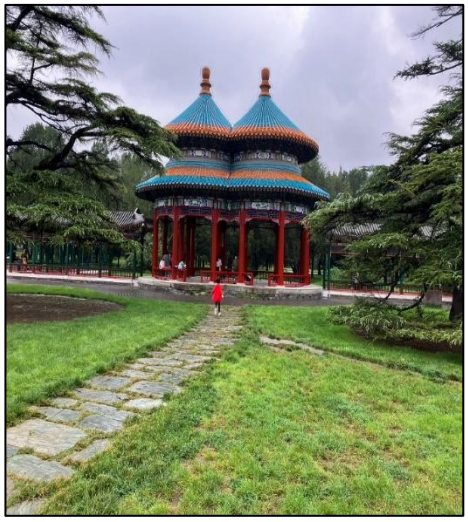
２．内容

・万里の長城

世界最大の建築物で全長約 6000ｋｍの大城壁。北京市街地から北西へ約 70ｋｍのあたりに位置する。北方騎馬民族の侵入を防ぎ、シルクロード貿易を守るために築かれた。1987 年にユネスコの世界文化遺産に登録される。紀元前 7 世紀の春秋時代から明代まで約 2000 年以上にわたって造成が重ねられ、現存するものの大部分は明代に建造されたもの。

標高は約 1000mほどでありバスやケーブルカーなどを利用して頂上まで向かった。頂上からの景色はとても感動するものでした。実際に長城がレンガや石で作られているのを見て、昔の人の努力の結晶を直接感じることができた。観光客向けのお土産屋さんがずらりと並んでいたが、ほとんど品ぞろえが同じだったのが面白かった。また、どのお店の人も値切り交渉をしようとすると応じてくれていたので、値切られることを考えて価格とかを決めているのかなとも思った。万里の長城で食べたラーメンは日本のものには及ばなかったけれど、それなりにおいしかった。滑り台で下まで降りることができるようになっていたのは子供とかも楽しめるようなシステムで観光地としてのアトラクションの役割を果たしていると感じた。

・天壇



明朝の永楽 18 年（1420 年）に建てられ、故宮とともに北京の象徴となっている。明清代の皇帝が天に祈祷を行ったとされる巨大な祭祀施設とされる。重要な国家儀式の空間として一般の立ち入りが禁止されていたが現在は公園として開放されている。1988 年にユネスコの世界文化遺産に登録される。

敷地面積が約 273 万平方メートルと広大で、全部の建物を見て回ることはできなかった。公園内の道も碁盤の目のように道が直角になっているところが多くまっすぐな道がずっと続いていたという印象であった。歴史的建造物と豊かな自然の調和が感じられてよかった。上海よりも気温が低く雨も降っていたので寒かった印象が強い。広大な敷地に同じような木が何本もずらりと並んでいて、日本との規模感の違いを感じた。かなり広い敷地だが自然や道なども美しく整えられていて世界遺産としての雰囲気を感じることができた。

・北京自由行動での食事

上の写真は北京の自由行動の日に食べた中華料理の写真。左が 1 日目の夜に食べた餃子で、右が 2 日目の夜に食べた焼売の写真。餃子は日本では見られないようなカラフルなものもあった。個人的には北京料理の方が中華料理独特の香辛料のにおいのようなものが少ない気がして食べやすかったように感じた。

北京自由行動記録②

記録：熊倉　裕人

１．実施日

日時：2024 年 9 月 5 日～9 日

２．内容

・天安門広場

「北京の中心軸：中国の首都の理想的秩序を示す建築物群」を構成する世界遺産。天安門は、かつての北京の中心部であり王宮であった紫禁城の第 1 門である。中華人民共和国が成立した後は、国家のシンボルとなっている場所。もともとは明（1368 年～1644 年）の時代に門が建造されるものの、何度か再建を繰り返し、1651 年に築かれた際に満州語で「天命を受けて安定した国を治める」という意味で「天安門」と名付けられた。現在の門は 1970 年に再建されたもの。

広場に入るためのセキュリティチェックは厳重で、上海観光の時よりも緊張感があった。手荷物は X 線検査と目視・手探りでの検査もされた。中に入ってみると、広大な土地が何よりも印象的であった。南北 880m、東西 550m あり、最大で 50 万人を収容できるらしい。広場には天安門しかないと思っていたが、人民大会堂や中国国家博物館、いくつかの商店も併設されていた。不思議に思ったのが、天安門の前にスペイン国旗が掲げられていたことだ。調べてみたところ、私たちが天安門を訪れた翌日の 9 月 9 日に北京でスペインのサンチェス首相と会談し、経済や貿易等の協力関係を強化していく方針を話し合ったようだ。世界遺産としての側面だけでなく、対外国との友好関係を示すための象徴的な場所として利用されていることが新たな発見であった。

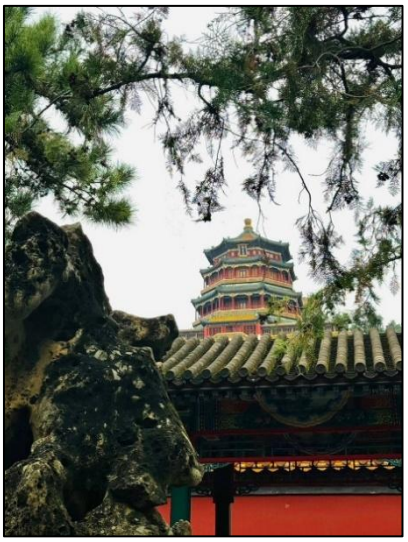
・北京動物園・海洋館

中国で最古かつ最大規模の敷地を有する動物園。面積 50 万㎡。清朝末期の 1906 年に数種の動物を集めて作られた「万牲園」が起源で、1955 年 4 月 1 日に現在の北京動物園となった。園内はさまざまな種類の動物の展示と歴史的建造物からなる。490 種類以上、5,000 匹近くの動物が見られる。動物園内にある暢観楼は、西太后が紫禁城から頤和園に向かう途中に使った離宮のひとつで、北京動物園の正門はその時代に建てられた建造物である。このような歴史的建造物が動物園内には多く残されている。

10 頭ほどのパンダが見られる「大熊猫館」が人気スポット。私たちは午後に行ったが、どのパンダも休憩モードでやる気がなかった。孫悟空のモデルになったキンシコウ等も人気らしい。

園内に複数の池があったり、川が流れていた。池には野生の鴨や白鳥が生息しており、緑や水、動物園で管理されていない動物まで鑑賞できるのが興味深かった。川ではボートや遊覧船が走っており、運賃を支払えば頤和園まで行けるようになっていた。

動物園の中には「北京海洋館」という水族館があり、追加料金を払えば入館できる。12 万平方メートルの敷地内に 1000 種類以上の海洋生物が飼育されている、世界最大の内陸水族館。目玉の一つは現在絶滅の危機に瀕する「中華鱘（カラチョウザメ）」の大水槽である。どの水槽も大規模で、ベルーガ（シロイルカ）が誰も観覧していない質素な大水槽に一匹だけ展示されていたりと、非常に貴重な種類を独り占めで鑑賞できる時間が多くとても貴重な経験であった。



・頤和園

北京市街地の中心部に建つ紫禁城の北西に位置する広大な庭園で、1998 年ユネスコの世界遺産に登録されている。中国屈指の名園と謳われ、敷地面積は約 290 万㎡で、東京ドーム約 62 個分の広さを誇る。広大な庭園の約 4 分の 3 の面積を、人口の湖「昆明湖」が占める。乾隆帝がこの地に江南地方の風景を再現しようと、杭州の西湖を模して造られたと言われているこの巨大な人工湖とその周囲に点在する色鮮やかな中国風建築の数々が、頤和園の風光明媚な景観を作り上げている。

園内にある万寿山の中腹に建つ、仏香閣がシンボルであった。高さ

約 36.5m で、遠くからでも見上げる高さであった。その他にも、花鳥画、風景画、歴史画など 14000 枚もの絵が描かれた、昆明湖の北岸に沿って伸びる長い回廊「長廊（ちょうろう）」や、全長約 36m の石造りの船「清晏舫（せいあんほう）」など、園内に見どころが点在しており、滞在時間 2 時間程度で全てを回ることができないほどであった。

また、建築物や湖だけでなく特徴的な木や岩が植わっており、鮮やかな色の仏香閣や長廊との相性がよく、写真映えする風景だった。野良と思われる猫も見られ、人が住んでいないのに食べる餌があると考えると自然の豊かさも感じられた。

編集後記

中国に到着して最初のバスの中から街を見たときに初めに思ったのが「似た建物ばっかりだな」ということだ。全て同じ形の一戸建てやマンションがいくつも並び綺麗に区画整備されている様子は少し奇妙に感じた。こんな面白みのない家に住んで嬉しいのだろうかと少し思ったが、大規模に一斉に事業を進める中国らしいやり方だと自分の中で腑に落ちたし、住民の人たちはそんなことまず過ぎりもしないだろうなと思った。

加えて感じたのが、一点集中の社会構造がどれだけ便利かということだ。日本では、というか資本主義社会では、独占や寡占を嫌うため、一つのシステムに様々な機能が集中することは少ない。向こうではWeChatやAlipayがあるけれども、日本においてはLINE Payみたいなものはあるけれど普及していないし便利ではない。中国のシステムは、自転車を借りるのもタクシーを呼ぶのも天安門広場の入場チケットを買うのも全てWeChat等に集約されていて、それぞれのシステムが使いやすかった。中国語を読めない自分たちでもある程度ちゃんと使えて、もし日本のPay PayとLINEとタクシーのGOとHello Cyclingとticket boardが一つのシステムに集約されたらどれだけ便利だろうかと思う。他にも、自動販売機に顔認証がついているなど、便利に感じる機能は多かった。

もう一つ感じたのは物価感覚の違いだ。自分の感覚としては、日本で買ったら「お得だなー」と思うぐらいの値段設定になっていたと思う。日本で自転車を借りるには一番安いもので30分130円とかだったが、中国では30分30円程度で借りることができた。お茶も100円もしないでコンビニで買うことができて、タクシーも気軽に使えるほど安く感じた記憶がある。以前はもっと安く物価が高くなってきたと聞いていたが、思ったより安かった。

文化的には、思っていたよりも日本関連のことが受容されていることに驚いた。ホテルのすぐそばにはファミマがあり、街中を見ていれば牛丼屋を見つけることもできる。コンビニには日本のお茶が売られていて、日本のお菓子、日本のアニメ関連の商品が各地で多く見られた。日本語を話す人はもちろんあまり多くなかったが、反日思想が蔓延っていると思っていた割には文化的な受容は進んでいた。

総じて、思っていたより100倍楽しめたなと感じる。個人的海外渡航あるあるとして、「行く直前は面倒すぎて楽しみじゃなくなる」というのがあるのだが、それを加味しても予想以上に楽しめた。想像よりも自由だったり、でも想像通り汚かったり…みたいな連続がこの研修を楽しくしてくれたと思う。

天野　広大

今回の中国研修において私が特に印象に残った出来事を二つ書き留める。

一つ目は中国人の優しさである。中国の人々は基本的にはっきりこちらの意思を伝えればできる限り助けてくれようとするし、言語の壁があってもコミュニケーションを取ろうと様々な工夫をしてくれた。中国人大学生との交流では中国の文化や言語について丁寧に説明してくれたり、後日 WeChat で観光について尋ねたときも非常に優しく対応してくれた。また、ホテルでおすすめの火鍋屋さんを聞いたときは、近くにいた人全員で調べて観光客でも楽しめる最適な店を教えてくれた。初対面の私にも分け隔てなく親切に対応してくれた彼らの姿を見て、中国人は怖いというイメージは完璧に消え去った。

二つ目は天安門広場で体験した国民の毛沢東元主席に対する崇拝である。天安門広場の中には私たちのような観光客の他にたくさんの中国人の方が座ってくつろいでいたり、中国国旗を片手に一緒に写真を撮ったりしていた。彼らが醸し出す空気感や熱量から中国に対する強い愛国心を感じ、まさにこれが私が想像していた中国だと思った。日本において元首相を同じように掲げても日本国民からここまでの熱量と崇拝を得られるかは非常に疑問である。現地でしか味わえない貴重な体験だった。

総じて中国研修は様々な経験を通して私を大いに成長させ、忘れられない思い出となった。最後に研修を指導してくださった尹先生、佐賀先生、シン先生に感謝する。ありがとうございました。

伊藤　亜起

今回の中国渡航で感じた様々なことを書いていきます。

中国という国は、日本に住んでいると「近くて遠い国」と表現される国の１つです。その呼び名が示す通り、地理的・歴史的・文化的にかなり近い国（古代日本はかなり中国に影響を受けたことは日本史で学んだはずです）である一方、渡航ということに対してはかなりハードルがある国ではないでしょうか？

渡航前の私も、個人旅行での渡航先の候補として真っ先に中国は出てこなかったと思います。これはなぜかと振り返ってみると、中国への勝手なイメージや偏見があったからだと思います。私が持っていた中国へのイメージは、「マナーが悪い」、「声が大きい・怖い」、「逮捕される」、「町が汚い」などで、マイナスの印象がかなり強かったです。これは、観光地での中国旅行客の振舞いやテレビでの報道（汚染水問題の件など）にかなり影響を受けたものだと思います。私が今回の渡航を決めたきっかけは、一橋に留学に来たとある中国人留学生と交流を行い、私が当時持っていた中国へのイメージや偏見にヒビが入ったからです（彼とは日本のゲームの話で盛り上がりました）。そして、実際に渡航を経験してかなり中国へのイメージがガラッと変わりました。

先ずは中国人の国民性（？）と街の雰囲気についてです。今回の渡航でかなり多くの中国の方々と交流しました。大学生からタクシー運転手まで年齢もバラバラです。彼ら/彼女らにひとつ共通して感じたこととして挙げられるのは、良くも悪くも大雑把だなということです。観光地で軽いぼったくりに遭い、地元の警察に相談してみたときに警官に大爆笑されたのはとても印象的でした。

上海の街を歩いてみると、横断歩道でもないところを堂々と渡ったり車線変更の時も全くウィンカーを出さなかったりと日本人からするとかなりひやひやする光景が繰り広げられていますが、市民の皆さんは「大丈夫こんなもんだよ」とお互い信頼しています。

路肩のフルーツ屋さんで繰り広げられる謎の口論、物干し棒から滴る水、街中を駆け抜けるスクーターのクラクション、街中すべてがカオスでそれを当然のことようにやさしく包み込む街とそこに棲む人のなんともいえないゆったりした雰囲気に私はたまらなく惹かれていきました。

次に、私がかなり衝撃を受けた点は中国の持つ圧倒的な技術力です。特に訪問先であるBOE（京東方科技集団）ではスマートフォンの液晶から自動車まで様々な面に応用される中国の技術を紹介していただきました。キャッシュレス決済や交通機関の無人運転技術、様々なコンテンツが盛り込まれた地図アプリなど身近な日常生活でその凄さに触れることができたのは良い経験だったと思います。日本では実用化が難しい様々な技術が実際に街中に溢れていて、一歩先の未来に行ったような感覚でした。

このように、今回の渡航は良い意味で私の予想を裏切ったものとなりました。そして、日本国内での中国への印象がいかに身勝手なもので、一方的なものなのかも実感しました。私の経験した中国渡航はまだまだこの文章に書ききれるものではないですが、中国に行ってよかったと心の底から思えたことは確かです。

最後になりますが、現地で様々な訪問先で素敵な経験をさせてくださった尹先生、辛先生、賈申さん、日本から支えてくださった佐賀先生やGLP事務局の職員の方々、訪問先の企業と大学の皆様に感謝申し上げます。また、一緒に旅をした2024年度中国海外短期調査ゼミの皆さんにも感謝します。ありがとうございました。

大浦　暖人

私は渡航前、中国にあまり良い印象を抱いていなかった。中国人は常にいら立っていたり、反日思想が強いと思い込んでいた。日本のマスコミは中国の悪いところばかり取り上げて報道するからだと思う。それと同時に、中国の産業や経済は日本より大規模ではあるが技術面で劣ると考えていた。

しかしその考えは間違いであると渡航を通して学んだ。根本は日本人と同じように温厚な方が多いと感じた。温厚なものの全体的におおざっぱで、細かいことは気にしない主義が、

少し気が強く見えてしまう原因だと思う。お土産店で店員さんにお菓子の内容量を聞いてみても把握していなかったりと、かなりおおざっぱだと感じる部分は多かった。しかし、今まで自分は店員に多くのことを求めすぎていたと再認識し、日本人も一定の柔軟性を持って相手に期待しすぎないことも大事なのではないか。

直近だと深圳での日本人小学生殺人事件をきっかけに日本国内で反中の動きが盛んになっているが、普段からニュースを鵜呑みにしすぎず、なぜこれほどの騒動になっているのか、その背景を自分で確認するようにしたい。

また、電子決済や公共交通機関は日本よりはるかに進んでいると感じた。どの店でもWeChat や Alipay を使えるし、自転車は Alipay を通して短時間から格安で利用できた。ある程度長距離の移動も気軽に自転車でできるのは健康的であると感じた。さらにタクシーは、日本ではまだ普及していないディディのライドシェアが広まっており、手軽に・安く利用できる。(ただし、中国の電話番号を持っていないと不便な場面も多く、まだまだ外国人には優しくない設計であるようにも思える。) BOE や歩歩高等の最先端技術も目の当たりにした。

私の当初の渡航目的は、「中国人の学生はなぜ日本人より英語が得意なのか」を学ぶことにあった。高校生の頃に中国人留学生と交流した経験や、吉林大学学生との討論会を通して、中国人は日本人より英語が流ちょうであると感じていたからだ。現地に赴いてみると、上の世代の中国人は全く英語が通じない人も多い中、交流した学生は皆英語が流ちょうであった。その原因は近年の中国の英語教育の成功にあると考える。

しかし、北京師範大学の学生に日本人は英語が拙いという話をしたところ、「日本人の英語は流ちょうではないかもしれないが、聞き取れるから十分だ」と話していた。今までは英語力がネイティブに近ければ近いほど良いという一点ばかりに注目してしまっていたが、本来の目的はコミュニケーションを取ることであり、我々日本人の根本的な問題は英語力不足よりも内気さなのかもしれないと考えるようになった。

またその学生と会話していて感じたのが、日本の多くの大学生と同じく大学受験が 1 つのゴールになってしまっているということだ。中国は日本以上に大学受験の競争が し烈で、特に都市部の学生は受験勉強に励む。しかし師範大学の学生は、「何となくいい大学に行くのが目標で北京師範大学に入学したが、特別やりたいことは見つかっていない。日本文学をきっかけに日本に興味を持ったので、いつか日本に来て東京でやりたいことを見つけ、場合によって日本では職に就きたい」と話していた。これだけ日本と近い状況の中国だからこそ、教育制度など日本が学べる部分も多いのではないだろうか。

今回赴いた上海や北京は、どちらも中国を代表する 2 大都市であるが、その毛色はかなり異なっていた。ぜひ地方部にも行ってみたい。

熊倉　裕人

今回僕が中国短期海外調査に参加した理由は、海外に行ったことがなく大学のプログラムで参加すれば初めての海外で何かあったとしても安心だと思ったからです。実際ガイドの人や先生方に中国語の面で助けてもらう場面が多くあり、中国語が話せる人なしで中国に行くというのはかなり大変なのではないかとも感じました。

この調査を通して一番印象に残ったことは中国では英語があまり通じなかったことです。外国人向けの案内所みたいなところでも英語が伝わらなかったのは特に意外でした。一方でホテルの人などは困ったことがあったときに英語で助けてくれたので、中国人の中でも英語を話せる人と話せない人の差が大きいようにも感ました。また日本語はもちろん英語も通じず、翻訳機を使ったり、相手の様子を汲み取ったりして相手が伝えたいことを考える経験も日本ではあまりできないような経験だったので良かったです。英語が通じなかったことでよりコミュニケーションが取れることの重要性を実感することが多くありました。

僕は中国に渡航する前、中国は「怖い」国だという印象を強く持っていましたが「怖い」というよりは「厳しい」国だなという印象に渡航してみて変化しました。駅の改札を通るたびに荷物検査があったりするのは最初、過剰の検査ではないかなどとも思いましたが、このような厳しさのゆえに治安が保たれているのだとも思いました。町のいたるところにも警備員や警察官のような人がいたが、何も変なことをしなければ当然何か言われたりすることもなく、多少国の違いはあったとしても大きな部分では日本とあまり変わらないかなといったところが渡航してみて感じた正直な感想です。

今回の海外調査では、いろいろなことを経験することの大切さを特に学びました。これからは中国だけではなくいろいろな国を訪れてみたいと思うようになったことも自分の中ではかなり大きな変化だと感じています。

最後になりますが、渡航前からサポートしていただいた、尹先生、佐賀先生、研修中様々な場面で助けていただいた辛先生、賈申さんに心から感謝申し上げます。貴重な経験をさせていただきありがとうございました。

今　祥吾

多くの人が、中国に渡航する前は良いイメージは持っておらず、渡航後は手のひらを返すように良い国だった、また行きたいという感想を持つ。かくいう私もその一人になった。日本のメディアでは中国の反日教育や日本人襲撃事件、日本人の拘束といった部分が強調されて流されている。それを見ると確かに悪いイメージを持ちがちだが、実際行って感じた生

の中国は全く違うものだった。

私がこの中国短期海外調査に参加した理由は、隣国だけどあまり訪れることがなく、かつ良いイメージを持っていない中国が実際にはどのような感じなのかを掴みたかったからである。今回の渡航を通して、実際に現地でしか経験できないことや感じることのできない雰囲気を味わうことができ、とても有意義なものになった。

今回の渡航で特に印象に残った出来事はデジタル化を含む技術力の高さと実際の街の雰囲気である。技術力の高さは、企業訪問ではもちろん電子決済の普及や公共交通機関、新幹線からも感じることができた。企業訪問では BOE や歩歩高といった企業を訪問し、3D メガネを使用せずに 3D で表示できるモニターや、黒板の筆跡をそのままモニターに映し出せる技術、スマートウォッチで子供が今建物の何階にいるのか、何で移動しているのかを把握できるようにしている技術など高度でかつ民衆に浸透している技術に衝撃を受けた。また、ほとんどすべての支払いを電子決済で行い、地下鉄などの公共交通機関からタクシーまで 1 つのアプリ内で完結できるところに驚いた。新幹線は上海から北京に移動する際に乗車しましたが、日本よりも速い速度でかつ揺れもそこまで大きくなく日本の新幹線と遜色ない性能だと感じた。さらに、車内からアプリで出前を注文すると、途中駅で受け取れるようになっているサービスもあり、日本とは異なる発展をしていると感じた。

街の雰囲気という点では、英語がほとんど通じず中国語しか通じないという場面が多かったと感じる。また、観光地に行くとお土産を値切る文化があったり、バイクや自転車の専用レーンが綺麗に整備されておりたくさん走っているなど日本とは全く異なる雰囲気だった。上海は経済の中心と言われるように高層ビルが立ち並び、さまざまな文化が共存しているように感じた。一方、政治の中心と言われる北京では同じような雰囲気の建物が並び、天安門広場に入る際には厳しい荷物検査、身体検査があった。街中でも軍隊や警察が行進しており異質な雰囲気を放っていた。

メディアでは中国人の反日感情や襲撃事件について多く言及されているが、実際に訪れてみるとデジタル化が進む先進国で、実際に学生と話してみると日本に好意的な印象、日本文化に興味を持つ人が多く、メディアが流す情報だけで判断してはならない大切さを改めて痛感した。その一方、街中では共産主義の息を感じることも多く、日本とは全く異なる雰囲気を味わうことができた。

最後になりますが、事前準備から日本で支えてくださった尹先生、佐賀先生、GLP 事務局の職員の方々、現地で様々な訪問先で素敵な経験をさせてくださった辛先生、賈申さん、訪問先の企業と現地の大学の皆様に感謝申し上げます。ありがとうございました。

下坂　一悟

今回私がこの中国短期調査に応募した理由の一つに、日本から飛行機で三時間ほどで行け、日本と違う社会主義をとる国に行き、人々がどのように日常生活を送っているのか知りたいと前々から考えていたと同時に、危険といわれる中国でも大学のプログラムでいけば安全だろうと思ったことがあげられます。

結果的に、今回の中国研修はこのような私の考えを大きく変えるものとなりました。

まず、確かに街のいたるところに防犯カメラがあり、現地の人々は顔認証で商品の代金を払うことができるほど情報が一元化されているなど、管理されていることを感じさせる場面はあったものの、全体を通しての印象は「日本とそんなに変わらない」というものでした。確かに、今回訪れた地域は上海・北京といった中国でも屈指の発展した場所だったほか、街のにおいや上下水道の設備など衛生面で日本と異なる部分もありましたが、あまりの違いに驚くということは 10 日間の中国研修を通して少ないものでした。しかし、少ない驚きの中で多くを占めたのは、顔認証での支払いサービスを始めとした中国のテクノロジー技術です。手配から支払いまですべてを終えられるタクシーアプリや、中国企業を訪問した際に学んだ中国で開発された様々な技術は日本で見たことがないものも多く、地理的に近い位置にいる国の良い部分を日本の多くの人が知らないことを惜しくもかんじました。

また、中国の治安についても、不安を感じさせられるような場面はありませんでした。道路をひしめく数多くのバイクや、自動車の運転の荒さに冷や汗をかくことはあったものの、スリやからまれるといったこともなく安心して過ごすことができました。

以上のように、日本で過ごしているだけでは情報の少なさから中々知ることのできない中国の実態について学ぶことができたことは、私にとって大変貴重な機会になりました。

10 日間の研修で多くの中国の方々と関わった中で、中国の方々の優しさに多く触れることができ、「中国人が～」という言葉に強い抵抗感を覚えるまでになったことは私自身の大きな変化です。

最後になりますが、中国滞在中の生活を支えてくださった方々をはじめ、渡航前から授業内やその他の場面でも私たちの研修を支えてくださり、貴重な経験をさせてくださった方々に感謝申し上げます。ありがとうございました。

関野　瑠花

この海外調査に応募したきっかけは、隣国であり世界経済に大きな影響力をもつ中国に対し、「実態が分からない部分が多く、怖い」という漠然とした印象しか持たない自分や多くの日本人の姿勢に疑問を抱いたことにある。そのため、大学のプログラムで、観光だけでなく学生との交流や起業への訪問の機会を得た今回の中国渡航経験は、非常に貴重なものとなった。

さて、私が中国で特に印象に残ったのは、治安水準・システムや交通機関の利便性・英語の通じなさである。

まず治安水準について、渡航前には多くの友人から中国に入国すること自体を心配されたが、私たちが訪れた上海・北京は経済・政治の中心であることもあり、日本と全く変わらない治安水準であるように感じられた。上海は東京のような都会であり、政治上の重要施設が多い北京は、いたるところに設置された監視カメラを犯罪抑止に繋げている側面があるのではないかと感じた。もちろん地方に行けば安全とは言えない場所もあるのかもしれないが、中国に対して危ない・怖いといった印象を持っているまわりの人にも、まずはこの2都市に行ってぜひ実際の中国に触れてみてほしいと感じた。

システムや交通機関の利便性について、今回の渡航においては、全ての決済をAlipayとWeChat で行うことが出来たことに加え、天安門などの見学の際の予約や、タクシーの手配についても、WeChat のアプリ内プログラムで行うことができた。さらに、現地のガイドさんが顔認証を利用した決済も実際に見せてくださり大変驚いた。日本ではデジタル化に対応できない人や情報を管理されることに抵抗の強い人も多く、ここまでのシステム化が叶うことは難しいかもしれないが、管理されることと引き換えに大変便利なシステムが構築・提供されていることを実感し魅力的に感じた。また一方で、土産物店やコンビニ・テーマパークでは、日本の店員さんやキャストの方と比べてのんびりとした雰囲気や勤務態度の寛容さを感じることが出来た。いつどんなお店を訪れても店員さんがきっちりとしており、テーマパークのキャストさんは世界観のつくり込みを徹底しているような、日本らしい良さを再確認する機会となった一方で、徹底的な管理社会と柔軟性や寛容さが共存する中国社会が興味深く、素敵に映った。

そして最も驚いたことに、中国人の多くは英語が話せないし、話さないということがある。これまでの海外旅行でも、英語が全く通じない、という経験はしたことがなかったので、新鮮でむしろ楽しく感じたが、観光地に行っても、簡単な単語すら伝わらないことが多く、またこちらが外国人であることがわかってもフルスピードの中国語で会話を続けてくることも多いことには衝撃をうけた。ここで活躍したのがジェスチャーや翻訳アプリで、それらを活用しながら観光で現地の人とコミュニケーションをとることが出来た時の喜びは大変大きく、私たちはタクシー内での会話などを非常に楽しんだ。しかし、方言が多いことや国内でGoogleが使用できないことに起因しているのか、アプリの翻訳の精度は非常に低く、中国人と真の交流をしたいならば語学学習が必須であるなと感じさせられた。また街で全く英語が通じなかった一方で、訪問先の大学で会った学生たちは非常に英語が堪能で、教育格差を実感させられた。

長いと思っていた10日間の中国研修はあっという間で、そして非常に密度の濃い充実したものであった。そしてこの渡航を通し、中国について、漠然としたイメージを持つだけでなく、正しく理解し、客観的に向き合えるよう、自分から知っていこう、と感じられるよう

になった。しかし、巨大な人口を抱え、広大な国土をもつ中国の実態はまだ全く理解できていない。いつか、中国の地方の実態についてもぜひ実際に訪れて確認したいと感じた。

最後になりますが、現地でこのような充実した経験をさせてくださった尹先生、辛先生、賈申さん、ガイドさん、訪問先の皆様、日本から支えてくださった佐賀先生やGLP事務局の方々に、心より感謝申し上げます。ありがとうございました。

竹野　柚貴

今回の短期海外調査は、日本のメディアやインターネットを通して感じる中国のイメージとは異なる、本当の中国の姿を自分の目で見るとともに、日本とは異なるマナーや価値観を体験できる貴重な機会となった。当初、中国短期海外調査への参加を決めたのは、日本とは全く異なる国である中国や、そこに暮らす中国人の在り方について、少しでも理解を深めたいと考えたからである。確かに、メディアでは中国との政治的問題や観光客による迷惑行為が多く報道されており、悪いイメージが全くなかったわけではない。しかし、比較的中立的な視点から、日本との文化や価値観の違いを知りたいという思いがあった。

ところが、実際に中国に到着した際の第一印象は、日本とそれほど異なっていないというものだった。空港を出て高速道路から見えた景色は、日本で目にするものとさほど変わらず、初日に訪れた中国料理店においても、料理と卓の形状を除けば、日本の店舗とさほど違いがないように感じられた。中国が日本人とは根本的に異なっているという偏った先入観があったことに気付かされることとなった。

しかしながら、中国は人口や言語、気候、政治的条件など、当然ながらすべてが日本と同じというわけではなく、その違いにも気付かされることとなった。特に印象に残ったのが、小規模商店やショッピングモールの売り場における店員の働き方である。客がいない時にはスマートフォンを見ており、購入のしそうな客が来ると積極的に話しかけ、試食・試飲を勧め、商品説明を行うのである。このような働き方は、日本の価値観に照らせば批判の対象となりやすいのではないだろうか。しかし、中国ではそれを特段注意する人もおらず、そのフレンドリーさに商品購入を促されることさえあるかもしれない。その是非は別として、日本と比較して効率的な働き方であると考えられる。まさに、中国の常識や価値観に触れた瞬間であった。日本にいるだけでは、このような働き方は否定されがちだが、中国を訪れたからこそ、そのような働き方を受け入れる環境や価値観が存在することを知り、より広い視点で判断できるようになったと実感している。中国の交通事情についても同様のことが言える。確かに、

歩道を高速で走行するバイクや自転車、日本と比べて荒々しい運転など、交通ルールに関して気になる点は多々あった。しかし、警察がそのような行為を注意することは少なく、実際に事故が頻発しているわけでもなかった。これは中国人にとっては慣れ親しんだ光景であり、常識の範疇に含まれているのだろう。そのため、中国の交通がカオス的なものに見え、興味深く紹介されるのは、我々が日本の価値観に浸っているからなのだと実感した。

総じて、短期海外調査はバイアスのかかった中国への見方を矯正したうえで、価値観の違いへと目を向けるきっかけになる良い機会だった。

中嶋　駿

今年の春にアメリカに行った。初めての海外だったのだが、根本の部分は一緒ではないかという印象が大きかった。そんなわけで、今回の中国も日本との大きな違いなどないだろうという気持ちで訪問した。古くから交流があり、隣国である中国はそこまで新鮮ではないだろうという思いは、しっかりと裏切られた。

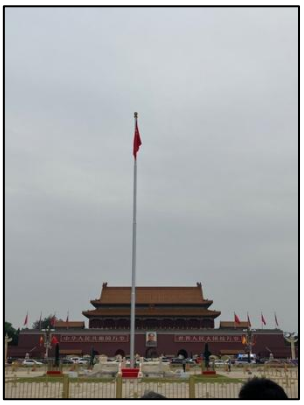
まず、街の様子が違った。自転車や小型バイクが路上の至る所にとめられ、歩道を歩いていれば後ろから小型バイクがクラクションを鳴らしてくる。それに加え、食べ物を売る露店、建物の外に大きく迫り出した物干し竿、小さな建物がひしめく田子房など、雑に言ってしまえば混沌とした雰囲気は、日本やアメリカにはみられないものだった。街中の人が日本人と似た顔立ちをしていることもかえって街の雰囲気の違いを際立たせていた。

人の身体的特徴にも違いがあったように思う。アメリカのように見た目が余りにも違うと、こちらの感覚が麻痺状態になって、より細かな違いに気づきにくい。中国人は大まかな部分で日本人と一緒だから、小さな違いに目を向けることができた。手足が長くすらっとした人もいれば、そうでない人もいる。同じように顔立ちも、どちらかといえば濃い人も薄い人もいた。中国は大陸の一部だから、各所から人が集まる。多様な身体的特徴は、大陸の広さを思わせて感慨深かった。

対人関係の違いもあった。初対面での馴染みやすさを外門、仲間としての馴染みやすさを内門とすると、中国人は外門の外は「知ったことではない」という感じなのに対して、内門の中は非常に温かいのだろうという感じがした。日本人は外門の外はほどほどに温かいが、

内門の中の温かさは中国人には劣るのではないかと思った。

政治的な体制も全く違う。規制だらけの天安門や、至る所に配置された警備要員、諸 SNS をシャットアウトするインターネットは国による統制の象徴だった。そんな中に生きる人たちは堅苦しい思いをしているかというと、そんなことはない。規制の中でも楽しめる自由はしっかり楽しんでいるような印象を受けた。



最後に印象に残ったのはテクノロジーだ。宝山鋼鉄で見たように、昭和の時代は鄧小平が日本の製鉄所に見学に来るなど、「逆遣唐使」状態だった。しかし、今は状況が違う。ウーバーや電子決済、レンタルサイクルサービスなど、日本が見習わなくてはいけない部分は多い。再び、遣唐使状態になる日も近いのではないかと思った。

野村亮太

中国短期海外調査に参加しようと思った理由は、普段の生活では中国に渡航する機会が少ないこと、そして急速に成長を遂げた中国経済やその現状を直接見たいと思ったからです。また、日中関係が緊張している中で、日本のマスメディアが報じる中国と実際の中国を比較してみたいという動機もありました。

まず、日本人の間でよく持たれているイメージとして、過度な監視社会や日本に対する嫌悪感を持つ人々が多いという先入観があります。しかし、実際に中国を訪れて現地の人々と交流すると、そのイメージとは異なり、日本人に対して敵対的な態度を取る人はほとんどいませんでした。逆に、現地の学生たちは日本の文化に興味を持ち、日本を訪れたいと考えている人が多くいました。監視社会についても、確かにカメラの数は多いものの、監視されているという実感はなく、現地の人々も日常生活でそれを気にしていない様子に驚かされました。

次に、街の様子についてです。北京と上海では雰囲気が大きく異なっていました。上海は高層ビルが立ち並び、グローバルで自由な雰囲気を持っているのに対し、北京は高層ビルが少なく、横に広がる建物が多く、全体的に堅い印象を受けました。夜景も上海は煌びやかでネオンが目立つのに対し、北京は控えめで落ち着いた雰囲気でした。

経済や企業に関してもいくつかの点で印象深いものがありました。物価と賃金の低さには驚かされ、日本も円安と賃金の低迷で知られていますが、中国ではそれ以上の低さを感じ、発展途上の側面を実感しました。企業規模については、日本と比較して大規模な企業が多く、特に BOE のスクリーンの普及率には驚きました。また、中国の中小企業も社会貢献に対する意識が高く、国際的な援助活動に取り組んでいることも、日本との共通点や違いとして興味深く感じました。

今回の中国短期海外調査を通じて、私は中国の現実と、メディアによって形成されるイメージとのギャップを実感しました。特に、現地の人々の親しみやすさや、日本への好意的な態度、そして監視社会に対する現地の生活実態が、日本で抱かれがちなステレオタイプとは大きく異なるものでした。また、経済的な発展や企業の規模の大きさにも驚かされ、中国が国際社会においてどのように成長し、影響を与えているかを実感しました。この経験を通して、より広い視野で日中関係や世界の動向を見る重要性を再認識しました。

浜崎　天佑

中国に実際に行って、まず印象的だったのは渡航する前の中国に対するイメージと全く違ったことである。比較的、日本人は中国についてネガティブなイメージを持っている人が多く、私自身もあまり良い印象は抱いていなかった。しかし予想に反して、訪問先の方々や、飲食店の店員を含め中国の人々は非常に親切であった。日本のマスコミでは中国の悪い部分が取り上げられがちだが、メディアの情報だけを鵜呑みにするのではなく実際に十日間の渡航で得た体験をもとに中国に関する情報を理解していきたいと思った。

また、中国では経済発展と伝統文化が共存している様子が日本より目に留まった。特に上海では非常に綺麗な夜景などから急速な経済成長が見られたが、少し路地裏に入ったりすると歴史的な建物などが並んでいた。特にテクノロジー分野の発展が顕著であった。交通機関から飲食店までほとんどすべての支払いが現金ではなく、スマートフォンを使って行われるなど、日常生活に便利さとスピード感が組み込まれていることを改めて実感した。

このように中国が急速に発展している一方で、古い町並みや寺院が大切にされ守られている様子が魅力的であった。しかし、日常生活にモバイル決済が浸透するなど便利な点が多いことに対して、不便なことも多々あった。まず、中国人と英語でコミュニケーションをとることが容易でない点である。簡単な英語の単語も伝わらないことが多く、すべて翻訳機で意思疎通をしていた。

次に、外国人が生活しにくい点である。例えば、飲食店のメニューが中国語のみであり英語のメニューがないことや、地図アプリを英語設定にすることができず中国語でアプリを使用しなければいけないことがあげられる。実際に中国に訪れる観光客を増やし中国に対する悪いイメージをなくすために、外国人が旅行しやすいように英語を日常生活により浸透させることが大事だと思った。

今回の中国渡航は、様々な経験を通して中国に対する印象を大いに変えた貴重な思い出となった。この経験を今後の学びや仕事に活かしていきたいと思う。

古山　百華

今回の中国短期海外調査では、日本にとって隣国でありながらその実態を掴みづらい中国を自分の目で見ることができ、非常に有意義な経験ができました。上海、北京という中国で最も大きな2つの都市を歩き、現地の人と交流したことで得られた知見について、記録します。

まず、最も大きな衝撃は、中国に訪問した皆が感じていたことですが、その発展度合いです。特に、交通機関と決済システムの2つが、今まで見たどの国よりも高いレベルで組織されており、間違いなく想像以上のものでした。配車サービスやシェアサイクルが都市内のどこでも安く簡単にアクセスでき、現地の人にはもちろん、観光客にとってもかなり滞在しやすいようにできていると感じ、日本でこれらのサービスの導入の遅れがどれほど深刻なものであるかを体感できました。決済システムについても、噂通りどこにいってもQRコード決済が完全に導入されており、年配の方々も難なくそうした仕組みを使いこなしているのは印象的でした。上海の街を歩いていたとき話しかけてきた物乞いの方が、片手にWeChatのQRコードを持っているのを見たときは、大変驚き、感心しました。

現地の学生や、観光客との交流も非常に刺激的でした。日本では連日、中国経済の崩壊がニュースの見出しになっており、実際街なかを見ていると、廃ビルや工事を中断したかのようなマンションも多少見受けられ、不動産バブル崩壊の話はあながち間違ってないのかという印象を受けました。このことについて現地の学生に話を聞いてみると、実際中国経済の停滞は感じているとのことでした。私は、こうした現状に対し彼らが資本主義経済そのものに欠陥があると指摘するのではないかと考えていましたが、意外にも批判の矛先は政権に向いていて、最近は国内もそういう感じなのかと聞いてみると、コロナ禍以降特に若い世代は現政権に対する不信を抱いていると言うので、驚きました。市場経済の導入が中国においても成功体験として扱われているのは若干残念な気持ちもありましたが、中国の若者の中で自由主義的な機運が高まっているのは大変印象的で、世界的にも大きな影響のある動向だと思いました。交流した学生の多くがインスタグラムのような本来禁止されているサービスを使用しており、検閲の影響力は次第に下がっているようです。また、海外からの観光客も想像していたよりずっと多く、欧米人に中国に対する印象を尋ねるとなかなか好印象で、私の欧米人に対する先入観を改める機会になりました。

今回の訪問では、中国、世界に対する価値観を変えられる素晴らしい体験ができました。今後中国に訪れるのであろう変化の時代を考えると、何十年か経った後に、今の中国の姿を見ていたことが大変価値のある経験になるのだろうと思います。

宮原　堪爾

今回中国を訪問してもっとも強く感じたことは、国内外からの見え方の違いである。様々な背景があることは前提として、やはり日本国内での中国へのイメージはあまり良いものではない傾向にあると言えるだろう。それはもはや国内での世論になりつつあるし、当然中国から日本への印象も良くない、お互い国家を超えて国民レベルで対立しているのだと日本人は考えていると言っても過言ではないほどである。ただ、実際中国に行ってみると様々な場所で日本人を歓迎してくれたり、「日本が好きだ」と話しかけてくれたりした。現地で働いている日本人の方がおっしゃっていたように、日本国内ではメディアをはじめとしてネガティブな感情を煽動するような動きがあると感じた。このような情報に対して、私たちは短絡的に飲み込んでしまってはいけないと思うし中国のみならず、物事に対する情報リテラシーを日頃からより意識して生活しようと思った。

また、中国の経済的な発展には驚かされた。中でも交通の発展は目を見張るものがあった。まずその価格の安さである。地下鉄やタクシー、レンタル自転車まで日本とは比べものにならないほど安価で利用できる。これらの交通機関すべてが一つの決済アプリに集約されており、乗車から降車までの手間も非常に少ない。また、実際に見ることはなかったが無人タクシーのサービスもすでに開始しているようで、現地の日本人で乗ったという方もいらっしゃった。交通ルールとしては曖昧な部分も多々感じられ、夜中の自転車運転等は肝をひやすこともあったが、やはり発展とその浸透度は国家全体の行動力を象徴するかのようで印象的だった。

事前のリサーチ不足でもあるが、中国で英語が通じなかったことはこの研修における大きな誤算であった。大学で交流した生徒さんたちは多くの人が流暢に英語を話していた一方で、街やショッピングモールにいる人々は一切英語を話すことができなかった。グローバル化の中で日本国内でも英語力の低さがよく指摘されるが、体感では話せない人の度合いで比較すれば日本をも下回るように感じた。日本で交流する中国人は基本的に英語を流暢に話す印象を持っていたのでこれも驚きであった。年代や、受けることの出来た教育レベルに依存して国内でも大きな差があるということは日本と同様だと感じた。

今回の短期研修を通して、様々な角度から物事を眺める必要性を強く感じた。多くの生徒が、10 日間の渡航で中国に対する印象が大きく変わったと感じている。この短期間でも現地に行くことで簡単に認識が変わることを、長期間疑うこともなく私たちは日本国内で感じていたのである。このような現地体験の重要性を感じられたことで、海外経験への志向がより強くなった。今後同様の体験をするためにも、様々な場所へ自分の足で行きたいと思うし、この経験を将来的に生かせる日が必ず来るのだろうと思う。

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