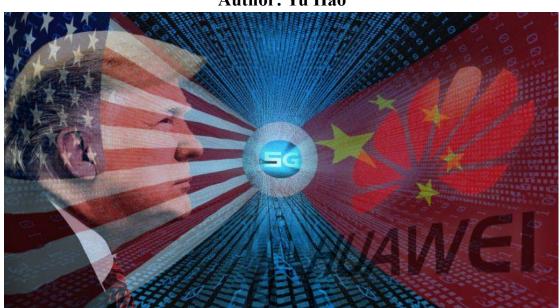




# **Research on the US Restrictive Policy on China`s Technology Industry during the Trump Administration**

----A Case Study of Huawei



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## Summary

With the appointment of Donald Trump as the 45th President of the US in 2017, his "America First" and unilateralist policies have brought many unstable factors to the global political landscape. In particular, Sino-US relations have deteriorated during this period. With the successful signing of the phase-one trade deal between China and the US in January 2020, the Sino-US trade war has been temporarily eased. However, Washington's restrictions on China's technology industry during the Trump administration have increased significantly compared to the past, while tensions have not been eased as trade relations. This thesis focuses on finding out why the US under Trump's administration has increased restrictions on the Chinese technology industry.

The thesis uses the Copenhagen School Securitization Theory in the field of International Security Studies and the Neoclassical Realism Theory in IR field to build a comprehensive theoretical framework. By conducting a case study on Huawei, which is the key actor at the forefront of the Sino-US technology battlefield during this period, the Problem Formulation, Why the Trump administration increased restrictions on China's technology industry is answered. Washington under Trump's administration used the reason of defending national security to increase restrictions on China's technology industry entering the US to conduct business as well as normal business dealings with American companies. Further, it lobbied its allies to try to restrict the development of China's technology industry comprehensively at the international level. However, Washington does not have enough evidence to prove that the technology industry from China poses a threat to the national security of the US, which makes its behavior a typical securitization speech act under the securitization theory, with the purpose of gaining support from domestic and international audiences for its policies that interfere with free market economy. Washington's motive for implementing securitization acts is to prevent the US's survival rights from being deprived by the existential threat of China, which became a larger and more urgent challenge during Trump's administration. Further,

Neoclassical Realism theory provides a similar but more comprehensive explanation on this issue. The development of technology has driven the improvement of China's overall power and international influence, made Washington increasingly feel the clear challenge from the international system. This systemic level pressure has shaped Washington's policy orientation toward China through the unique personality of Trump and his administrative team and the relatively consistent strategic view of China from the US political elites during this period. Under the securitization construction of Trump and his team, the policy of increasing comprehensive restrictions on China's technology industry has won the support and approval of the domestic civilians and was finally implemented.

## **1. Introduction**

On January 15, 2020, Liu He, the Chinese Vice Premier of the State Council, and the US President Trump signed the China-US phase-one economic and trade agreement at the White House, marking the 18-month Sino-US Trade intensified trade war has temporarily eased (Swanson & Rappeport, 2020). However, the tension between Washington and China's high-tech industries does not seem to have improved accordingly. Since Trump came to power, his administration has imposed comprehensive restrictions on China's high-tech industries on the grounds that national security is threatened, such as rejecting Chinese companies' mergers and acquisitions (M&As) in industrially significant technology fields of the US, continuing to impose sanctions on Chinese high-tech companies and imposing restrictions on visas for scientific research talents from China. Although Trump pledged in the first phase deal to cancel tariffs on \$160 billion worth of China's exports that were to take effect on December 15, 2019, and to lower the tariff rate of \$120 billion worth of goods imported from China that entered into force on September 1, 2019. Some technology products, including mobile phones, laptops, flat-screen TVs and Bluetooth headsets appear in this first-phase tariff exemption list (Wong et al., 2020). But for the more core industrially significant technology products in aerospace, robotics, automobiles and telecommunication fields, which are included in the earlier list of tariffs are not exempted from trade agreements at this stage (Cassella, 2018). At the same time, although the Trump administration has extended the temporary license for Huawei to continue business with US companies until May 15 this year (Shepardson & Alper, 2020), a series of Chinese information and communications technology (ICT) companies are still on the US Department of Commerce's entity list because of the serious threat posed by their equipment and services to US national security according to Trump's administration, which means their business dealings with US companies were completely cut off. Washington's ban on US use of these companies' equipment and technology continues to increase

(Brown, 2020). All these actions reflect that the Trump administration's restrictions on China's high-tech industries have not been eased as the progress in their trade relations. In other words, the process of technology "decoupling" between Washington and Beijing is still ongoing.

It is true that science and technology (S&T) are the primary productive forces, the key to national strength, and the commanding heights of great power competition. The historical development of modern times proves that a country that has a leading position in the field of S&T and applies advanced technology to domestic economic, national defense, and social management fields will have a significant advantage in the competition of great powers. After the WWII, the US replaced Germany as the world's S&T center and remains the position till now. It is exactly the technology edge that has powered the US's economy and allowed its military to overmatch potential adversaries. US high-tech multinational companies has allocated resources globally for such a long time, so that the US can maintain the top of the global value chain as well as its technological superiority. However, imposing restrictions on Chinese companies that are important players in the global value chain will undoubtedly hurt US economic interests. On the one hand, with the development of high-tech industry, Chinese companies are increasingly demanding core made-in-US software, such as operating systems for mobile phone and computer, as well as hardware, such as semiconductors. Restrictions on China's high-tech industries will take a huge toll on US suppliers (Duckett, 2019) and benefit competitors from South Korea and Japan (Behsudi, 2020). On the other hand, the low-cost equipment and services provided by Chinese technology companies have attracted many American corporate customers, so that the ban from Washington will ultimately force them to find high-cost alternatives, which will cause a lot of extra costs and even threaten the survival of the company (Cao, 2019). Although the US during the time of George W. Bush and Obama had relatively low restrictions on the investment and acquisition of Chinese technology companies, these restrictions on China's high-tech industry gradually escalated during the Trump era. The scope became wider and more measures were taken. More importantly, defending national security as a reason

appears more frequently in the narrative of restrictions imposed by Washington. The US has earned massive economic benefits from free and open markets, but the Trump administration has intervened in and intended to keep a distance from Beijing in the field of leading technology.

Therefore, based on this background, the Problem Formulation of this thesis is:

*Why the Trump administration increased restrictions on China`s technology industry?* 

## 2. Methodology

### **2.1 Choice of Theory**

This thesis will use the theory of Neoclassical Realism in the field of international relations and Securitization theory in the field of international security studies to conduct a more comprehensive theoretical analysis of the Problem Formulation.

Neoclassical Realism was born in the post-cold war period. It is a revision of classical realism and structural realism by some realist in response to the criticism of neoliberalism and constructivism. Neoclassical realists believe that structural realism, liberalism, or constructivism can only articulate relatively little content in foreign policy or international politics. The international system under the assumption of structural realism often provides clear information on the external constraints and opportunities that a country faces only in rare cases, so in most cases there is plenty of room to debate the nature of international threats and opportunities. Liberalism as an influential subset of the Innenpolitik approach, is restrictive in explaining many aspects of international politics because it downplays the importance of relative power distribution. Constructivist theory of international relations makes it difficult for analysts to predict the foreign policy choices of countries and leaders, and it is

impossible to explain past behavior except through ex post facto stipulations (Ripsman et al., 2016, p.2-7). Neoclassical Realism theory tries to cover these shortcomings, identifies consequential variables at multiple levels of analysis, and shows how they lead to a series of consequences at different levels such as foreign policy, grand strategic adjustments, international outcomes and structural changes, which makes it a more powerful explanatory tool than its competitors (Ripsman et al., 2016, p.7). In other words, Neoclassical Realism incorporates domestic-level variables into the realist analysis framework. At the same time, the research question of this thesis emphasizes looking for changes in policy output between different leaders in the same country. Although China's overall strength and level of technological development have continued to improve in the past two decades, the domestic political environment and leadership style of the US have also undergone significant changes. As emphasized by neoclassical realists, the theory can be used to explain variations in the foreign policy of the same state over time or across different countries facing similar external threats or opportunities (Taliaferro et al., 2009, p.21). From this perspective, Neoclassical Realism is suitable for analyzing the research problems of this thesis.

Then, from the perspective of international security studies, Securitization theory will be chosen. As a main theory of the Copenhagen School, Securitization theory belongs to the constructivism security concept. In fact, the boundary between international security studies and international relations is often difficult to divide. As important debates in international relations simultaneously have evolved around security, there are inevitable overlaps between the two areas when it comes to issues such as national security (Buzan & Hansen, 2009, p.17). Securitization theory emphasizes that in order to avoid being deprived of the right of survival by other units in the system, actors construct a "security" problem through speech acts, so as to obtain the audience's permission for behaviors beyond the general rules as well as the mobilization of resource (Buzan et al., 1998, p.26). Considering the background of the research topic in this thesis, the US under the Trump administration frequently cited protecting the US national security as a reason to restrict China's high-tech industries.

Therefore, the Securitization theory is suitable for the research problem in this paper.

Both Neoclassical Realism theory and Securitization theory emphasize the joint impact of systemic-level factors and unit-level factors on changes in national policy output. Even if the two theories originate from different schools, they can still provide a more comprehensive explanation of the research question in this thesis under the same theoretical analysis framework. This will be further elucidated after the introduction of backgrounds and assumptions of the two theories in the next chapter.

### 2.2 Research Method

First, this paper will take a qualitative case study method to conduct relevant research on Huawei, a key player in the current Sino-US conflict in the field of S&T. According to Ripsman et al., Neoclassical Realism falls squarely within the approach of "causes-of-effects" and belongs to the qualitative research category of the social sciences (Ripsman et al., 2016, p.108-109). At the same time, given that Neoclassical Realism requires researchers to investigate the role of idiosyncratic state institutions and processes on policy choices among other factors, this theory is more suitable for detailed qualitative case studies rather than large-N quantitative studies (Ripsman et al., 2016, p.131). Therefore, in order to examine the specific policy-making process of a particular country and to find out the reasons, restricting the scope of the study through typical cases can make the results of the study better reflect the causality of national foreign policy choices. As a Chinese ICT company, Huawei occupies an important position in China's high-tech industry strategic planning and is currently the leader of China's high-tech industry. In the context of my research question, Huawei has always been one of Washington's key goals. The US in the Trump era has also adopted a series of restrictions on Huawei that are obviously different from those before. Through Huawei's case, I can analyze the reasons behind the change in Washington's policy more clearly. In addition, Huawei's case includes the process of Trump and his team trying to securitize a threat by speech acts, which can be analyzed using the analysis framework of securitization theory. Therefore, Huawei's case is very typical.

Second, in the specific Huawei's case, qualitative discourse analysis method will be used to analyze the descriptions in public speeches and documents issued publicly by Trump and his team. As Buzan et al. have emphasized, "...one cannot make the actors of securitization the fixed point of analysis-the practice of securitization is the center of analysis (Buzan et al., 1998, p.32)". In the analysis of the speech act of securitization process, the focus on the actor's security discourse can more clearly discover how he labeled an issue with a security tag by dramatizing it, thereby obtained the right to respond to threats through extraordinary measures (Buzan et al., 1998, p.26). When conducting security discourse analysis, the main technique is "Read, looking for arguments that take the rhetorical and logical form defined here as security (Buzan et al., 1998, p. 177)". Therefore, in the discourse analysis of this case, I will find out how they construct a plot that includes existential threat, point of no return, and a possible way out (Buzan et al., 1998, p.33) from Trump and his team's public discourse about Huawei. In other words, these discourses will be used to find a description of the threat that Huawei can cause, the urgency of this threat or when it will have irreparable consequences, and how to solve Huawei's threat.

### 2.3 Choice of Data

Therefore, based on Neoclassical Realism's preference for qualitative case analysis and Securitization theory's recommendations for qualitative discourse analysis, this paper will mainly select qualitative data for the analysis. At the same time, Ripsman et al. suggested that researchers should go beyond the restrictions of secondary data when studying the selection of particular policies, because these data are often ignored or biased by other historians or political scientists (Ripsman et al., 2016, p.132-133). Therefore, this paper will mainly select documents, statements and speeches released by the US government and its agencies, such as the White House, the US Department of Justice, the Senate Select Committee on Intelligence, and the US Federal Communications Commission (FCC), etc. These materials can be either obtained from their official websites, or from press releases of some mainstream media such as BBC, Reuters and CNET. Meanwhile, some secondary data based on other researchers' research and analysis are also used for reference.

At the same time, quantitative data such as Sino-US economic data (GDP, total trade, etc.), S&T data (R&D expenditures, number of patents, number of unicorn enterprises, etc.), military data (military spending) will also be included in the analytical framework. Neoclassical realists suggest using the above indicators to measure the material capabilities of a state (Ripsman et al., 2016, p.44), so as to better understand the changes in the power distribution at the level of the international system.

### 2.4 Limitation

The research has some limitations. For the topic studied in this thesis, which is the US restriction on Chinese high-tech industry, this issue is still ongoing. In other words, this event may be affected in the future by some sudden external changes (some "black swan" events such as the current rampant coronavirus) or other deeper strategic considerations, which for me as a student cannot observe from the available information. Therefore, this paper can only analyze the policies that have been implemented and the processes that have taken place on the basis of publicly available historical data, instead of predicting the future trend of this issue.

Secondly, because the topic and case are specifically selected in this thesis, the amount of discourse materials available is limited in the analysis of security discourse. Therefore, quantitative analysis methods such as word frequency statistics cannot be applied through the establishment of a completer and more systematic corpus. Only limited speeches and statements related to the selected case can be extracted to analyze how subjects accomplish the securitization process through specific words and sentences.

## 3. Theory

### **3.1 Neoclassical Realism**

#### 3.1.1 Theoretical Background

Hans J. Morgenthau as the founding father of Realism of IR studies constructed the core proposition of classical realism theory. He took the state as the basic unit, and pointed out that the power and interests of the state were the starting point of the state acts (Morgenthau, 1950). In the late 1970s, realists represented by Kenneth Waltz inherited classical realist arguments about power and national interests, and constructed structural realism. He considers international realm to be "anarchical, horizontal, decentralized, homogenous and mutually adaptive (Waltz, 2010)", and stated that "In anarchy, security is the highest end (Waltz, 2010, p.126)", and the power should be used as a means to that end instead of the end itself. Thus, state guarantees security by seeking and maintaining power, especially military power, so that causes "security dilemmas" among states. As one of the mainstream theories in the field of international politics, the realism theory represented by structural realism played an important role in explaining the opposition between the US and the Soviet Union and providing guidance to countries during the Cold War. However, with the increase in economic exchanges and cooperation between countries as well as the acceleration of globalization after the 1970s, realism that emphasizes power and security has gradually failed to explain the state's strategic adjustments and changes in foreign policy, so that got criticized by other theoretical schools such as neoliberal institutionalism and constructivism. In this context, some realists have inherited the premise of structural realists using the international system structure as an independent variable, and borrowed from the unit-level factors in Morgenthau's classical realism, emphasized that factors from the international systemic level are affected by the unit intervening factors, leading to differences in dependent variables such as national policy-making. Gideon Rose explored the common features of the four books written by Thomas J. Christensen, Fareed Zakaria, Randall Schweller and William C. Wohlforth, pointing out that their views are significantly different from structural realism, offensive realism or defensive realism. They followed the philosophical foundation of realism based on human nature, acknowledged the core concept of power politics, and combined the unit of analysis of structural realism and classical realism. Based on that, Rose named this new theoretical genre as "Neoclassical Realism" (Rose, 1998).

#### **3.1.2 Theoretical Assumptions**

As a new branch of realist logic extension, Neoclassical Realism favors structural realism's focus on the threats and opportunities provided by international system when the state formulates foreign policy. However, neoclassical realists do not believe that countries will necessarily respond fluidly and mechanically to changes in the international environment (Ripsman et al., 2016, p.19). Correspondingly, they argue that structural realism theory ignores the following four aspects of the impact on national policy output. First, state leaders do not always correctly perceive the stimulus of the system because of their personal subjective factors. Second, the signals from the international system about threats and opportunities are not always clear. Third, leaders do not always respond rationally to system stimuli. Fourth, states may not be able to effectively obtain domestic resources for response due to constraints in their domestic political or economic environment (Ripsman et al., 2016, p.20-24). Under the influence of these factors, neoclassical realists believe that structural realists' research on the state's response to changes in the international system has certain limitations. Neoclassical Realism is based on retaining structural realism's emphasis on primacy of the international system and relaxing the constraints of external determinism in a way of "bringing the state back" in response to the limitations of structural realism (Ripsman et al., 2016, p.31).

#### Type I, Type II& Type III Neoclassical Realism

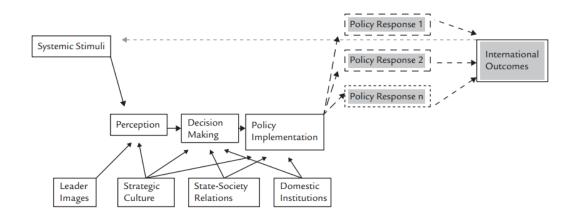
The efforts of neoclassical realists to date have led to three branches of the theory.

The Type I Neoclassical Realism aims to explain the infrequent deviations from structural realist expectations, which means that the neoclassical realists believe that the international system sends a clear signal to the state, and in most cases the state will respond as the results of the structural realism analytical framework. Only in rare cases can these signals be misunderstood by leaders' perceptions or constrained by domestic politics, preventing leaders from responding reasonably (Ripsman et al., 2016, p.28).

The Type II Neoclassical Realism expands the scope of theoretical interpretation, enabling it to explain a wider range of foreign policy choices and grand strategic adjustments. Proponents of this argue that the international environment does not provide a clear and urgent threat in most general cases. States choose policies from a range of policy options based on the worldviews of their leaders, the strategic culture of the state, the nature of the domestic political coalitions, and the domestic political constraints they face (Ripsman et al., 2016, p.29). The Type II Neoclassical Realism transcends its position as a corrective theory of structural realism and forms an independent foreign policy theory (Ripsman et al., 2016, p.31).

The Type III Neoclassical Realism further expands the scope of theoretical interpretation. The political phenomena that can be explained cover the short-term crisis decision-making, foreign policy behavior, the grand strategic adjustment patterns of an individual country, and the systemic outcomes, even the evolution of international system structure (Ripsman et al., 2016, p.1). The basic logic of it can be shown in the following figure: Independent variables at the international system level can lead to a wider output of dependent variables through domestic intervening variables that have different effects at different times and at different stages. The independent variables, intervening variables, and dependent variables of the Type III Neoclassical Realism will be explained below respectively.

Figure 3.1 The logic of Neoclassical Realism



Source: Ripsman, N. M., et al. (2016). Neoclassical Realist Theory of International Politics (p. 81). New York, NY: Oxford University Press.

#### **Systemic Independent Variables**

-International System

The international system is the starting point of Neoclassical Realism. The country's place in the international system, especially its relative power capabilities, remains the primary factor determining the scope and ambition of a country's foreign policy (Rose, 1998, p.146). The basic assumption of Neoclassical Realism is that territorial states are the main units of the international system (Ripsman et al., 2016, p.35). In terms of the structure of the system, the definition made by structural realism is the starting point for a more comprehensive view of Neoclassical Realism about structure. First, neoclassical realists believe that although the structure of the system delimits a series of possible strategic responses and bargaining results, and can thus impose constraints on units, the system itself cannot indicate the behavior of individual units (Ripsman et al., 2016, p.36), which means the behavior of units is still determined by their own attributes. Second, the principle of anarchy of the system brings pervasive uncertainty among the units, which makes the system a self-help environment (Ripsman et al., 2016, p.37). Third, neoclassical realists believe that there are "structural modifers" beyond the structural level, which can modify the effect of anarchic ordering principle and the relative distribution of capabilities on strategic interaction parameters and possible external behavior of individual units, including geography, technology diffusion rates and offensive-defensive balance in military (Ripsman et al., 2016, p.38-40). In other words, the structure of the international system is an explanatory variable that is conditioned by structural modifiers such as technology and geography (Ripsman et al., 2016, p.43).

Therefore, Neoclassical Realism views international politics as an endless struggle for power and influence and power among states in a world where resources are finite and the intentions and strengths of each one is uncertain (Frankel, 1996, p. ix–xx). In the definition of power, Neoclassical Realism follows the "elements of national power approach", which regards power as resources (Baldwin, 2016), which means power is the means to an end instead of the end itself. The indicators used to measure the country's material capabilities generally include GDP, annual defense expenditure levels, the size and composition of the armed forces, military research and development, demographic trends within the population, natural resource endowment and territorial size (Ripsman et al., 2016, p.44).

#### -Clarity

The clarity of signals presented to states by the international system is a core systemic variable of Neoclassical Realism theory. Generally speaking, clarity mainly consists of three parts. First, whether threats and opportunities are sufficiently clear that can be discerned. Second, whether the system provides information on the time horizon of threats and opportunities. Third, whether there are optimal policy options that stand out (Ripsman et al., 2016, p.46-48). If the nature of threats and opportunities faced by states, as well as the time frame in which they are expected to materialize and the optimal policy responses, have higher clarity, then there will be less divergence in policy choices among different countries and across domestic societal alliances (Ripsman et al., 2016, p.49-50).

#### -Permissive/Restrictive Strategic Environment

Another additional systemic variable is the nature of a state's strategic

environment. Generally speaking, the more imminent the threat (or opportunity) and the more serious the threat (or more enticing the opportunity), the more restrictive the state's strategic environment is. Conversely, there will be the more permissive environment (Ripsman et al., 2016, p.52). In a restrictive environment, states have fewer choice but to redress threats or exploit opportunities (Ripsman et al., 2016, p.52). It is therefore less complex than a permissive strategic environment.

#### **Domestic Intervening Variables**

The incorporation of domestic intervening variables makes Neoclassical Realism different from structural realism. These domestic intervening variables will condition whether and how states respond to the international systemic pressures (Rose, 1998, p.144-177). The intervening variables of Type III Neoclassical Realism are state leaders' images, strategic culture, state-society relations, and domestic institutional arrangements (Ripsman et al, 2016, p.59).

#### -Leader Images

Leaders of states are called by neoclassical realist as foreign policy executive (Ripsman et al., 2016, p.61). Their highly personalized "images" based on previous experience and values generate cognitive filters that influence how leaders process information. All incoming information from the outside world is subject to cognitive filters that personize and bias leaders' perception of external stimuli (Ripsman et al., 2016, p.62). Meanwhile, the personality of the leader also affects the state's response to systemic stimuli (Ripsman et al, 2016, p.63).

#### -Strategic Culture

The narrower strategic culture refers only to that of the military as a bureaucratic organization, while the broader concept refers to entrenched beliefs, worldviews, and shared expectations of the world (Goldstein & Keohane, 1993). It can affect the way countries perceive, adapt to systemic stimuli, and structural shifts in material

capability (Ripsman et al, 2016, p.66). It can form the strategic understanding of political leaders, social elites, and even the public, and make it more deeply entrenched through socialization and institutionalization (Ripsman et al, 2016, p.67). Meanwhile, dominant ideology is also an important part of strategic culture, affecting the state's attitude towards international affairs, its willingness to use force, and the degree of nationalism (Ripsman et al, 2016, p.69).

#### -State-Society Relations

Neoclassical realists believe that factors such as the degree of harmony between the state and society, the degree to which society defers to state leaders on foreign policy matters in the event of disagreements, the level of domestic political and social cohesion, and the public's support on overall foreign policy and national security goals will influence the extraction, mobilization and utilization of national power by leaders (Ripsman et al, 2016, p.71). Generally speaking, harmonious state-society relations allow the state to have a relatively free hand to enact policies in the way it considers appropriate (Ripsman et al, 2016, p.71). Conversely, the complexity of policymaking will increase as leaders struggle with domestic opposition (Ripsman et al, 2016, p.71).

#### -Domestic Institutions

Formal institutions, organizational routines and procedures, and bureaucratic oversight are usually established by constitutional provisions with clear rules and regulations (Ripsman et al, 2016, p.75). These domestic political institutions crystallize state-society relations, and determine who can contribute to policy formation or at what stage of the policy process (Ripsman et al, 2016, p.75). Generally speaking, the institutional variables that affect the foreign policy of democratic countries are the concentration of power in the hands of the executor, the executive-legislative relationship, party systems, the voting rules, the quality of the government, and administrative competence (Ripsman et al, 2016, p.76).

#### **Dependent Variables**

The dependent variables of Type III Neoclassical Realism include not only the country's foreign policy choices, but also the international outcomes produced by the interaction between these policy choices and the systemic structure itself, which is occasionally influenced by international outcomes (Ripsman et al, 2016, p.80). The scope of these dependent variables will gradually expand over time.

Specifically, in the short-term time defined in terms of days, weeks, and months, Neoclassical Realism can help explain the policy choices made by countries in response to the particular challenges and opportunities presented to them by the international system and other countries (Ripsman et al, 2016, p.83). It involves policy responses to emergencies. In the short-to-medium term, with months and years instead of decades, the policy formulation will be more forward-looking. Neoclassical Realism theory can shed light on the country's policy planning and grand strategy adjustment process (Ripsman et al, 2016, p.81). In the medium-to-long term, usually several years and decades, the interaction among grand strategic choices of the great powers will affect international outcomes and even reshape the international structure (Ripsman et al, 2016, p.82-86).

## 3.2 Securitization Theory of Copenhagen School

#### 3.2.1 Theoretical Background

Securitization theory is one of the main contributions of the Copenhagen School (Buzan & Hansen, 2009, p.212), which is a branch of non-traditionalist international security studies.

The International Security Studies has gradually emerged from the debate after the World War II on how countries can prevent external and internal threats (Buzan & Hansen, 2009, p.8). According to Buzan & Hansen's work of combing of international security studies, the research in this filed is gradually evolving in an attempt to answer four questions. The first is whether the state should be a priority as a referent object (Buzan & Hansen, 2009, p.10). In other words, security research should focus on the question of who's security should be protected. The second one is whether internal and external threats should be taken into consideration for security at the same time (Buzan & Hansen, 2009, p.11). Or, is the threat to a country's domestic economy, ideology, or sovereignty as important as its external challenges in the international system? The third question is whether to extend security beyond the military and use of force (Buzan & Hansen, 2009, p.12). In other words, should social, economic, or environmental security issues be included in the field of security research? The fourth is whether to see security as inextricably tied to a dynamic of threats, dangers and urgency (Buzan & Hansen, 2009, p.12). This refers to that the international security studies need to answer what the nature of security is.

Following the above logic, the main issue of international security studies in the early Cold War period of time is how to prevent the world from tragically entering a new war of Great Power after the two world wars. Under the tension of the Cold War, the core topic of security research in both the US and Europe is to find out how to resist the expansion of the Soviet Union's ideology, and to prevent Soviet blocs from defeating the western world. "Security" at that time refers to national security, which is threatened by the military power of others and defended by its own (Walt, 1991). The studies of security also focus more on how a country maintains a favorable position in war through military-political means, thereby ensuring national security. Realism became the dominant paradigm of security research during this period. By the 1970s, with the easing of US-Soviet relations and the increasingly prominent role of the economy in international relations, the traditional security concept that included only military security was increasingly questioned. In the debate between neo-realism and neo-liberalism, traditional security studies have been further developed, but still retains the characteristics of objectivism (Buzan et al., 1998, p.203). The third phase of the development of security studies is the peaceful end of the Cold War. Military threats in the traditional sense are no longer the primary issue for the post-Cold War world system. While new issues such as the increase in intra-state conflicts, the fear of immigration in the Western societies, the decaying environment and the acceleration of epidemic such as AIDS demonstrated that traditionalism have been unable to cope with the challenges of the post-Cold War era (Buzan & Hansen, 2009, p.187). A constructivist view of security is taking shape at this stage. Non-traditionalist international security studies which seeking to widen and deepen the narrow military and national-centered security issues of traditionalists becomes the important outcome of the evolution of security studies during this period. One of them is Copenhagen School, which classified by Buzan & Hansen as the "European approaches" (Buzan & Hansen, 2009, p.191).

#### **3.2.2 Theoretical Assumptions**

The main representatives of the Copenhagen School are Barry Buzan and Ole Wæver. Generally speaking, as a relatively early and contributing "widening and deepening approach" to security studies, the Copenhagen School positions itself between traditionalist state-centrism and the traditional Peace Research's call for "individual security" as well as Critical Security Studies' call for "global security" on the one hand, so that establishes a broader concept of "societal security" (Buzan & Hansen, 2009, p.213).On the other hand, it shifts the analysis of security issues from the objectively defined security to the discourse securitization analysis. The securitization approach widens the source of threats and the range of referent objects, enabling it to cover more emerging non-traditionalist security issues. At the same time, it provides a Constructivist counterpoint to the materialist threat analysis of traditional Strategic Studies (Buzan & Hansen, 2009, p.36).

Specifically, the Securitization theory follows the basic assumption of the constructivist security concept, that is, the structure of the international system is not only related to the allocation of material resources, but also to social relations. Constructivists agree with the material factor in the structure, but consider it to be limited, because "material resources only acquire meaning for human action through the structure of shared knowledge in which they are embedded (Wendt, 1995, p.73)". A "security dilemma" is formed when states are highly distrustful of each other, and a

"security community" is formed when the shared knowledge among states makes them highly trust one another. Moreover, Wendt exampled that 500 British nuclear weapons are less threatening to the US than 5 North Korean's, because the former is friend for the US and the latter is not (Wendt, 1995).

The core assumption of Securitization theory is that the definition of security depends on its successful construction in discourse (Buzan et al., 1998, p.213). The securitization process is a "speech act", which means the threat can be dramatized by the description of a state representative to turn an emergency condition into a security issue, thereby gaining the right to use all necessary means to block a threatening development (Buzan, 1998, p.21; Wæver, 1993). In other words, "security" is a self-referential practice on a particular political agenda, and it is in this practice that the issue becomes a security issue-not necessarily because of the existence of a real "existential threat", but because the issue was presented as a threat (Buzan et al., 1998, p.24). The definition of threat by objectivism will cause deviations in the urgency because different understandings of different countries, nations, and cultures. Securitization is the process in which one actor fit with the perceptions of what constitutes a "real" threat by others. In other words, it's the process of shared intersubjective understandings of security between actors (Buzan et al., 1998, p.31). Therefore, the exact definition and criteria of securitization is constituted by the intersubjective establishment of an existential threat with a saliency sufficient to have substantial political effects (Buzan et al., 1998, p.25).

The process of securitization is the process of presenting issues in security terms (Buzan & Hansen, 2009, p.214). Securitization means to present an issue as urgent and existential which is so important that it should not be exposed to the normal haggling of politics but should be considered and dealt with decisively by the top decision-making level over other issues (Buzan et al., 1998, p.29). Therefore, securitization is a more extreme version of politicization spectrum (Buzan et al., 1998, p.23). When a state calls a certain change of development a security issue, it can demand a special power, which means that the state can occupy social resources in the name of national security, and thus deprive citizens of their rights to freedom.

In the process of securitization, securitizing actors and referent objects are linked together. The former ones are defined as "actors that securitize issues by declaring that something, which is the referent object is being existentially threatened", while the latter are "things that are seem to be existentially threatened and that have a legitimate claim to survival" (Buzan et al., 1998, p.36). "Existential threat" is closely related to "referent objects". And also, it is precisely because of the intersubjectivity of securitization process, the audience of the speech act is very important. Audiences need to accept the saying from securitizing actors of their shared value are facing the existential threat. The key to evaluating the success of securitization is whether actors persuade audiences to tolerate or obey procedures or rules that go beyond the general agenda through their expressions and rhetoric of threats. Securitization is not fulfilled only by breaking the rules, nor solely by existential threats, but by using the existential threats as excuses to legitimate the breaking of rules (Buzan et al., 1998, p.35). Therefore, securitization theorists believe that a successful securitization process has three components (or steps): existential threats, emergency action, and effects on interunit relations by breaking free of rules (Buzan et al., 1998, p.26). When an argument with this particular rhetorical and symbolic structure is approved, and gains the tolerance of the audience to the violation of the rules by the behavior of securitizing actors, which fully achieves the expectation of the actors (Buzan et al., 1998, p.25).

Based on the above definitions of security and securitization, securitization theorists have expanded the coverage of security analysis. Beyond traditional military issues, securitization theory incorporates political, economic, societal, and environmental sectors into the analytical framework (Buzan, 1991, p.19-20). Meanwhile, securitization theorists also emphasize the impact of "facilitating conditions" on speech act. A successful speech act needs to follow the security form, the security grammar, and adds particular professional dialects in different sectors, such as talking about "identity" in the societal field and "sustainability" in the environmental field (Buzan et al., 1998, p.46). In addition, securitizing actors need to be in an authoritative position, which commonly can be seen as political leaders, bureaucracies and governments (Buzan et al., 1998, p.40), to make a securitization reference to a certain threat-related object. In this way, audiences can conjure a security threat (Buzan et al., 1998, p.33).

Although the definition of securitization process under the Copenhagen School seems to be open, securitization theorists have further limited the excessive expansion of security issues, in order to prevent various securitizing actors from entering the ideological security dilemma. The Copenhagen school emphasizes that the optimal option for long-rage is desecurization, which is to return the issue to the ordinary public sphere after receiving sufficient attention (Wæver, 1993). Securitization theorists believe that security should be viewed as negative, which not the more the better (Buzan et al., 1998, p.29). Securitization can only be a last resort as a failure of normal political approaches, instead of a tool for a small amount of power holder to silence the opposition and use power to control more opportunities (Buzan et al., 1998, p.29).

## **3.3** The Combination of Application of the Two Theories

The purpose of this section is to further provide a combined application framework of the two theories, which are completely different and originate from different schools. Admittedly, realism and constructivism are two epistemologically contradicting approaches, and supporters of each are constantly self-revising in the academic debate and the evolution of the international situation in order to establish a more explanatory analytical framework for international politics. However, the combination of Neoclassical Realism theory in the field of IR studies and Constructivist Securitization theory in the field of international security studies can provide a more comprehensive explanation path rather than contradiction for the research problem of this paper.

First, it is undoubtedly that Neoclassical Realism helps explain the changes in a country's foreign policy, and the emphasis of the application, which is also the key to distinguish it from other realist theories, is the combination of systemic level variables

and domestic level variables. The variable of "State-Society Relations" at domestic level emphasizes that it is the support of the domestic society for the government that will affect whether leaders can freely determine policy output in accordance with changes in international system and their own perceptions. It will be more convenient for leaders to implement their policies if the relation gets better, which will give leaders the incentive to actively improve it. Generally speaking, mobilization is a good way to improve the relation, which is also emphasized by neoclassical realists (Ripsman et al., 2016, p.145). Based on the Securitization theory, the intersubjectivity of security has led the subject (generally a national leader) to share security perceptions with audiences (generally the domestic public) in a way that securitizes an existential threat, so that can finally allow him to deprive the public of personal liberty or access to social resources, which is an effective way for the leader to mobilize domestic people. From this perspective, the speech act of securitization is a way for national leaders to deal with domestic constraints, so that affecting the domestic intervening variables emphasized by neoclassical realists to a certain extent, eventually leading to changes in foreign policy output.

Second, the Securitization theory essentially broadens the definition of "security" so that it does not have to be related to objectively existing dangers or threats. Any emergency that has nothing to do with traditional national security, such as the remarkable economic development and technological progress of competitors, can be constructed as a security issue through speech acts, so that get resolved quickly and extraordinarily. It reflects the typical feature of constructivism. However, the motivation of this is the fear of being deprived of the right to survive by the other party, emphasized by securitization theorists (Buzan et al., 1998, p.26). In other words, in order to cope with the growing and imminent threats from competitors in the international system, a country will increase the securitization speech acts to seek more support from audiences for its emergency actions beyond the conventional rules of procedure. From the perspective of Neoclassical Realism, the change of this existential threat is due to the growth of the relative power of the other leads to a change in the power distribution at the systemic level because of the limitation of the

resources of the international system. This is precisely the core reason for the change in the output of a country's policy emphasized by Neoclassical Realism. From this perspective, the Securitization theory can provide a similar explanative approach to the research question of this thesis with Neoclassical Realism. However, it does not affect the analysis of the research problem in this thesis, since a neoclassical realist would criticize that the constructivism theory can only use ex post facto stipulations to explain the change of state's foreign policy rather than predict it, as I mentioned in the section of "Choice of Theory". Because this paper is also an ex post analysis of the policy output of Washington during the Trump era rather than a prediction of the future of Sino-US technological relations, although this has become a limitation of this paper.

Therefore, the combination of Neoclassical Realism theory and Securitization theory can provide a more comprehensive analysis framework for the research question. As a major approach for Washington to impose restrictions on the Chinese technology industry during the Trump era, securitization speech acts can effectively improve State-Society Relations of the US in eyes of neoclassical realists, thus giving the Trump administration greater autonomy in foreign policy. While the change in the power distribution at the international systemic level emphasized by Neoclassical Realism is also the main reason why the Chinese technology industry has increasingly become an existential threat to the US in the eyes of securitization theorists, which led Washington to add restrictive policies implemented on the grounds of guarding national security during this period.

## 4. Analysis

## 4.1 US Restrictions on China's Technology Industries

#### 4.1.1 Before Trump Administration

Historically, since the founding of New China, US restrictions on China's

technology industry have never stopped.

In terms of specific policy output, from a macro perspective, the US and most of its NATO allies established the Coordinating Committee for Multilateral Export Controls and formulated the International Munitions list, the International Atomic Energy list, and the International Industrial list which includes "dual-use" items and technologies as early as 1949 (Reference for Business, 2020). The transfer of advanced technology to the socialist camps of the Soviet Union and New China is restricted in this way. With the end of the Cold War and the disintegration of the Soviet Union, the Committee was also disbanded at the request of Russia and other countries. However, in order to continue to maintain its advantages in the high-tech field, 33 countries signed the Wassenaar Agreement to implement new control lists and information exchange rules under the leading of US in 1996 (Reference for Business, 2020). There are two lists in the Agreement, namely the Munitions List and the List of Dual-Use Goods and Technologies, which set up huge obstacles for developing countries such as China to introduce advanced technologies from developed countries. If someone compares the Agreement with the National Outlines for Medium and Long-term Planning for Scientific and Technological Development (2006-2020) (MLP) initiated by Chinese government, he will find that more than half of the priority topics in the MLP are involved in the export restriction lists of the Agreement (Du, 2019). It can be seen that the Wassenaar Agreement has targeted and restricted the development of China's military and civilian high-tech industries to a greater extent.

Meanwhile, Washington has launched five *Section 301* investigations against China before 2017 on the grounds of imperfect Chinese patent and intellectual property (IP) protection regulations and unfair barriers in the Chinese market, imposed punishment tariff on relevant Chinese exports. The purpose of these investigations and tariff sanctions was mainly to protect the IP of American products exported to China and further open the Chinese market. The protection of cutting-edge technology of the US was only a part of its appeal. And for China's exports that were under tariffs, electronic products accounted for only a small proportion, while a larger proportion were manufactured products. In addition, the trade conflict has not escalated further after the US demands have been met.

From a micro perspective, as an inter-departmental committee specializing in reviewing all foreign investment and M&A activities in the US, the *Committee on Foreign Investment in the United States* (CFIUS) has restricted acquisitions activities from China many times. Since 2008, CFIUS's block of M&As of US S&T companies from Chinese buyers has increased dramatically (Capri, 2020). Moreover, the Obama administration has also imposed restrictions on Huawei, ZTE and other companies' businesses in the US market, and prevented his government departments from using Chinese technology equipment and services (Young, 2013), which will be explained in detail in the following case study.

In addition to the exact policies implemented, the US has been complaining and accusing the Chinese technology industry all the time. Based on the attraction of China's huge market and relatively cheap labor costs, more and more American multinational technology companies have set up their subsidiaries and laboratories in China since the Reform and Opening Up. Many multinational companies continue to complain to the US government that China is forcing them to be engaged in joint venture with Chinese companies in order to transfer technology and steal IP. This has become the main accusation of Washington against Beijing (Gros, 2019). Meanwhile, the US government has always opposed the state-owned capital and other state support behind China's high-tech enterprises, and believed that they caused unfair market competition. In addition, Beijing decided to reduce its reliance on software and hardware provided by US high-tech companies, such as banning government computers from using the Microsoft operating system and blocking Google's related networks services after the exposure of PRISM (Clover, 2014). Accordingly, both US government officials and entrepreneurs have accused this of being a "forced localization" of technology, which politicized the high-tech sector (Clover, 2014).

#### 4.1.2 During Trump Administration

Since Trump took office in 2016, the US has continuously increased restrictions on the Chinese technology industry. Compared with previous policies, the Trump-era US imposed various types of restrictions on China's high-tech sector at multiple levels.

At the macro level, the Trump administration once again launched the Section 301 investigation against China and provoked the largest trade war ever (Meredith, 2018) based on the results of the investigation, which mainly focused on issues about China's official-led industrial policy, the so-called "mandatory" technology-transfer policy, the acquirement of technology and IP through the acquisition of US companies with official support and the theft of US trade secrets through cyber intrusion (Trump, 2018). Among the goods under tariffs, China's exports of high-tech industries such as aviation, ICT and robotics, which were involved in the Made in China (MIC) 2025 strategy released by Beijing in 2015 to achieve the goal of "World Manufacturing Power" became the main part of Sino-US trade war. The Section 301 investigation report publicly released by USTR mentioned "MIC 2025" 116 times in whole or in part (Sheehan, 2018). And the 10 categories of high-tech products covered in the Washington tariff list are highly overlapped with 9 categories of products compared with those supported by MIC 2025 (Liu, 2019). On the basis of a consensus on China's future increase in the purchase of US goods and services made in the recent signed trade deal, Washington further required that China need to strengthen IP legal protection and eliminate mandatory technology transfers as well as to stop the direct support from Beijing when Chinese companies acquiring foreign technology (Lawder et al, 2020). It can be seen that the trade war provoked by the Trump administration has turned the complaints of the so-called Chinese technology theft from the US government and enterprises into practical actions. In addition, the deal only canceled and suspended some of the US tariff of Chinese exports. For previously taxed exports, especially high-tech products that highly coincide with MIC 2025, the tariffs still exist, which means that the US continues to target the development of China's technology

industries involved in MIC 2025.

Also, Washington has further updated and strengthened its high-tech export control system. As an annex to the *National Defense Authorization Act for Fiscal Year* 2019 (NDAA), the *Export Control Reform Act of 2018* adjusted the export control measures for military and civilian dual-use items and authorized the *Bureau of Industry and Security* (BIS) of US Department of Commerce to formulate relevant rules to strengthen the supervision of sensitive technology exports. On February 15, 2018, the House Foreign Affairs Committee Chairman, Ed Royce as the main proponent of the bill, emphasized that as China is increasingly forcing American companies in China to transfer sensitive technologies and harming US security and economic interests, the bill will modernize the US regulatory control system so that sensitive technologies will not fall into the hands of countries that will use US technology against the US (Covington Alert, 2018).

At a micro level, Washington's restrictions on Chinese high-tech companies have also increased. First, Trump has stepped up his intervention in the acquisition of Chinese S&T companies. In 2018, the US government incorporated the *Foreign Investment Risk Assessment Modernization Act* (FIRRMA) into the NDAA on the grounds of strengthening national security. It reformed the CFIUS review process and added four types of transactions under the jurisdiction of CFIUS (U.S. Department of the Treasury, 2018a). Although the final version of FIRRMA does not list China as a country of particular concern, the SEC.1719 of the bill refers specifically to MIC 2025 (U.S. Department of the Treasury, 2018b). Since 2017, about 50 transactions outside China have been reviewed by CFIUS, and less than half have been approved. In high-tech industries, especially semiconductors, the rate of rejection of investment acquisitions from China is very high (The China Senior Analyst Group, 2019). CFIUS also conducts special risk reviews of M&As of state-owned enterprises in China.

Second, the BIS has continuously put Chinese high-tech enterprises in the Entity List of the Export Administration Regulations (EAR). Since the US Department of Commerce cited ZTE's violation of US sanctions to Iran and so that put it in the list in April 2018, more than 200 Chinese companies and organizations have been treated the same (Kawakami & Hoyama, 2019). Well-known Chinese ICT companies such as Huawei, Hikvision, Sugon, Dahua Technology and DJI are all Trump's key targets. Being included in the Entity List means that US companies who do exports, re-exports and transfers of US-origin goods, software and technology to them will face additional licensing and other restrictions, resulting in normal commercial trade activities being largely affected.

Third, Washington has restricted the market space of more Chinese technology companies besides ZTE and Huawei in the US on the grounds of defending national security. Section 889 of the NDAA explicitly prohibits government agencies and their contractors from using telecommunications and video surveillance services or equipment provided by Huawei, ZTE, Hytera, Hikvision and Dahua Technology as well as any subsidiaries or affiliates of them (115th Congress, 2018). Meanwhile, Trump signed the Executive Order to declare a national emergency and prohibit US companies from using telecommunications equipment and services that pose a risk to national security produced by "foreign adversaries" (Trump, 2019), which are widely considered to refer to Huawei from China (Stewart, 2019).

At the individual level, unlike the historically continuous attraction and emphasis of scientific research talents in the high-tech field of the US, the Trump administration has targeted monitoring and restrictions on the exchange of scientific research talents between China and the US. In the 2017 National Security Strategy, Trump clearly pointed out that China can achieve military modernization and economic development, partly because its access to America's world-class universities (Trump, 2017). As a result, Washington has gradually tightened the visa approvals for Chinese students studying in the US as well as visiting researchers in certain specialties, and reduced the number of Chinese scholars especially who are suspected of being associated with the Chinese government to enter key laboratories. Specifically, according to the new visa regulations of the US State Department, Chinese graduate students major in high-tech majors such as robotics and aviation might face a limitation of visa period to one year instead of the previous standard period of five years from June 11, 2018 (Menchaca, 2018). In addition, Washington has strengthened its monitoring of Chinese scholars in the US, especially those involved in China's overseas talent recruitment programs. In April 2019, three Chinese scientists were dismissed by MC Anderson Cancer Center because of their inexpressible connection with China. Subsequently, two Chinese-American geneticists were also fired from Emory University because they did not disclose the Chinese funds they received (Nedelman, 2019).

More importantly, the US Department of Justice accused Huawei's CFO Meng Wanzhou of violating the Iran Sanctions Act thus arrested her in Vancouver on December 1, 2018 (Office of Public Affairs, 2019a). It is difficult to evaluate whether Meng is illegal or not because the case is still under trial, but there is no doubt that this incident is a huge blow to Chinese ICT companies, especially for Huawei. Moreover, it happened at a time when the US imposed restrictions on China's high-tech industry, which made it difficult to judge Washington's motives.

At the international level, Washington continues to lobby its allies and partners to try to reach a consensus on the blockade of China's technology industry. On May 31, 2018, representatives from the US, the EU and Japan issued a tripartite statement in Paris, condemning the forced technology transfer policy of some foreign companies as well as the acquisition of sensitive information and trade secrets through cyber intrusion, expressing that they will endeavor to take effective measures to stop such policies and practices (Office of the United States Trade Representative, 2018). Meanwhile, Trump continued to try to persuade European countries to ban Huawei from participating in their 5G network construction projects, and threatened to cut off the sharing of information and intelligence (Kapadia, 2019). In addition, the US government is urging Chinese Taipei to curb the supply of its chip maker TSMC to China, which is Huawei's main supplier (Hille, 2019).

In summary, although the US government has always adopted restrictive policies to protect its own technological advantages and curb the development of China's technology industry, the output of Washington's policies during the Trump era has been upgraded. Not only the increase both from the macro-national level and micro-enterprise level, but also further extend the restrictions to the exchange of talents, and to a greater international level to comprehensively contain the MIC 2025. Meanwhile, the Trump administration has also transformed critics and complaints about China's so-called "technology theft" into actual actions. More importantly, the US government closely linked the development of China's technology sectors, especially the ICT industry, with national security, so that implemented corresponding restrictions and protection policies on the grounds of "defending US national security" during this period. In the next section, we will analyze the case of Huawei, the one that on the forefront of the battlefield between the US government and the Chinese high-tech industry in the Trump era through a securitization theoretical analysis framework to have a clearer understanding of the implementation of restrictions from Washington.

### 4.2 Case of Huawei

#### 4.2.1 Background

Huawei Technologies Co. Ltd. is an ICT company established in Shenzhen, China in 1987 and currently the leader of China's technology industry. It surpassed Apple to become the world's second largest smartphone supplier in 2018 (Swearingen, 2019). The founder of Huawei is Ren Zhengfei, a former engineer of the PLA. He achieved his first commercial success by producing small telephone exchanges in the early days of Huawei. Taking advantage of China's need to rapidly upgrade its domestic telecommunications infrastructure, Huawei thrived on the domestic market (including winning important government contracts) for most of the 1990s (Swearingen, 2019). Subsequently, Huawei began to promote its equipment overseas under the policy of Reform and Opening up. As a private non-listed company, Huawei is employee-owned, which means its shares are held by all its employees instead of letting the state-owned capital to be the largest shareholder (Graff, 2020).

Since 2007, the US has questioned the "close" relationship between Huawei and the CCP, and therefore began to intervene in Huawei's overseas business. In 2008, the

George W. Bush administration prevented Huawei and Bain Capital from planning a \$2.2 billion deal to acquire the network manufacturer, 3Com based on the fear that Huawei may fine-tune the company's anti-hacking software to allow the Chinese military to access US computers (Graff, 2020). In 2010, CFIUS again prevented Huawei's efforts to acquire 3Leaf Systems, a server technology company, on the grounds that Huawei might install a surveillance "backdoor" in its equipment. In response, Huawei issued an open letter to the US government, denying the security risks of its products and requesting Washington to conduct a full investigation into its corporate operations (Rogers & Ruppersberger, 2012). After that, the US House of Representatives Intelligence Committee issued an investigation report in 2012, indicating that Huawei "provided evasive, nonresponsive, or incomplete answers to questions at the heart of the security issues posed (Rogers & Ruppersberger, 2012)". Therefore, the Committee recommended that the US government, especially sensitive departments, not to use Huawei equipment. It also recommended that CFIUS must block M&As involving Huawei and suggested American companies do not do business with it (Rogers & Ruppersberger, 2012). Subsequently, Obama requested NASA and a few government departments to seek approval from federal law enforcement before using Chinese ICT equipment (Young, 2013), and prohibited Huawei and ZTE from participating in bidding for US government procurement. Besides, no more requirements or administrative orders have been made.

However, just like previously mentioned, things changed drastically during the Trump era. In February 2018, Chris Wray, Director of Federal Bureau of Investigation (FBI) told the Senate Intelligence Committee at a hearing that Huawei's mobile phones pose a security threat (Boom, 2018). Directors of other five intelligence agencies reached a consensus on it later. In May, the Pentagon banned the sale of Huawei's smartphones at US military bases worldwide (Graff, 2020). Trump signed the NDAA in August, in which prohibited commercial cooperation between government agencies and Huawei as mentioned above. Although Huawei sued the US government for this, it was eventually rejected by the court (Keane, 2020). In January 2019, the US Department of Justice released a 13-count indictment accusing Huawei

and its CFO Meng of financial fraud, obstruction of justice and violation of sanctions against Iran (Office of Public Affairs, 2019a), which also led to earlier arrest of Meng in Canada. The Department has further unsealed a 10-count indictment accuses Huawei has been stealing trade secrets from the US operator T-Mobile since 2012 (Office of Public Affairs, 2019b). With the signing of the Executive Order on May 15, the US entered a national emergency to protect the security of the use of communication technologies and services in the country (Trump, 2019). Accordingly, the BIS added Huawei to its Entity List and so that cut off all US companies' commercial businesses with Huawei. Then, Google, Intel, Qualcomm and Facebook all publicly or privately stated that they would abide by the order and cut off the future services and applications provide to Huawei mobile phones. Although Huawei got suspensions from Washington by, on the one hand, receiving the temporary license from the US Department of Commerce to be allowed to maintain its current products, in order to provide software updates and security patches to existing customers with the US companies that it does business with (Nieva, 2019). On the other hand, Trump also proposed to lift some restrictions against the business that does not involve the "great national-emergency problem" between US companies and Huawei after the G20 Summit in order to restart the trade agreement negotiations with China (CNET News staff, 2019). But the "fact" that Huawei is the threat to US national security has not changed, which leads it to be on the Entity List still. Trump also further signed the legislation proposed by FCC to prohibit US rural carriers from using federal subsidies to purchase Huawei's equipment and services (Brown, 2020).

Meanwhile, Washington has continued to lobby its allies since 2019, reminding them to be alert to the security risks caused by using Huawei equipment and services. Trump even threatened to cut off intelligence sharing and cooperation with countries that insisted on remaining business with Huawei in the 5G construction process (Reicher, 2019).

In short, Washington's restrictions on Huawei during the Trump era have also increased, as it has done to the overall Chinese technology industry. Continuously argued that Huawei's technology and services pose a threat to US national security, Washington prevented Huawei from conducting business activities in the US domestic market on the one hand, and cut off the supply of Huawei's hardware and software from US companies on the other hand. Furthermore, during this period, the US arrested Huawei's CFO and sought more collective actions from allies at the international level.

#### 4.2.2 A Real Threat to US National Security?

Actually, Washington has no evidence that Huawei has set up a "back door" which can be used by the Chinese government to carry out information theft and surveillance on the US till now (Swearingen, 2019). In fact, on the one hand, any mobile device will pose a certain threat to personal safety and privacy due to its security holes. On the other hand, the American intelligence community's concerns about Huawei are more from its own experience. Documents leaked by Edward Snowden, showed that the US government has forced some of the largest US technology companies, including Microsoft, Google and Apple, to monitor their own citizens since 2007. Generally speaking, companies always cannot refuse when the government uses administrative capabilities to force them opening the back door (Kennedy, 2019). Therefore, from this perspective, all communication equipment and technology are unsafe since they all have the risk of being used by the government for surveillance.

But Washington has always had no conclusive evidence to accuse Huawei. Adam Segal, director of the Digital and Cyberspace Policy Program at the Council on Foreign Relations, once stated "No one has yet found a back door in a Huawei product (Stewart, 2019)". Washington believes that Huawei participated in espionage activities at the request of Beijing just because of Ren's military background and the financial support that Huawei received from the Chinese government. Microsoft President Brad Smith also stated that when he asked the Trump administration to provide more evidence about the national security threat posed by Huawei, the answer he got was very vague (Keane, 2019). In contrast, Huawei has taken measures to reassure its audience and client government of its credentials and security record (Mascitelli & Chung, 2019). Therefore, objectively speaking, the insecurity caused by the development of ICT is widespread, but so far there is no way to prove that Huawei's equipment or technology directly threatens the national security of the US, or this ever-existed threat has become bigger is the Trump era.

In addition, Chuck Schumer, the Senate minority leader, has questioned Washington's repeatedly suspension of Huawei bans as mentioned above. He said, "If President Trump and his Commerce Department agree that Huawei is a national security threat, they should start acting like it. Every day President Trump is soft on Huawei (Keane, 2019)", which means to some extent, the so-called national security threat posed by Huawei is not objective, but comes from the construction of Washington. A theorist of the Copenhagen School may see this as a typical process of securitization. The leader and his ruling group construct a security issue through speech acts, which may not necessarily be an objectively existing threat, and proposes the urgency of taking countermeasures that beyond the original agenda, in order to obtain the audience's recognition of their behavior.

#### 4.2.3 The Theoretical Application of Securitization Theory

This section will follow the analytical framework of Securitization theory to find out how the US government securitize Huawei's business, through discourse analysis of the documents published by Washington and the public statements of Trump and his team related to Huawei. And then give an evaluation of the whole securitization process.

#### **The Securitization Process**

The first "National Security Strategy" during Trump's tenure that was released by the White House on 2017 December 18, in which China was mentioned 33 times, comprehensively involving various aspects such as economy, military, science, technology and international influence. Trump first emphasized the importance of economic security and information security to US national security, like,

"Economic security is national security" (Trump, 2017, p.17).

"Data...will shape US economic prosperity and our future strategic position in the world. The ability to harness the power of data is fundamental to the continuing growth of America's economy, prevailing against hostile ideologies, and building and deploying the most effective military in the world" (Trump, 2017, p.3).

"...A strong, defensible cyber infrastructure fosters economic growth, protects our liberties, and advances our national security" (Trump, 2017, p.13).

Accordingly, Washington's allegations of China's high-tech industries, especially Huawei's threats to US national security, are divided into two main paths. On the one hand, Huawei's leadership in 5G construction and its "close" contact with the Chinese government have made its business activities threaten the economic security of the US. On the other hand, the security risks of Huawei's equipment and 5G network service deployment are serious threats to the data and information security of the US government and citizens.

In Path One, Trump emphasized the importance of developing emerging technologies to maintain the competitiveness of the US, which can promote industrial development and create jobs to ensure economic security. He stated,

"To maintain our competitive advantage, the United States will prioritize emerging technologies critical to economic growth and security, such as data science..." (Trump, 2017, p.20).

It can be seen that one of the reasons why Washington has been continuously restricting the high-tech industries of rising competitors is that these emerging technologies will destroy the competitive advantage of the US and threaten its economic security. In this case, the data science in the 5G construction led by Huawei is the source of threats to the US economic security.

Meanwhile, Trump accused China of threatening US economic security through IP theft and technology transfer. He said, *"Every year, competitors such as China steal U.S. intellectual property valued at hundreds of billions of dollars... In addition to these illegal means, some actors use largely legitimate, legal transfers and relationships to...fill their capability gaps and erode America's long-term competitive advantages " (Trump, 2017, p.21).* 

IP theft and forced technology transfer has always been a key issue for Washington to blame China. Trump directly saw the threats to economic security caused by these actions as the threats to national security, and constructed them into a major threat to the safety of the state and citizens, so that provided a basis for the emergency actions beyond the previous rules of procedure later.

For these emergency actions, Trump has already mentioned them in his national security strategy, such as,

*"…*this Administration will work with the Congress to strengthen the CFIUS to ensure it addresses current and future national security risks "(Trump, 2017, p.22).

*"We will consider restrictions on foreign STEM students from designated countries to ensure that intellectual property is not transferred to our competitors …" (Trump, 2017, p.22).* 

These actions were turned into reality later, and became the main policy outputs of the US government in the Trump era to restrict the Chinese high-tech industry represented by Huawei.

In Path Two, Trump constructed that Washington is currently in a situation where information and data security is threatened. Such as,

*"Federal networks also face threats ... The government must do a better job of protecting data to safeguard information and the privacy of the American people" (Trump, 2017, p.12).* 

It can be seen that Trump believed that the government's protection of information is to safeguard the security of the American people. Since Huawei cannot provide equipment and services that Washington trusts, the use of Huawei's related products exposed governmental and personal data to danger. It also provided a suitable reason for future mandatory measures against Huawei's potential threat to US information security. Furthermore, Trump directly pointed out China's dangerous actions in obtaining information, as,

"China gathers and exploits data on an unrivaled scale and spreads features of its authoritarian system, including...the use of surveillance..." (Trump, 2017, p.25).

In fact, such a statement constructed a logic that the Chinese government spares no effort to illegally monitor and obtain information on a global scale, so that guided its audience to regard communications equipment manufactured by Chinese enterprises as a tool for the Chinese government to the measure of data theft, especially when this company has an ambiguous relationship with the CCP. Similarly, Trump also foreshadowed the measures he took in the future by saying such,

"The United States will impose swift and costly consequences on foreign governments, criminals, and other actors who undertake significant malicious cyber activities" (Trump, 2017, p.13).

Trump emphasized intensity and effect of the implementation of these measures, thus made them as emergency actions established by the securitization actors to respond to existential threats.

It can be seen that Trump included economic security and information security in national security, and gradually conveyed to the audience the threats posed by Huawei's business practices to economic as well as information security, thus constructing a securitization process to Huawei.

Also, it is stated that in the Executive Order signed by Trump, "I further find that the unrestricted acquisition or use in the United States of ICT or services designed, developed, manufactured, or supplied by...foreign adversaries... with potentially catastrophic effects, and thereby constitutes an unusual and extraordinary threat to the national security, foreign policy, and economy of the United States. (Trump, 2019)". Trump deepened the impact of this threat on national security by dramatizing the consequences of the use of foreign adversaries' communication equipment. Further, Trump stated, "This threat exists both in the

case of individual acquisitions or uses of such technology or services (Trump, 2019)". He promoted this threat from the national level to the individual level through speech acts, so as to construct a clearer understanding of this urgent threat to individual audiences. Accordingly, Trump stated, "Although maintaining an open investment climate in ICT ... is important for the overall growth and prosperity of the United States, such openness must be balanced by the need to protect our country against critical national security threats (Trump, 2019)". It can be seen that Trump has securitized Huawei's business to the public through the previous construction process, made audiences aware of the severity of the threat, and further proposed that he has no choice but to impose restrictions that beyond the rules of free and open markets to protect the safety of the country and citizens. Under this kind of securitization construction, it has become a reasonable policy choice to put Huawei and more "threatening" Chinese technology companies on the Entity List. In addition, although Trump has shown "self-contradiction" to a certain extent, emphasizing, "You look at what they (Huawei)` ve done from a security standpoint, a military standpoint. Very dangerous (BBC, 2019)" on one hand, but wanting US companies "to be allowed to do business (Freifeld & Stone, 2020)" on the other hand. However, this is precisely Trump's way to keep the continuous securitization to Huawei. As he said, "I mean, things are put on my desk that have nothing to do with national security (Freifeld & Stone, 2020)", which from another point of view, bans that have not been lifted yet are really based on the consideration of national security. In other words, theorists of the Copenhagen School would think that Trump is now undergoing a process of partial desecuritization, during which resuming normalization of non-emergency situations. However, for the still-urgent matters of Huawei, such as 5G construction, IP theft, and state-owned capital support which threats to US information and economic security, Trump maintained his securitization construction and continued to concentrate resources and mobilize audiences to treat this existential threat with policies that exceeds the general rules of procedure.

Trump's administrative team has followed the similar securitization paths. As the Secretary of State of the Trump Administration, Michael Pompeo also mentioned in his speech to Silicon Valley employees at the Commonwealth Club in California, "... even if the CCP gives assurances about your technology being confined to peaceful uses, you should know there is enormous risk, risk to America's national security as well (Pompeo, 2020)". He specifically pointed out that "...China's rampant theft of intellectual property is real (Pompeo, 2020)" and will "take down some of that competitive advantage that is driven by the state-owned enterprises inside of China (Pompeo, 2020)" in the next phase trade negotiations with Beijing on the one hand, which proves that China's high-tech enterprises have become threats to US economic security based on their theft of IP rights and the backing government support. On the other hand, he continued to say, "... we`re putting our allies and partners on notice about the massive security and privacy risks connected to letting Huawei construct their 5G networks inside of their countries... This is technology that the CCP will have access to this information (Pompeo, 2020)", which directly constructs Huawei's 5G network facilities as a tool for the CCP to obtain personal information and privacy, resulting in serious threats to information security. Meanwhile, he saw Huawei's 5G technology as the same as Soviet technology, based on the saying of "...this is an imperfect analogy... but none of us would have installed Soviet technology (Pompeo, 2020) ".

Similarly, at the aforementioned hearing attended by directors of the US intelligence agencies in 2018, Warner as the Vice Chairman of the Committee on Intelligence stated that, *"In recent years we've seen major (China's) technology firms whose rise is attributed in part to their illicit access to US technology and IP (Select Committee on Intelligence, 2018)"*, which follows the Path One construction to Huawei. Later, FBI Director Wray said in response to Senator Cotton's question about risks of using Huawei products in the US, *"... we're deeply concerned about the risks of allowing any company or entity that is beholden to foreign governments that don't share our values...It provides the capacity to maliciously modify or steal information, and...the capacity to conduct undetected espionage (Select Committee on Intelligence, 2018)"*, which follows

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the Path Two and further securitized the Chinese government behind Huawei, attributing the information insecurity brought by Huawei to the control of a government with different values from the US. In addition, Senator Cotton also asked the six directors to raise their hands if they themselves or if they would like to suggest US citizens to use Huawei products, but no one did. This also conveys the urgency of Huawei's threat to national security from another perspective.

Following the above logic, in the Path One securitization of Huawei, the US Department of Justice mentioned "*Theft*" for 9 times, "*Steal*" or "*Stolen*" for 17 as well as "*Fraud*" for 38 times in the 23 prosecutions to Huawei and Meng unsealed in January 2019. For a company, whether the theft of trade secrets or fraud in its business is a serious violation of market rules. Based on the current progress, we can't determine whether Huawei has ever committed any of these illegal acts before making a final decision. However, such prosecutions were filed at a time when the conflict between the Washington and China's technology industry was intensifying. The image of Huawei, which became a national security threat constructed by Washington is being seen by audiences all around the world. It greatly increases the possibility of Huawei being boycotted by other countries. This case made Huawei famous for being positioned as a criminal rather than an innovative company and put its business in danger in the US and EU.

The FCC as an independent agency under Congress, which is responsible for the management of radio, television and communications in the US, has played a role in the Path Two construction of Huawei as an information security threat. In the statement of the aforementioned proposal that was eventually signed by President Trump to ban US rural carriers from using federal subsidies to purchase Huawei's equipment and services, Chairman Ajit Pai said, "Hidden 'back doors' to our networks in routers. switches—and virtually any other type of telecommunications equipment—can provide an avenue for hostile governments to inject viruses, launch denial-of-service attacks, steal data, and more... (Pai, 2018)". He clearly showed the serious consequences of this threat to the audience, and let them feel the imminence of the threat, thus constructing the

audience's need for the government to take emergency actions to deal with this threat. Although he used "certain communications equipment providers" instead of Huawei in the statement, from the perspective of the legislation signed by Trump afterwards, only Huawei and ZTE were removed from the US government subsidy list.

In addition, Washington's securitization construction of Huawei does not be limited domestically. Pompeo said in an interview with FOX Business on February 21, 2019, "Huawei technology also presents security risks to Europeans... We can't forget these systems were designed with express work alongside the Chinese PLA (Limitone, 2019)", which expresses to European audiences that they are under the same threat by unwarrantedly emphasizing the relationship between Huawei and the PLA. Trump's Chief Technology Officer Michael Kratsios also publicly accused that, "China stole our intellectual property... forced companies to hand over valuable technology in order to access their market. And now, they require access to all data, information, and secrets contained on any server in China (Kratsios, 2019)", in order to construct Chinese technology industries including Huawei as threats to both economic security and information security. Further, he proposed to European allies, "... if we don't act now, Chinese influence and control of technology will not only undermine the freedoms of their own citizens, but all citizens of the world (Kratsios, 2019)", which emphasizes the necessity of emergency action against this threat at the global level. The Secretary of Defense Mark Esper further stated in the Security Conference in Munich in February, "Reliance on Chinese 5G vendors... could render our partners` critical systems vulnerable to disruption, manipulation, and espionage. It could also jeopardize our communication and intelligence sharing capabilities, and by extension, our alliances (Esper, 2020)", which can be seen as the exaggeration to the risk by doing business with Huawei. Washington dramatized that the threat posed by Huawei is so urgent that the US has no choice to carry out emergency actions even at the expense of the alliance. Such speech acts show Washington's attempts to pass on the awareness of Huawei's threat to European audiences.

From the above, Trump with his administrative team constructed Huawei as an existential threat to US national security and even global security to domestic and international audiences through two securitization paths. In Path One, Washington exaggerated the IP theft, forced technology transfer, and state-back unfair competition that Huawei's business contained, and believed that these acts seriously threatened economic security. In Path Two, Washington dramatized Huawei's close relationship with the Chinese government and CCP and so that determined that Huawei's equipment and services have reserved backdoors for data theft and espionage without any evidence. Such hidden danger is a threat to user's information security. While economic security and information security have directly become components of national security in Trump's National Security Strategy, which has made Huawei a threat to national security.

#### **Evaluation of the Securitization to Huawei**

Admittedly, Washington's securitization speeches to Huawei are not limited to those mentioned above, but basically follow the similar approach. A securitization theorist would think that there are relatively clear components in Washington's securitization process. Obviously, the securitization subject is President Trump with his administrative team, including cabinet members, as well as Departments and other independent agencies such as the FBI and the FCC. As the ruling team of the federal government, their securitization reference is authoritative. Even if no direct evidence is provided to prove the security risks posed by Huawei, multiple actors continuously express the potential threat posed by Huawei is enough to cause the suspicion of audiences.

The entire administrative team has presented to the general audience, including US citizens, companies and allies, that the national security of the US and even the international security, has been threatened by Huawei's unfair competition and the provision of unsafe equipment in more and more countries. As the referent object emphasized in Securitization theory, the national security of the US and other countries can be expanded to cover more categories so that directly related to the property and personal security of enterprises and people, just as Trump has done. In securitization speech act posed by Washington, they grasped the key points in the conflict related to Huawei accurately. For the economic field, in a country with a highly liberalized capitalist market and high awareness of IP protection as the US, the unfair competition backed with state funds, the theft of IP and the forced transfer of technology are all serious violations of market rules and absolutely intolerable behaviors. For the field of information technology, personal data and privacy security are the most basic requirements a person has for his communication equipment and network. No users would choose devices and services that can cause the leakage of their privacy. Therefore, Washington uses rhetoric descriptions to exaggerate the business of Huawei by saying that it had the most sensitive and unacceptable behaviors in these two fields, so that audiences can quickly and effectively reach a consensus that it would be very dangerous if unconventional measures are not made to stop the spread of Huawei.

Further, it is actually the construction of the securitization to the broader Chinese government and the CCP behind Huawei. The source of the improvement of the competitiveness of Chinese technology companies is the state-supported high-tech industry development policy. The difference in ideology and values has deepened the US suspicion that China has incentive to reserve a "back door" to access to information and data illegally. All these have made Washington more and more convinced that China is an existential threat to its national security. The reasons and motives for implementing these policies restricting China's technology industry through the way of securitizing Huawei and even China during the Trump era will be answered in the next chapter by incorporating Neoclassical Realism theory into the analytical framework.

To sum up, Washington defined Huawei and the Chinese regime as an existential threat to US national security during the Trump era. The group of leadership attempts to present threats posed by Huawei and China's technology industries to its domestic and international audiences and so that establish a security consensus through the speech acts contained in public statements. As theorists of the Copenhagen School believe that securitization has inter-subjectivity, the success of the process depends on whether the audience shares the same threat perception with the securitization subject. From the results, a poll showed that 74% of Americans believe that Huawei should be removed from the US (5G Action Now, 2020). It can be said that the domestic effect of Washington's securitization process on Huawei is very significant.

However, from the perspective of the international audience, only Australia and New Zealand in Five Eyes (an international intelligence-sharing group established in 1946) have clearly stated that Huawei's business is prohibited nationwide. Canada, also a member of Five Eyes has not decided whether to ban Huawei or not yet. The UK as another member, made it clear that Huawei was allowed to construct within 35% non-sensitive parts of the country's 5G network (Sandle & MacLellan, 2020). In addition, the EU allows its member to decide whether to use Huawei's technology (Chee, 2020). For now, the EU countries basically formulated laws and regulations to ensure the safety of their domestic 5G network construction after Huawei was banned in the US, but there is no restriction on it. In other regions, only Japan has banned public procurement of Huawei and ZTE (Kyodo, 2018). It can be seen that only a few international audiences have reached a threat consensus with Washington, and the effect of its securitization is not obvious yet.

### 4.3 Why Trump Administration Seek More Restriction?

Following the analysis framework of Securitization theory used in the previous Huawei case, we can find that the Trump-era US government constructed Huawei as an existential threat to US national security to let domestic and foreign audiences share this security perception and further get support of the policy output from them. As Buzan believes, the fundamental motivation for a securitization subject is the fear of being deprived of our right to survive by the other party (Buzan et al., 1998, p.26). The reason why Washington during the Trump era increased the degree of securitization against threats from China and Huawei, is precisely because this existential threat becomes larger or more imminent, leading to a greater deprivation of the US's right to survive from the perspective of Securitization theory. This logic has a strong consistency with the neoclassical realist's way of thinking. A neoclassical realist would think that this change in "existential threat" comes from changes in the power distribution in the international system and changes in the clarity of signals provided by the system. Meanwhile, the "intersubjective" speech act made by the securitization subject to audiences, which is precisely the attempt of policy makers to change the influence of domestic intervening variables on their response to systemic-level stimuli from the perspective of Neoclassical Realism. According to such analytical logic, the main research question of this thesis can be further answered under the analytical framework of Neoclassical Realism.

#### 4.3.1 Systemic Level

#### **Power Distribution**

#### -Technology

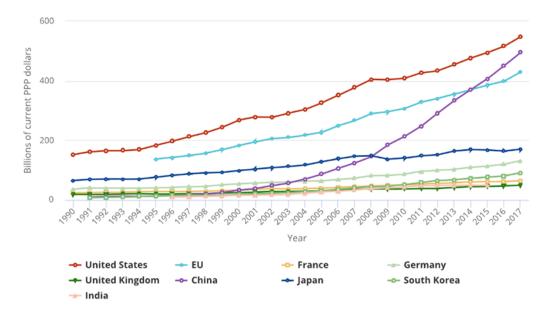
A neoclassical realist believes that changes in power distribution at the level of the international system are the primary factors affecting foreign policy output. The core conflict between Washington and Beijing technology industries, definitely came from the relative change of Sino-US technology power.

The US has established its position as a global leader in S&T by increasing R&D expenditure and attracting outstanding talents from Europe after the WW II. With its technological advantages, American multinational companies allocate resources in the world market, establish a global industrial chain and occupy the upper reaches of the value chain to obtain high profits. Therefore, this provides support for its widespread deployment of military forces (Heath & Thompson, 2018). In the 1980s, under the guidance of Reform and Opening up strategy, China's sixth Five Year Plan (1981-1985) created a "Computer and Large Scale IC Lead Group" (Capri, 2020, p.61), which started China's pursuit and development of advanced technology. China has attracted foreign companies to enter the market through a series of policies. While

relying on the huge demographic dividend to become a "world factory", China has learned and absorbed advanced technology in a cooperative manner, and further promoted independent R&D process. This development model of China in the technology industry can be summarized as "IDAR", which stands for "Introducing-Digesting-Absorbing-Reinnovating" (Capri, 2020, p.61). The independent innovation of the technology industry represented by the last "R" is the most important of the four for Beijing. The MLP promulgated in 2006 clearly expressed Beijing's requirements for enhancing innovation capability. Although technology is not new to China's national strategy, President Xi Jinping paid more attention to it. Former leaders of China mainly regard the purpose of developing technology as catching up with the West, while Xi's vision is to make China a global technology leader and so that placed technology at the center of his plan of "Chinese dream". The MIC 2025 further expressed the determination of the Chinese government during Xi to achieve the goal.

Under the guidance of these policies, Beijing has paid more attention and material support to the development of S&T. R&D expenditure is an indicator that can reflect the growth potential of a country's S&T strength. As we can see from Figure 4-1, China's R&D spending has risen rapidly since the 21st century, and surpassed the EU in 2015 to climb to the second of the world. The average annual growth rate of China's R&D expenditure is 18%, which is much higher than the US's 4%. It is estimated that MIC 2015 includes CCP's commitment to provide funds of \$ 300 billion within ten years to the technology industry (Capri, 2020, p.8). Also, a well-known China National IC (Integrated Circuit) Plan issued by Beijing in 2014 called for \$150 billion in funding, while US companies only spent \$32.7 billion in this area in 2018 (Capri, 2020, p.31). Further, in response to Washington's restrictive policies, the Chinese Ministry of Finance announced a five-year tax relief policy for semiconductor manufacturers and software developers in May 2019 (Segal, 2019).

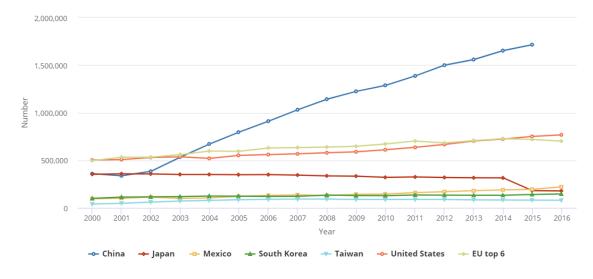
Figure 4-1: Gross domestic expenditures on R&D of selected countries: 1990-



Source: National Science Foundation. https://nsf.gov/statistics/seind/

In addition to R&D funding support, scientific research is inseparable from a strong team of engineers and scientists. Beijing has long regarded talents as the first resource to promote independent innovation, which can be seen in the National Medium and Long-Term Talent Development Plan (2010-2020). In terms of scientific research personnel, as Figure 4-2 shows, from 2000 to 2015, the number of people with bachelor's degrees in science and engineering (S&E) increased from 359,000 to 1,716,000. In the same period, this number in the US increased from 483,000 only to 751,000.

Figure 4-2: S&E first university degrees of selected countries: 2000 - 2016



Source: National Science Foundation. https://nsf.gov/statistics/seind/

Under such a supportive environment and talent reserve, the strength of China's technology industry has increased significantly. Invention patents can best represent the level of technological innovation. According to a report released by the World Intellectual Property Organization (WIPO), China submitted 58,990 applications through the Patent Cooperation Treaty (PCT) system in 2019, surpassing the US as the largest user of the system (WIPO, 2020). Since the PCT system was put into operation in 1978, the US has always been at the top of the list. In fact, WIPO received only 276 applications from China in 1999, which has increased 200-fold in 20 years. In particular, Huawei with the results of 4,411 patent applications ranked first among the global companies for three consecutive years (WIPO, 2020). Moreover, three of the top ten in the list are from China and only one for American company (WIPO, 2020). Chinese technology companies represented by Huawei have developed rapidly in recent years and have become increasingly competitive in the world market. Fortune's list of the world's top 500 companies in 2019 includes 37 companies in the technology industry and 5 of which are from Mainland China (Fortune, 2020). The list of Unicorn companies in 2019 shows that China ranked first with 206 in it, following is the US of 203 (Hurun Research Institute, 2019). It can be seen that the relative enhancement of the strength of China's technology industry has become the main source of Washington's perception of China's threats.

What worries Washington even more is that the US is losing its status as a rule maker in the technology industry. As a telecommunications equipment provider, Huawei now is in the global leading position of 5G communications. 5G is the abbreviation of the 5th Generation mobile communication technology. It has obvious advantages in terms of the using speed and the number of connected devices compared with 4G. China began the deployment of 5G construction in 2013. In the 5G field, the Standards-Essential Patents (SEPs) are key indicators for measuring the discursive power in standard setting. With first-mover advantage and government promotion, the number of China's SEPs has been declared to be 6,783, contributing 32103 to the 5G standard, and the number of engineers participating in the 3GPP (a group of standards organizations of mobile telecommunications) meetings is 6512 as of November 2019 (IPlytics, 2019), all above ranked the first of the world. At the enterprise level, Huawei has declared 3,325 SEPs, contributed 19,473 contributions to 5G standards, and has 3,098 engineers participated in 3GPP meetings, surpassing all other companies (IPlytics, 2019). All these have made Huawei and China have the power of making orders that the US cannot obtain in 5G construction and global deployment. Huawei's 5G competitiveness is now ranking first among the top five equipment vendors (GlobalData, 2019). It has currently won 91 5G commercial contracts, surpassing Ericsson and Nokia and ranking first in the world (Huawei, 2020a). As of the end of 2019, 62 telecom operators in 34 countries have officially announced 5G commercial use, and Huawei has supported 41 of them (Huawei, 2020b). In addition, Alibaba has also become one of the world's leading technology companies in electronic payment, blockchain and cloud computing, as well as DJI is leading the consumer drone market. China's next-generation technology leadership is taking shape in these areas, making the US increasingly worried about the loss of its inherent technological advantages.

However, objectively speaking, there is still a big gap between China and the US in the development of the technology industry. Although the growth rate of China's R&D expenditure is relatively fast, the R&D intensity, which is the proportion of

R&D expenditures to GDP, is still low. China's R&D intensity in 2018 was 2.186, which was lower than the average of 2.401 in OECD countries and lags behind 2.826 of the US (OECD, 2020). In terms of patent applications, the discard rate of Chinese patents is as surprising as the growth rate of the application number. Statistics in 2017 shows that more than 60 percent and 90 percent of China's utility-model and design patents, respectively, were discarded within five years, while the utilization rate of US patents after five years still reaches 86% (Lo, 2019). In terms of scientific research talents, the number of Chinese S&E PhD recipients still lags behind the US (Trapani & Hale, 2019). Meanwhile, China still has a talent gap of nearly 5 million in high-tech fields, including quantum science, biotechnology and artificial intelligence (AI) (Zwetsloot & Peterson, 2019), who can only be introduced abroad. Although China has the plenty of foreign talents recruitment programs, many foreign researchers are reluctant to stay in China for political, cultural and linguistic reasons (Zwetsloot & Peterson, 2019), which makes this talent gap difficult to be filled. In terms of technology companies, 12 of the aforementioned companies in Fortune's list are American companies, which makes the US still the largest profit earner in the technology industry. At the same time, since Chinese technology companies have long been protected by the government in the domestic market, many of them except for several leading companies lack international competitiveness, which is known as the Galapagos syndrome (Capri, 2020, p.67).

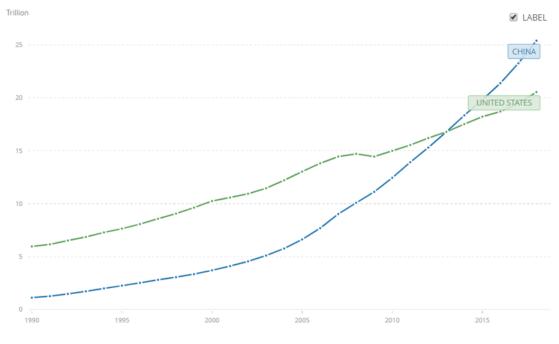
Even more serious is that in the field of production of semiconductors, which is almost the core components for all next-generation key emerging technology construction, China relies heavily on foreign suppliers, especially American companies that occupy 45% of the global semiconductor market share (Capri, 2020 p.20). China has always been the world's largest importer of semiconductors, and the imports have even exceeded that of oil. China's semiconductor manufacturers can only meet 9% of domestic demand, leaves the rest to be imported, and 56.2% of which are from the US (Capri, 2020 p.23). Chinese companies are generally only responsible for Assembly, Testing and Packaging (ATP) in the global industrial chain of the semiconductor industry, which is at the low-value end of the value chain (Capri, 2020 p.17). Even the current domestic independent R&D leader, Huawei's self-developed chip subsidiary HiSilicon, relies heavily on the IP of a UK chip designer Arm Holding, which was recently acquired by Softbank, and materials from TSMC, which relies on US manufacturing technology for its high-volume commercial production lines (Capri, 2020 p.26). Thus, the key knowledge and core technologies are controlled by the US or its allies. This has made Washington's restrictions on the Chinese technology industry very effective, especially the supply cut-off policy.

In summary, the speed and achievements of China's technology industry are constantly catching up with the US. In the next generation of emerging technologies, China has even further threatened the role of rule-makers inherent in the US. Although China and the US still have a large gap in the technology industry, the narrowing of this gap has made Washington realize that the international system is experiencing a redistribution of scientific and technological power. In addition, Beijing has recently further proposed plans for the construction of a series of new infrastructures in telecommunication networks, AI, and scientific research area, which will further promote the improvement of Beijing's strength.

#### -Economy

The development of technology has become the driving force of productivity growth and has a decisive effect on long-term economic growth, which has been discovered and proven by economists such as Robert Solow and Paul Romer (Whelan, 2014). Driven by the continuous development of S&T, China's economic strength has improved significantly in the 21st century. Especially in the post-financial crisis period, China's GDP growth rate is very alarming, surpassing Japan in 2010 and becoming the world's second largest economy (BBC, 2011). In terms of GDP based on PPP, as shown in Figure 4-3, China has already surpassed the US in 2014 and became the world's largest economy.

Figure 4-3: GDP(PPP) of China & US:1990-2018



Source: The World Bank.

https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.CD?locations=CN-US

Although China's GDP per capita ranks only 72 in the world by \$9,771, less than the world average standard of \$11,313, and further less than the US's 10th position at \$62795 (The World Bank, 2020). Washington is well aware that the industrial policy of supply-side structural reforms implemented by Beijing under the current "New Normal" of the Chinese economy can bring the potential growth, especially since Beijing's emphasis is on technological innovation. It is estimated that the growth rate of China's tech-driven New Economy in the past decade is about twice that of the overall economic growth, and it provides 20 times more jobs than traditional sectors (Yu, 2017). The improvement of high-tech innovation and industrial upgrading can change China's position in the current global value chain, and make it move forward in the upstream of the chain which is the position for developed countries. It will lead to a situation of competition with US interests. In addition, part of Washington's worry about the gradual gain of China's 5G leadership comes from economic considerations. The leading position of the US in the 4G era brings huge economic contributions and employment opportunities. It contributed \$100 billion in growth to US GDP, increased wireless-related jobs by 84% and brought in \$125 billion in revenue for US companies (Recon Analytics, 2018). The current trend of 5G leadership gradually shifting to China makes Washington increasingly feel the redistribution of China-US economic strength in the future. Furthermore, the benefits of 5G may be much greater than 4G. The direct contribution of 5G's leadership to China's GDP is estimated to reach 2.9 trillion RMB (\$409.5 billion) by 2030, and the indirect contribution will reach 3.6 trillion RMB (\$508.3 billion) (CAICT, 2019).

Thus, the continuous improvement of the Chinese economic power driven by the technology industry, especially the potential economic growth brought by the 5G leadership position, has made Washington's global economic hegemony greatly challenged by China's rise.

#### -Military

The increase in the level of S&T brought to the growth of military power is another major source of Washington's perception of China's threats. Technology is military development, verv important for especially in the fields of telecommunication network and AI. Countries that took the lead in making key technological breakthroughs may have asymmetric military advantages. Since 2009, China's military expenditure has continued to increase by 83% to \$250 billion in 2018, while the US spending fell by 17% during the same period, although it rebounded a bit in 2018 to reach \$649 billion (Floyd, 2019). While China's military expenditure is still far less than that of the US in terms of amount, Xi's pursuit of military power, especially military technology, has brought about obvious results. The PRC 70th anniversary parade in 2019 showed the most advanced weapons such as Dongfeng-41 intercontinental-range ballistic missile and WZ-8 supersonic reconnaissance unmanned aerial vehicle, as well as electronic warfare systems such as early warning radars, and satellite communications systems (Panda, 2019). Products of these new generations of military technology make China can reach potential adversaries across the globe (CBS News, 2019). This posed a huge threat to Washington and exacerbated the security dilemma, since its relationship with Beijing continued to deteriorate after Trump took office. The intervention of the US with its Asian allies on the sovereignty

issues of Hong Kong and Taiwan in China and the ongoing disputes over China's territories in the East and South China Sea have given China considerable incentives to develop military technology to enhance its defense capabilities. Furthermore, in the era when the most powerful weapons are controlled by the Internet, any country that dominates 5G technology will gain an absolute advantage in intelligence and military (Sanger et al., 2019). Therefore, this also constitutes another source of Washington's perception of the threat of the Chinese technology industry, especially ICT.

#### -International Influence

China has been adhering to international multilateralism and seeking more cooperation since being admitted to the WTO. Beijing has always been playing the role of a defender of the world order established by Western capitalist countries, mostly the US. The Belt and Road Initiative (BRI) proposed by Beijing under Xi's administration in 2013 drove the further increase of China's regional multilateral cooperation. Since then, the group of BRICS, the Forum on China-Africa Cooperation, and the RCEP have all shown that China's influence in the East Asian region and even the world is increasing. Furthermore, Beijing proposed the construction of Digital Silk Road (DSR) project under the BRI framework in 2015 and reformulated it at the 2019 Belt and Road Forum. Essentially, DSR is a plan for Beijing to establish communication infrastructure and data platforms in Asia, the Middle East, Europe, Africa and Latin America through brand new communication technologies (Wheeler, 2020). It signifies that China is using its technological advantages to create its own digital highway with its own standards to enhance its technological global governance capabilities. During this time, Trump embraced the concept of "America First" and successively withdrew from the TPP, the Paris Agreement, and the Intermediate-Range Nuclear Forces Treaty. During the outbreak of the COVID-19, Washington even suspended funding for the World Health Organization (BBC, 2020). Washington's willingness to participate in the management of international affairs and international governance is getting weaker. Or, the participation of the US in international affairs during the Trump era must be based on the unilateral premise that

the US obtains the greatest benefit, which led its international influence to decline. From the analysis of the previous Huawei case, we can also see that the securitization to Huawei is not so successful on the international level. In the previous tensive trade war, many US allies have also become targets of Trump's tariff threats and imposition, which has led to corresponding changes in the international influence of China and the US.

#### Clarity& Permissive/Restrictive Strategic Environment

The increase in China's overall national strength has changed the power distribution in the international system, which sent a signal of "Chinese threat" to Washington. And this signal became clearer during the Trump era, making Washington adopt stricter restrictions.

Firstly, the restrictive policies of the US do not seem to have the expected effect on the Chinese technology industry. With the support of various national policies issued by Beijing, China's technology industry has maintained rapid development even in a restricted environment for a long time. In particular, the resilience of the Chinese technology industry has made Washington feel more and more threatened. Take Huawei as an example, the Chinese ICT giant still achieved a 19.1% overall revenue growth rate under the blockade in Washington (Huawei, 2020c). In the situation that Google suspended its software supply, Huawei announced its own operating system HarmonyOS that had been developed internally to replace Google's Android within three months (Boom, 2019). Meanwhile, Huawei has started to produce 5G base stations that do not contain US components after being completely cut off by the US provider (Jiang, 2019). These responses from Huawei have made Washington receiving clearer signals of the existential threats from the Chinese technology industry to the inherent technological advantages of the US, so that making policies of increasing the intensity and expanding the scope of restrictions being included in Trump's policy pool.

Secondly, the so-called technology transfer has made more relative losses

undertaken by American companies or more relative benefits brought to the Chinese technology industry, making Washington's perception of the threats brought by technology transfer clearer. In fact, China made commitments that it would not require foreign companies to transfer technology in exchange for the opportunity to enter the Chinese market when China joined the WTO (Brum, 2019). Such kind of behavior was banned repetitively in the Foreign Investment Law published in 2019. Therefore, the mandatory technology transfer that Washington has been complaining about is not allowed and also illegal in China. In fact, China's payments of licensing fees and royalties for the usage of foreign technology have increased four-fold in the last decade and ranked fourth globally (Lo, 2019), which means most of the so-called forced technology transfer are legally paid usage. Actually, the reason why multinational companies enter the markets of other countries is fundamentally because they think it is profitable after the weigh of pros and cons. If the risk is greater than the return, then companies will unconditionally withdraw from this market. From this perspective, the "technology transfer" can be seen as one of the costs of multinational companies, and they voluntarily accept it in pursuit of greater economic benefits. In fact, many factors have enabled multinational companies to gain more profits when they enter the Chinese market. First, provincial governments used various preferential policies, such as tax breaks, cheap rents, and subsidized loans, to attract foreign companies to enter China because of the assessment of officials (Gros, 2019). Second, China's huge consumption potential attracts multinational companies to enter in order to more directly conduct production according to the needs of Chinese consumers. Third, China's relatively cheap and well-trained labor force has reduced the production costs of multinational companies in developed countries. However, recently provincial officials were no longer assessed by FDI attraction so the incentives for multinational companies are getting less (Gros, 2019). Meanwhile, with the improvement of China's independent R&D, the market competitiveness of Chinese products is increasing, so that makes the market share of foreign products relatively reduced. In addition, the gradual disappearance of China's demographic dividend has also led to the reduction of the labor cost advantage of American companies in the Chinese market. These changes have made US multinational companies receive less revenue than before, resulting in Washington becoming more clearly aware of the threat posed by China's so-called forced technology transfer.

Thirdly, the new National Intelligence Law promulgated by Beijing in 2017 has made Washington increasingly worried about its intelligence security. It emphasizes that every Chinese citizen is responsible for national security. According to the law, national intelligence agencies can "request relevant organs, organizations, and citizens provide necessary support, assistance, and cooperation" and intelligence officials can "enter relevant restricted areas and venues, learn from and question relevant institutions, organizations, and individuals, and may read or collect relevant files, materials or items" (Canadian Security Intelligence Service, 2018). The promulgation of this law makes Washington believe that the Chinese government and CCP can legally require Huawei to provide the data and information it holds, which brings great insecurity to users, especially government users who have Huawei equipment and services in their national 5G construction projects. Although officials in Beijing continue to emphasize that the enforcement of intelligence laws will respect and protect human rights and the legitimate rights of individuals and organizations (Kharpal, 2019), such a typical event can still be regarded as a clearer signal of the threat of Chinese technology industry to US national intelligence and information in the eyes of neoclassical realists, which led to the tightening of the Trump administration's policies.

However, judging from the current situation, the US is still in a slightly permissive strategic environment, resulting in Washington not having no choice when making policies. As analyzed above, there is still a large gap between China's technological strength and that of the US. And the reason for this gap is structural, which means that China still needs a longer time and greater input to be able to avoid the influence of Washington in the production of core components and the development of core technologies, such as semiconductors. This also explains Trump's policy output of repeatedly giving Huawei suspensions. Although the threat of China's technology industry to Washington is getting bigger and closer, the policy pool to deal with this threat is not limited to just simply set restriction on it. Trump has stated that although Huawei "is something that is very dangerous", it can still be part of the deal with Beijing (BBC, 2019), which shows that Trump is trying to use Huawei as a bargaining chip for Beijing. As agreed in the current phase-one trade deal, China will increase the purchase of US manufacturing, energy, agriculture, and financial service products, which can improve the US trade deficit. Meanwhile, the complete ban of business with Chinese technology companies is expected to bring 18% market share loss and 37% revenue loss for US companies (Varas & Varadarajan, 2020). It is still important for Washington to continue to keep the ability of the US to obtain economic profits from the global value chain in order to maintain its position of global economic hegemony. Therefore, based on the above considerations, resuming some of the business activities of Chinese companies that have nothing to do with national security in the eyes of Trump has become one of the possible policy outputs of Washington at this stage.

In summary, the challenges and threats from the international system felt by the US during Trump's administration are becoming larger and clearer. The development of China's technology industry has driven the continuous growth of its comprehensive power, which has changed the power distribution in the systemic level, thus threatening the US hegemony position. Meanwhile, the resilience of China's technology industry and some adjustments of domestic policy as well as law in Beijing during this period have made Washington's perception of threats from China increasingly clear. It becomes an effective method for Washington to curb China's rise by increasing restrictive policy output towards China's technology industry. However, given that there is still a large gap between China's power and the US's, as well as the economic correlation between technology sectors of the two countries, the optimal policy choice for Washington is not "the more restrictive the better". Thus, the US also used these restrictions as bargaining chips in order to gain an advantage from China during trade negotiations. Meanwhile, Washington also seeks to properly lift

some restrictions on China's technology industry in areas unrelated to national security in order to maintain the US's ability to use global value chains to capture economic benefits.

#### 4.3.2 Domestic Level

The key difference between Neoclassical Realism and structural realism is that the former emphasizes the intervening variables, which are factors at the domestic level of the unit. They will affect the country's interpretation of changes in independent variables at the system level, thereby affecting the output of foreign policy.

#### Leader Images

The constitution and institutional framework of the US determine that the President and his administrative team have the decisive power for diplomatic and military issues, leading these issues always have strong personal characteristics (McCormick, 2019). This has been confirmed and strengthened since the Truman period, and is no exception in the current Trump period. First of all, Trump's self-awareness is particularly strong. He emphasizes the self-centered approach to life, which comes from his successful experience in implementing personal decision-making models in family businesses. Therefore, he insisted on "America first" and emphasized that the US should first consider its own interests when he came to power. This also explains the unilateral restriction policy when facing threats from the Chinese technology industry. Second, fickleness is one of the cores of Trump's personality traits. Trump is good at using changeable strategies in business negotiations, because he believes that he cannot let opponents understand his bottom line and strategic intent. But it is also worth noting that although Trump's negotiation strategy is constantly changing, his basic policy choices are usually unchanged, which have typical preferences to protectionist and populist. This explains that he first adopted strict restrictions on the Chinese technology industry, and then gave

suspension in order to seek greater benefits. But what remains unchanged is his perception of that China's rise needs to be contained to protect American interests. Third, concerning the vacancy of political experience before, Trump has a certain dependence on a small number of people in his team that he trusts in the field of national security and economic. Vice President Pence and Secretary of State Pompeo, as the top figures in the cabinet, are all hawks against China. Their criticisms of China are not only confined to the level of Sino-US trade, but have further increased to ideological issues. John Bolton, as the national security adviser during the period when Washington set more restrictions on the Chinese technology industry, is also a hawk. He always criticized the Obama administration's diplomatic weakness and even encouraged the US to abandon the "One-China Policy". Patrick Shanahan as the then acting Secretary of Defense also expressed his distrust of Huawei (Agence France-Presse, 2019). In addition, Peter Navarro, Director of the Office of Trade and Manufacturing Policy and Robert Lighthizer, the trade representative, are also hardliners with a tough attitude toward China on trade issues. It can be seen that the overall attitude of Trump and his team toward China shows the characteristics of radicalism and protectionism, which led to Washington's interpretation of China's rise and the relatively increase of its power in this period as a threat that needs to be resolved urgently.

#### **Strategic Culture**

Overall, the Trump administration's values and view of security generally show typical Republican features, which are pessimistic assessment of external security threats and challenges, the emphasis on the role of hard power in the guard of national security, and the maintenance of alliance relations (Cohen, 2018). Moreover, the current US domestic political elites have reached strategic consensus on China. Both the Republican Party and the Democratic Party believe to a certain extent that the Clinton's "Engagement" strategy towards China has completely failed. They think China has been trying to establish its own rules in the existing Western-led international system, and the rapid growth of China's power in recent years has prompted Beijing to show an increasingly aggressive offensive diplomacy. Under such circumstances, the US has to implement comprehensive strategic competition against China in the fields of economy, security, and ideology. These are confirmed in the description of China as "adversary" and "revisionist power" in the National Security Strategy of Trump. Therefore, Washington's restrictive policies are reasonable based on such strategic values to China.

#### **State-Society Relations**

Neoclassical realists believe that good state-society relations allow policymakers to relatively freely respond to changes in the international system in the way they deem appropriate. With the power of populism, Trump obtained a large number of votes from the white middle-and-low class labors who lived in the Rust Belt and considered themselves victims of globalization. Trade and fiscal policies of Trump, such as imposition of tariffs, tax cuts, and promotion of manufacturing return, are catering to the demands of those people who believe their jobs have been taken away. Although the average support rate for Trump's term of office is only 40%, which is the lowest among successive US presidents since 1937 (Wikipedia, 2020), the public has shown the most positive attitude towards the US economy in the past 18 years under the Trump administration (Snow & Schwartz, 2019). Furthermore, Trump has continued to securitize China's technology industry and Beijing since taking office, trying to further mobilize the public and promote people to establish a concept that China is a threat. According to a survey made by Pew Research Center, 60% of US respondents have an unfavorable opinion of China in 2019, which has reached its highest level ever (Silver et al., 2019). While American's awareness of China as a threat has also increased year by year. They believe that China as well as Russia would become the country that poses the greatest threat to the US in the future (Silver et al., 2019). Thus, it can be seen that in terms of economic and technology industrial issues involving China, especially in the field of S&T, Trump's administrative team

has reached a greater degree of consensus with the public through securitization speech acts. Such good state-society relations have enabled Washington to formulate corresponding policies based on systemic changes and individual interpretations by policymakers in areas that involve these issues, finally leading to the increase of restrictions on the Chinese technology industry.

To sum up, at the domestic unit level, the characters and experiences of Trump and his team members determine Washington's policy preference for curbing the rise of China to protect national interests and maintain the hegemony. Meanwhile, the domestic political elites in the US formed a consensus on the implement of comprehensive strategic competition to China's rise during this period, which further deepened Trump's awareness of China's threats. In addition, under the construction of Washington's securitization to China, civilians of the US have a high degree of support for the Trump administration's economic and industrial policies towards China, which also gives Trump more freedom to formulate restrictive policies that violate the free market economy based on his personal cognition and preferences.

#### 4.3.3 Policy Output

Changes in the relative power of China and the US in technology, economy, military, and international influence have made Trump feel more challenges from the international system. At the same time, the signal of threat posed by China's rising power is becoming increasingly clear during this period. The challenge from the systemic level is influenced by the image of the US domestic team of leadership and the strategic values, finally leading to the policy output with the support of the domestic society. Under the Trump administration, Washington imposed multiple levels of restrictions quickly and strictly on the Chinese technology industry on the one hand, but on the other hand, it also tried to use these restrictions as a bargaining chip, seeking to enhance the relative power of the US in other ways.

Judging from the range of theoretical explanations of neoclassical realists, the

dependent variable in our analysis is the medium-term foreign policy output of Washington under its grand strategy. As mentioned above, with the increase of China's independent R&D expenditure and industrial policy support, China's technology industry has actually risen since the end of the 20th century. Therefore, the current situation in which the Chinese technology industry represented by Huawei poses a threat to the leadership of the US technology should be under Washington's expectation rather than an emergency. The increase of such restrictions in the Trump era is also in accordance with the US's grand strategy of curbing the challenger to prevent it from continuing to rise and further threaten the US, in order to keep the technology edge and thus maintain the hegemonic position.

## **5.** Conclusion

The Problem Formulation of this thesis, "Why the Trump administration increased restrictions on China's technology industry?" is answered under the analytical framework of the Securitization Theory of Copenhagen School as well as Neoclassical Realism Theory, through the case study of Huawei and the securitization discourse analysis of the public statements made by Trump and his administrative team. The following will summarize key findings of this thesis.

First of all, in terms of the Trump administration's specific policies on China's technology industry, Washington's restrictions have been fully upgraded compared to the past. Trump not only increased the restrictions on the Chinese technology industry from the macro-national level and the micro-enterprise level, but also further extended to the exchange of talents, and even sought to manipulate other countries through rhetoric. The Chinese telecommunication giant Huawei was the main target of Washington during this period. By sorting out the Trump administration's restrictions on Huawei, I found that Washington tended to prevent Huawei from providing equipment and services to American customers and cut off business transactions between US companies and Huawei on the grounds of defending national security.

Similarly, Washington has advised and even threatened its allies to adopt the same. However, the security threats posed by emerging technologies are widespread, which has been proved in Washington's PRISM program. In fact, there is no evidence that Huawei's equipment or technology directly threatens the US national security. Therefore, following the analytical logic of the Securitization Theory under Copenhagen School, this is Washington's use of rhetoric speech acts to securitize Huawei and China's technology industry as national security threats to its people and allies, thus seeking support for its policies of intervening in a free market economy. Through the discourse analysis of the public statements of Trump and his executive team, I found that it was a successful securitization process to Huawei domestically, but didn't meet Washington's expectation internationally.

Trump found a suitable excuse for Washington to increase restrictions on the Chinese technology industry through securitization speech acts during this period. This also led me to think more about Washington's motives, which is also the core research question of this thesis. Therefore, I added the Neoclassical Realism theory and combined it with the Securitization theory to provide a more comprehensive answer to this question.

From the perspective of Neoclassical Realism, the change of power distribution at the international systemic level as well as the change in the clarity of the signals conveyed by the system and the type of strategic environment are the main reasons for Washington's increased policy efforts. With the increase of Beijing's independent R&D input and the support of a series of industrial policies, China's technological power has surged rapidly. While driven by the development of S&T, China's economic and military power have also increased significantly, resulting in Beijing's growing international influence. All these have led to a decline in the relative power of the US compared with China. Therefore, in order to maintain the position of the US in the international system, especially in the field of technology, stricter restrictive policies need to be implemented.

Meanwhile, some noticeable changes have made signal of challenges conveyed from the international system become increasingly clear during this period. First, the increasing resilience of the Chinese technology industry has made Washington's past restrictive policies ineffective. Second, the relative losses borne by US companies entering the Chinese market have increased as China's development of independent R&D. Third, the promulgation of China's National Intelligence Law has deepened Washington's concerns about the Chinese government and CCP forcing China's technology industry to provide data. All of these has led Washington to feel more clearly the threat posed by the rise of the Chinese technology industry, thus increasing the intensity of restrictions.

In fact, the emphasis of neoclassical realists on changes in the international systemic level has a similar manifestation in Securitization theory. Securitization theorists emphasize that the main motivation of securitization subjects comes from preventing their survival rights from being deprived by existential threats, which in this issue is China's technology industry. The reason Washington has increased its restrictions is precisely because this threat has become greater and more urgent.

Objectively speaking, given that there is still a considerable gap in power between China and the US, Washington is still in a slightly permissive strategic environment. This allows the Trump administration to still have a choice of relaxing some of the restrictions on relatively less core or urgent areas to maintain the ability of American companies to use the global value chain to obtain benefits, in order to enhance US economic power. The choice can be further used as a bargaining chip with Beijing to ask for more.

The pressure from the international system will eventually become a policy output through the influence of intervening variables at the domestic level, according to the analytical framework of Neoclassical Realism. From the domestic level, Trump's self-centered personality and skill of business bargaining have led to his emphasis on "America First" after he took office and a policy preference for greater restrictions on China. At the same time, because of his lack of political experience, his policy making is affected by the administrative team around him to some extent, who are mostly hawks. Meanwhile, the American political elites reached a consensus on Washington's strategic orientation towards China during this period, which is to implement comprehensive strategic competition. Such political values have further deepened Trump's perception that China is a threat. In addition, under the Washington's securitization construction towards China, the American citizens have a high degree of support for the Trump administration's economic and industrial policies against China, which also gives Trump more freedom to formulate intervention policies that obviously violate the free market economy based on his personal cognition and preferences.

As a result, the Trump administration's policy of increasing restrictions on the Chinese technology industry represented by Huawei and trying to seek more benefits through this restriction is a response to China's continued growth in its power and international influence during this time. However, the grand strategy of the US has not changed. Washington's policy output during this period is still to maintain the hegemonic position of the US in the international system and to contain the competitor who is posing imminent threats.

To sum up, the problem formulation of this paper has been answered more comprehensively. The increase in Chinese technology-driven power has changed the power distribution in the international system, making Washington feel a growing and imminent threat from China. Trump and his administrative team have sought the support domestically and internationally for Washington's policy of intervening the free market economy by securitization. Finally, the US increased restrictions on China's technology industry in order to directly contain China's rising and use them to seek more benefits from China in order to indirectly change the relative power.

# Bibliography

- 115th Congress. (2018). H.R.5515 John S. McCain National Defense Authorization Act for Fiscal Year 2019. *Congress.gov*. Retrieved from https://www.congress.gov/115/bills/hr5515/BILLS-115hr5515enr.pdf
- 5G Action Now. (2020, January 23). New Poll Shows 84% of Americans Believe Wining the 5G Race against China is Crucial. 5G Action Now. Retrieved from <u>https://5gactionnow.com/new-poll-012320/</u>
- Agence France-Presse. (2019, June 1). Too much risk in Huawei's ties to Chinese government, US defence chief says. *South China Morning Post*. Retrieved from <u>https://www.scmp.com/news/china/diplomacy/article/3012714/too-much-risk-hua</u> weis-ties-chinese-government-us-defence-chief
- Baldwin, D. A. (2016). Power and International Relations: A Conceptual Approach. Princeton: Princeton University Press.
- BBC. (2011, February 14). China overtakes Japan as world's second-biggest economy. *BBC*. Retrieved from https://www.bbc.com/news/business-12427321
- BBC. (2019, May 24). Trump says Huawei could be part of trade deal. BBC. Retrieved from https://www.bbc.com/news/business-48392021
- BBC. (2020, April 15). Coronavirus: US to halt funding to WHO, says Trump. BBC. Retrieved from https://www.bbc.com/news/world-us-canada-52289056

Behsudi, A. (2020, February 10). U.S. chip firms fear Trump's screws on Huawei is bad for business. *Politico*. Retrieved from <u>https://www.politico.com/news/2020/02/10/us-chip-firms-fear-trumps-screws-on-</u> huawei-is-bad-for-business-113222

Boom, D. V. (2018, February 14). Don't use phones from Huawei or ZTE, FBI director says. *Cnet*. Retrieved from <u>https://www.cnet.com/news/huawei-zte-fbi-chris-wray-nsa/</u>

- Boom, D. V. (2019, August 9). Huawei unveils its Android replacement and names it `Harmony`. *Cnet*. Retrieved from <u>https://www.cnet.com/news/huawei-unveils-its-android-replacement-and-names-i</u> <u>t-harmony/</u>
- Brown, S. (2020, March 13). Trump signs law barring rural carriers from using Huawei gear. *Cnet*. Retrieved from <u>https://www.cnet.com/news/trump-signs-law-barring-rural-carriers-from-using-hu</u> <u>awei-gear/</u>
- Brum, J. (2019). Technology Transfer and China's WTO Commitments. Georgetown Journal of International Law, 50(3). Retrieved from <u>http://search.proquest.com/docview/2312507708/</u>
- Buzan, B. (1991). People, states and fear: An Agenda for International Security in the Post-cold War Era / (2. ed.). New York: Harvester Wheatsheaf.
- Buzan, B., et al. (1998). Security: A New Framework for Analysis. Boulder, Colo: Lynne Rienner Pub

- Buzan, B., & Hansen, L. (2009). *The Evolution of International Security Studies*.Cambridge: Cambridge University Press.
- CAICT. (2019). 2020 中国 5G 经济报告. CAICT. Retrieved from http://www.caict.ac.cn/kxyj/qwfb/ztbg/201912/P020191213608761136661.pdf

Canadian Security Intelligence Service. (2018). *China and the Age of Strategic Rivalry.* World Watch: Expert Notes series publication No. 2018-05-02. Retrieved from <u>https://www.canada.ca/content/dam/csis-scrs/documents/publications/CSIS-Acad</u> emic-Outreach-China-report-May-2018-en.pdf

- Cao, S. (2019, May 29). How Trump's Huawei Ban Will Affect US Consumers Beyond Smartphones. *Observer*. Retrieved from <u>https://observer.com/2019/05/huawei-ban-affects-american-consumers/</u>
- Capri, A. (2020). Semiconductors at the Heart of the US-China Tech War. *Hinrich Foundation*. Retrieved from <a href="https://hinrichfoundation.com/trade-research/global-trade-research/thought-leader\_ship/semiconductors-at-the-heart-of-the-us-china-tech-war/">https://hinrichfoundation.com/trade-research/global-trade-research/thought-leader\_ship/semiconductors-at-the-heart-of-the-us-china-tech-war/</a>
- Cassella, M. (2018, June 15). Trump amps up China trade war with tariffs on high-tech imports. *Politico*. Retrieved from <u>https://www.politico.com/story/2018/06/15/trump-tariffs-chinese-high-tech-goods</u> <u>-648965</u>
- CBS News. (2019, October 1). China uses Communist Party's 70th anniversary to show off new high-tech missiles. *CBS News*. Retrieved from <a href="https://www.cbsnews.com/news/china-parade-70th-anniversary-communist-party-new-high-tech-missiles-hypersonic-df-17-today-2019-10-01/">https://www.cbsnews.com/news/china-parade-70th-anniversary-communist-party-new-high-tech-missiles-hypersonic-df-17-today-2019-10-01/</a>

- Chee, F. Y. (2020, January 29). EU deals another blow to U.S., allowing members to decide on Huawei's 5G role. *Reuters*. Retrieved from <u>https://www.reuters.com/article/ idUSKBN1ZS163</u>
- Christensen, T. J. (1996). Useful Adversaries: Grand Strategy, Domestic Mobilization, and Sino-American Conflict, 1947-1958. Princeton, NJ: Princeton University Press.
- Clover, C. (2014, July 9). Tech sector caught in war of words over US-China spying claims. *Financial Times*. Retrieved from <u>https://www.ft.com/content/d955f660-0719-11e4-b0d3-00144feab7de</u>
- CNET News staff. (2019, June 29). Trump to let US firms sell tech to Huawei. *Cnet*. Retrieved from https://www.cnet.com/news/trump-to-let-us-firms-sell-tech-to-huawei/
- Cohen, E. A. (2018). Trump's Lucky Year: Why the Chaos Can't Last. *Foreign Affairs*, *March/April 2018*:2. Retrieved from https://www.foreignaffairs.com/articles/2018-01-20/trumps-lucky-year
- Covington Alert. (2018, March 8). Export Control Reform Act Introduced in Congress. *Covington*. Retrieved from <u>https://www.cov.com/-/media/files/corporate/publications/2018/03/export\_control</u> <u>reform\_act\_introduced\_in\_congress.pdf</u>
- Du, Y. (2019). 中美经贸摩擦的本质与中国应对之策. *中国流通经济, 33*(9):42-53. DOI:10.14089/j.cnki.cn11-3664/f.2019.09.004.

Duckett, C. (2019, June 13). S&P warns Huawei ban will hit US tech long-term.

ZCNet. Retrieved from

https://www.zdnet.com/article/s-p-warns-huawei-ban-will-hit-us-tech-long-term/

- Esper, M. T. (2020, February 15). As Prepared Remarks by Secretary of Defense
  Mark T. Esper at the Munich Security Conference. US Department of Defense.
  Retrieved from
  https://www.defense.gov/Newsroom/Speeches/Speech/Article/2085577/
- Floyd, D. (2019, June 27). U.S. vs. China Military Spending: Which Is Bigger?. Investopedia. Retrieved from <u>https://www.investopedia.com/articles/personal-finance/043015/us-vs-china-military-budget.asp</u>
- Fortune. (2020). Global 500. *Fortune*. Retrieved from https://fortune.com/global500/2019/search/?sector=Technology
- Frankel, B. (1996). Restating the Realist Case: An introduction. *Security Studies: Realism: Restatements and Renewal*, 5(3), 9–20.
- Freifeld, K., & Stone, M. (2020, February 25). U.S. still eyeing ways to curb sales to Huawei after Trump's chipmaker comments: sources. *Reuters*. Retrieved from <u>https://www.reuters.com/article/ idUSKCN20I2JS</u>
- GlobalData. (2019, June 25). Telecom industry's first 5G RAN competitive analysis published by GlobalData reveals Huawei leadership. *GlobalData*. Retrieved from <a href="https://www.globaldata.com/telecom-industrys-first-5g-ran/">https://www.globaldata.com/telecom-industrys-first-5g-ran/</a>
- Goldstein, J., & Keohane, R. (1993). *Ideas and Foreign Policy: Beliefs, Institutions, and Political Change*. Ithaca: Cornell University Press.

- Graff, G. M. (2020, January 16). Inside the Feds' Battle Against Huawei. *Wired*. Retrieved from https://www.wired.com/story/us-feds-battle-against-huawei/
- Gros, D. (2019). This is not a trade war, it is a struggle for technological and geo-strategic dominance. *CESifo Forum*, *20*(1), 21–26.
- Heath, T., & Thompson, W. (2018). Avoiding U.S.-China competition is futile: Why the best option is to manage strategic rivalry. *Asia Policy*, *13*(2), 91–119.
- Hille, K. (2019, November 4). US urges Taiwan to curb chip exports to China. *Financial Times*. Retrieved from <u>https://www.ft.com/content/6ab43e94-fca8-11e9-a354-36acbbb0d9b6</u>
- Huawei. (2020a, February 20). Huawei Releases New 5G Products and Solutions, Poised to Bring New Value. *Huawei*. Retrieved from <u>https://www.huawei.com/en/press-events/news/2020/2/huawei-new-5g-products-s</u> <u>olutions</u>
- Huawei. (2020b, February 20). Huawei Unveils 10 Key Enablers for Accelerating Global Commercial Adoption of 5G. *Huawei*. Retrieved from <u>https://www.huawei.com/en/press-events/news/2020/2/5g-commercial-10-keys-lo</u> <u>ndon</u>
- Huawei. (2020c). 2019 Annual Report. *Huawei*. Retrieved from https://www.huawei.com/en/press-events/annual-report/2019
- Hurun Research Institute. (2019, December 21). Hurun Global Unicorn List 2019. Hurun. Retrieved from <u>https://www.hurun.net/EN/Article/Details?num=A38B8285034B</u>

- IPlytics. (2019). Who is leading the 5G patent race?. *IPlytics*. Retrieved from <a href="https://www.iplytics.com/wp-content/uploads/2019/01/Who-Leads-the-5G-Patent-Race\_2019.pdf">https://www.iplytics.com/wp-content/uploads/2019/01/Who-Leads-the-5G-Patent-Race\_2019.pdf</a>
- Jiang, S. (2019, September 26). Huawei says it has begun producing 5G base stations without U.S. parts. *Reuters*. Retrieved from <u>https://uk.reuters.com/article/ idUKKBN1WB0YD</u>
- Kapadia, R. (2019, March 12). Tech Cold War Heats Up as U.S. Warns Germany on Huawei. Barron's. Retrieved from <u>https://www.barrons.com/articles/tech-cold-war-heats-up-as-u-s-warns-germany-on-huawei-51552404412</u>
- Kawakami, T., & Hoyama, T. (2019, November 19). Trump's blacklist squeezes 200 Chinese companies as net widens. *Nikkel Asian Review*. Retrieved from <u>https://asia.nikkei.com/Economy/Trade-war/Trump-s-blacklist-squeezes-200-Chinese-companies-as-net-widens</u>
- Keane, S. (2019, November 19). Huawei says US license extension doesn't fix its unfair treatment. *Cnet*. Retrieved from <u>https://www.cnet.com/news/microsoft-president-says-us-government-isnt-being-open-about-huawei-ban/</u>
- Keane, S. (2020, February 19). Judge dismisses Huawei suit challenging US government's equipment ban. *Cnet*. Retrieved from <u>https://www.cnet.com/news/judge-dismisses-huawei-suit-challenging-us-govern</u> ments-ban-on-its-equipment/

Kennedy, S. (2019, May 1). Scott Kennedy on Huawei's Role in the Global Tech

Sector. *National Committee on U.S.-China Relations*. Retrieved from https://www.ncuscr.org/media/podcast/uschinainsights/scott-kennedy-huaweis-rol e-global-tech-sector

- Kharpal, A. (2019, March 4). Huawei says it would never hand data to China's government. Experts say it wouldn't have a choice. *CNBC*. Retrieved from <u>https://www.cnbc.com/2019/03/05/huawei-would-have-to-give-data-to-china-gov</u> <u>ernment-if-asked-experts.html</u>
- Kratsios, M. (2019, November 7). Remarks by U.S. Chief Technology Officer Michael Kratsios at the Web Summit in Lisbon. US Embassy & Consulate in Portugal. Retrieved from https://pt.usembassy.gov/u-s-chief-technology-officer/
- Kyodo. (2018, December 10). Japan sets policy that will block Huawei and ZTE from public procurement as of April. *The Japan Times*. Retrieved from <u>https://www.japantimes.co.jp/news/2018/12/10/business/japan-sets-policy-will-bl</u> <u>ock-huawei-zte-public-procurement-april</u>
- Lawder, D., et al. (2020, January 16). What's in the U.S.-China Phase 1 trade deal. *Reuters*. Retrieved from <u>https://www.reuters.com/article/ idUSKBN1ZE2IF</u>
- Limitone, J. (2019, February 21). Pompeo slams Huawei: US won't partner with countries that use its technology. *Fox Business*. Retrieved from <u>https://www.foxbusiness.com/technology/pompeo-slams-huawei-us-wont-partner</u> <u>-with-countries-that-use-its-technology</u>

Liu, W. (2019). 中美贸易摩擦中的高技术限制之谜. 东北亚论坛, 28(2):82-96.

- Lo, C. (2019). The Sino-U.S. Tech Race: Some myths and realities. The International *Economy*, *33*(2).
- Mascitelli, B., & Chung, M. (2019). Hue and cry over Huawei: Cold war tensions, security threats or anti-competitive behaviour?. Research In Globalization, 1, 100002.
- McCormick, J. (2019). American foreign policy making: Institutions and individuals in the Trump administration. In Foreign Policy Issues for America: The Trump Years (pp. 16–30).
- Menchaca, M. (2018, June 16). U.S. shortens length of some Chinese student visas. The Daily Texan. Retrieved from https://thedailytexan.com/2018/06/16/us-shortens-length-of-some-chinese-student -visas
- Meredith, S. (2018, July 6). China accuses the US of launching the 'largest trade war in economic history'. CNBC. Retrieved from https://www.cnbc.com/2018/07/06/china-implements-new-tariffs-on-us-productsstate-media-says.html
- Morgenthau, H. J. (1950). Politics among Nations the Struggle for Power and Peace. New York: Knopf.
- Nedelman, M. (2019, April 25). Scientists with ties to China ousted from US cancer center amid fears of foreign influence. CNN. Retrieved from https://edition.cnn.com/2019/04/25/health/md-anderson-investigation-nih-china/i ndex.html

Nieva, R. (2019, May 21). Google revives Huawei work temporarily after US eases 76

restrictions. Cnet. Retrieved from

https://www.cnet.com/news/google-to-temporarily-continue-work-with-huawei-af ter-us-eases-restrictions/

OECD. (2020, February 28). Main Science and Technology Indicators. *OECD*. Retrieved from <u>http://www.oecd.org/sti/msti.htm</u>

Office of Public Affairs. (2019a, January 28). Chinese Telecommunications Conglomerate Huawei and Huawei CFO Wanzhou Meng Charged With Financial Fraud. US Department of Justice. Retrieved from <u>https://www.justice.gov/opa/pr/chinese-telecommunications-conglomerate-huawe</u> i-and-huawei-cfo-wanzhou-meng-charged-financial

Office of Public Affairs. (2019b, January 28). Chinese Telecommunications Device Manufacturer and its U.S. Affiliate Indicted for Theft of Trade Secrets, Wire Fraud, and Obstruction of Justice. *US Department of Justice*. Retrieved from <u>https://www.justice.gov/opa/pr/chinese-telecommunications-device-manufacturer</u> <u>-and-its-us-affiliate-indicted-theft-trade</u>

Office of the United States Trade Representative. (2018, September 25). Joint Statement on Trilateral Meeting of the Trade Ministers of the United States, Japan, and the European Union. Retrieved from <u>https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/septembe</u> r/joint-statement-trilateral

Pai, A. (2018, March 26). Chairman Pai Statement on Network and Supply Chain Security Proposal. *Federal Communications Commission*. Retrieved from <u>https://www.fcc.gov/document/chairman-pai-statement-network-and-supply-chai</u> n-security-proposal Panda, A. (2019, October 2). A Modern, Advanced People's Liberation Army: First Takeaways From the 70th Anniversary Parade. *The Diplomat*. Retrieved from <u>https://thediplomat.com/2019/10/a-modern-advanced/</u>

Pompeo, M. R. (2020, January 13). Silicon Valley and National Security. US Department of State. Retrieved from <u>https://translations.state.gov/2020/01/14/silicon/</u>

Recon Analytics. (2018). How America's 4G Leadership Propelled the U.S. Economy. *Recon Analytics*. Retrieved from <u>https://api.ctia.org/wp-content/uploads/2018/04/Recon-Analytics\_How-Americas</u> <u>-4G-Leadership-Propelled-US-Economy\_2018.pdf</u>

Reference for Business. (2020). Coordinating Committee for Multilateral Export Controls and the Wassenaar Arrangement. *Reference for Business*. Retrieved from <u>https://www.referenceforbusiness.com/encyclopedia/Con-Cos/Coordinating-Com</u> <u>mittee-for-Multilateral-Export-Controls-and-the-Wassenaar-Arrangement.html</u>

- Ripsman, N. M., et al. (2016). *Neoclassical Realist Theory of International Politics*. New York, NY: Oxford University Press.
- Rogers, M., & Ruppersberger, D. (2012, October 8). Investigative Report on the U.S. National Security Issues Posed by Chinese Telecommunications Companies Huawei and ZTE. U.S. House of Representatives 112th Congress. Retrieved from https://republicans-intelligence.house.gov/sites/intelligence.house.gov/files/docu ments/huawei-zte%20investigative%20report%20(final).pdf
- Rose, G. (1998). Neoclassical Realism and Theories of Foreign Policy. *World Politics*, 51(1), 144–172.

- Sandle, P., & MacLellan, K. (2020, March 10). British PM Johnson defeats lawmaker revolt on Huawei's 5G role. *Reuters*. Retrieved from <u>https://www.reuters.com/article/ idUSKBN20X142</u>
- Sanger, D. E., et al. (2019, January 26). In 5G Race With China, U.S. Pushes Allies to Fight Huawei. *The New York Times*. Retrieved from <u>https://www.nytimes.com/2019/01/26/us/politics/huawei-china-us-5g-technology.</u> <u>html</u>
- Segal, A. (2019, December 18). Year in Review 2019: The U.S.-China Tech Cold War Deepens and Expands. *Council on Foreign Relations*. Retrieved from <u>https://www.cfr.org/blog/year-review-2019-us-china-tech-cold-war-deepens-andexpands</u>

Select Committee on Intelligence. (2018, February 13). Open Hearing on Worldwide Threats. Retrieved from https://www.intelligence.senate.gov/hearings/open-hearing-worldwide-threats-0#

Sheehan, M. (2018, April 3). Trump's Trade War Isn't About Trade, It's About Technology. *Macro Polo*. Retrieved from <u>https://macropolo.org/analysis/trumps-trade-war/</u>

Shepardson, D., & Alper, A. (2020, March 11). U.S. Commerce Department extends Huawei license through May 15. *Reuters*. Retrieved from <u>https://uk.reuters.com/article/ idUKKBN20X32G</u>

Silver, L., et al. (2019, August 13). U.S. Views of China Turn Sharply Negative Amid Trade Tensions. *Pew Research Centre*. Retrieved from <u>https://www.pewresearch.org/global/2019/08/13/</u> Snow, M., & Schwartz, D. (2019, December 16). Trump Job Approval and Economy Rating Hit Highs, Quinnipiac University National Poll Finds; On Ukraine: 52
Percent Say Trump Pursued Personal Interest. *Quinnipiac University National Poll*. Retrieved from

https://poll.qu.edu/images/polling/us/us12162019\_utel65.pdf

- Stewart, E. (2019, August 19). The US government's battle with Chinese telecom giant Huawei, explained. Vox. Retrieved from <u>https://www.vox.com/technology/2018/12/11/18134440/</u>
- Swanson, A., & Rappeport, A. (2020, January 15). Trump Signs China Trade Deal, Putting Economic Conflict on Pause. *The New York Times*. Retrieved from <u>https://www.nytimes.com/2020/01/15/business/economy/china-trade-deal.html</u>

Swearingen, J. (2019, February 27). What Is the Cost of the U.S. Paranoia About Huawei?. *Intelligencer*. Retrieved from <u>https://nymag.com/intelligencer/2019/02/is-the-u-s-being-too-paranoid-by-bannin g-huawei.html</u>

Taliaferro, J. W., et al. (2009). Introduction: Neoclassical Realism, the state, and foreign policy. In *Neoclassical Realism, the State, and Foreign Policy,* edited by Lobell, S. E., et al., 1–41. New York: Cambridge University Press.

The China Senior Analyst Group. (2019, May 14). A New Great Game--China, The U.S., And Technology. *S&P Global*. Retrieved from <u>https://www.spglobal.com/en/research-insights/featured/a-new-great-game-china-the-u-s-and-technology</u>

The World Bank. (2020). GDP per capita (current US\$). Retrieved from

https://data.worldbank.org/indicator/NY.GDP.PCAP.CD

- Trapani, J., & Hale, K. (2019, September 4). Higher Education in Science and Engineering. *The National Science Board*. Retrieved from <u>https://ncses.nsf.gov/pubs/nsb20197/data#supplemental-tables</u>
- Trump, D. J. (2017). National Security Strategy of the United States of America. The White House. Retrieved from <u>https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017</u> -0905.pdf
- Trump, D. J. (2018, March 22). Presidential Memorandum on the Actions by the United States Related to the Section 301 Investigation. *The White House*. Retrieved from <u>https://www.whitehouse.gov/presidential-actions/presidential-memorandum-actio</u> ns-united-states-related-section-301-investigation/
- Trump, D. J. (2019, May 15). Executive Order on Securing the Information and Communications Technology and Services Supply Chain. *The White House*. Retrieved from <u>https://www.whitehouse.gov/presidential-actions/executive-order-securing-infor</u> <u>mation-communications-technology-services-supply-chain/</u>
- U.S. Department of the Treasury. (2018a, August 15). Summary of the Foreign Investment Risk Review Modernization Act of 2018. Retrieved from <u>https://www.treasury.gov/resource-center/international/Documents/Summary-of-FIRRMA.pdf</u>
- U.S. Department of the Treasury. (2018b). Title XVII—Review of Foreign Investment and Export Controls. Retrieved from

https://home.treasury.gov/sites/default/files/2018-08/The-Foreign-Investment-Ris

k-Review-Modernization-Act-of-2018-FIRRMA 0.pdf

- Varas, A., & Varadarajan, R. (2020). How Restrictions to Trade with China Could End US Leadership in Semiconductors. BCG. Retrieved from <u>https://image-src.bcg.com/Images/BCG-How-Restricting-Trade-with-China-Coul</u> <u>d-End-US-Semiconductor-Mar-2020 tcm9-240526.pdf</u>
- Walt, S. (1991). The Renaissance of Security Studies. *International Studies Quarterly*, 35(2), 211-239.
- Waltz, K. N. (2010). *Theory of International Politics*. Long Grove (Illinois, Estados Unidos): Waveland Press.
- Wendt, A. (1995). Constructing International Politics. International Security, 20(1), 71–81.
- Wheeler, A. (2020, February 19). China's Digital Silk Road (DSR): the new frontier in the Digital Arms Race?. Silk Road Briefing. Retrieved from <u>https://www.silkroadbriefing.com/news/2020/02/19/chinas-digital-silk-road/</u>
- Whelan, K. (2014). Endogenous Technological Change: The Romer Model. University College Dublin MA Macroeconomics Notes. Retrieved from <u>https://www.karlwhelan.com/MAMacroSem1/Notes12.pdf</u>

Wikipedia. (2020). United States presidential approval rating. *Wikipedia*. Retrieved from <a href="https://en.wikipedia.org/wiki/United\_States\_presidential\_approval\_rating">https://en.wikipedia.org/wiki/United\_States\_presidential\_approval\_rating</a>

WIPO. (2020, April 7). China Becomes Top Filer of International Patents in 2019 Amid Robust Growth for WIPO's IP Services, Treaties and Finances. *WIPO*. Retrieved from

https://www.wipo.int/pressroom/en/articles/2020/article\_0005.html

- Wong, D., et al. (2020, March 2). US, China Sign Phase One Trade Deal: How to Read the Agreement. *China Briefing*. Retrieved from <u>https://www.china-briefing.com/news/us-china-phase-one-trade-deal/</u>
- Wæver, O. (1993). Securitization and Desecuritization. Kbh: Center for Freds- og Konfliktforskning.
- Young, D. (2013, April 2). Huawei, ZTE Banned From Selling to U.S. Government. *Techonomy*. Retrieved from <u>https://techonomy.com/2013/04/huawei/</u>
- Yu, X. (2017, December 20). China`s new economy grows twice as fast as GDP and helps offset job losses, says top think tank. *South China Morning Post*. Retrieved from <u>https://www.scmp.com/business/companies/article/2124979/chinas-new-econom</u> y-grows-twice-fast-gdp-and-helps-offset-job
- Zwetsloot, R., & Peterson, D. (2019, December 31). The US-China Tech Wars: China`s Immigration Disadvantage. *The Diplomat*. Retrieved from <u>https://thediplomat.com/2019/12/the-us-china</u>/