

# The Construction of Error-Tolerant IR Theory: Unification of Three Mainstream IR Theories

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Error-tolerant IR (international relation) theory is constructed on the base of error-tolerant powers paradigm and error-tolerant economics. Error-tolerant powers paradigm takes the integration between trial and error and anarchy as the starting point of IR theory and upholds that the power to trial and error is an original power, for which states compete. So the core concept of realism should be the original power to trial and error; error-tolerant economics argues that liberal IR theory enables hegemonic powers to compete for their original power to trial and error in an implicit way. Error-tolerant powers paradigm regards that states who truly control original powers to trial and error can define identities and create shared knowledge, which is the core of constructivism. Besides taking the original power to trial and error as the core concept, error-tolerant IR theory can unify three major schools of realism, liberalism, and constructivism by relative right-doing and trial-and-error capabilities, and corresponding costs as endogenous drives.

*Keywords:* error-tolerant powers paradigm, error-tolerant economics, anarchy, power to trial and error

## Introduction

In 2005, Amitav Acharya and Barry Buzan (2007) launched the research project, “Why Is There No Non-Western IR Theory?”, which can be related as “Why is it difficult to construct a Chinese school of IR theories?” for Chinese scholars (Qin, 2018). So far, Chinese-style IR (international relation) theories mainly encompass Zhao’s (2006) Tianxia theory, Yan’s (2014) moral realism, and Qin’s (2018) relational theory of world politics. Their contributions are highly acknowledged in China’s IR theory circles, but why are their influences in the West difficult to compete with three major schools of realism, liberalism, and constructivism? The fundamental reason why Western scholars, especially American ones, can put forward original IR theories is that their academic tradition has climbed over two mountains, original political philosophy represented by Hobbes (1996), Locke (1967), and Kant (2011) et al., and economics (Samuelson & Nordhaus, 2009). For instance, Keohane’s (1984) neoliberal institutionalism originates from two main resources: Firstly, it draws on the liberalism of John Locke, James Madison (Hamilton, Madison, & Jay, 2014), and John Rawls (1999); secondly, it draws on the emerging new institutional economics of the 1970s (North, 1990; Keohane, 1989). But in non-Western countries, this is not the case.

By relying on their outstanding talents and imagination, three Chinese pioneers mentioned above have

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climbed the insurmountable cliff of Chinese-style IR theories, and provided a signpost and original guidance on them. But without the support of original political philosophy and economics, China's new generation can hardly keep up with pioneers' IR theories, let alone develop them. Therefore, the issue raised by Amitav Acharya and Barry Buzan (2007) is secondary. For Chinese scholars, the primary problem is how to construct a more universal political philosophy and economic theory. Then, they begin to construct a more universal theory of international relations, rather than overemphasizing Chinese-style characteristics. In terms of political philosophy, this article first reviews error-tolerant rights paradigm, and error-tolerant democracy (Zhou, 2018; 2019), which provides new insights into the concept of liberty or freedom. Through the elaboration of the COVID-19 governance in China and the United States, error-tolerant rights paradigm and error-tolerant democracy have demonstrated better explanatory power than liberalism and liberal democracy; in terms of economics, this article reviews error-tolerant economics constructed by studying China's rise based on error-tolerant rights paradigm. Error-tolerant economics points out that Western economics overlooks several fundamental concepts, such as trial-and-error costs, trial-and-error capabilities, the power to trial and error, etc., which have partly misled the development of developing countries. Finally, we will apply error-tolerant rights/powers paradigm and error-tolerant economics to the field of IR and construct error-tolerant IR theory, which can unify three major schools of realism, liberalism, and constructivism.

### **Literature Review**

China (Deng, 1996) has promoted Reform and Opening-up since 1978, and philosophy and social sciences ushered in a spring. Actually the so-called spring is the climax of China's translation of Western masterpieces into Chinese. However, the path of political development in China is so unique that even Western famous political theories can hardly interpret it. In the late 1990s, some Chinese scholars grappled with the localization of Chinese political science (Yu, 2019; Wan, 2022), rather than interpreting China's phenomena with Western theories. But the first two decades of the 21st century have witnessed a significant asymmetry between China's unexpected rise and its lack of discourse power on the international stage. Surprisingly, telling China's story has awakened its enemies in the West (Zheng & Yang, 2019), so it's urgent for China to have a system of original Chinese-style philosophy and social sciences to self-explain. After the May Fourth Movement for science and democracy in 1919 (Chow, 1960), generations of Chinese scholars have been diligently exploring the original political philosophy with Chinese characteristics and universality, but most academics either act as cheerleaders (Zheng & Yang, 2021), or repeat previous academic work at a low level (Deng, 2020). Modern Western history is the evolution of liberalism, the core of which is the interpretation of the concept of freedom. So for Chinese academic circles, the biggest challenge is how to compete with the West to define the concept of liberty or freedom that can be accepted by the West and China.

To redefine the concept of liberty, the best path is to return to the theoretical origin of liberalism "the state of nature" and combine it with trial and error (Popper, 1972), and thus, liberalism will develop into a more universal theory, namely error-tolerant rights paradigm as the core of error-tolerant political philosophy (Zhou, 2018; 2019). Specifically, once trial and error is incorporated into the state of nature, liberal hypothesis of atomic individual is challenged. For the purpose for self-preservation, each member of a community needs to observe trial-and-error practices of the other people, vice versa. One person's practice of trial and error, if not noticed by other people, is insignificant. So atomic individual is meaningless for the survival of the entire group and does not exist. Second, since people are not born with wisdom, where do people's ideas come from? Error-tolerant

rights paradigm holds that human ideas are conceived by trial-and-error practices and are revised in subsequent trial-and-error ones (Zhou, 2018). Anyone who has the qualification of trial-and-error practices, the right to trial and error, or the right to be wrong, has the opportunity to define new ideas. In this sense, the right to trial and error is an original right, i.e., new ideas are invented and old ones die out. Furthermore, error-tolerant rights paradigm believes that liberty comes from mutual empowerment rather than the God (Zhou, 2018). So two pillars of error-tolerant rights paradigm are the right to trial and error as an original right and mutual empowerment theory, rather than two ones of liberalism, natural rights theory and social contract theory (Locke, 1967). Liberty in error-tolerant rights paradigm is divided into the right to liberty in innovative fields, the original right to trial and error, and the rights to liberty in non-innovative fields as the subordinate ones.

Constructing error-tolerant democracy, Zhou (2018) further discovered the right to trial and error is as an original right. Error-tolerant rights paradigm recognizes that in a democratic society, everyone has an equal right to trial and error as an original right and corresponding rights to be right. However, trial-and-error capabilities vary among all the individuals, and out of efficiency, it is necessary for the people to transfer their rights to trial and error in political, economic, and social fields to elites, who possess stronger trial-and-error capabilities. In political aspects, the process of transfer is through elections; meanwhile, elites should empower the people corresponding rights, such as the rights to be informed, to participate, to be heard, to oversee, to be educated, and to criticize, etc. It can be seen from the above that what people have transferred is one right, but what they have to gain is a series of ones. So the right to trial and error is quite different from the rights to be informed, to participate, to be heard, etc. Zhou (2018) thought this is because the right to trial and error is an original right, and once it is transferred, people should be compensated by a series of rights at the level of subordinate ones. Error-tolerant democracy also holds that entrepreneurs, financial capitalists, et al. are empowered by the people through market mechanism without elections, and they should empower and benefit the people reasonably. This process is called error-tolerant market economy in error-tolerant economics (Zhou, Jiao, & Luo, 2022).

Taking the COVID-19 governance in the United States as an example, error-tolerant rights paradigm and error-tolerant democracy have shown that liberalism and liberal democracy misunderstand the concept of liberty and this has ultimately made the United States pay a heavy price, including the deaths of more than one million Americans (Zhou, Tan, & Liu, 2020; Zhou, Qu, & Shen, 2021; Zhou & Qu, 2021). Specifically, on January 23, 2020, Wuhan was locked down due to the COVID-19 pandemic, which was criticized as a violation of human rights by the West (Zhou et al., 2020). According to error-tolerant rights paradigm, the closure of Wuhan has shown that the government has performed the power to trial and error as an original power, so the rights to life, travel in non-innovative fields, etc. at the level of subordinate rights defined under the context of the non-COVID-19 pandemic, have to be redefined during the COVID-19 pandemic. So it is the first mistake that Western media have made by using subordinate rights under the context of non-COVID-19 to criticize Chinese government who has performed the power to trial and error as an original power under the context of COVID-19. Subsequently, China has effectively contained COVID-19 and redefined new subordinate rights to liberty in the context of the COVID-19 pandemic: keeping social distance, wearing face masks in public places, showing health codes, etc. (Zhou et al., 2020), and the US government has no better way to deal with it, so denying new subordinate rights to liberty during the COVID-19 pandemic means that the US government has violated human rights, and that is the second mistake. Therefore, the death toll of the United States due to the COVID-19 has exceeded one million and this great disaster in the 21st century is due to misunderstanding the concept of liberty (Zhou, 2018).

Moreover, the failure of the COVID-19 governance in the United States is closely related to its economic

inequality caused by free markets. But actually America has a great opportunity to reflect on the American financial crisis of 2008 and redefine liberty from mutual empowerment under the background of regulation, namely the rights to liberty of entrepreneurs and financial capitalists in the public economy are empowered by the people, so they should empower and benefit the people, corresponding to regulation and redistribution respectively. During the COVID-19 pandemic, empowering and benefiting the people, regarded as economic democracy, has not been realized for neoliberal policies, and that leads to insufficient public funds in helping citizens badly hurt by the disease (Zhou et al., 2021). In terms of democratic theory, liberal democracy has not realized that the essence of election is to transfer people's original rights to trial and error and corresponding rights to be right to politicians, and the separation and balance of powers does not evaluate whether president, states, mayors, et al. have exercised the power to trial and error as an original power reasonably or not, so that they could even abuse it during the COVID-19 governance. This has done great harm to people's human rights without any accountability or impeachment (Zhou & Qu, 2021). The analysis above has shown that the explanatory power of error-tolerant rights paradigm and error-tolerant democracy is significantly stronger than that of liberalism and liberal democracy, which means that the former is more universal.

In terms of economics, error-tolerant economics based on error-tolerant rights paradigm and error-tolerant democracy has developed List's standard model (Allen, 2011) into List-Afa's error-tolerant model (Zhou et al., 2022) by studying China's rise. Error-tolerant economics, though in its infancy, has found that Western economists have not systematically constructed theories around core concepts, such as trial-and-error costs, trial-and-error capabilities, trial-and-error directions, and original trial-and-error rights since Adam Smith (1927) published his famous works, an inquiry into the nature and causes of the wealth of nations in 1776. These concepts are directly related to the product from scratch, which in turn affects the proportion or degree of private versus state-owned enterprises (SOEs) in a country (Canterbery, 1987). Core problems of error-tolerant economics in innovative fields are: (1) Who bears trial-and-error costs in a state, especially in the core areas? (2) How can trial-and-error costs be accumulated? (3) How can trial-and-error costs be reduced? (4) How can trial-and-error costs be recovered, and profits be made? In Western countries, the development of industrialization mainly depends on private enterprises that bore trial-and-error costs, and corresponding right-doing costs, i.e., production costs. But for just independent developing countries after World War II, trial-and-error costs required to digest the first two Industrial Revolutions and participate in the Third Industrial Revolution are too high, and only SOEs can bear them possibly. Especially after more than a hundred years of humiliation of being invaded, China's private enterprises could not afford trial-and-error costs and corresponding right-doing costs required for the development of heavy industries, so SOEs are the unique choice. Therefore, the promotion of public ownership in China is consistent with China's industrialization requiring SOEs to bear trial-and-error costs.

However, pure public ownership and planned economy were not conducive to the overall increase in productivity, and the incentives for individuals were insufficient. Since Comrade Xiaoping Deng (1996) pushed forward Reform and Opening-up in 1978, most of private enterprises have borne trial-and-error costs and corresponding right-doing costs in light industries, but private property could not be protected until 2004 (The National People's Congress of the People's Republic of China, 2004). In core innovation areas, such as aerospace, high-speed train, and other heavy industries, SOEs are responsible for them. Therefore, the path to Chinese-style modernization is that SOEs have borne trial-and-error costs of core innovation areas in order to protect the right to trial and error as an original right, and light industries are constantly opening up to private enterprises in order

to ensure efficiency and reduce corruption and waste.

Here is controversy over as the degree of private ownership versus public ownership; individual freedom versus the common good, etc. (Canterbery, 1987). In the 1980s and 1990s, Hayek's (2011) neoliberalism that dominated the mainstream in the world is the trinity of liberty, private property, and free markets. Neoliberalism believes that liberty is related to human dignity, and only private property is conducive to individual liberties. The free market based on private property is the most efficient and fair way of economic activities (Hayek, 2011). For democratic theories, Schumpeter (1954) proposed electoral democracy in 1942. After the efforts of Robert Dahl's pluralistic democratic theory, liberty and democracy are finally unified (Dahl, 2006). As a result, American academic circles have completed a four-in-one system of philosophy and social sciences with "liberty, private property, free markets, and liberal democracy (LPFL)" as universal values. Free markets and liberal democracy deem that democracy and private property are naturally consistent, quite different from the contradiction between democracy and capitalism in the 19th century (Arblaster, 2002). As long as there are SOEs that represent public ownership, Hayek's neoliberalism thinks instinctively that SOEs are incompatible with liberty. But Hayek's neoliberalism ignores the role of SOEs in the history of Western economic development to supply public utilities, to correct market failure, and to guarantee strategic sectors (Bognetti, 2020). Practically, from the mid-19th century to the late 1970s, SOEs have developed for over a century and made great contributions to the development of Western economy. From the end of World War II to the late 1970s, SOEs reached their peak and emerged in new sectors, accounting for a significant portion of GNP. From the early 1980s to the 2008 financial crisis, privatization gained recognition. However, the crisis of 2007-2008 led SOEs to save faltering private sectors. Hence, private property can protect liberty, and SOEs can also protect it, which is ridiculous for neoliberalism (Hayek, 2011). The development of Western economies has proven that hybrid ownership is reasonable, and the proportion of private versus SOEs depends on a country's specific situation and tradition (Bognetti, 2020). Finally, the core of Western social sciences, "liberty, private property, free markets and liberal democracy (LPFL)", has been rebuilt. Liberty can be possibly compatible with both private property and SOEs, while free markets need to develop into error-tolerant market economy (Harvey, 2020; Zhou et al., 2022). Thus, the rebuilt four-in-one system is "liberty, hybrid ownership (including private and state-owner property), error-tolerant market economy and error-tolerant democracy (LHEE)".

Generally speaking, Western IR theories are based on the political philosophy of Hobbes, Locke, Kant, et al., as well as economic theories, so the development of political philosophy and economics will inevitably lead to new developments in IR theories. For political philosophy, liberalism and liberal democracy have evolved into error-tolerant rights paradigm and error-tolerant democracy respectively (Zhou, 2018; 2019), which shows a better explanatory power than liberalism and liberal democracy concerning the COVID-19 governance; for economics, error-tolerant economics provides new concepts systemically, such as trial-and-error costs, trial-and-error capabilities, trial-and-error direction, trial-and-error rights, and develops free markets into error-tolerant markets on the basis of summarizing China's modernization path (Zhou et al., 2022). Therefore, the ideas of error-tolerant rights/powers paradigm and error-tolerant economics can be applied to the field of IR to construct error-tolerant IR theory, just like theoretical resources needed by Keohane's neoliberal institutionalism (Keohane, 1989) have been formed. Surprisingly, the process of constructing error-tolerant IR theory can help us unify three major schools of realism, neoliberal institutionalism, and constructivism.

### **Error-Tolerant IR Theory: Unifying Core Concepts of Three Mainstream Schools and Providing Endogenous Drives for Transition Between Hobbesian, Lockean, and Kantian Cultures**

Waltz's (1979) neorealism takes anarchy as a self-help system, which makes international politics inevitably full of conflicts. Keohane's (1984; 1989) neoliberal institutionalism adopts neorealism's assumption that anarchy is the cornerstone of IR theory, and views international systems as "material strength plus international institutions". Wendt's (1999) constructivism breaks neorealist's main idea that the unique solution to anarchy is a self-help system, and proposes that anarchy be what states make of it. So Wendt (1999) further put out three solutions about anarchy, namely, "Hobbesian, Lockean, and Kantian cultures". Especially the Kantian anarchy based on collective security interests is no longer connected with self-help in any sense. From the logical analysis above, the key to construct an original IR theory lies in the interpretation of anarchy.

Displacing the paradigm of liberal rights, "natural rights theory and social contract theory" (Locke, 1967), error-tolerant rights paradigm, the right to trial and error as an original right and mutual empowerment theory (Zhou, 2018), is constructed through the integration of the trial-and-error approach into the natural state or anarchy. Liberalism argues that the legitimacy of power is justified by the right, i.e., the leaders' power is due to the transfer of people's rights (Locke, 1967). From this point, the function of power and right is consistent. Now that the right to trial and error is an original right, the power to trial and error is also an original power, and that will cause a huge impact on IR theories (Morgenthau, 1973).

First, realism sees power as the core, and states' interests are defined in terms of power (Morgenthau, 1973). Error-tolerant powers paradigm also accepts the importance of power, but provides a better explanation of the relationship between power and interests. Error-tolerant powers paradigm strengthens that the core of power is the power to trial and error as an original power, and corresponding powers to be right. In the field of IR, a great power, especially hegemonic one, is particularly eager to defend and even expand its original power to trial and error, because subordinate rights, such as the right to life, liberties in non-innovative fields, and property, etc., are decided by it. Thus, the expansion of a state's original power to trial and error means that it can have a larger share of sub-rights, and the acquisition of its wealth is usually at the cost of sacrificing the interests of other countries. But the process of competing for original powers to trial and error is also a trial-and-error process, which may encounter counterattacks from opponents, and thereby harms its own security possibly. This does not mean that the greater the share of original powers to trial and error a state possesses, the better (Waltz, 1979). In addition, in the international system, the connotation of security is defined by the state that has the original power to trial and error in the maximum share, and the process of this definition is also the process of trial and error (Smith, 2005). So it is natural to misunderstand the connotation of security for the United States with original powers. For instance, after September 11, the United States' understanding of security is that terrorists have the greatest threat to US national security (Bush, 2002). But since Trump's president, the United States believes that China is its real greatest long-term security threat (Rappeport, 2019).

Second, Waltz (1979) deems that state behavior is subject to the international power structure, where each state, based on the distribution of power among states, determines its position and way of dealing with international politics. Error-tolerant powers paradigm holds that since the core of power is the power to trial and error as an original power, the international power structure should be "the distribution and proportion of the original power to trial and error and corresponding powers to be right", which is referred as to the error-tolerant

power structure. For hegemony, it has occupied the largest power to trial and error as an original power in it. However, the error-tolerant power structure does not exist in advance, and is constructed in trial-and-error reciprocal practices among states (Wendt, 1999). Those states who can dominate the practice of trial-and-error interactions or not are depended on their relative material strength, mainly military and economic (Waltz, 1979; Grieco, 1988; Edelstein, 2002).

So error-tolerant IR theory proposes four basic concepts to characterize relative material strength, namely, relative right-doing competences and relative right-doing costs between states as Unit One; relative trial-and-error capabilities and relative trial-and-error costs between states as Unit Two (Grieco, 1988). Unit One determines the error-tolerant power structure of current international systems (Powell, 1991), and Unit Two predicts its possible future changes. For instance, Germany achieved industrialization in the second half of the 19th century and became the dominant state in World War I and World War II. The fundamental reason why Germany had the confidence to change the structure of international systems was that from 1809, when the University of Berlin was established (Östling, 2018), to 1933, when the Nazis came to power, German universities gradually became the world center for scientific research, and the best scientific papers were mainly written in German (Robertson, 1979). Error-tolerant IR theory, in other words, explains that promoting comprehensive trial-and-error and right-doing competences and reducing right-doing and trial-and-error costs at the national level are based on a scientist's trial-and-error and right-doing competences at a personal level by establishing modern universities (Östling, 2018). Ultimately, Unit One at the level of the international system has been comprehensively improved, which gave Germany the opportunity to change the error-tolerant power structure by wars, particularly launching World War II.

The analysis above has shown that error-tolerant IR theory has integrated international, national, and individual levels, and is not limited to a systemic theory. Neorealism holds that the state is the unitary rational actor, and its behaviour is a function of the distribution of power among states, rather than its domestic politics (Waltz, 1979). For error-tolerant IR theory, it emphasizes that whether two or more states have direct military conflicts or not depends on Unit One and Unit Two mentioned above, and Unit One and Unit Two as endogenous drives (Tang, 2016) are decided by state's comprehensive right-doing competences and right-doing costs, comprehensive trial-and-error capabilities and trial-and-error costs, which are based on individual's corresponding competences and costs. Therefore, individuals, states, and international systems are an organic whole in error-tolerant IR theory similar to neoclassic realism (Rose, 1998; Lobell, Ripsman, & Taliaferro, 2009), and that is different from Waltz's neorealism and Keohane's neoliberal institutionalism which adhere to the research direction of systemic theories, arguing that research at the national and individual levels cannot constitute international political theories. But for error-tolerant powers paradigm, if a state wants to change the situation of relatively backward material strength, it is actually changing the backward situation of Unit One and Unit Two, which is based on individualism. So the state must turn to reform domestic political systems, social structures, or the form of government, which is closely related to foreign policies (Telbami, 2002).

Third, since the 1970s, the reason why realism to compete for the original power to trial and error in international system through military conflicts has gradually suspended is that right-doing and trial-and-error costs the United States needs to pay are sometimes difficult to bear, such as the Vietnam War (Lind, 2002). In the context of the rivalry between the United States and the Soviet Union, the military strength of two superpowers could be matched against each other, which means that their Unit One and Unit Two in the military field are very close. Then, can the United States take another way to reduce trial-and-error and right-doing costs

to grasp a larger share of the original power to trial and error in the economic field to obtain higher monopoly profits, and drag down the Soviet Union economically? That is why neoliberal IR theory has come to the world stage (Keohane, 1984).

Both liberalism and neoliberal institutionalism advocate reciprocity, cooperation, dependence, etc. (Keohane, 1984; Axelrod, 1984). Neoliberal institutionalism also introduces the concept of new institutional economics. In detail, reducing transaction costs, providing relatively complete information, and decreasing uncertainty, international institutions can solve the problem of market failure in international cooperation (Axelrod & Keohane, 1985). The question is: What the prerequisites are for the United States to promote such an international cooperation? In the 1980s and 1990s, the United States promoted the spirit of the four-in-one system of philosophy and social sciences of “liberty, private property, free markets and liberal democracy (LPFL)” on a global scale, and completely ignored the importance of SOEs in Western history (Bognetti, 2020). Error-tolerant powers paradigm holds that if developing countries accept American value, their entrepreneurs will voluntarily give up the power of liberty, or to say, the core power to trial and error as an original power in core innovative fields. The reason is that if developing countries are really aimed to eradicate poverty and achieve prosperity, they should first try to realize industrialization. The problem is that both their participation in the third industrial revolution and digestion of the first two industrial revolutions, based on their insufficient right-doing and trial-and-error capabilities (Krasner, 1991), have to pay higher right-doing and trial-and-error costs. As we know, after World War II, most independent developing countries colonized or invaded by developed countries did not participate in the first two industrial revolutions. Facing the Third Industrial Revolution that emerged after World War II, most SOEs in developing countries can difficultly afford right-doing and trial-and-error costs due to their lower trial-and-error and right-doing competences. So privatization advocated by neoliberalism (Hayek, 2011) means that their private entrepreneurs would voluntarily give up the original power to trial and error in the heavy industries. In that way, Western states have deprived developing countries of the original power to trial and error, and monopolized this power in the core areas of the world, and thereby enjoyed super-monopoly profits. Their wealth accumulation is astonishing. Or, to put it differently, the essence of liberal IR theory is that through peaceful means, Western states help their own private enterprises monopolize the original power to trial and error in the core areas of the economy (Baldwin, 1993). So the trial-and-error capabilities of developing countries in core innovative areas will be reduced to almost zero, even though they have abundant trial-and-error costs. Compared with developing countries, Unit One and Unit Two of Western states are almost infinite, and can obtain an absolute monopoly in core economic fields. In this context, the globalization mainly promoted by the US enables it to have greater trial-and-error costs, recover trial-and-error costs, and earn substantial profits through the global market. Developing countries can only bear the original power to trial and error and corresponding powers to be right in the low-end industry, where the competition is quite tough.

Therefore, the liberal IR theory helps the United State compete for the power to trial and error as an original power in a peaceful way, which means that it has to strike developing countries’ right-doing and trial-and-error capabilities. The best way is to let developing countries voluntarily give up the original power to trial and error in core areas directly. But American private enterprises cannot spread this four-in-one system of philosophy and social sciences globally, so neoliberal institutionalism has to recognize the importance of state power, and then adopt the assumption of neorealism that the state is the major actor (Waltz, 1979; Keohane, 1984). In order to make the majority of developing countries accept the four-in-one system, the international mechanism led by the United States manipulates the national behavior of developing countries in positive and negative ways: to reward



cooperative behavior; or to punish non-cooperative behavior (Keohane, 1984). Clearly, countries who will give up the original power to trial and error will be rewarded by the United States through international institutions that are the humanly devised constraints that shape human interaction (North, 1990). To note that, the international system is formulated by countries that hold the original power to trial and error (Elias, 2000; Foucault, 2000). Finally, in terms of Unit One and Unit Two, the United States is permanently ahead of developing countries in core areas. In this way, it has truly achieved its goal of subduing the enemy without fighting. Thus, error-tolerant powers paradigm agrees with John Mearsheimer that the emergence of an international order is largely a by-product of the selfish behavior of the great powers (Mearsheimer, 2001). The interdependence, cooperation, and international institutions that neoliberal institutionalism talks about are all byproducts of American selfish behaviors.

For error-tolerant powers paradigm, it is wrong for Carr (2001), Morgenthau (1973), Waltz (1979), Mearsheimer (2001) et al. to criticize the liberal IR theory for neglecting the concept of power. On the contrary, neoliberal institutionalism peacefully helps the United States compete for the original power to trial and error in the core areas of the global economy. President Bill Clinton has declared that in this world where liberty rather than authoritarianism advances, the cynical calculation of pure power politics cannot be recognized and is not suitable for the new era (Clinton, 1992), as has disguised the essence of neoliberal institutionalism (Keohane, 1984). In the system with “liberty, private property, free markets and liberal democracy” as the core, Clinton’s view is correct, but with “liberty, hybrid ownership, error-tolerant market economy and error-tolerant democracy” as the core, Clinton’s view is a pure lie. The essence of American values is to monopolize the original power to trial and error in core areas. For error-tolerant powers paradigm, the concepts of cooperation and interdependence, etc. advocated by Keohane and Nye (1977) are all theoretical coats to cover up America’s ambitious attempt to monopolize the core original power to trial and error (Keohane, 1984).

Fourth, for constructivism, Wendt (1999) bravely argues that anarchy is what states make of it, which implies that the state can construct different cultures, Hobbesian, Lockean, or Kantian. Then how does Wendt deny that the Hobbesian culture is the only solution to anarchy (Waltz, 1979)? Wendt (1999) dismantled the marriage of anarchy and power politics, and argues that whether the international system is self-help or “other-help” is depended on each other’s identities: enemies, rivals, or friends. Obviously, collective identity formation under anarchy is not innate but determined by social interaction of states. Through practical activities, the state forms the mutual subjective meaning, namely, shared ideas or collective meaning about self and others, which constructs state identities and corresponding interests (Wendt, 1999). Error-tolerant powers paradigm agrees with Wendt’s point of view that shared ideas are formed in interaction between states (Wendt, 1999). But different from his constructivism, error-tolerant powers paradigm integrates trial and error into practices including interaction, and then empowers trial-and-error practices, i.e. the power to trial and error, and suggests that the power to liberty in innovative fields be the power to trial and error as an original power. In international systems, the original power to trial and error shows that new shared ideas are born from it and old shared ones die out due to it (Zhou, 2018; 2019). Wendt (1999) believed that power and interests should be expressed through shared ideas, but shared ideas are formed in trial-and-error practices and corrected in subsequent trial-and-error ones. Therefore, only by mastering the original power to trial and error can one have an opportunity to create or discard shared ideas (Foucault, 2000).

The error-tolerant power structure of the international system is the distribution and proportion of the original power to trial and error and corresponding powers to be right, in which shared ideas are mainly created

by one or more states with the largest share of the original power to trial and error, in order to determine and maintain his or their own identities and corresponding interests. Therefore, shared ideas are derived from the error-tolerant power structure of the international system, and subordinate to it. When will shared ideas be recognized or discarded? The key lies in whether shared ideas are conducive to maintaining the legitimacy of the state that holds the largest share of the original power to trial and error; whether they are conducive to its gaining more original powers to trial and error, improving its right-doing or trial-and-error capabilities, and reducing its right-doing and trial-and-error costs; whether they are conducive to its striking opponents' right-doing or trial-and-error capabilities, and their right-doing or trial-and-error costs. Thus, the error-tolerant power structure and corresponding shared ideas are a whole. Shared ideas that have constructed the structure of the international system and given it impetus (Wendt, 1999) only see conceptual structure and neglect that they are mainly created by the state that holds the maximum share of the original power to trial and error (Elias, 2000; Foucault, 2000). Therefore, if constructivism recognizes that shared ideas are created by a state with the original power to trial and error, it should agree that the essence of anarchy is always power politics.

Wendt proposes a thought-experiment of "First Encounters" and expounds that there are three cultures of anarchy, described as Hobbesian, Lockean, and Kantian respectively. When two states encounter each other in anarchy, they may become friends, rivals, or enemies, depending on the actions they take and their understanding of the meaning of those actions (Wendt, 1999). Error-tolerant powers paradigm recognizes three anarchic cultures that Wendt describes in First Encounters between alien peoples, but subsequent interactions depend on relative material strength. In the theory of error-tolerant IR, whether great powers adopt military conflicts or not is depended on Unit One. When there is a significant difference in Unit One between two countries, the possibility or trend of military conflict always exists. Then when military actions will be taken or how urgent it is for them is depended on Unit Two.

Hobbesian, Lockean, or Kantian cultures are just different ways of competing for the original power to trial and error for great powers. States, such as China and Japan, encountered each other for the first time and became very friendly in subsequent interactions. But Japan discovered that it had already taken the lead in terms of Unit One in the field of industrialization by the late 19th century, which means that the relative trial-and-error or doing-right costs required for Japan to plunder China's wealth through aggression were very low, and the so-called Sino-Japanese friendship collapsed at any time (Paine, 2005). In the 1920s when Japan was damaged by the earthquake, Chinese NGOs raised donations for it (International Development Center, 2014), but Japan still launched a war against China, because in military fields, Japan's relative right-doing competence, i.e., military technologies, has been far ahead of China. Hence, whether the first encounter is a conflict or not is actually accidental. Two states or more have to compete for the original power to trial and error in international fields and corresponding powers to be right, which basically are depended on Unit One for now and Unit Two for the future. Error-tolerant powers paradigm especially emphasizes that the emergence of Kantian cultures, such as the EU, is also to compete for the power to trial and error as an original power. For error-tolerant IR theory, the initial main goal of the EU was to compete with the former Soviet Union for the original power to trial and error globally. When the Soviet Union collapsed in 1991, the EU has mainly competed with the United States and China in the fields of finance and manufacturing for the original power to trial and error (Siripurapu & Berman, 2023).

Since the essence of constructivism is also power politics, why do shared ideas emphasized by Wendt have certain explanatory power? Or why does Wendt's constructivist theory of IR seem correct sometimes? Error-tolerant powers paradigm believes that when the error-tolerant power structure of the international system is in a

stable period, shared ideas are consistent with identities and interest determined by the greatest power with the largest share of the original power to trial and error. Then, shared ideas can represent the great power's identity and interest, and have certain explanatory power. But the change of Unit One and Unit Two as endogenous drives may lead to changes in the current or future framework of the error-tolerant power structure. In that case, previous shared ideas may be abandoned. For instance, Sino-US relationship has gradually moved from friendship to conflict since 2018 (Swanson, 2018). In essence, China has greatly narrowed Unit One and Unit Two in military and economic fields, which makes the United States feel great pressure, so it takes the initiative to abandon previous shared ideas of Sino-US friendship and turn to Sino-US conflict, predicted by Mearsheimer (2001). There is a prerequisite here that the United States must have the maximum share of the original power to trial and error; otherwise, it cannot change the culture in the field of international relations.

### **Error-Tolerant IR Theory: Unification of Three Major Theories of International Relations**

Error-tolerant IR theory is constructed on the basis of error-tolerant powers paradigm and error-tolerant economics, and holds that states mainly compete for the original power to trial and error and corresponding powers to be right. For realism, this theory suggests focusing on the original power to trial and error and corresponding powers to be right, not just traditional ideas of power. Why is the original power to trial and error so important? Because connotations of sub-rights, such as the right to life, liberties in non-innovative fields, and property, are defined by it. Hence, original powers to trial and error, and interests are generally unified (Morgenthau, 1973); liberal IR theory which error-tolerant economics (Zhou et al., 2022) has discovered enables hegemonic powers to compete for original powers to trial and error in an implicit way. When developing countries practice Western values of "liberty, private property, free markets and liberal democracy (LPFL)", they have voluntarily given up original powers or rights to trial and error in their core areas due to high trial-and-error costs and weak trial-and-error capabilities. Finally, developed countries, especially the United States, can monopolize the core areas of industry, and then utilize the global market to recover trial and error costs and earn monopoly profits. But who has the ability to construct an international system based on Western values? Obviously, American private enterprises do not have this capability, so neoliberal institutionalism (Keohane & Nye, 1977; Keohane, 1984) later realizes the importance of the state as an actor in international relations. For constructivism, its first defect is that it has not realized the power to trial and error as an original power: Human ideas are conceived through trial-and-error practices, and corrected in subsequent ones. Whoever has had the original power to trial and error can create new ideas and abolish old ones, both domestically and internationally. So international cultures, such as Hobbesian, Lockean, or Kantian, et al., are created or abolished by powerful states that hold the largest share of original powers to trial and error. In this sense, realism and neoliberal institutionalism, related to Hobbesian and Lockean cultures respectively, are just ways or means for powerful states to compete for the original power to trial and error and corresponding powers to be right.

Furthermore, the second reason why Wendt's constructivism is incomplete (Booth, 2005) is that it provides three solutions to anarchy, corresponding to Hobbesian, Lockean, or Kantian cultures, but it cannot provide endogenous drives for the transition from one culture to another. However, error-tolerant IR theory has overcome the above defect by relative right-doing competences and relative right-doing costs between states as Unit One; relative trial-and-error capabilities and relative trial-and-error costs between states as Unit Two as endogenous drives. When Unit One is very beneficial to powerful rational states, conquest is easy and profitable for them (Tang, 2016), and most of them would like to create Hobbesian culture, related to realism. Conversely, they

would like to create Lockean culture, related to neoliberal institutionalism, to compete for the original power to trial and error in economic fields. In the other hand, when Unit One is very beneficial to powerful rational states, some weak states may create Kantian cultures to compete for the original power to trial and error like EU. In short, error-tolerant IR theory based on Unit One and Unit Two in specific historical periods is manifested as Hobbesian culture, related to realism; or as Lockean culture, related to neoliberal institutionalism; or as Kantian culture. In other words, Hobbesian, Lockean, or Kantian cultures are constructed by error-tolerant IR theory based on Unit One and Unit Two, as true constructivism instead of Wendt's incomplete constructivism. Finally, we can conclude, error-tolerant IR theory as complete constructivism has unified three major theories of international relations.

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