

The impact of globalized knowledge dissemination and U.S. intellectual hegemony on Taiwan

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Abstract. The phenomenon of globalization has contributed to the spread of knowledge. The earliest economic globalization was related to international trade, and the industrial revolution at the beginning of the twentieth century contributed to the later development of international trade. Post-war globalization became dominated by the United States, whose strong political, economic, and military power sustained the hegemonic realist demand for globalization hegemony to prevail in the world. The Hegemonic Stability Theory (HST), the world system, the Bretton Woods system, neoliberalism, the World Intellectual Property Organization (WIPO), the WTO, and multinational corporations, all of these concepts play an important role in the dissemination of knowledge in the context of globalization, and they also provide room for theoretical explanations and legitimate ways for the US to promote hegemony later on. Hegemony has a profound impact on the development of developing countries. In Taiwan in East Asia, the U.S. has had a long and profound impact on it, from economic and military assistance, to economic and industrial cooperation, to knowledge and cultural exchanges, the U.S. has successfully accomplished the social transformation of Taiwan, and has successfully used knowledge hegemony to control Taiwan's way of knowledge production and dissemination.

1 Globalized knowledge dissemination and hegemony

Globalization is a broad concept whose origins cannot be traced back, perhaps from the discovery of the American continent by Christopher Columbus in 1492. The driving force behind the rise of globalization since World War II has been the United States. In order to promote post-war economic recovery and the resumption of global trade, the United Nations Monetary and Financial Conference was held in Bretton Woods in 1944, and the agreements on the establishment of the IMF and the WB were signed, which formally opened the prelude to the globalization of the economy in the post-war period, and the Bretton Woods system

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established the US Dollar as the gold standard system. Globalization firstly refers to the phenomenon of "economic globalization", and the rise of international trade is an important symbol of globalization. At the same time, it also included concerns about finance, communications, environmental protection, and the economic development of the countries of the South.

2 Globalized knowledge dissemination

Before the 20th century Britain used the technological advantage gained from the industrialization revolution and gained benefits all over the world through international trade and colonization. After the 20th century the United States of America replaced Britain as the world's number one economic power. With the advent of the digital information age, globalization has facilitated the cross-border dissemination of knowledge and technology. At the same time, the IMF (2018) suggests that "international trade and competition can facilitate the global spread of knowledge, thus providing an important conduit for globalization to benefit all countries" (IMF, *世界經濟展望*, 2018.4). The IMF (2018) also suggests that "globalization is the most important tool in the global economy. and competition can facilitate global knowledge diffusion, thus providing an important channel for globalization to benefit all countries". IMF (2000) defines four basic concepts of globalization, including international trade and international exchanges, the flow of capital and investment, the movement of people, and the dissemination of knowledge, which in fact describe an interactive relationship that affects each other under globalization. "The synergy-oriented model can be defined as the theoretical background for the active creation of the knowledge society and the knowledge economy, especially the effective institutional interactions in the process of their creation and the scientific and technological progress brought about by the acceleration of internationalization". (Borissas Melnikas, (2011), *Knowledge Economy: Synergy Effects, Interinstitutional Interaction and Internationalization Processes*, *izinerine ekonomika - engineering economics* 22 (4). P.368 .) Knowledge, as a carrier of globalization, plays an important role in the shaping of the region (the world), which on the one hand brings the world closer together through the exchange of knowledge, ideas and institutional approaches, and on the other hand deepens mutual understanding and cooperation in order to face the common challenges of human society.

Globalization is closely related to international relations (IR), which in the narrow sense refers to the study of inter-governmental interactions. Since it is difficult to explain international relations through a single-oriented study, the study of international relations is mainly divided into two fields, traditionally from the point of view of realism, while international security focuses on war and peace, and its research targets are war and peace. Traditionally, the study of international security focuses on war and peace, with the government as the main actor in the country. On the other hand, it focuses on the study of "international political economy" (IPE). With the deepening of globalization, the study of globalization issues has become more extensive, with more and more attention paid to North-South relations, international production, international aid, and the global environment, and knowledge has begun to spread more widely, affecting the logic of action of different actors in the international arena through the production, sharing, and exchange of knowledge pairs, with a wider range of research targets, including intergovernmental organizations (IGOs). It includes intergovernmental organizations (IGOs), non-government organizations (NGOs), multinational corporations (MNCs), as well as individuals and cities.

The development of international relations affects the lives of ordinary people all the time. For example, in the trade war between China and the U.S., the tariff problem affects the standard of living of ordinary people in the U.S.; the Russian oil and gas export problem caused by the Russo-Ukrainian War affects the production and life of the ordinary people in

Europe; and the food problem in Ukraine caused by the war affects the food and clothing of the grassroots in some developing countries. "International relations are closely related to structural factors such as history, geography, economy, politics and internal affairs, which together shape the main trend of international relations today, which is globalization. (歐信宏、胡祖慶 譯, Joshua S.Goldstein, Jon C.Pevhouse 著, (2013), 國際關係, 雙葉書廊有限公司, 2 頁.)

International relations reflect the complexity of global issues, especially in dealing with the global environment, which requires the co-operation of the world's richest countries and the world's poorest countries to meet their common interests. The reality, however, is that in the 50 years since the signing of the 1972 Declaration on the Human Environment, there has been little effective governance. This public finance problem, where the public good and the private sector are at odds, is a by-product of economic globalization. Climate change is a problem because too few people see it as a problem, and what affects us indirectly is often easily overlooked and forgotten. It is clear that globalization is not a problem that can be solved by voting or co-ordination, and Mancur Olson has long raised the "free-rider problem" (Free-rider problem In public finance issues, many people have no need beforehand and enjoy the fruits of others' efforts afterwards. See: Mancur Olson, (1965).The Logic of Collective Action: Public Goods and the Theory of Groups. Harvard University Press.) of a complex collective action by such a large group of participants in globalization, and one that is clearly unfair and unevenly distributed.

Assuming that the externalities of environmental governance in dealing with the public problem of global carbon emissions are in the common interest of all humankind, and that each individual is of equal status in terms of the state, "in a truly large group, each individual would receive only a tiny fraction of the benefits of the collective action. This small gain does not stimulate the individual in the large group to take voluntary action consistent with the interests of the group". (蘇長, 嵇飛 譯, 曼瑟.奧爾森(Mancur Olson), (2005), 權力與繁榮 (Power and Prosperity), 上海人民出版社, 62 頁.) It is conceivable that because of the huge power differentials between countries, the costs will vary, and many small countries, mostly victims, who are not highly industrialized, who prefer rapid economic growth, and who in reality are not in a position to provide the contribution of governance per se, and who have little need for the environment, will become 'blatant' free-riders. The Copenhagen Conference (COP15/MOP5) called on some countries of the South to take more responsibility for global emissions reductions in the North, where environmental and climate problems are the result of 200 years of industrialization in the North. This also reflects some of the dilemmas of governance under globalization, just as environmental governance itself requires the joint efforts of every individual, but due to the differences between individuals that lead to the complexity of the problem and the difficulty of cooperation, the conflict between development and environmental issues under globalization has become more prominent.

There are three schools of thought on globalization, namely hyper-globalization, sceptics and transformationism. Hyper-globalization emphasizes the role of free economy and decentralization of state power, and argues that "traditional nation-states have become business units in the global economy in a reversal of the norm" (Ohmae, K. 1995. The End of the Nation State. New York:Free Press. P.5 .); sceptics argue that globalization has not been able to bridge the gap between the countries of the South and the North, but on the contrary the gap has been widened, and that the formation of Regional Trade Organizations (RTOs) has refuted the integration of globalized countries into a globalized economy, and has brought global free trade, "at the same time, the formation of regional trade organizations (RTFOs) is a major factor in globalization. At the same time, sceptics believe that global management and internationalization of the economy are the main demands of the Western countries, mainly to maintain their leadership in world affairs".(沈宗瑞,高少凡,許湘濤,陳

淑鈴譯(2001, 全球化大轉變: 全球化對政治, 經濟與文化的衝擊, 台北: 韋伯文化, 2-13 頁. See: David Held, Anthony McGrew, David Goldblatt, Jonathan Perration 1999. *Global Transformations: Politics, Economic and culture*. Published by Cambridge: Polity Press.) Transformationalists do not fully believe in a free economy, and at the same time, they recognize the weakening of national sovereignty. These changes are gradually reshaping modern society and the new order. (See: Giddens, A. 1990 *The Consequences of Modernity*. Cambridge: Polity press.)

Regardless of the viewpoints, however, it is important to recognize the role of corporations as the driving force behind globalization. The pursuit of economic development has led to the growing power of multinational corporations (MNCs), which have gained more and more voice in the international arena. Through the export of capital, technology, and talent, MNEs are shaping a closer global economic community. "MNEs develop new technologies, including products, production, and management practices through the establishment of subsidiaries in target countries, which play an active role in contributing to the innovation and strategic renaissance of MNEs." (Birkinshaw, J. , Hamel, G. and Mol, M.J. (2008) . *Management innovation*, *Academy of Management Review*, Vol. 33 No. 4, pp. 825-845.) Knowledge is a resource. The globalization of multinational enterprises (MNEs) facilitates the integration of knowledge across regions and the creation of new value. "As MNEs deploy their knowledge-intensive functions abroad, they are gradually shifting their motivation for geographic expansion from economies of scale to the exploitation of local knowledge and opportunities." (Cantwell, J. and Janne, O. (1999). *Technological globalisation and innovative centres: the role of corporate technological leadership and locational hierarchy*. *Research Policy*, Vol. 28 Nos 2/3, pp. 199-144.) Thus, contemporary MNEs under globalization are not only acting as knowledge transmitters, but also developing and creating new knowledge. The integration of knowledge across regions has led to interactions between regions, and the generation of knowledge has made the firms themselves more strategically valuable in the globalized marketplace.

An interesting phenomenon in the context of the rapid growth of MNE-led globalization is that "while the process of globalization has brought the world closer together through the exchange of knowledge, ideas and practices, advances in the diffusion of knowledge have not been reflected in the expansion of knowledge production venues and modes". (Navnita Chadha Behera, *Globalization, deglobalization and knowledge production*, *International Affairs*, Volume 97, Issue 5, September 2021, Pages 1579 - 1597. <https://doi.org/10.1093/ia/iiab119>) The important reason for this is that the paradigm of international relations under globalization has been unilaterally dominated by the United States in the post-war period. "Hegemony is a concomitant of international relations. The hegemonic countries of the agrarian society have obvious characteristics of military hegemony, the hegemonic countries of the industrial society have obvious characteristics of industrial hegemony, and the hegemonic countries of the information society initially show the characteristics of knowledge hegemony. (黃鳳志, 2006, 數字鴻溝與國家關係知識霸權, 東北亞論壇, 第 15 卷, 第 3 期, 62 頁.) The United States has maintained its absolute hegemony in the post-war period, and its prosperous economy and emerging culture have become the target for many developing countries to learn from. At the same time, relying on the global expansion of multinational corporations, it has an absolute say in knowledge production, and "there exists a serious tendency of 'one-sidedness' in the innovation and dissemination of knowledge, and the developed countries actually monopolize most of the domains of knowledge innovation. (Ibid, p.66.)

Finally, the rise of the anti-globalization wave also shows the dilemma of knowledge dissemination. As early as the 2000s, we can learn through the news media that demonstrators in Seattle, USA protested against the WTO, and then in recent years President Trump's trade

war with China has made the anti-globalization wave stronger and stronger. Now the U.S. is more concerned with the realities of global strategic competition with China.

3 Globalization and U.S. hegemony

Kindleberger is the founder of the theory of hegemonic stability, which advocates the need for a hegemonic state to maintain a stable international monetary system, and that the state at the center of the system, i.e. the hegemonic state, must stabilize the operation of the international monetary system. (Gourinchas, Pierre-Olivier; Rey, Hélène; Sauzet, Maxime. 2019 *The International Monetary and Financial System. Annual Review of Economics*. P.860) At the same time, Kindleberger cited the concepts of "dominance" (Dominance, this concept is mainly used to deal with public financial issues. It is willing to establish a top-down power structure close to the form of government. It emphasizes that the hegemonic system is the specific practice of dominance. See: 歐信宏, 胡祖慶 譯, Joshua S.Goldstein, Jon C.Pevehouse 著, 2013, 國際關係, 雙葉書廊有限公司, 4 頁.) and "leadership" in international relations to justify the rationality of hegemonic states. From the perspective of public goods in economics, public goods have the characteristics of non-competitiveness (Non-Rivalrous) and non-exclusiveness (Non-Excludable), and there is no need for a hegemonic state to maintain the stability of the international monetary system. From the perspective of public goods in economics, due to the non-rivalrous and non-excludable nature of public goods, no private enterprise is willing or even able to devote itself to public welfare in the long term, so no one but the government can bear the long-term expenses of public goods, while the United States advocates the role of an international government to provide public goods for the international community, and when there is a crisis, it is necessary for a country to bear the burden. (參閱: 查理斯·P·金德爾伯格, (1986) 1929-1939 年世界經濟蕭條, 上海譯文出版社, 347 - 348 頁.) This is in fact a side argument to the above mentioned "free-riding" problem of the Southern countries being unable to solve public affairs under globalization. At the same time, Wallerstein "argued in *The Modern World System* that 'hegemony is stability and hegemony is chaos'. (張建新, 1999, 霸權體系與經濟增長-克林頓政府貿易政策的政治經濟分析, 復旦大學, 3 頁.) In *The Modern World System*, Wallerstein "argues for the basic rule of hegemony as stability and hegemony as chaos". These theories were based on the absolute economic superiority of the U.S. With the economic recovery of later countries, such as Japan and Germany, and then the rise of China, the U.S. hegemony was rapidly and relatively weakening, and "its economic partners benefited more than it did from free trade, and discouraged it. Other economies, more efficient, more dynamic, and more competitive, have risen, weakening the hegemon's international position and reducing the economic surpluses on which it depends to pay for global hegemony." (楊宇光 譯, 羅伯特·吉爾平, 2006, 國際關係政治經濟學, 上海人民出版社, 94 頁.) It is clear that hegemony is cyclical and economically related.

When the U.S. economy weakens and no longer provides more international public finance, a new hegemony correspondingly arises, and conflict between hegemons forces the world back into the "Law of the Jungle" wars Hobbes envisioned until new rules are established. However, modern "wars of hegemony" must be nuclear wars, and no one can stay away from them. Therefore, theoretically, no one can take over the hegemony of the United States. Keohane, another proponent of the hegemonic stability theory, argues in *After Hegemony* that "the legacy of U.S. hegemony has been inherited in the form of large-scale international mechanisms that create a more favorable institutional environment for cooperation, without which cooperation would be very difficult; it is easier to maintain mechanisms than to create new ones. The adoption of mechanisms reduces transaction costs and increases the likelihood of cooperation." (蘇長和 譯, 基歐漢 Keohane, R., 2001, 霸權

之後:世界政治經濟中的合作與紛爭,上海人民出版社, 289-294 頁。) These mechanisms provide the institutional safeguards for the subsequent creation of global intellectual hegemony.

In the Bretton Woods system, there was an important international agreement, the Uruguay Round, " (The Uruguay Round is the "General Agreement on Tariffs and Trade" (GATT). The participating parties signed the Marrakesh Agreement in 1994. 125 countries participated in the meeting to discuss four major categories: basic telecommunications, financial services, agriculture, and service industries, and established The World Trade Organization replaced the General Agreement on Tariffs and Trade. See: https://bo.io.gov.mo/bo/i/2004/20/aviso16txt_cn.asp) The TRIPs agreement reached in the Uruguay Round exceeded even the expectations of many intellectual property interests. It may well have been a near-perfect fulfillment of the negotiating agenda set out in Punta del Este in September 1986." (約翰·H·傑克遜, 2001, *世界貿易體制——國際經濟關係的法律與政策*,復旦大學出版社, 340-341 頁。)The United States, as the driving force behind the IP negotiations at that conference, has done well to protect its leading industries and gained significant benefits in the future by successfully integrating IP into the multilateral trading system. The value of the Uruguay Round lies in the fact that it brought together a majority of the world's countries to reach a trade agreement that enabled the U.S. to get rid of its unilateral hegemony in providing the world with public finance, and instead develop a global supply model, in which each signatory country undertook to make concessions in the commitment agreement, which not only enabled developing countries to become adherents to the system and its defenders, but also provided reliable institutional safeguards for the U.S.'s new "intellectual hegemony. It also provides a reliable institutional guarantee for the new round of "intellectual hegemony" of the United States.

By vigorously promoting the awareness of intellectual property protection in developing countries, developed countries have made their intellectual property rights equally protected in developing countries. With the gradual dismantling of tariff barriers in various countries and the gradual formation of a unified world market, intellectual property rights have become an important means for developed countries to maintain their dominant position in the global economy.

4 Intellectual property and intellectual hegemony

Intellectual Property Rights (IPR) is the protection of intellectual success produced by citizens, legal persons or other organizations, and is often referred to as intangible property rights. According to the WIPO Convention established in 1967, (See: WIPO, 1979. Convention Establishing the World Intellectual Property Organization. <https://wipolex.wipo.int/en/text/283854>) it mainly protects six categories of intellectual property rights: copyrights, patents, trademarks, industrial designs, geographical indications and trade secrets, and at the same time, the Convention also provides for the suppression of acts of unfair competition. Intellectual hegemony is the establishment of legitimate forms of intellectual property rights that are not legitimate. In a globalized international society, it is mostly the technological monopoly of advanced and developed countries over developing countries.

5 Intellectual property rights

Economic globalization and intellectual property rights are inevitably linked, the establishment of intellectual property protection mechanisms under globalization, to ensure the legitimate competition between countries, it protects the production of bilateral and

multilateral agreements between the international community, today's scientific and technological innovation, the protection of intellectual property rights is increasingly important to the stability of the economy, the protection of intellectual property rights in the global arena is conducive to stimulate creativity, the realization of knowledge into wealth, and thus promote the process of social development, the sustainable development of society also requires the continuous creation of new knowledge to be maintained. The protection of intellectual property on a global scale is conducive to stimulating creativity and realizing the process of transforming knowledge into wealth, which in turn promotes the development of society, and the sustainable development of society requires the continuous creation of new knowledge to be maintained.

Bacon (Bacon) mentioned "knowledge is power" in his *Meditations*, and the assertion is, in hindsight, an accurate summary of the development of human society as a whole. Whether it is the Neolithic era of slash-and-burn cultivation or the 21st century of the information boom, science and technology have always been a guarantee of productivity and superiority. When modern countries evaluate their comprehensive national power, they will compare their hard and soft power. On the other hand, if we evaluate a country's power from the perspective of knowledge-based economy, we should look at it from the perspective of intellectual property rights. So this kind of evaluation standard is extremely abstract, and when we look back at the 2019 Sino-US trade war, you will find that the fundamental reason behind the conflict driven by China's challenge to the knowledge economy of the United States, discussing the list of tariffs imposed by the two countries on each other to study is boring, any form of war behind there must be its value, in the era of globalization to advocate free trade in the interests of U.S. businesses. In the era of globalization to advocate free trade is in line with the interests of U.S. companies, it is clear that the imposition of tariffs is not in line with U.S. interests, and through trade wars to prevent the development of China's advantageous enterprises, so as to win technological advantage has a more far-reaching value, the globalization of the era of the evaluation of the country's key factors in the scientific and technological strength of the intellectual property is often the embodiment of scientific and technological strength, which is directly related to the competitiveness of a country. According to the latest data from the World Intellectual Property Organization (WIPO), the total number of patent applications in China accounts for 45.7% of the global total, which is 27.5% higher than that of the United States, the second largest country in the world. (WIPO: More than 85% of all patent filings in 2020 occurred in the IP offices of China, the U.S., Japan, the Republic of Korea and the EPO. China accounted for 45.7% of the world total. See: WIPO, 2021 Intellectual Property Statistics: Facts and Figures. <https://www.wipo.int/edocs/infogdocs/en/ipfactsandfigures/>) The increase in patent filings by Chinese companies is due to internal competition, particularly in the computer technology and digital communications sectors, which also happen to be strong sectors for the US. Although there is still a gap between China and the developed world in terms of cutting-edge technology, the rapid pace of IP development will clearly impact on the core interests of the United States in the future, and a war in the knowledge economy will be far more protracted than a trade war.

6 Intellectual hegemony

The concept of knowledge hegemony is a "derivative" of cultural hegemony. Cultural hegemony first came from Gramsci's theory, who pointed out that "a social class can dominate or rule a multicultural society by manipulating the social culture (beliefs, interpretations, perceptions, values, etc.)". (See: Gramsci, Antonio (1971). *Selections from the Prison Notebooks*. International Publishers.) Cultural hegemony conveys a critical way

of thinking, which is highly secretive and transforms the world through invisible power, compared with rigid military and economic hegemony.

As one of the new types of hegemony in the field of international relations, the hegemony of knowledge has countless connections with intellectual property. Since the middle of the last century, the protection of intellectual property has been mastered by large consortia, and now the scope of protection of intellectual property has become very detailed. The application of intellectual property makes some large enterprises have absolute technological barriers in key technological fields, especially in agriculture and medicine, for example, the TRIPS agreement, on the one hand, has a 20-year protection of drug patents, and at the same time, the intellectual property itself also guarantees the legitimacy of monopolistic behavior, especially some key drugs that can only be produced by developed countries, and the majority of people in poor countries can not afford to buy them, which obviously is not favorable to the weaker countries. This is obviously unfavorable to the weak countries. Under globalization, developed countries use their dominant areas to promote trade, and intellectual hegemony prevails under the auspices of the WTO and intellectual property rights. Monsanto Company's mastery of seed gene technology enables food to provide more yield and be more resistant to diseases and pests, but after gaining the trust of farmers through aid, they successfully control farmland and dominate the market. However, after gaining the trust of the farmers by means of aid, they succeeded in controlling the farmland and taking over the market, because the farmers could not save the seeds and had no better alternatives. Excessive protection of intellectual property is an artificial restriction on the dissemination of knowledge, and the same intellectual property rights can be used by the owner of the intellectual property rights against potential competitors, and this kind of behavior also curbs the development of innovation.

The huge difference in the level of economic and technological development between the North and the South, and the preemptive nature of intellectual property rights, make trade barriers and technology barriers an insurmountable gap. "The expansion of IPRs has raised the cost of technology imports to developing countries, so that developing countries no longer have the policy options and flexibility in the use of IPRs that developed countries have to support their domestic development." (徐元, 2010, 知識產權貿易壁壘研究, 東北財經大學, 138 頁.) IP relies on legal support, and globalization has spread and expanded that set of institutional standards through international organizations and NGO's, which have provided a guarantee for the entry of multinational corporations.

As mentioned above, multinational corporations are key players in the spread of globalization. The production of knowledge includes both state and non-state actors, and multinational corporations not only play the role of non-state actors, but also become machines for developed countries to control the world. In order to survive and compete, enterprises kept on creating new intellectual property achievements. Developed countries already had an advantage in the development of science and technology, and in order to maintain their dominant position, they needed to continuously improve the level of science and technology in order to maintain the stability of their economic hegemony, and at the same time, they also needed to have a stable national political and economic system.

In the 1970s, when American hegemony was being challenged, the U.S. succeeded in shifting the pressure of economic costs through the means of international trade established by the Uruguay Round. "The U.S. government's policy of exporting U.S. intellectual property rights through the World Trade Organization and industrial policy supports differential growth and profitability, with the dual goals of generating differential growth relative to economic competitors and maintaining military superiority over geopolitical competitors." (Weiss, L. (2014). *America Inc.? Innovation and enterprise in the national security state*. Ithaca, NY: Cornell University Press.) By actively drawing developed countries together and coordinating multinational cooperation to maintain world political and economic stability,

the hegemonic powers reduce the cost of their own inputs, and by retreating, they ensure their dominance and leadership in international relations. In the latest Forbes Global 2000 list, the number of U.S. companies consistently tops the list, with the U.S. owning the largest number of 590 companies. (See: Forbes, 2022. <https://www.forbes.com/lists/global2000/?sh=5b0454b65ac0>) These companies are the most profitable for the U.S. globally. When these technologically advanced enterprises enter developing countries, they quickly take over the market, sell their own standards and models under the umbrella of the WTO, plunder local resources, and build intellectual property barriers. The hegemony of intellectual property rights directly leads to the abuse of intellectual property rights in developed countries and the damage to the well-being of the people of developing countries and their right to life, and most countries have no power to counteract the multinational enterprises of developed countries. Most countries have absolutely no power to counteract the multinational enterprises of developed countries.

7 The impact of intellectual hegemony on Taiwan

I have spent a lot of time above exploring the relationship between intellectual property and intellectual hegemony under globalization. Let's go back to Taiwan and look at the development of Taiwan's modernization under globalization. Under globalization, a very few developed countries in the world have plundered the markets of developing countries by means of free trade. In order to protect their own national interests, developing countries have started to implement protectionist policies, which is also known as the blockade policy that has led to the backwardness of developing countries. After the Nationalist government retreated from Taiwan in 1949, it actively sought assistance from the United States in terms of policy, and therefore followed the development model of the Western developed countries, mainly the United States, in terms of economic policy at an early stage. In terms of ideology, from the nationalist and anti-communist education in the 1950s, to the liberal and pro-US policy in the 1960s, and then the left-wing ideology in Taiwan in the 1970s under the influence of the Cultural Revolution in Mainland China, these three major lines of thought have shaped Taiwan's ideological perceptions of the Mainland. (參閱:鄭鴻生, (2018), 《重認中國:台灣人身分問題的出路》, 人間.) All three theories existed within a Western framework of thought, and these theories caused structural changes in the ideological identity of the later Taiwanese society, as well as in the production and dissemination of knowledge.

8 From U.S. aid to economic construction

In the 1950s, the world was in the midst of the Cold War, with the rise of welfare state policies in Europe and the United States, the rapid development of neo-liberalism under globalization, and the tension between the two sides of the Taiwan Straits, which had just been partitioned by the Civil War, became even more tense due to the outbreak of the Korean War. During the most turbulent period, the KMT tightened its control over speech. After the relocation of the Central Daily News to Taiwan, "the Kuomintang started up again in Taiwan, and it was only after the KMT had gained control of this propaganda mouthpiece that the KMT was able to break out of its predicament through the propaganda and construction of 'Reform' and 'Free China' and to seek further foreign aid at a time when the government was in a state of turmoil. (參閱:陳志昌,(2014),重起爐灶:遷臺初期的《中央日報》(1949-1953),國立暨南大學,I頁.) Taiwan benefited economically from the U.S. Foreign Assistance Act (FAA), which provided economic support and military aid for the KMT's anti-communist ideology in Taiwan, as well as for Taiwan's internal economic reconstruction. The KMT's success in seeking U.S. aid had both external and internal necessities. Externally, the Cold War between

the U.S. and the Soviet Union, the U.S. and the KMT's anti-Communist ideology coincided with each other, and the Korean War gave the U.S. no reason to give up on Taiwan at that time; internally, the island's large influx of people from the mainland led to material constraints, and the high level of military spending led to a fiscal deficit and rising prices.

"Nearly three-fourths of total U.S. aid to Taiwan is non-project based, provided through a large CIP. In addition to basic necessities such as food and clothing, the CIP provides Taiwan's farms with much-needed industrial supplies such as fertilizer, oil, and cotton. It also involves the importation of non-project capital equipment to replace, modernize, or expand existing factories or build new ones." (CIP is an international trade term, which means: all risks and expenses before delivery are borne by the seller. See: Jacoby, Neil H. (1966.) *US aid to Taiwan: A study of foreign aid, self-help, and development*. London: Frederick A. Praeger. Pp.42-45.) "Projects financed by U.S. aid included those under the Second Four-Year Plan (1957-1960) of the Nationalist Party, which placed special emphasis on the Shimen Reservoir, tidal land reclamation, vocational assistance for retired military personnel, and public housing." (See: Gold, Thomas B. (1986). *State and society in the Taiwan miracle*. New York, NY: M. E. Sharpe. Pp.69-70.) Obviously, such assistance eased Taiwan's internal crisis, while the provision of aid construction and standards provided a good foundation for the later development of Taiwan's international trade to accept future investment processing, and more homogenization with the West in knowledge production.

In the 1950s, Taiwan's economic policy was still import substitution, with other developing countries due to the adoption of trade protectionism. In the 1960s, through the U.S. aid after the recovery of economic construction, the initiative to abandon trade protectionism, the economy began to shift to the export processing industry, Taiwan's use of cheap labor and the suppression of domestic demand to the developed countries to dump products, and quickly captured the market, the policy of Taiwan from the Taiwan's policy shifted from seeking aid to proactive engagement in the process of integrating into globalization, and Taiwan's achievements during this period have attracted world attention. As Taiwan's deeper opening to the world coincided with the rise of U.S.-sponsored neoliberalism, which deepened Taiwan's dependence on the West, "the Japanese government provided aid to Taiwan in a less formalized way, but the shift in economic strategy made Taiwan a key investment location for both Japanese and U.S. firms in search of a low-cost production base." (Ibid. ,p.79.) When the U.S. invested capital and technology in Taiwan and used cheap labor to extract excess profits, this economic growth model continued until the late 1980s, when Taiwan's economic growth gradually reached a developmental ceiling, at which time the dividend of cheap labor had long since disappeared, and although the economy had reached a certain level of development, intellectual property rights were still held by the U.S. in many key areas. When Taiwan learned the model of developed countries in Europe, the United States and Japan and began to export the processing and manufacturing industries, the United States is still earning a lot of benefits, according to statistics: since 2008-2017, Taiwan has to pay as much as 80% of the annual average cost of intellectual property rights to the United States, amounting to an annual average of more than NT\$100 billion in expenditure. (參閱:高嘉和、盧冠誠,2018年2月6日,《年付千億權利金 台灣陷智財赤字國》,自由時報:自由財經,查詢日期:2022年6月10日.<https://ec.ltn.com.tw/article/paper/1175019>) These high expenditures highlight the U.S. control of Taiwan's intellectual hegemony in the field of technology under globalization.

9 U.S. knowledge hegemony and knowledge dissemination in Taiwan

During the period of martial law, the Taiwanese government issued the "Implementation Outline of Counterinsurgency National Education" and the "Measures for the Implementation of the Extraordinary Educational Program" in 1950. These two laws strictly limited the free development of education in Taiwan, and the education at that time focused on the Three Principles of the People, anti-Communist and patriotic education, as well as the goals of de-Japanesization and Mandarinization, which showed the characteristics of the time in terms of safeguarding the Chinese culture and stressing the importance of localization and orthodoxy. In terms of higher education, "since the 1960s, the government began to emphasize manpower planning, reviewing the development of university education and specialized education, and making changes in line with the future development of the economy". (黃國維,(2011),戰後至 1970 年代初期台灣的大學教育發展研究(1945-1972),國立台灣師範大學,147 頁.) It can be seen that education at that time was goal-oriented, and a strictly controlled society had been under pressure from the U.S. In the book "Chiang Ching-kuo's Taiwan Era," (參閱:林孝庭,(2021),蔣經國的台灣時代:中華民國與冷戰下的台灣,遠足文化.) it is revealed that the Chiang government had been under pressure from Washington to democratize and reform Taiwan, and at the same time, it also reveals its disappointment with the authoritarian government.

After the Martial Law was lifted, there was a wave of reforms in Taiwan's education, which impacted the traditional education policy. Taiwan's higher education gave up its monopoly model, and universities began to learn from the Western model of autonomy. "Similar to global practice, Taiwan's higher education has undergone a decentralized and market-oriented transformation. In a more socio-politically emancipated environment, the Taiwanese government allowed higher education institutions to have greater autonomy in their operation." (See: Ka-Ho Mok,(2010).Reflecting globalization effects on local policy: higher education reform in Taiwan,Journal of Education Policy,Pp.644-645.) At the same time, the government has opened up the private sector to establish private institutions, creating more opportunities for schooling. The reforms have allowed for the wider dissemination of knowledge in the community, and have made Taiwan more diverse and better able to connect with business, the market, and the international community in the global knowledge economy.

The spread of democracy and politics in the United States has had a decisive impact on education in Taiwan. It has not only promoted profound changes in education, but has also had a profound impact on the shaping of the ideology of the entire society. The impact of U.S. intellectual hegemony on Taiwan's localized knowledge is inevitable, for example, the most representative of localization, The "Three Principles of the People" was a compulsory subject for all in the past, and the "Graduate Studies of Three Principles of the People" was set up in many universities, but after the reform of the basic abolition of the examination, nowadays, in response to the changes of the times in Taiwan's universities are no longer, and replaced by the "Graduate Institute of National Development", which is more in line with the needs of modernization and development.

Westernization was widely used by the Taiwanese government as a strategy for modernization. In the early days, the KMT even set up "Zhongshan Scholarships" to allow outstanding students to go abroad for further study, which provided the KMT with an excellent reserve force. Taiwan's deep-rooted belief in Westernized modernization, its desire to improve its international status under the pressure of globalization, and its great desire to democratize education. The Ministry of Education (MOE) specially selected experts, all of whom had been trained at U.S. universities, to lead and organize the curriculum development team to carry out the curriculum reform. These characteristics at the meso- and micro-levels led to the practice of reform: a shift from the U.S. through the imitation of replicated pedagogical methods and materials. (See: Yi-Hua Lai.(2022). Education reform through westernization in Taiwan: a case of transferring the constructivist-based mathematics

curriculum from the United States. *Journal of Asian Public Policy*.) This is especially true of higher education in Taiwan, where most young and mid-career professors have studied abroad, "According to data released by Taiwan's Ministry of Education, prior to 1990, 80-90% of those pursuing higher education abroad had traveled to the United States, which for a time constituted the largest expatriate student body in the country. The situation has certainly changed recently, but the number of students traveling to the U.S. for higher education still accounts for half of the total." (See: Kuan - Hsing Chen, Sechin Y.S. Chien & Translated by Tao-lin Hwang.(2009). *Knowledge production in the era of neo-liberal globalization: reflections on the changing academic conditions in Taiwan. Inter-Asia Cultural Studies*.p.208.) While the U.S. contributes to its culture by attracting talented people from around the world through its strong culture, it also releases talented people from a variety of industries, many of whom become tools for the dissemination of U.S. ideology and intellectual hegemony.

For example, the discipline of international relations itself, as a post-war discipline, is tightly bound up with American hegemony. "The dominance of the English language in the 'marginal' or 'semi-marginal' relationship between the American 'center' of international relations and the rest of the world helps to preserve the status quo and maintain existing power structures." (Peter Master.(1998). *Positive and Negative Aspects of the Dominance of English. TESOL Quarterly, Vol.32, No.4. p.717.*) This theory of the world system reflects the reality of the relationship between the American center and Taiwan's borderlands, where the spread of English language education has favored the U.S. in attracting talent in Taiwan, and in this respect has caused the loss of Taiwanese talent to U.S. intellectual hegemony. In the field of state relations, whether a work can be published or not is usually controlled by European and American publishers, who set the rules and monopolize the academic hegemony. The establishment of TSSCI is backed by the cult of SCI and SSCI, and the domination of the U.S. over the field of academics has a direct impact on its voice in the international arena. " (See: Stephen Chan, Peter Mandaville, Roland Bleiker.(2001). *Forget IR Theory, in Stephen Chanet (eds.), The Zen of International Relations :IR Theory from East to West . Palgrave . p.44*) Such a particular process controls the selection, organization, and diffusion of discourse, and it creates a system of exclusion that elevates certain discourses to a position of dominance and suppresses others to the periphery." Such a practice maintains the intellectual hegemony of the United States, and its recognition has become a trend in Taiwan's academic circles.

After a long and glorious period under the influence of the United States, Taiwan's hegemony has been challenged by the rise of mainland China, and the influence of the United States on mainland China has gradually disappeared, to be replaced by the competition between the United States and China in the international arena. The rapid expansion of the overall strength of the two sides of the Taiwan Strait has made Taiwan, which was already distrustful of the mainland, feel more and more "fearful". Under the influence of long-term education and economic and trade, Taiwan society generally reflects a pro-American sentiment, which makes the Taiwanese government tend to follow the United States, and politically cooperate with the United States' policy of anti-China, so that cross-strait relations today are getting farther and farther apart.

10 Conclusion

The emergence of intellectual property rights and the spread of intellectual hegemony under globalization have their own inevitable reasons for development, which are closely related to the pattern of world domination by the United States after the Second World War. Intellectual property in today's world has its own interests, and it is increasingly being emphasized by developing countries, especially in the fast-rising East Asian countries, and the WTO has

made intellectual property an indicator of the standard of modern countries and a major manifestation of national competitiveness. International disputes over intellectual property rights are constantly occurring, and intellectual property protection has become one of the key issues in the field of contemporary international relations. The technological gap between developed countries and developing countries, and the fact that the intellectual property system does not provide more protection for the weaker developing countries, has caused many countries to suffer losses in actual competition.

Starting from the establishment of the US-led international system under the post-war US-Soviet Cold War, this paper follows the development of globalization and explores the relationship between globalization and hegemony, the relationship between intellectual property and hegemony, and the impact of hegemony on Taiwan. The following conclusions are drawn:

(1) Cooperation in public affairs under globalization is difficult, and countries of different status can assume different responsibilities.

(2) Under globalization, developed countries have strengthened their cooperation with developing countries through multinational enterprises, and at the same time monopolized the markets of developing countries.

(3) The US has transferred the weakening of its hegemony caused by the excessive provision of public finance through the means of trade agreements.

(4) Intellectual property is a means for the US to profit from developing countries.

(5) By aiding Taiwan, the US opened up Taiwan's market and reaped excess profits from Taiwan.

(6) The impact of US intellectual hegemony on Taiwan's education has changed the way Taiwan produces knowledge, and at the same time made Taiwan more dependent on the US.

Finally, there are two suggestions for developing countries and Taiwan.

At a time when hegemonic countries are in charge of intellectual property, it is important to improve domestic legislation on intellectual property protection strategies in a timely manner, and to work hard to unite the voices of developing countries in the international arena in order to try to establish a more just and reasonable international intellectual property protection system.

Taiwan should learn to find its own position in history, rather than blindly following in the footsteps of the United States, thereby jeopardizing its own interests.

References

1. IMF, 《世界經濟展望》, 2018.
2. 歐信宏、胡祖慶 譯, Joshua S. Goldstein、Jon C. Pevehouse 著, (2013), 國際關係, 雙葉書廊有限公司.
3. 蘇長、嵇飛 譯, 曼瑟·奧爾森(Mancur Olson), (2005), 權力與繁榮, 上海人民出版社.
4. 烏拉圭回合. 參閱:https://bo.io.gov.mo/bo/i/2004/20/aviso16txt_cn.asp
5. 沈宗瑞、高少凡、許湘濤、陳淑鈴 譯 (2001), 全球化大轉變: 全球化對政治、經濟與文化的衝擊, 台北: 韋伯文化.
6. 黃鳳志, (2006), 數字鴻溝與國家關係知識霸權, 東北亞論壇.
7. 查理斯·P·金德爾伯格, (1986) 1929-1939 年世界經濟蕭條, 上海譯文出版社.
8. 張建新, (1999), 霸權體系與經濟增長——克林頓政府貿易政策的政治經濟分析, 復旦大學.
9. 楊宇光 譯, 羅伯特·吉爾平, (2006), 《國際關係政治經濟學》, 上海人民出版社.

10. 蘇長和 譯,基歐漢(Keohane,R.),(2001),《霸權之後:世界政治經濟中的合作與紛爭》,上海人民出版社.
11. 約翰·H·傑克遜,(2001),《世界貿易體制——國際經濟關係的法律與政策》,復旦大學出版社.
12. 徐元,(2010),知識產權貿易壁壘研究,東北財經大學.
13. 鄭鴻生,(2018),《重認中國:台灣人身份問題的出路》,人間.
14. 陳志昌,(2014),重起爐灶:遷臺初期的《中央日報》(1949-1953),暨南大學.
15. 高嘉和、盧冠誠,2018年2月6日,《年付千億權利金 台灣陷智財赤字國》,自由時報:自由財經,查詢日期:2022年6月10日.<https://ec.ltn.com.tw/article/paper/1175019>
16. 黃國維,(2011),戰後至1970年代初期台灣的大學教育發展研究(1945-1972),台灣師範大學.
17. 林孝庭,(2021),蔣經國的台灣時代:中華民國與冷戰下的台灣,遠足文化.
18. Borisas Melnikas, (2011),Knowledge Economy: Synergy Effects, Interinstitutional Interaction and Internationalization Processes, *izinerine ekonomika - engineering economics* 22 (4).
19. Mancur Olson,(1965).The Logic of Collective Action: Public Goods and the Theory of Groups. Harvard University Press.
20. Ohmae, K.(1995). The End of the Nation State. New York:Free Press.
21. Giddens, A.(1990)The Consequences of Modernity. Cambridge:Polity press.
22. Birkinshaw, J. , Hamel, G. and Mol, M.J. (2008) . Management innovation , *Academy of Management Review*, Vol. 33 No. 4.
23. Cantwell, J. and Janne, O. (1999).Technological globalisation and innovative centres: the role of corporate technological leadership and locational hierarchy. *Research Policy*, Vol. 28 Nos 2/3.
24. Navnita Chadha Behera, Globalization, deglobalization and knowledge production, *International Affairs*, Volume 97, Issue 5, September 2021, Pages 1579–1597.
25. Gourinchas, Pierre-Olivier; Rey, Hélène; Sauzet, Maxime. (2019)The International Monetary and Financial System. *Annual Review of Economics*.
26. WIPO, (1979).Convention Establishing the World Intellectual Property Organization.
27. Gramsci, Antonio (1971). Selections from the Prison Notebooks. International Publishers.
28. Weiss, L. (2014). *America Inc.? Innovation and enterprise in the national security state*. Ithaca, NY: Cornell University Press.
29. Forbes, (2022). <https://www.forbes.com/lists/global2000/?sh=5b0454b65ac0>
30. Jacoby, Neil H. (1966.)US aid to Taiwan: A study of foreign aid, self-help, and development. London: Frederick A. Praeger.
31. Gold, Thomas B.(1986). State and society in the Taiwan miracle. New York, NY: M. E. Sharpe.
32. Ka-Ho Mok,(2010).Reflecting globalization effects on local policy: higher education reform in Taiwan, *Journal of Education Policy*.
33. Yi-Hua Lai.(2022). Education reform through westernization in Taiwan: a case of transferring the constructivist-based mathematics curriculum from the United States. *Journal of Asian Public Policy*.

34. See: Kuan - Hsing Chen, Sechin Y.S. Chien & Translated by Tao - lin Hwang.(2009). Knowledge production in the era of neo - liberal globalization: reflections on the changing academic conditions in Taiwan. *Inter-Asia Cultural Studies*.
35. Peter Master.(1998). Positive and Negative Aspects of the Dominance of English. *TESOL Quarterly*, Vol.32, No.4.
36. Stephen Chan, Peter Mandaville, Roland Bleiker.(2001). Forget IR Theory, in Stephen Chanet (eds.), *The Zen of International Relations :IR Theory from East to West* . Palgrave.