Studies of the Weatherhead East Asian Institute, Columbia University

The Studies of the Weatherhead East Asian Institute of Columbia University were inaugurated in 1962 to bring to a wider public the results of significant new research on modern and contemporary East Asia.

Engineering Asia

Technology, Colonial Development, and the Cold War Order

Edited by
Hiromi Mizuno, Aaron S. Moore, and John DiMoia
Miracles seem to have occurred in many places after World War II (WWII). Miracles came to West Germany in the 1950s as the shuttered economy on the Rhine recovered and grew remarkably, to Japan in the 1960s as the once bombed and flattened nation sustained more than a 10 percent economic growth rate over a decade, and to the Han River in the 1970s as the formerly colonial country South Korea emerged as a newly industrialized country. National economic growth charts—those gross domestic product (GDP) charts that became the tool to measure nations’ economic vitality under the Breton Woods system—made these miracles neatly visible. They visualize economies as discrete national activities and erase the traces of geographical ambiguities of a nation. The Japanese GDP chart, for example, shows no trace of the expansion of the empire before 1945, as if “Japan” had always been the same nation-state. Textbooks list factors that contributed to this phenomenal economic growth: American aid, a skilled labor force, adept maneuvering of economic policies, a strong work ethic, and so forth. In short, the miracle narrative, embellished with the GDP charts, tames the story of global capitalism and developmentalism of the twentieth century into a distinct national story, rendering regional and global contexts invisible and irrelevant behind the teleology of national economic development.

To critique what is made visible and invisible under this nation-based miracle narrative is the first aim of this volume. We challenge the nation-centered story of economic development because such a framework disassociates colonial Asia from Cold War Asia, and empires from post-WWII international development. Instead, we pay attention to flows, connections, and transformation, and ask how colonial Asia was reconfigured into Cold War Asia after the war. Therefore, the book covers a wide geographical area of Japan, Korea, Taiwan, Indonesia, Burma, and Thailand, although the focus of our critique in Part I and Part II is the miracle narrative of Japanese development, and in Part III, South Korea’s. Chronologically, the book coverage spans from the early twentieth century to the early 1970s. We highlight the 1950s and 1960s as the transformative period to emphasize continuity with change rather than rupture,
during which period colonial Asia was reconfigured into Cold War Asia. The key to this reconfiguration was developmentalism, promoted and carried out through the networks of technology. Scholars such as Chalmers Johnson and Kōbō yashiki have examined Japan's economic development and its trans-war continuity by focusing on the role of the government, bureaucracy, and prominent political leaders. This volume instead focuses on the trans-war network of technology and underlines the role of engineers, scientists, and intellectuals in establishing its infrastructure. In the case of Japan, war reparations paid to Asian countries in the 1950s and 1960s in the form of technology aid best illustrates the trans-war network of development at work. Japanese engineers, entrepreneurs, and Asia specialists vigorously created, expanded, and followed their opportunities through official development assistance (ODA) channels prepared by war reparations treaties, paving the path to the "miraculous" economic growth. Reparations agreements and resulting overseas projects would not have happened without the groundwork by these men. For South Korea, too, overseas development projects carried out by entrepreneurial engineers were crucial in establishing its own post-colonial national development. The second volume of the post-war reconfiguration of Asia.

While the Cold War was a crucial context of this reconfiguration, it should not be considered as the only or most important context. The third and final aim of the book is to take seriously Asia's postcoloniality. The assumption that the making of Cold War Asia was simply the case of the world powers forcing their way through geopolitics underestimates the degree of destruction and the complications caused by the Asian-Pacific War and the agency of postcolonial Asian states. Too often, scholarship has used the "Cold War context" as a shorthand with which to analyze actions, events, and options not necessarily related to conflicts between the two superpowers, thereby overshadowing local, longer-standing, or else contingent politics. Japan's high economic growth in the late 1950s and 1960s needs to be situated in its relationship not just with the USA, but also with other Asian countries; that is, in the context of pre-1945 colonization, the post-1945 decolonization process, and postcolonial realities.

The postcolonial realities included economic nationalism, various domestic ethnic conflicts as part of postcolonial nation-building, and the global dollar shortage. The USA emerged as the most prosperous country (in fact, more prosperous than before the war) from WWII, having accumulated two-thirds of the world's gold, with an immense balance of trade surplus and a growing reserve. Dollars needed to circulate somehow to resume world trade and global capitalism. The mechanism set up under the Bretton Woods system—with the International Monetary Fund and the World Bank (named the International Bank for Reconstruction and Development at the time)—alone was not sufficient. The Marshall Plan, other development aid programs, and foreign investments were implemented to revitalize European and Japanese economies in order to promote world trade and expand the American market. The huge dollar shortage impeded not only the return of European colonial powers to Southeast Asia—which, without losing a moment, declared political independence—but also postcolonial Asian countries' economic growth to achieve economic independence. As chapters in this volume well demonstrate, the economic nationalism of newly independent Asian countries, including Korea, was a major driving force behind the reconstruction of the network of colonial development into a network of international development under the Cold War. To control the capital, resources, and economic planning of the country was not the only purpose of national industrial development. The other target was to engineer domestic ethnic (or political in the case of South Korea) tensions into a shared national goal of prosperity. Highly complex ethnic politics had existed long before the arrival of colonial powers in Southeast Asia, but its exploitation and manipulation by colonial governance, Japanese war strategies, and the two sides of the Cold War often resulted in violent conflicts and deeper suspicions among various ethnic groups as well as rival groups. Development was appealing to Asian leaders—"developmental dictators" as some scholars call them—who are military regimes needed continuing legitimation for their authoritarian governments and personal political dominance.

These postcolonial realities posed both immense problems and opportunities for Japan. The collapse of the empire and economic network, war damages, and a drastic increase in population due to repatriation and the postwar baby boom kept Japan's economic recovery difficult. Japan was also trying to achieve economic independence from American aid and World Bank loans. Technology aid proved to be the key.

This introduction essay discusses the role of Japan's technology aid that connected the USA, Japan, and postcolonial Asia. Various scholars have examined postwar Japan's ODA, but they portray Japanese ODA in a rather myopic manner. With a common narrative line of "from the aid receiver to the aid donor," the scholarship has...
wrongly reinforced the idea that providing aid is the result and indicator of Japan's economic success, as if the aid Japan received from the USA and the World Bank trickled down to peripheries, from the First World via Japan to the Third World countries, in the "hub-and-spoke" pattern. This mistake is, we argue, based on nation-based history and a narrow focus on the bilateral relationship with the USA, which are conventionally employed when writing post-WWII history.

Seeking to illuminate intra-Asia connections, I invoke the image of a kula ring. My reference to the gift exchange network in Papua New Guinea is not meant to endorse how Western anthropologists have recorded and characterized the system. On the contrary, it is to point out that the gift exchange system anthropologists have long regarded as premodern and preindustrial in fact provides a useful analogy to the network of industrial development in the modern, capitalist world. The kula ring image is useful in highlighting the role of technology aid in the modern, capitalist economy in Asia, not as mere rhetoric, but as an actual configuration in the historical conditions in postwar Asia, where the market economy was severely hampered by the lack of dollars. But the kula ring is also useful as a metaphor because, first, aid giving was a necessary condition of Japanese economic recovery and high growth rather than the result, and second, the metaphor emphasizes intra-Asia relations, rather than the US-centered "hub-and-spoke" model that scholars of Cold War studies are now starting to critique. As Daniel Immerwahr has critiqued, most studies of development by the US are based on a hub-and-spoke model according to which the agents of the United States circulate through the world and intervene in various places. That model pays little attention to connections between Southern nations or indeed to any part of the international system.4

The critique should not be limited to scholars of the USA. Histories of Asian countries, too, are often written with American policies representing the only "external influence," reinforcing the assumed progressive view of modernization that the USA taught and provided a means for development in the Asian country. But industrialization requires more than US capital and political will; it also needs access to expertise, the foreign market, and inexpensive materials—that is, the flow of technologies, capital, goods, resources, and people. This is why intra-Asia relations are crucial. The kula ring-like system of technology aid in not a creation or imposition by one single country; rather, while based on unequal power relations, it was born out of various needs, strains, and forces of numerous actors, such as Southeast Asian developmental dictators, American Cold War warriors, and Japanese engineers and pan-Asianists. Bruce Cumings, Chalmers Johnson, Bai Gao, and others have pioneered the studies of developmental states. Our work does not look at developmentalism as a national story, as these works have done, but instead examines the intersection of nation-state developmentalism and international development.5

The transformation of colonial development into postwar international aid did not take place without a price. The final and most important objective of this chapter is to think about the symbolic violence behind the mythology of the miracle narrative. The book's coverage ends in the early 1970s, by which time the transformation was complete, the new postwar generation of aid experts trained, and the miracle narrative firmly established, with Japan having overtaken West Germany to be the world's second largest economy and South Korea's heavy chemical industrialization in full swing. Yet violence persisted, committed both physically and symbolically, albeit suppressed behind the successful establishment of the kula ring network of development in Asia, as discussed in the last section of this chapter.

Rethinking development

The connection between postwar ODA and the empire is not something one finds in literature on Japanese overseas aid. In fact, the conventional narrative presented by the Japanese government and scholars alike marks the year 1954 as the beginning of Japanese foreign aid. In this narrative, the 1950s and 1960s are treated as the "formative period," before the institution of ODA became fully established in the 1970s. However, the clear message of this timeline—that something new began in 1954 and fully blossomed in the 1970s—is misleading, and the adjective "formative" is a misnomer in my assessment. This period should be considered "transformative" instead.

Let me first explain why the year 1954 has been considered the new beginning. In October of that year, Japan joined the Colombo Plan. The Colombo Plan was an international aid organization established in 1951 by Britain, Australia, Canada, and New Zealand to rehabilitate the former British Commonwealth countries while sending off the Communist influence. Composed of various bilateral agreements, it focused on technology transfer for the purpose of the economic development of South and Southeast Asian countries. Japan managed to join the Colombo Plan as a donor, as Australia's economic interest overcame its initially strong opposition. By the early 1950s, Japan was a crucial market for Australia's wool, and the Australian government decided that reintroducing Japan to Asia through the Colombo Plan would ensure Japan's economic growth and thus the expansion of its export market.6

---

4 Daniel Immerwahr, "Modernization and Development in US Foreign Relations," Passport (September 2012): 24. In this historiographical essay, Immerwahr also states (also on page 24), "by allowing themselves to move beyond moral accounting, US historians might begin to take up the technical aspects of development projects ... [M]any aspects of actual modernization projects are highly technical, with non-ideological dimensions that might be understated as episodes in the history of science and technology studies rather than solely in the history of US foreign relations."


American pressure, of course, was effectively behind Japan's admission. The first major international organization for postwar Japan (admission into the United Nations took place two years later), the Colombo Plan provided Japan with significant access to South and Southeast Asian countries and affirmed international expectation for Japan's active role in Cold War Asia.

Equally pivotal was the conclusion in 1954 of Japan's first war reparations treaty with an Asian country. The San Francisco Peace Treaty left it to Japan and Asian victim countries to negotiate reparations arrangements bilaterally. In 1954, the first treaty was signed with Burma. It specified that Japan give the Burmese government US$200 million in lieu of Japanese goods and services and an additional US$50 million for technical assistance and joint ventures between the Japanese and Burmese public and private sectors over the 1955–65 period. The 1955 agreement with the Philippines mandated that Japan provide US$550 million with "the service of the Japanese people and the products of Japan in the form of capital goods." Under the 1959 reparations agreement with South Vietnam, Japan paid US$39 million, again in the form of "the service of the Japanese people and the products of Japan"; US$278 million of that was designated for the construction of the Da Nhım hydroelectric power plant using Japanese companies and US$75.5 million was designated for consumer goods produced in Japan. Japan's additional loan of US$75 million to South Vietnam was specifically for purchasing Japanese materials to build the Da Nhım dam. The "Japanese service and goods" specification defined all the reparations and quasi-reparations settlements between Japan and other Asian countries, whether or not the country was part of the San Francisco Peace Treaty.

Scholarship on Japanese war reparations has said little about the fact that reparations were paid in the specific form of "Japanese service and goods." This feature, however, was widely noted at the time. For example, the Reparation Study Group, which published a book in 1959 explaining the details of the reparations treaties to the Japanese readers, emphasized that "the most pronounced characteristics of Japan's reparations treaties is that payment is to be made in kind and service, not in cash," and called this feature "highly unique." Large-scale constructions were carried out throughout Southeast Asia by Japanese consultants, engineers, companies, machines, and equipment.

8 For more details, see Akita, Krozewski, and Watanabe, eds., The Transformation of the International Order of Asia.

It is significant that the Japanese construction companies in charge of these reparations projects did not regard the year 1954 as a new beginning. The twentieth-anniversary publication of the Japan Overseas Construction Association (海外建設協力会) —established in 1955 by major construction companies—in fact started its history with colonial projects such as railroad construction in Taiwan and Korea, building cities in Manchuria, and the formation of the Beijing Civil Engineering Trade Association by Japanese; and explains that the reparations projects of the 1950s and 1960s were just like these colonial projects: they brought contracts to these companies, with the pay secured by the government, and with no international bidding and competition. In contrast, the publication asserts, overseas projects after the 1970s were different, as they were commercially based and competitive.12 To these Japanese construction companies that provided “Japanese service and goods” of war reparations, the 1950s and 1960s were more or less a continuation of the colonial period. To them, the new era began in the 1970s.

The construction companies, and consulting companies that worked in tandem with them, indeed demonstrate a clear continuity from the colonial period to the reparations period. Japan’s largest construction companies of today—Kaigai Shimizu, Taisei, Takenaka, and Obayashi—all grew with the expansion of the Japanese empire; they were also the key contractors in reparations projects in Southeast Asia. Kaigai and Taisei, for example, built Wusanto Dam, the largest dam in colonial Taiwan, as well as the Taiwan Bank headquarters building, the Taipei Railways, the Wusuh Power Station, the Takao sea port, and so forth in the colonial period, and continued to win contracts for projects in Taiwan after 1945. Another example—the case of Kubota Yutaka’s trans-war and trans-Asia dam construction—is discussed in detail in Chapter 4.

Many scholars of international development consider foreign aid as a distinctively post–WWII and Cold War phenomenon. The following quote by eminent scholar of economic development, Keith Griffin, serves as a standard description of this view: “Foreign aid as it is understood today has its origins in the Cold War. It is largely a product of the ideological confrontation between the US and the Soviet Union which dominated international politics for forty-five years.”13 However, newer scholarship has begun to examine the connection and continuation from colonial development to international aid. "Development emerged during the colonial period," explains Philip McMichael in his popular textbook of international development.14 Joseph Hodge’s Triumph of the Expert locates the emergence of British development discourse in the late colonial, interwar period and argues that “the postwar crusade to end world poverty represented not so much a novel proposal marking the dawn of a new age, as the zenith of decades, indeed centuries, of debate over the control and use of the natural and human resources of colonized regions.”15 One can point to the British Empire’s

Introduction: Japan's Technology Aid and Postwar Asia

"economic cooperation." In 1951, in preparation for Japan's independence and return to Asia, the Asian Issues Research Group (Ajia Mondai Chōsakai) was established. Its chairman, Ogata Takehara, had just been cleared from Class A war criminal suspect status a few months earlier; during the war, he was the Tokyo Asahi Newspaper editor-in-chief, a member of Showa Kenkyukai, a strong supporter of Kono's New Order Movement, and a close friend of Toyama Mitsuru, a powerful right-wing political boss who founded the secret ultra-nationalist society Gen'yūsha. Back in 1934, Ogata formed a research group similar to the postwar group, the East Asian Issues Research Group (Tōa Mondai Kenkyukai), which "collected, organized, preserved, and analyzed as many materials as possible" about Manchuria and China. This provided Ogata with important connections with the intelligence network. Ogata was a pan-Asian nationalist. As soon as the Asian Issues Research Group was launched, he energetically toured nine Southeast Asian countries as a special envoy of Yoshida Shigeru. He was highly critical of the Hatoyama cabinet's negotiation efforts with the Soviet Union toward normalization, demanding that Hatoyama instead spend more energy on re-establishing relations with Asia. Recently, researchers have found that the CIA approached Ogata in the 1950s as the most influential Japanese politician who could block the Japan-Soviet normalization. Before he achieved his ambition to become the next prime minister, however, Ogata passed away in 1956.

The Asian Issues Research Group had other big names: Kishi Nobusuke, also a Class A war criminal suspect and soon-to-be prime minister of Japan; and Miwa Jūsaku, a Japan Labor-Farmer Party leader. Kishi and Miwa, close friends and former classmates at Tokyo Imperial University, were behind the establishment of the 1955 system from the conservative and socialist lines, respectively. Kishi, along with other so-called "radical bureaucrats," was the architect of the Manchurian planned economy and postwar Japan's developmental state. Other notable core members included Akamatsu Kaname, an economist famous for the Flying Geese Theory (to be discussed later), and Kada Setsuji, a professor of economics who was also a member of the wartime Showa Kenkyukai.

In 1954, the Asian Issues Research Group was absorbed into the Asia Association (Ajia Kyōkai), a newly created auxiliary agency under the Ministry of Foreign Affairs in order to manage and oversee Japan's technical aid. Here, too, the direct connection with prewar colonial development was apparent. The chair of its technical aid section was Hatta Yoshiaki, one of the most prominent technology bureaucrats in Japan. A railroad engineer by training, he worked on various railroad and civil engineering projects in Japan proper, and in the 1930s and wartime held powerful leadership positions in the empire, including the vice president of the South Manchurian Railway in 1932, the Minister of Commerce and Industry and that of Colonial Affairs under the Hiranuma Cabinet in 1939, the Minister of Railroad under the first Tōjō Cabinet, and Minister of

---

18 Hatta Toyosuke, Chichi Hatta Yoshiaki no Omoide (Tokyo: Keisō shuppan, 1976), 49.
20 Kuriya, Ogata Tetsukata, 151.
Communication in the second Tōjō Cabinet. He worked closely with powerful men in Manchuria such as Kishi Nobusuke, Hoshino Naoki, and Ayukawa Gōsuke (who went to Tokyo Imperial University's Engineering Department with Hatta). Just before the war ended, Hatta became the president of the Northern China Development Company, the above-mentioned state-sponsored company that helped Japanese capitalists conduct development projects in various industries such as electricity, agriculture, communication, and mining in northern China. Now in the 1950s, Hatta oversaw development projects of virtually identical itineraries in South and Southeast Asia. Hatta's career exemplifies the colonial origins of international development and the continuing significance of the Manchuria connection for postwar Japan, two themes the following chapters illuminate as well.

While bylaws emphasized their political and ideological neutrality, the Asian Issues Research Group and the succeeding Asia Association—and related institutions such as Ajiken, examined in Chapter 3—clearly entailed pan-Asianist aspirations with a strong connection to Manchuria and China. It is nonetheless too simplistic to argue that the Manchuria connection alone survived the war and shaped postwar Japan. Not everyone in those organizations was connected to Manchuria; there were also many who had worked and studied in Southeast Asia, such as Itagaki Yoichi. As it is made clear in Chapter 3, Itagaki and his fellow Southeast Asia specialists played a pivotal role in establishing the field of Asian Studies in postwar Japan that produced knowledge for Japan's Asian development. Institutions such as the Asia Association and the Ajiken were highly significant, I maintain, because they connected and merged the Manchuria network and the Southeast Asia network into postwar Japan's technocratic network for Asian development.

To insist that 1954 was the new beginning of Japanese development aid is to erase this colonial connection. This is why the 1950s and 1960s should be considered "transformative," rather than formative. The postwar machine of international development and aid was not a totally new formation. It was something deeply rooted in Japan's colonial development.

Technology aid through "services and goods"

Colonial development was a vital part of Imperial Japan's economic growth. During the 1930s and early 1940s, Japan went through tremendous industrialization. According to the US Strategic Bombing Survey, Japan's industrial production overall increased by a total of 15 percent from 1937 to 1941. By the end of 1941, heavy industry overtook the earlier predominance of light industry; whereas heavy industry constituted only 38 percent of total industrial output in 1930, the figure rose to 73 percent by 1942. In 1940, Japan was producing more organic high explosives than the USA. This heavy industrialization was achieved by relying on Asia. The collapse of international trade during the Great Depression—higher tariffs, import quotas, foreign exchange controls, and preferential trade blocks by the world's economic powers—led to Japan's reliance on Asia and military expansion into Asia. After Japan's invasion of Manchuria in 1931, Japanese investments in the region increased from 97 million yen in 1931 to 1,420 million yen in 1941. Such investment and resulting development directly contributed to Japanese industries at home. China supplied 14 percent of Japan's iron ore imports in 1938; by 1941, it furnished 49 percent. As embargoes posed by the USA and its allies cut off oil and other crucial supplies, Asia became the critical "lifeline" for Japan. Termined the "Co-Prosperity Sphere," Asia from Manchuria to Southeast Asia sustained the Japanese war industry by supplying rubber, oil, coal, food, labor, and so forth and by purchasing Japanese goods. After 1941, more than 80 percent of Japan's exports went to Asia; by 1944, virtually all exports went to China and Manchuria. Japan's imports, too, came mostly from Asia; whereas in 1938 only 38.4 percent of imports were from China and Manchuria, from 1942 onward, Japan relied on Asia for more than 95 percent of its imports. Yet Japan's Co-Prosperity Sphere was no match for the American empire, whose industrial capacity surpassed Japan's by manyfold. The war ended with Japan's unconditional surrender, and the Japanese Empire collapsed.

Having lost this economic sphere, Japan was utterly devastated. The Japanese economy, which had been expanded but severely distorted (by 1938, more than three-quarters of the government's budget went to military spending) and damaged, could not find a way to recover. Air raids destroyed most cities, large and small, and the remaining factory facilities—many of which had been converted to war material production—were confiscated by the victorious Allies. Nearly seven million Japanese were repatriated from the former Co-Prosperity Sphere. Japanese territory was reduced to that of Montana in size, but with a population of over seventy million. The economy did not improve under the US occupation. This marks a stark contrast to the case of West Germany, whose economy began recovering after 1948. West Germany, as soon as the Federal Republic was founded, became a member of the Organisation for European Economic Cooperation in 1949 and the European Coal and Steel Community as well as the Council of Europe by 1951. Back in the economic sphere and supported by the USA, West Germany experienced
drastic economic growth in the 1950s, dubbed an "economic miracle." However, the Japanese economy under the US occupation continued to struggle. It was not that Japan lacked industrial capability. In fact, wartime mobilization drastically increased Japan's industrial capacity. As the Strategic Bombing Survey concluded, it was "the declining flow of raw materials" due to the Allied attacks on Japanese shipping after the summer of 1942—that did "not support the new higher level of output." Thus, war damage at home was only one factor. The stopping of trade and material flow was an even more significant factor. This situation of Japan differed greatly from that of West Germany, whose trade partners in Europe relied on its recovery for their own economic reconstruction. Unable to access the economic sphere that had sustained its economic growth in the past and now with more mouths to feed and fewer factories to operate, Japan relied heavily on American aid.

The frustrating tardiness of the Japanese economic recovery became a serious American concern, as Japan's position in US strategic thinking changed with the onset of the Cold War. With the Truman Doctrine of 1947, the US occupation policy drastically shifted from eliminating the former Asian enemy's potential for a return to power to actively creating an effective Cold War ally and "factory of Asia." In March 1949, the Dodge Line was announced, criticizing the Japanese economy as an "economy on stilts" (takeuma keizai) that had been precariously standing on the two poles of American aid and Japanese government subsidy. As Supreme Commander for the Allied Powers (SCAP) officer Philip Taylor put it: "We have got to get Japan back into, I am afraid, the old co-prosperity sphere." While George Kennan and the CIA initially hoped for Japan's "access to the Northeast Asian areas—notably North China, Manchuria, and Korea—now under direct, indirect, or potential control of the USSR" and envisioned the "liberation" of northern China and Manchuria for this purpose, Mao Zedong's success in defeating the Nationalist Party in China in October 1949 nullified this option. In search of new peripheries that would reconstitute Japan's economic sphere, they looked to South Asia (National Security Council Paper NSC-48) and then Southeast Asia (NSC-68) and proposed that the Japanese economy would be rehabilitated through the USA—Japan—Southeast Asia triangle.

Asia after 1945, however, was no longer the Asia of the Co-Prosperity Sphere, but a dramatically different place. The collapse of the Japanese empire released nascent historical forces in full swing, and the Asia-Pacific War morphed into civil wars and independence wars all over Asia. Chiang Kai-shek and Mao Zedong resumed the civil war that had been on hold during the war against their common enemy, Japan. Korea, now freed from Japanese rule but divided along the 38th Parallel, went into a ferocious civil war to claim sole sovereignty over the peninsula. Meanwhile, the Dutch East Indies, British Burma, and French Indochina picked up guns against their old colonial masters who had naively assumed that they could return and reign again after their humiliating loss of the colonies to Imperial Japan. Asia is where the European empires first crumbled. By 1955, much of Asia obtained independence, hosting the world's first conference for the "Third World" in Bandung, Indonesia, voicing their non-aligned position in the Cold War.

Returning to this Asia was not easy for Japan. No matter what Japanese pan-Asianists might have idealized, memories of Japanese brutality and betrayal were fresh and suffering still raw. As George Kennan put it in October 1949, "the terrific problem [is] how then the Japanese are going to get along unless they reopen some sort of Empire toward the South. Clearly we have got ... to achieve opening up of trade possibilities, commercial possibilities for Japan on a scale very far greater than anything Japan knew before. It is a formidable task." Technical aid helped Japan deal with this formidable task, beginning with South Asia. South Asia at the time loomed larger in the mind of American policy-makers than Southeast Asia; the USA then regarded India and Japan to be the two pillars of the anti-communist wall in Asia (NSC 46). In March 1949, Pakistan, which was desperately looking for a partner that would compensate the lost access to resources and expertise in India after the partition, requested technical aid from Japan through the United Nations Economic Commission for Asia and the Far East (ECAFE). SCAP agreed. By the end of that year, Japan sent approximately sixty technical experts to countries such as Pakistan, India, Ceylon, and Burma. Pakistan's request for Japanese technical aid was quickly followed by Japanese trade missions; by the end of 1950, Japan became Pakistan's largest export partner after only the USA. In 1950, Japan also contributed US$80,000 to the United Nations Expanded Programme of Technical Assistance (EPTA) and began to receive trainees for technical training as a contributing participant of the US Third Country Training Programs. Even from this perspective, the year 1954 was not the beginning of Japanese international aid. Technical cooperation had already begun paving the way for Japan's trade relations under US auspices during the occupation period.

A succeeding series of National Security Council policies—the most influential one being NSC 68 in 1950—fully integrated Southeast Asia into US strategic thinking. The unifying force of American capital, Japanese technology, and Southeast Asian resources was to build the wall against communism. The Korean War surely provided a crucial boost to the Japanese economy, but the short-lived "Korean War boom" and


34 Quoted in Gordon, A Modern History of Japan, 239.


a subsequent recession made clear that Japan needed stable trade relations for steady economic growth.

What plagued both Japan and postcolonial Asia was the lack of dollar reserve. Indeed, this was a huge global problem of the immediate postwar world, whose reconstruction needed to depend on imports from the USA, the only country that came out of the war as prosperous; by 1947, the USA had accumulated 70 percent of the world's gold reserve. Britain, for example, was in need of US$2–6 billion to balance its deficit and make the foreign sterling balances convertible.37 But Europe's dollar crisis was mitigated by 1950. Japan, unable to reconstitute its trade relations, continued to drain foreign reserves. The problem was even graver for Southeast Asian countries. Export monocultures, long established under European colonial rule, led neighboring postcolonial states to compete over the same export crops such as rice and rubber, whose prices fluctuated too rapidly and frequently in the postwar period. Demand for consumer and capital goods only intensified, increasing the imbalance between import and export. Western capital continued to control resources in their territories such as oil and rubber. In order to launch industrialization and become economically independent, these nations needed capital goods, but importing capital goods only dried up their foreign reserves and increased the nations' debts. Without a foreign currency reserve, Southeast Asian countries lacked the capital required for industrialization. Here, too, technology became the crucial factor. Japanese war reparations in the form of capital goods and services were the solution to this conundrum. Japanese technology functioned as part of the magic formula that aided all parties involved: Japan (the donor), Asia (the receivers), and the USA (the architect of Cold War Asia). This magic formula then transformed Japan from one of the largest recipients of international aid to one of the largest providers of international aid.

I highlight three key features of technology embedded in the reparations treaties between Japan and Asian victim countries: capital goods, reparations/aid, and depoliticization. First, technologies given as reparations needed to be capital goods, not consumer goods, to aid the country's economic development, rather than leading to dependency. Reparations items thus commonly included large-scale infrastructure projects such as the construction of dams and hydroelectric power stations, ports, and irrigation, as well as machinery, plants, and tools. As explained above, this was the key element of the solution to the perpetual lack of dollars in Asia.

The Marikina development project in the Philippines is a good example of this mechanism. Originated on President Quirino's order in 1953, the Marikina development was a multipurpose project that involved the construction of a dam near Manila along the Marikina River to provide electricity and water for industrial and agricultural uses and for the prevention of floods. The Philippine government used American engineers and aid money to conduct preliminary investigations and to draw up a blueprint. Two years after the signing of the reparations treaty with Japan, this project became a reparations project. During reparation negotiations, it was decided that the Philippines would borrow yen for the Marikina project and use the yearly payment of Japanese reparations to pay it back. Of the US$5.4 billion that the Marikina project was estimated to cost, two-thirds was covered by the Japanese reparations funds. In short, it provided the Philippines with a way to complete the major infrastructure development project without using US dollars or foreign loans. This worked well for Japan, too, as it was able to fulfill the duty of paying reparations while providing Japanese companies with contracts.38 This was the basic structure of all of the so-called reparations projects. The better-known projects include Burma's Balu Chan dam and hydroelectric power station and South Vietnam's Da Nhim dam and the hydroelectric power project, which used 90 percent of the Japanese war reparations (US$39 million worth of Japanese services and goods).39 Reparations to Burma in many ways functioned as a blueprint for all the succeeding treaties with the other Asian countries. Burma became independent in January 1948, but did not attend the San Francisco Peace Treaty Conference or sign the Peace Treaty, due to its dissatisfaction with the US-centered content of the treaty. It did, however, participate in reparations meetings and, when the Philippines suggested a very high reparations amount of US$8 billion, it took a pragmatic line by counting it with US$200 million dollars. Prime Minister of Burma, U Nu, had his own objective of securing funding to implement the Pyidawtha Plan, a national development plan to build an industrial welfare state in Burma.40 Negotiations with Japan, which began in late 1953, ended with the peace treaty and the reparations treaty signed on November 5, 1954, and enacted on April 16 of the following year. The treaty specified that Japan give the Burmese government US$200 million worth of Japanese goods and services, in addition to US$50 million for technical assistance and joint ventures between Japan and the Burmese public and private sectors over the 1955–65 period. The content of Japanese services and goods was to be determined by the Burmese government.

The largest project was the building of a multipurpose dam and hydroelectric power stations on the Balu Chaung River. This was the first large-scale power plant for Burma and was the first overseas construction project for Japan after 1945. Burma's dam project provides a clear example of the colonial–postcolonial connection of development, with engineers playing a central role in the process, as Chapter 4 demonstrates through the figure of Kubota Yutaka. Kubota launched his civil engineer-cum-entrepreneur career by building large dams in colonial Korea and Manchuria, such as the Sup'ung Dam, the third-largest in the world at the time. After the war, Kubota established Nippon Köei, one of the first Japanese consultant companies, and hired Japanese engineers desperately looking for employment after their repatriation from the empire. Starting with the Balu Chaung dam, Kubota oversaw many large infrastructure projects throughout Asia, and Nippon Köei grew to be the largest consultancy company in Japan. The president of the Overseas Construction Company Association explains this clearly:

38 Nagano Shin'ichirō and Kondō Masami, eds., Nihon no sengo baishō, Chapter 4.
39 Laos concluded a quasi-reparations treaty with Japan in 1959; in exchange for Laos giving up its right to reparations, the two countries signed a technical aid treaty that provided 10 million yen in the form of Japanese goods and services. Much of this amount was spent on building waterworks and a new power plant in the capital, Vientiane.
Reparations projects were projects of the Japanese government. This was a large merit. It meant that Japanese construction companies had guaranteed payment and encountered no competition with foreign competitors as the projects did not involve international bidding. Japanese companies were able to learn know-hows of overseas construction and on-the-ground workings of business in foreign countries under the protection of the government, which immensely helped them later enter the international market on the commercial base.41

The gospel of development transmuted war reparations payment into international aid. This is the second function of technology in the Japanese reparations treaties and is the most important function that needs to be highlighted and problematized. Reparations became aid through the actual language of the treaties as well as through the extension of reparations projects as aid projects.

Since reparations projects were required to use Japanese companies, foreign observers criticized that Japanese ODA was too tied to Japan’s commercial interests. This is an accurate criticism, but misplaced. During the transformative period, an economic motivation behind reparations/aid was not a problem for either Japan or the receiver. After all, that was precisely the purpose of the “Japanese goods and services” specification of the reparations treaties. It is not the receiving country uses capital goods given as reparations effectively for the country’s development and economic growth, it will contribute to the growth of Asia. Both the giver and the receiver benefit from this.42 Statements like this were made publicly and widely in the media and policymakers’ discussions.

Rather, the Japanese worried more about the connection with the old empire. Japan tried very hard to avoid the criticism of looking imperialistic again. As Hatta Yoshitsuki candidly confessed, “Japan may provide aid as a genuinely friendly gesture, but it tends to be criticized in media as a return of the Greater East Asian policy or economic imperialism.”43 In order to avoid such criticism, the Yoshida government’s “Policy Regarding Economic Aid for Asian Countries” announced in December 1953 that Japanese foreign aid was not initiated by the state, but administered by the Asia Association. This did not stop criticism, however. After all, avoiding such criticism would be extremely difficult when those in charge of reparations projects were the same ones involved in development projects under the Japanese Empire. As explained earlier, Hatta—wartime president of the Northern China Development Company—himself embodied the connection between colonial development and postwar reparations aid.

Asian countries nonetheless accepted, even embraced, Japanese technology aid because of a difficult but urgent need for economic decolonization. Technology answered the postcolonial needs of these countries. Japanese reparations aid cannot be fully comprehended without Asian countries’ postcolonial needs and ambitions.

As historian of Indonesia, Kurawasa Aiko, maintains, Indonesia’s reparations cannot be understood without considering Sukarno’s policy to expel Dutch capital from his country’s ocean transportation. For Indonesia, composed of thousands of islands, shipping is extremely important, but the industry had been monopolized by the Dutch capital of the Royal Packet Navigation Company (KPM), and remained so after independence. Reparation negotiations with Japan helped Sukarno make the difficult decision to force out KPM and nationalize the shipping industry. A rather heavy weight was placed on ships and related training within the list of Indonesian reparations: sixteen ships, ten patrol boats, and technical training associated with ship repairs and ocean transportation.44 Chapter 5 in this volume also demonstrates how Japan’s wartime interest and investment in oil in the Dutch Indies transformed into its postwar interest and investment in oil in Indonesia through postcolonial Indonesia’s desire for economic decolonization.45 That chapter details the complex economic and political interests on the side of Indonesia that made reparations aid possible and workable. A powerful critique has been made of postwar developmental aid from the perspective of Cold War gains made by the donor countries, but it has also been pointed out that such a critique assumes too little agency on the side of the receiving countries. An especially strong connection between the Indonesian reparations and the Japanese Empire—Sukarno and Mohammad Hatta, two Indonesian independence leaders under the auspices of Imperial Japan, and the Manchurian network that connected Kishi Nobusuke and Kubota Yutaka—needs to be understood not as a simple continuation of prewar connections, but rather as networks reconfigured and made useful again by technology aid. Indonesia’s postcolonial aspirations, Japan’s economic and diplomatic needs, and US Cold War interests.

Some scholars regard Indonesia’s “repatriation student program” to be exceptionally free from commercial ties and diplomatic interests, but this too needs to be understood in the postcolonial context. As part of the reparations package, Sukarno requested Indonesian youth to be sent to Japanese universities for education. As mentioned earlier, Indonesia also sent a large number of young engineers to Japan to be trained in shipbuilding, repair, and transportation, as part of his economic decolonization policy. While many Indonesian reparations projects have invited criticism, the studying abroad program has tended to be received positively, because it produced future political and business leaders in Indonesia; providing the educational opportunities to the youth, however selective, has been seen as “the only exception” to the reparations “that emphasized the material aspect of industrialization and commercial transaction.”46 However, this program also was not free of expectations for an economic return. The commercial expectation for accepting students and trainees was well expressed by the director of the Japan Association for International Construction Technology (国際建設技術協会), Yanigasawa Yonekichi, in 1960. Upon returning from an observation tour of the Suez Canal construction, he expressed his disappointment regarding the

---

43 Hatta Yoshitsuki, “Aija no keizen kaihatsu to wagakuni no gijutsu kyōyoku ni tsuite,” Aija kyōkai shi (October 2018): 5.
46 Nihon no sengo baiso, 77, 80.
lack of familiarity with the quality of Japanese technology among Egyptians. "How can we make those countries with no knowledge of Japan appreciate Japanese technology and science? I believe the only way is to invite people from Egypt and other countries to Japan while sending Japanese to stay in those countries."69 The dispatch of technical experts and accepting technical trainees from abroad were directly connected to the international introduction of Japanese science and technology and the expansion of the market. As if to legitimize the program, technical aid publications from the transformative period are replete with statements by foreign trainees that emphasized their heightened appreciation for the high quality of Japanese technology and desire to publicize Japanese technology once they returned home. Foreign trainees were brought to Japan not only by governmental programs, but also by the private business sector. The business sector established its own agency in 1959, the Overseas Technical Training Agency (海外技術教育会), to receive trainees from abroad, and such companies as Mitsubishi Electronic Company, Ishikawajima-Harima Heavy Industry, and Isuzu Auto trained engineers and technicians from India, Burma, the United Arab Republic, and many other countries. The first issue of the Overseas Technical Training Agency newsletter carried a statement by Vice Minister of International Trade and Industry: "our foreign trade will increase when foreign investment and the technical training program advance in tandem like the two wheels of a vehicle."68 This was precisely how England used its postwar technical training program. As Yoko Katsuhiko explains, financially struggling England was concerned with American, (West) German, and Soviet technology taking over India. Establishing a technical college in India with a technical aid fund was one major mechanism by which England could train post-independent South Asian youth to be familiar with British technology and machines.69

Reparations programs constituted an important part of Japan's technical aid programs during the transformative period. "Technical aid" is generally defined as: (1) dispatching technical experts; (2) receiving trainees from abroad; (3) granting equipment; (4) establishing technical centers; and (5) building youth corps programs. Japanese technical aid programs were covered by the national budget earmarked for war reparations, the Colombo Plan, the Middle East and African Technical Plan, the Japan–US Joint Third Country Technical Training Programs, and so forth.68 During the first few years of the transformative period, programs were limited to dispatching Japanese experts and receiving foreign trainees. But in the late 1950s, with reparations projects in full motion, technical aid projects expanded both in their scope and size dramatically. In 1957, the Japanese government set aside a separate

69 Yoko Katsuhiko, "Indo koda daigaku no sesurikku to kokusai enjoi," in Korinbun para, 103. The Philippines and South Korea also included the technical training program in their respective reparations packages, although the scale was much smaller.

While this chapter does not discuss agriculture and medicine, both were also important areas of technical aid in addition to engineering and construction. Some programs covered a wider range of fields; for example, the Japan–US Joint Third Country Technical Training Program, which brought a very large number of Asian trainees to Japan, included finance, welfare, education, and administration as well.

budget for preliminary investigations for overseas development projects and tasked the Association for Overseas Construction Technology (国際建設技術協会) to be in charge. Among the various preliminary investigation groups sent abroad in the late 1950s and 1960s for mostly infrastructure building projects, Indonesia occupied the highest number (more than twenty investigation groups), followed by the Philippines, Cambodia, Thailand, Malaysia, and Pakistan. In 1958, Japan joined the Mekong River Comprehensive Development Project, the multinational technical aid project led by the United Nations. Also in 1958, the overseas technical training center program began as a new enterprise. Inviting trainees all the way to Japan limited the size and length of the program, due to cost and time constraints on trainees traveling abroad and the language barrier. Under the new program, training centers were built in the aid-receiving countries, making technical training available to a larger number of people. Japanese experts, equipment, and tools were dispatched. In 1959, through the quasi-reparations treaty, three such centers were built in Cambodia for agriculture, horticulture, and medicine. By 1972, thirty-three centers had opened throughout Asia. India was most represented in this category, with eight agriculture development centers, responding to the nation's strong demand for Japan's wetland cultivation techniques. These centers often operated in tandem with other agricultural aid projects such as the model farm program. All these centers were built with "Japanese services and goods." An often overlooked fact, because the criticism has been so focused on Japanese ODAs commercial ties, is that reparations helped Japan expand its aid programs. Joining the rank of international aid givers was itself as important for defeated and criminalized Japan as reopening trade.

Among these technical training centers were two road construction centers built in Thailand based on the Japan–Thailand treaties. Thailand's story is somewhat unique, but nonetheless shares the global trend from colonial development to postcolonial international aid. As the only sovereign nation in colonial Southeast Asia, Thailand allied with Imperial Japan and declared war against the Allies. Therefore, it was not invited to the 1951 San Francisco Peace Conference, nor was it eligible for war reparations defined by the Peace Treaty. However, Japan owed a large amount of money—1.5 billion baht total, when the annual budget of Thailand in 1943 was only 278 million baht—to the Thai government from war operations during the 1941–5 years.68

After a long negotiation, the so-called "special yen credit issue" was finally resolved with a treaty, the Agreement between Japan and Thailand Concerning Settlement of "Special Yen Problem," concluded in July 1955 and revised in January 1962. It specified that Japan had to pay to Thailand 9 billion yen by 1969 in the form of Japanese capital goods and service. The "in kind and in service" clause here makes it virtually the same as the reparations treaties. It is thus called a "quasi-reparations" treaty.

Repaying wartime debt through technical aid was not Japan's invention. The British government, having accumulated an enormous debt to India/Pakistan during wartime (1.5-times larger than its debt to the USA), used technical cooperation to

settle the sterling balance as well. Indian capitalists demanded capital goods for their new nation's economic development rather than receiving weak sterling for the balance. India obtained technology and expertise for industries such as shipbuilding, automobiles, and heavy chemicals, as well as ownership of merchant ships that had been monopolized by British capitalists. This was based on the multyear economic plan India had blueprinted even before the war ended. Providing capital goods and technical services was a highly convenient arrangement for the British government as well, whose economy was severely suffering with its growing debt in both dollars and sterling. Britain, after all, had been providing technical training to India all along.

The first Japanese road construction center was in operation in Songkhla between 1965 and 1969, the other in Surat Thani in 1971; both were located in the southernmost part of Thailand. Ten Japanese experts were sent to Songkhla with tools and machines worth 300 million yen that were granted to Thailand. They trained more than 200 Thai engineers and technicians on-site during the construction of a road that was 52 km in length. The Japanese understanding was that the primary purpose of the center was technical training and that neither completing the 52-km road nor granting equipment beyond training were absolute necessities. The Thai understanding, however, was different. Thai officials believed that the road construction itself was the primary purpose of the center and requested more equipment and services for surfacing the road completely. Tamamitsu Hiroaki, a technocrat in the Ministry of Construction stationed in Thailand, recalled later: “The weaker is the giver. We had to comply, because they already had Japanese experts in Thailand like hostages.” In order to respond to these additional demands within the set budget, the Japanese decided to utilize used trucks. “Thai people with a high pride,” Tamamitsu lamented, objected to this because “aid” should not come with secondhand tools, and their criticism was widely publicized in Thai newspapers. Criticism did not end there. Under pressure to complete the additional road construction within the allocated time, the Japanese outsourced parts of pedestrian bridges, but their careless design destroyed the roads around these structures. Tamamitsu, again, bitterly recalled: Thai people immediately complained that Japanese roads break right away. Those structures had nothing to do with us. Our job was to give machines and to teach [construction] techniques (gijutsu o ashieru). We could not be responsible for those bridges we did not make. It was the construction imposed by the Thai government. However, once it had the signboard with Japan on it—the Japan-Thailand Road Center—then the public complained that everything was our responsibility.

In the end, both the construction and the training programs were successful. Tamamitsu was proud and happy but also a bit sarcastic: “When [the Thai government] publicized the road as Japan’s production, I had to laugh, because Thailand actually paid twice as much as Japan did.”

When the Thai government requested a second road construction center in Surat Thani, the Japanese Ministry of Foreign Affairs was not too enthusiastic, remembering all the complaints and added work. The Japanese Ministry of Construction was eager, however, and Japan decided to accept the request. Tamamitsu explained the ministry’s reasoning as follows:

trade imbalance was particularly severe in favor of Japan that time, and Thai economic nationalism was on fire. The road center, which granted equipment and provided free service of experts, was in the purest sense a form of cooperation; it would help soften any emotional conflict arising from trade imbalance and wipe out a negative image of Japan as a so-called economic animal that abused technical assistance and economic cooperation for its economic expansion.

A preliminary research team was sent from Japan, an agreement was signed between the two governments (making clear, this time, that both construction and training were the equal priorities of the center) in 1971, and ten engineers were dispatched from Japan and stationed for four years. This time, “Japan was involved from the very beginning of blueprint drawing and used the best technology in order to avoid criticism later.”

The two Thai road centers produced a series of reports published in various Japanese engineering journals. Buried in descriptions of technical details is a very brief reference to the Japanese Imperial Army. Yamataka Shigeru, the head of the Japanese engineer group sent to Thailand, wrote: “We know about Kota Bharu [in Malaysia] where the Imperial Army landed, but not so many of us know that the Army went into Thailand [as well as Singapore] from there. … Thai soldiers who did not yet know the news of the [Japan-Thailand] alliance fought against Japanese soldiers.” However, “footprints of General Yamashita whose headquarters remain at a corner in town are being washed away. They are being replaced by the new footprints of Japanese sent to Thailand for the Japan-Thai joint ventures shipping frozen shrimp to Japan and Songkhla’s port construction.” By the late 1960s, most reparations projects had been completed, and new technical aid programs and commercially based projects were starting. Together with wartime memories, any association between technical aid and war reparations for Thailand had been washed away as well. The reconfiguration

---

53 “By the end of 1945, out of the total external liabilities owed by the UK of about 3,185 m., India held the largest proportion of about 38.5 percent.” Aditya Mulherjee, “Indo-British Finance: The Controversy over India’s Sterling Balances, 1939–1947,” Studies in History 6, no. 2 (August 1990): 232. Watanabe, Koromodo puran, 1,11.
54 Watanabe, Koromodo puran, 47 and 62.
of colonial development into international aid went side by side with that of war reparations into overseas aid during this transformative period. Technology—capital goods and services—transformed Japan from a war reparations indemnitor to an aid giver while depoliticizing Japanese aid projects.

This depoliticization is the third feature of reparations/aid I want to highlight. Technology not only depoliticized the colonial and Asia-Pacific War connections of postwar aid. For example, there were two other wars behind road construction in Thailand. First, nowhere in the numerous reports on the road centers do we find any reference to the Vietnam War. We only get a glimpse of this war because the Japanese reports mentioned Australia and New Zealand, each of which operated six centers in Thailand during the same period. It was against their centers, which prioritized completing all the roads, that the Japanese center was compared and complained about. Road construction in Thailand was a crucial part of the US operations against North Vietnam. By the mid-1960s, more than 80 percent of US airstrikes were being launched from air bases in Northern Thailand. Thailand received a large sum of aid from the USA in return: US$650 million in economic aid, US$940 million earmarked for Thai defense, US$760 million for war operation costs, and US$250 million for air bases and road construction. Thailand, with over US$2 billion in total assistance from Washington, was the second largest recipient of American aid in Southeast Asia, next to Vietnam.49 Australia and New Zealand, not major donor countries internationally, were nonetheless loyal military allies of the USA during the Korean War and the Vietnam War, being the core members of the Southeast Asia Treaty Organization (SEATO) headquartered in Bangkok and the Australia, New Zealand, and United States Security Treaty (ANZUS). Equally importantly, Australia and New Zealand had a vested interest in establishing their own economic and security ties with Southeast Asia, as they realized a weakened Britain could not be relied upon.50

The roads that Japan and other countries were building in Thailand were also related to Thailand’s violent ethnic conflicts. Southern Thailand, where the Japanese road centers were located, had experienced a long history of Thai government suppression of the Malay minority of Muslim faith. “Four Southern Provinces”—Songkhla, Pattani, Yala, and Narathiwat—together with the northern region of Malaysia, which used to constitute the Islamic kingdom of Pattani, were conquered by the Kingdom of Siam in 1785. Thai Muslims’ discontent was somewhat contained by Bangkok’s skillful maneuvering of colonial governance, but became intense after the 1932 “Bloodless Coup” Revolution by Field Marshal Plaek Phibunsongkhram (known in the West as Phibun), the Western-educated dictator who aspired to make Thailand a strong, modernized, and unified nation-state. Inspired by fascism, in 1940, Phibun launched a forced assimilation of the Muslim population under a series of Thai Custom Decrees that equated Buddhism with patriotism and prohibited wearing sarongs, using the Malay language and names, and teaching Islam. The forced assimilation policy was repealed as soon as the war was over, but Malay resistance reached a peak in 1948 with violent, organized protests against Thai officials, as the so-called Malay Emergency—a guerilla war between the Commonwealth and the Malay National Liberation Army—kept the British colonial government busy on the Malay side of the national border.51 By the time the treaties with Japan brought the road centers and other projects, Phibun had been ousted (exiled to Japan) and the Thai government had switched to the policy of improving living conditions in the southern region to mitigate Thai Muslim frustration. Needless to say, strengthening the transportation and communication ties with the southern region was also meant to curtail the southern region’s potential alliance with communist guerrillas.52 Road construction in Songkhla and Surat Thani was therefore part of the nation-building project in both the physical and political senses.

Tamamitsu and his Japanese engineers were aware of the kind of aid politics Thailand engaged with, but were ostensibly oblivious to, or indifferent to, the violence behind their aid projects. Tamamitsu complained that “a favorite of the aid donor nations, Thailand understands foreign aid as the buyer’s market. It constantly makes multiple countries fight each other for a better deal.”53 Yet, to Japanese engineers and bureaucrats, theirs was simply a Japanese aid project for the welfare of the people of Thailand. To the Japanese engineers dispatched abroad, their job was to transfer technology of road construction; as their reports make clear, it was with a sense of engineers’ duty that they helped Thai public works and trained young engineers. James Ferguson has famously named this indifference the “anti-politics machine.”54 While the bureaucratization of development aid that Ferguson discusses took place not in the 1950s/1960s of our concern but in the 1970s after the reparations projects were completed, the “development” of the 1950s and 1960s also tended to transform political matters into technical issues and render politics irrelevant. War reparations, Cold War geopolitics, and postcolonial nation-building of Southeast Asian countries were all big, complicated, and difficult problems to deal with, but technology—machines, skills, roads, and dams—transferred via “Japanese services and goods” separated development from such complications as a digestible, palatable enterprise.

We tend to think more about economic gains related to Japanese technical aid/ reparations. Indeed, according to historian Hirakawa Hitoshi, numbers demonstrate that the strategy of using reparations to boost trade did work: “With each Southeast Asian country, Japan’s trade share increased dramatically during the reparations period, especially in the areas where European and American companies had previously dominated.”55 However, in order to achieve this economic benefit in post-WWII Asia filled with bitter memories of Japanese occupation, Japan needed

---

59 See Oakman, Facing Asia.
to be accepted back. The depoliticization of war reparations/aid via technology provided this crucial function. The road centers remind us, however, that this was possible because Japanese aid was situated at the intersection of the Cold War and the authoritarian nation-building projects of Asian countries. This theme will return in my later discussion on Korea and in Chapter 9 on Korean road construction projects in Southeast Asia.

A kula ring for the flying geese

During the transformative period, Japan was one of the largest aid recipients in the world. Between 1953 and 1966, Japan borrowed US$360 million from the World Bank, making it the second largest receiver of aid next to India. The US Export–Import Bank also provided US$342 million between 1956 and 1970. These two sources of foreign capital constituted more than 60 percent of the total capital flow to Japan between 1953 and 1960.64 By 1970, however, Japan became one of the largest donors in the world, and by the end of the 1970s, it was the world’s second largest economy. Asian countries that Japan aided, such as South Korea, Singapore, and Taiwan, also began to receive international attention as newly industrialized countries (NICs). It was because of this dramatic shift that Akamatsu Kaname’s Flying Geese Theory became popular.

Akamatsu’s theory is widely understood to explain how the leading goose—in this case, Japan—led Asia as a whole to fly up. The prototype of the Flying Geese Theory was developed in the 1930s, based on Akamatsu’s observation of how the wool industry in Nagoya developed through a cycle of import, domestic production, and export as Japanese industrialization proceeded in the early twentieth century. Akamatsu then was a young economist influenced by Hegel. Inspired by what he saw in Germany and the USA while studying abroad, he harbored an ambition to establish a research institute in Japan to collect empirical trade data and to theorize on the dynamics of commerce. He created such a center at the Nagoya Commercial College, where he conducted research for the initial Flying Geese Theory. The “flying geese” at the time meant the pattern created by the textile industry’s rise and fall through the cycle of import, domestic production, and export, first exhibited by the cotton industry, then the muslin industry, and then the wool industry. Akamatsu perceived this pattern to be the Hegelian dialectics of thesis, anti-thesis, and synthesis. Through the 1930s, he further developed his theory to explain the industrialization pattern of the “latecomers” such as Germany, the USA, and Japan, as well as China and India. Akamatsu enthusiastically supported Japan’s expansion into Manchuria and China and the establishment of the Yen Economic Block through wartime-regulated economic policies. Born into a fallen former–samurai family who ran a rice shop rather unsuccessfully, he had been interested in the problem of poverty in Japan and expected the state to regulate the economy in order to alleviate the gap between the rich and the poor. He extended this vision to the world economy and wrote a dissertation that theoretically endorsed Japan’s construction of the New Order against the Western powers.65 He was also actively involved in research activities in Southeast Asia supported by the military between 1942 and 1945, welcoming the state order to establish a research institute of the Southeast Asian economy.66 When the war ended, he somehow escaped a purge. In the 1950s and 1960s, Akamatsu and his disciple, Kojima Kiyoshi, refined the theory into what is now known as the Flying Geese Theory by analyzing the return of a Japanese Co-Prosperity Sphere, beginning with the 1956 publication, “Our Nation’s Flying Geese Pattern: On the Machinery Tool Industry.” It was a strange theory, because it was a description and prescription at the same time; it was a theory based on the analysis of empirical data, but also a prescription for Japanese (and other countries’) economic growth. As Pekka Korhonen states, “it is not possible to distinguish between the impact of Japanese history and the impact of the theory on academic, bureaucratic, business and party political audiences” because “the theory is in a sense a story of the Japanese developmental experience on the abstract level.”67 As Raymond Vernon’s product cycle theory became established in the late 1950s and early 1960s, Akamatsu’s theory was brought back to the public discourse. In the 1980s, with the success of Japan and NICs, the Flying Geese Theory was prevalently used by Asian leaders as an Asian theory to explain Asia’s economic miracle.

But if we take this as a story of the lead goose successfully leading the flock, we misunderstand its real indication. In order for the flying pattern to be realized, the industry needs to have access to inexpensive resources for domestic production and the market for export—that is, for the lead goose to take off, it requires the flock of foreign countries to push it up. Indeed, in the pages of technical aid publications at the time, the focus was not on how Japan could lead Asia, but rather on how Asia could help Japan take off again. “It is absolutely necessary to expand the market of industrial goods in order for the advanced economies [such as Japan] to develop.” “We need to raise the economic level of these [Asian] countries so that they could buy imported goods and increase the capacity to provide more natural resources.” These statements were made widely and loudly,68 Japan desperately needed the market for its export goods and providers of the natural resources Japan lacked, but Asian countries were too poor to do this for Japan. This was keenly recognized as a devastating fact by Japanese political and business leaders. Ōkita Saburō, an Economic Stabilization Bureau (predecessor of the Economic Planning Agency) officer who also worked for ECAF, made this point clearly in his publications such as Theory on the Development of Southeast Asia (1954) and The Future of the Japanese Economy (1960).69 Ōkita, electric

64 Takagi, "From Recipient to Donor," 8.
66 Hirakawa, "Baisō to keizai shinshutsu," 50.
68 These statements are from the second issue of Kaizō by Kaigai gijutsuha keskyūkai; however, they also appeared frequently in other aid-related publications such as Ajia byōkaishi and Gijutsu koryōkukai.
engineer-cum-bureaucrat/economist, was deeply involved in the economic planning of the Japanese empire and postwar Japan. In the 1930s, he worked in northern China for projects related to electric power under the Asia Development Agency (興亞院), and during wartime he worked in the Ministry of Greater East Asia (大東亜省) and he issued a February 1945 report entitled “Japan’s Economic Dependence on Chinese Resources and a Plan for Japan’s Resource Procurement.” Soon after, in 1946, Okita articulated his vision of Japan’s revival as an economic power in the famous 1946 Report. Until his death in 1993, he exercised an extremely strong influence on Japanese economic and diplomatic policies. Okita knew Akamatsu’s theory. In fact, he made the theory popular internationally through his speech at Seoul National University in 1984, “Japanese services and goods” were provided “for free” to Southeast Asia because the Japanese economic recovery depended on whether Southeast Asian countries could develop their purchasing power for Japan. These goods could not just be products of the falling industries in Japan such as textiles, but must also include machines, tools, ships, and the heavy industries that were going through the cycle of domestic production and export in Japan. “The only way Japan could survive, concretely speaking, is to develop Southeast Asia, as Nagano Mamoru, politician and the vice president of the Asia Association, said in 1954.” Rather than waiting for these countries’ industrializations to take place, Japan provided the infrastructure of industrialization to these countries through reparations aid so that the flying geese pattern of industrial development could be formed. The idea of Japan and Asia co-prospering via technology was not mere propaganda or lip-service—it was Japan’s desperate cry. It was in the 1970s, after Japan overcame the precariousness of its economy, that it became the logic of the victor, cheap propaganda.

This was not an approach unique to Japan. US development aid, too, was based on the expectation that industrialization of underdeveloped countries would generate the market for American machines and plants. The American production capacity expanded drastically during wartime, and securing a new market to sustain the growth of its capitalist economy was crucial for stable domestic politics as well as the anti-Soviet strategy. Even before the war was over, political and business leaders drew up plans for the nation’s postwar economy, which eventually resulted in President Truman’s Point Four policy—that is, overseas development aid that centered on technical cooperation. Truman did not hide this American economic interest in his famous speech: “Experiences show that our commerce with other countries expands as they progress industrially and economically.... The process of economic development would expand the marketplace for capital equipment which underdeveloped countries cannot produce but are manufactured in large quantities by the US and Europe” (Point Four speech, January 1949). As Silvia Maxfield and James H. Nolt demonstrated in their study of American aid to the Philippines, Turkey, and Argentina, US policy in the 1960s prioritized import substitution industrialization of these countries at the sacrifice of American small-scale factories and trade companies, precisely because a certain level of industrialization in these countries was required for American machinery to sell.”

Bruce Cumings once argued that “if there has been a miracle in East Asia, it has not occurred just since 1960; it would be profoundly ahistorical to think that it did,” because East Asia’s economic success rested on industrialization under the Japanese Empire since the 1930s. We could also say that if there has been a miracle in Asia, it was not that Japan became the world’s economic power out of the ashes, but that Japan by the end of the 1960s had managed to reconstruct the trade structure in Asia that had enabled its prewar industrialization despite Asia’s strong remorse against Japan; it would be profoundly ahistorical to ignore how this reconstruction of Asia took place in the 1950s and 1960s. We could also say that what was miraculous was not the economic success per se, but the fact that Japan managed to get back into Asia. Technical aid/reparations were crucial for this process, as it was through technology that depoliticization colonial connections were achieved, as well as the peculiar transmutation of reparations into technical aid.

What reparations aid did was to create a kula ring for the flying geese. The kula ring, made famous by anthropologist Bronislaw Malinowski in the 1920s, is an exchange network of two ceremonial gifts in the Massim region in the east of Papua New Guinea. Two specific objects are circulated in a specific direction—the necklace travels clockwise and the armshell counter-clockwise—continuously traveling and sustaining direct and indirect relations among islands. This system of gift exchange has enchanted Western anthropologists, who have been debating its meanings and functions ever since. No tribe keeps the kula gift too long. Malinowski reported that keeping it as long as a year or two would risk the reputation of the tribal leader. Thus, it is not the kula gift itself that has the ultimate value; what is important is what the circulation of the gift establishes—that is, the relationship of indebtedness and trust among leaders whose statuses are not necessarily equal. The kula exchanges accompany many other gifts. They use ceremonial, rhetorical, and various other persuasion tactics to entice the partner to give more generously. Kula partners are also trade partners. Even the most powerful tribal leader’s sphere does not extend into the entire kula ring, but they know of each other, and only those belonging to the kula community can participate in commercial trade activities. It is reported that quite a large volume of commodities travel from partner to partner in the kula circle.

Development aid functioned in Asia in a similar way to the kula gifts. Technology aid rejects the distinction between gift giving and commercial transaction. As an aid, it is a gift, not a profit-extracting activity. Yet in order for the specific technology to be

---

74 Cumings, “The Origins and Development.”
worthy of development aid, it has to be useful and valuable to the receiving nation—that is, technology aid has to embody "the spirit of commodity" (as we will see in Chapter 7 through the Korean concept of the "economic translation"). Therefore, the frequently made criticism that aid projects were too closely related to profit-making misses the point. To go back to the kula analogy, it would make more sense to think of the function of technical aid as a kind of kula, "the path (created through the exchange of these valuables) to wealth, power, and reputation for the men who handle these valuables." The kula-style exchange is characterized by anthropologists as a premodern, different from the modern commodity exchange-based economy. Even Arjun Appadurai, whose Social Life of Things challenged the reified distinction between gift giving and commodity exchange, insisted that "the most important difference between the [kula] exchange ... and the exchange of commodities in modern industrial economies is that the increment being sought in kula-type systems is in reputation, name, or fame, with the critical form of capital for producing this profit being people rather than other factors of production." However, like the Thai road centers, the dam construction in Burma, and Hyundai's constructions in Vietnam and Thailand that are discussed in this volume, there were many examples in the transformative period that prioritized the completion of the contract, even if that meant going into the red, just so that the donor country and its companies could save face, improve their reputation, and gain trust internationally and domestically—that is, in order to belong to the modern kula ring. Reparation/technical aid was a modern kula.

Reparation/aid is a peculiar thing. It is both an obligation and a giving. It is neither a commodity nor a free gift. Aid cannot become a commodity. In fact, technologies provided through the reparations and aid treaties could not become commodities; they were prohibited from being resold out of that country (see, for example, Treaty with Burma, Article III, 1). ODA is never a free gift, as it is meant to establish a relationship of a sort, whether economic, diplomatic, or military. The logic of official aid is like that of a gift exchange system. While affirming the power of the aid giver, it also exposes the dynamics wherein the giver in fact relies on the receiver to accept aid.

What is most important to acknowledge here is that Japan's obligation to compensate wartime damages was replaced by the "(mis)recognized" role as the aid giver and cooperation partner, to use Pierre Bourdieu's language. "Recognition/(mis)recognition does not mean "fooled" or "brainwashed"; rather, it is the acceptance of and participation in the game that is being played. Reparations were "recognized/(mis)recognized" as aid through treaties. These reparations/aid projects successfully converted Japan's technical capital into economic and symbolic capital. Symbolic capital—the most important capital for Bourdieuan theory—is a way in which power is accorded legitimacy. Japan's position as the leader in Asia was intact by the mid-1970s, having secured the expanding market and suppliers of raw materials in Asia. The "old Co-Prosperity Sphere" was back without that name, transformed and reconfigured under strong nudge and protection from the USA, with ambitious developmental dictators in postcolonial Asia and, most importantly and ironically, through war reparations paid via technology aid that cleared up its war responsibility while simultaneously opening up the keda for Japan. And this was dubbed "Japan's miracle economy." The familiar indicator of this miracle, the GDP chart, only shows the national picture, facilitating a fantasy that economic growth is a national story of insightful maneuvering of economic policy by elite bureaucrats, a skilled labor force, a superb work ethic, peaceful dedication to economic prosperity under the pacifist constitution, and perhaps American aid. Economist Akamatsu Kaname's Flying Geese Theory was brought back from its own postwar purge, providing another layer of mythology to this picture.

Korea

The economic problems resulting from the collapse of the economic sphere in 1945 hit hard not just metropole Japan, but also its colonies, whose economies had been thoroughly integrated into that of the empire. For example, 40 percent of fertilizer used in Taiwan for its rice and sugar cultivation in 1939 came from Korea, 10 percent from Manchuria, and 50 percent from Japan proper. As Chapter 6 discusses, colonial Taiwan planted high-yield hybrid rice (Hōrai rice) that required a large volume of chemical fertilizer in order to support rice consumption in the metropole and to earn cash for the Taiwanese economy. To lose the market as well as the supply of fertilizer overnight was devastating for Taiwan, which needed to not only rebuild the war-damaged island, but also to do so during the chaotic transfer of power from Japan to the Chinese Nationalist Party. Needless to say, the Taiwan government spent much energy building up its own fertilizer industry and power plants on the island. The USA was more than willing to provide aid and to invest its capital, especially after the People's Republic of China became the USA's enemy in the Korean War.

Post-liberation challenges were even more severe for South Korea. In the 1930s, Japanese capital was heavily invested in industrializing Korea, penetrating all segments of the society, whereby colonial Korea experienced a rapid shift in occupational structure and urbanization. The major industrial base, however, was located in northern Korea, while southern Korea remained primarily agricultural. The chemical fertilizer that was exported to Taiwan, for example, was produced at Chosen Chisso's Hungnam factory, the largest chemical industrial complex in Asia, in the northern Korean province of Hamkyung. Its electric power source was generated by the Pujun River dam, a massive and technologically sophisticated dam that also powered the city built to house 75,000 workers of the Hungnam complex. The Pujun project was one of the colonial projects Kubota Yutaka engaged with, the protagonist in Chapter 4. Overall, 90 percent

of industrial capital was in northern Korea (see Chapter 7 for details). Like Taiwan, the collapse of the Japanese empire cut Korea off from the flow of capital, goods, and technologies that had industrialized its colonial economy, but for Korea, the 38th parallel additionally rid South Korea of access to the key industrial infrastructure on the peninsula. Those facilities instead sustained North Korea’s industrial development in the 1950s and 1960s. Expertise gained from those facilities, as Chapter 4 shows, moved with Japanese engineers and was utilized in Japan’s development projects in Southeast Asia, as Japan’s colonial interests transformed into development expertise after 1945. South Korea was left predominantly agrarian, with few industrial facilities to claim from the former colonial power.

It is not surprising, therefore, that South Korea proudly named its rapid economic development the Miracle of the Han River, recalling West Germany’s Wirtschaftswunder. Emerging from a violent American occupation (1945–8), to be followed by a brutal civil war (1950–3) that resulted in the destruction of much of the existing infrastructure, the Republic of Korea (ROK) aggressively pursued industrial development with a succession of five-year plans under the military government of Park Chung-hee. The familiar narrative emphasizes the role of American aid—billions of dollars—and the “guidance” of American economists and modernization theorists. Those who want to undermine the American influence instead emphasize Park’s leadership and Korean workers’ industriousness. While the USA held a vested interest in mobilizing the idea of the ROK being the showcase of the “free world” economy, and Korean nationalism may make it the showcase of the nation’s resilience and ingenuity, the Korean case proved to be more complicated, as we demonstrate in this book.

The three chapters on Korea in this volume highlight South Korea’s postcolonial desire to overcome the colonial past and determination to leverage opportunities available in the neocolonial Cold War geography, while solidifying the new nation-state against its communist neighbor. Agronomists (Chapter 8) and scientists (Chapter 7) were strongly driven by their desire to create Korea’s own rice and science out of the frustration and humiliation of the colonial period that had denied such an endeavor. They utilized resources that Cold War geopolitics created, such as the international rice research infrastructure of the Green Revolution and deliberate negotiation for the 1965 normalization treaty with Japan. The name of the new rice, Tongil or “the unification,” is highly indicative; not only did it straightforwardly express Park Chung-hee’s claim for the ROK’s legitimacy as the unifier of the peninsula, but the new rice was also born out of Korean agronomists’ masterful unification of japonica and indica rice—something that even Japanese breeders had failed to do—as well as the unity of Korean skills and American resources. Tongil rice was, in other words, Korea’s own Green Revolution.

Joining and taking advantage of the Cold War kula ring of developmentalism, in other words, was possible and desirable for Korea because of its own ambition and needs. Solidifying economic strength was necessary for the legitimation of Park’s political power domestically, which he needed as his authoritarian government was the result of his military junta overthrowing the democratically elected president. Internationally, too, the communist neighbor’s economic outperformance jeopardized the ROK’s standing in the Cold War in the early years of the Park administration.

In order for Korean capitalism to grow—that is, to establish its own flying geese pattern of industrial development—Korea needed the ever-expanding market and inexpensive resources. The 1965 normalization treaty with Japan was something South Korea unwillingly accepted upon strong pressure from the USA, but just as Indonesia used the Japanese reparations for its efforts to expel Dutch capital, it was also something that enabled South Korea to be more independent of the USA. The large sum of Japanese capital—US$300 million in unconditional grants, US$200 million in low-interest loans, and US$100 million in commercial credit—paid to the ROK as a means of reparations not only made South Korea less dependent on US aid, but also undermined American power over South Korean economic policy. Believing that the ROK could only manage agricultural development and light industrialization, the American administrations did not initially support Park Chung-hee’s desire to build the domestic steel industry, and even made him remove it from the first and second five-year plans. For the third five-year plan, however, Park turned to Japan to build an integrated iron and steel mill in Pohang, POSCO, the Pohang Iron and Steel Company, was to become one of the world’s largest steel-making companies. It was the backbone of South Korean heavy industrialization, in a manner that the Yahata Steel Mill, built by ambitious Meiji leaders, was for Japan earlier. Not surprisingly, Yahata Steel engineers received technical aid to POSCO. The point is not how much of a model the Yahata Steel provided, as South Korea also imported technology from West Germany at the same time. What is important here is to ask how post-independence Korea maneuvered leverage and resources to achieve its economic independence. Poised between Japan and the USA, and between colonial humiliation and neocolonial ambition, the ROK had to pull various strings skillfully. Both Japan and West Germany wanted to expand their markets and were willing to invest in the import-substitute economy of Asian countries. The ROK utilized both countries’ own needs to its advantage.

Chapter 8 most clearly demonstrates these dynamics through an examination of another pivotal institution for South Korean industrialization, the Korean Institute for Science and Technology (KIST). Tracing back to the colonial hierarchy of science, in which metropole Japan presided as the “brain” of the empire, Chapter 8 highlights Korean engineers’ and scientists’ frustrations that turned into a postcolonial desire to have their own R&D institute. As science legitimized the hierarchy in the colonial world, Korean scientists shared the complex desire that Gyan Prakash found among Indian scientists and modernizers regarding science and technology. Their postcolonial ambition, as Chapter 8 illustrates, was the constant force amidst national leadership

---

changes and the Korean War pushing for the establishment of the first government-funded R&D institute in 1966. Therefore, it marked not only Park's triumph over American advisors with his zealous pursuit of heavy chemical industrialization, but also Korean scientists' successful mobilization of scientific nationalism. Like Ajiken in Chapter 3 of this book, KIST was rooted in colonial experiences and incubated by the Cold War restructuring of Asia.

Yet domestic factors and US policy alone could not and did not bring out South Korea's so-called miracle. As Japan needed to secure the overseas market and suppliers of resources for its economic growth, Japan too had to reach out. Technology indeed paved a way for Korea to join the kula ring of development, and engineers were at the forefront of the overseas construction battlefield for Korea—literally. Park Chunghee eagerly responded to the American call to join the Vietnam War; and more than 300,000 troops were sent from the ROK in exchange for economic rewards. "Vietnam was a battlefield but it was also a market," as former ROK foreign minister Yi Tae-won said. If the Korean War was a powerful shot to Japan's sluggish economy in the early 1950s, the Vietnam War for Korea was "an economic bonanza" that lasted for many more years. Between 1965 and 1968 alone, as Gregg Brazinsky explains:

the ROK earned US$402 million through exports to Vietnam, sales to the US military, and other arrangements deriving from its decision to dispatch troops to the country. Moreover, the ROK began exporting products such as steel, transportation equipment, and nonelectric machinery to Vietnam. These were products that South Korea had not yet begun to export to other countries; by opening Vietnam as an export market for South Korean goods, the United States ultimately gave much building South Korean industries the chance to develop.86

While Asia as a whole expanded exports to the USA during the Vietnam War,86 because the ROK was the only Asian country that sent such a large number of troops to Vietnam (the "More Flags" campaign), despite its name, failed to enlist other Asian countries' troops in a significant number), the US military offshore procurement and military complex played particularly critical roles in South Korean industrialization.87

Chapter 9 demonstrates how the Vietnam War not only impacted the economy of the ROK, but also opened up the path to grow for companies such as Hyundai. Founded as a small construction company soon after liberation, Hyundai managed to win the bid for road construction projects in Southeast Asia during the Vietnam War, and its sacrificial work earned the company a reputation and trust inside and outside of South Korea. The Pattani–Narathiwat highway in Thailand that Hyundai built was located in the southern provinces, very close to the roads the Japanese built around the same time, at the heart of the Thai Muslim minority conflicts. While war reparations/technical aid provided an opportunity for Japanese technology to penetrate the Thai market, the Vietnam War provided such an opportunity to the ROK. As is maintained in Chapter 9, the Thai road project also provided Hyundai with a precious opportunity to learn how to carry out large infrastructure building projects and to manage workers, experiences the company utilized for its construction projects back home and later in the Middle East.88 Kubota of Nippon Kei transformed colonial interests into postwar expertise through war reparations. Hyundai transformed American Cold War interests into Korea's own expertise.

Violence behind the miracle

What is the problem? If Asia achieved the economic "miracle" by navigating geopolitics well and devoting itself to national development, what is there to critique? We need to remember that the ultimate effect of the kula ring of development was symbolic power—domestic consolidation of the authoritarian governments' political legitimacy, acceptance of Japan as a resumed regional power, and so on—and symbolic power is always achieved through symbolic violence.89 Accepting the "miracle" narrative commits violence twice: first, the physical violence that victims went through; and second, the symbolic violence by celebrating the kula ring elites of international development, thereby silencing the victims behind the "miracle." Now that the Cold War is over and developmental dictators are long gone, violence committed under the (mis)recognition of this fantasy has come up to the surface. Reparations paid "in kind and in service" worked well among the kula elites of technology aid, but not necessarily for individual victims of the Japanese empire. Since the mid-1990s, various reparations issues, legal battles, and compensation movements by wartime victims have been tormenting the Japanese government, as the kula ring of technology crumbled and Japan's economic leadership waned.

The "comfort women" issue is a good example. Violence was committed against approximately 200,000 young women from Korea, China, the Philippines, and other Asian countries, who were confined in the comfort stations throughout Asia to
sexually serve Imperial Japan's soldiers during wartime. Approximately 80 percent of them were Korean women. Not only were their bodies and human rights violated by the Japanese military, these women were also silenced after the war under the Korean ideology of chastity that "safeguarded masculine authority at the expense of women's lives," as the American neocolonial, militarized power continued to emasculate the liberated Korean nation. "In other words," Chungmoo Choi argues, "in the sacred mission of anti-colonial nationalism, the object of which is often to restore national masculinity, women of the colonized nation are doubly oppressed." Capitalist modernization united the colonial and the colonized male elites under the banner of national development. Reparations and other technology aid agreements concluded by the kula ring elites of development justified silencing of the victims. The so-called Reparations and Economic Cooperation Agreement between the ROK and Japan was signed simultaneously with the normalization treaty between the two countries. This agreement used the same language as war reparations and quasi-reparations agreements with the other countries discussed earlier: that the specified amount was to be paid by "the products of Japan and the services of the Japanese people." Almost half of the compensation aid was used to establish POSCO and 20 percent was used for the Soyang Dam, whose power plants provided energy for the "miracle of Han River." The Japanese corporations, factories, and consultancies that provided goods and services were paid for by Japanese tax money. Except for a small amount set aside for families of deceased soldiers or those who lost property, none of the reparations money went to victims of sexual and human rights violence in Korea. As soon as the Cold War was over, former comfort women took the matter into their own hands. They broke their silence and began demanding formal apologies and compensation from the Japanese government. The Japanese government maintains that the 1965 agreement between South Korea and Japan settled the reparations issue in exchange for Japanese aid. The unresolved "comfort women" issue remains to this day the largest diplomatic stumbling block between South Korea and Japan. The ROK's eager participation in the Vietnam War also led to similardouble violence. The topic of South Korean soldiers massacring Vietnamese civilians was a taboo in the ROK for a long time, until the Korean media's exposé in the early 2000s. The revelation caused sensational and even violent reactions in South Korea by upset veterans and those who feared it would jeopardize economic and diplomatic relations with Vietnam, Korea's fourth-largest trading partner (see Chapter 8 for the

ROK's investment in Vietnam through technical aid). As has been pointed out, the justification and evasion of responsibility expressed by Korean leaders were strikingly similar to those made by their Japanese kula ring partners regarding Japan's atrocities during the Asia-Pacific War. Korean soldiers, too, suffered from Agent Orange exposure, like Vietnamese and American soldiers, but they were silenced under the military regimes; only in the 1990s did the Korean media start to report affected veterans' conditions. We should include victims of environmental damage and physical destruction of livelihood that accompanied the construction of dams, roads, hotels, and other reparations and development projects in Asia, such as the Karen people discussed in Chapter 4. There are also more recent cases, such as Indonesian victims of the Koto Panjang Dam project of Suharto with Japanese ODA money. They sued the Japanese government in 2002, the first litigation case that involved Japanese ODA. Indonesian dam victims, Korean victims, and Vietnamese victims—all of these cases of violence and suppression separated in time and space nonetheless come from the developmentalist kula ring of Asia.

To take for granted or even celebrate the structure that allowed violence to be perpetrated against these Asian victims with language such as "miracle economic growth" and the "flying geese" commits the second layer of symbolic violence. Such language and theories naturalize economic development as a national success story without critically examining the political and economic conditions of postcolonial Asia that enabled it. There have been other attempts to demythologize the "miracle" narrative, such as highlighting conflicts, dissidents, and diversity in postwar Japan's domestic politics, rather than painting a picture of a diligent population working hard together. This volume looks outward instead of inward to critique the fundamental postwar assumption of economic growth measured by GDP statistics that blind us to each country's interconnectedness with the surrounding region.

The following chapters tell a story of how this intra-Asia technology network of the Cold War was established during the transformative period of the 1950s and 1960s: Japanese policy-makers and business communities (Chapter 2), intellectuals (Chapter 3), engineers (Chapter 4), and agronomists (Chapter 6) participated in the creation and development of this kula ring; how Indonesia (Chapter 5) was incorporated into this ring; and how Korean scientists (Chapter 7), agronomists (Chapter 8), and engineers (Chapter 9) sought to create a more powerful position for South Korea in the ring. The project to jointly examine the flows of technology and engineers in Asia has brought us to the point where we can theorize on this overall scheme of things, a big picture we could not have grasped if we had, as most historians do, researched and

---


* The full title of the agreement in English on the United Nations records is the Agreement on the Settlement of Problems Concerning Property and Claims and Economic Cooperation between Japan and the Republic of Korea.

* The ROK distributed a small portion—2.2 hundred million yen—of the fund to those Koreans who lost property due to the war and/or were "drafted or conscripted by Japan as soldiers, military workers, and laborers and died before August 15, 1945." The application period for reparations requests was short (ten months). The amount received for a deceased family member was 30,000 won. Chou Song-Won, "Džinšiči selyškien shikin to kankokur kairal kelias", in Ninkšan kankokai, 1965–2015, vol. II Kietin, ed. Abe Makoto and Kim Do-Hyun (Tokyo: Tokyo daigaku shuppankai, 2015), 83–4.


written monographs separately. At the same time, as we are primarily specialists of Japan and South Korea, we also acknowledge our limitations. This volume leaves out stories of the socialist bloc and its own network building. Stories of Southeast Asian engineers would have enriched this volume even more. Having a section on Taiwan would also have allowed us to develop more deeply our analysis of former colonial countries' complicated options and decisions in the ring. Our hope is that this volume will urge researchers to further develop discussions on the role of technology in intra-Asia development, politics, and violence. Asia, once colonized and exploited by the powerful empires, is now the center of the new century. This "miracle" should not be understood through only national narrative. We hope that this volume encourages readers to go beyond the boundary of the nation-states by exploring contingent ties, uncomfortable alliances, and engineers' and scientists' ambitions for the nebulous shaping of the region called Asia.

Bibliography


Part One

Engineering Asia at Home

Part 1 examines the development of the domestic infrastructure of postwar Japan's technology aid that was rooted in colonial development. While the past scholarship on official development aid has tended to focus exclusively on governmental ministries and agencies and on the 1970s onward, two chapters in Part 1 examine the understudied yet crucial segments of the technology aid machine that placed Japan in the kula ring network of development during the transformative period of the 1950s: the ubiquitous semi-public corporations that coordinated the interests of the public and private sectors (Chapter 2) and the interdisciplinary area studies that connected Japan with development network partners in Southeast Asia through the production of knowledge (Chapter 3).

The reader may choose to read Chapter 3 with Chapter 7, both of which feature pivotal segments of this institutional infrastructure building and the long-standing ambitions of the scientists behind them in Japan and Korea, but with different dynamics relative to each country's colonial positionality. Chapter 2 supplements the Introduction well and provides the context for all succeeding Japan chapters.