Science as a Family Affair: Won Pyong-Oh and the Transwar Origins of South Korean Ornithology*

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Introduction¹

In October 1965, Yamashina Yoshimaro (山階芳麿, 1900-1989) at the Yamashina Institute for Ornithology (YIO), Tokyo, received a package from Pyŏngyang. It contained a Korean book titled *The Checklist of the Birds of Korea* (朝鮮鳥類誌), the first volume, written by North Korean ornithologist Won Hong Gu (元洪九, Wŏn Honggu, 1888-1970) in 1964.² A month after Yamashina opened the package from North

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¹ Although this article adopts the McCune-Reischauer system for the romanization of Korean, I transliterate names following the persons' preferences as presented in their English written publications.

Korea, he received another report on the subject of Korean birds, this time originating from South Korea. The report, titled "Bird Banding in Korea," written by South Korean ornithologist Won Pyong-Oh (元炳旿, Wŏn Pyŏngo, 1929-2020), contained the first results of a nationwide bird banding survey conducted in South Korea.³ In fact, these two Korean ornithologists from the two Koreas were father and son. Yamashina himself recollected how he helped facilitate indirect communication between the Won family members, who had been living separately in the two Koreas since the armistice of the Korean War (1950-1953). This episode is considered a prime example of how scientific internationalism and humanity crossed the borders of the two Koreas during the tensest moments of the Cold War. Furthermore, the Won family's story has become a frequently visited Cold War cultural production, making them the subject of literary books and films in the two Koreas and Japan.⁴

Two important historical facts are often ignored in the current understanding of this episode. First, it is often overlooked that Won Pyong-Oh was not the only son of Won Hong Gu who pursued a scientific career in South Korea. In fact, during the late colonial period, his elder brother Won Pyung Hooi (元炳徽, Wŏn Pyŏnghwi, 1911-1995) was already an established zoologist specializing in rodent infestations. Won Pyung Hooi later moved to South Korea along with

² For the introduction of Won Hong Gu's career, see Kyung-soo Chun, "Choryuhakcha Wŏn Honggu sŏnsaenge taehan p'yŏnsang [A Biography of Ornithologist Dr. Won Hong Gu]," Kŭndaesŏji 18 (2018).

³ Pyong-Oh Won, *Bird Banding in Korea* (Seoul: Migratory Animal Pathological Survey and Ornithological Institute, Kyung Hee University, 1965).

⁴ Yoshimaro Yamashina, "Watakushi no rirekisho: Dai 13 kai. Saishū ryokō yowa [My Resume: Vol. 13. Reminiscences of Bird Collection Trips]," Nihon Keizai Shimbun, May 9, 1979; Kimio Endō, Ariran no aoi tori [Arirang's Blue Birds] (Tokyo: Kōdansha, 1984); Tae-ho Kim, "Pundandoen sanha, saee shirōbonaen maŭm [Divided Lands and Seas, Hearts Carried on Birds]," in Odapiranŭn haedap: kwahaksanŭn ŏttök'e mandŭrŏjina [The Wrong Answer is the Answer: How History of Science is Made] (Paju: Changbi Publishing, 2021), 181-186.

his twenty-year-old younger brother, Won Pyong-Oh, during the Korean War. Although it is well known that Won Pyung Hooi was a faithful collaborator in his father's ornithological fieldwork, the eldest son's role in the indirect interactions of the Won family via Japanese ornithologist Yamashina has remained unexamined.⁵

Second, the role played by Yamashina and other Japanese biologists in the formation of South Korean ornithology went above and beyond just enabling personal communication between father and son. Yamashina, Kuroda Nagamichi (黑田長禮, 1889-1978), Tokuda Mitoshi (徳田御稔, 1906-1975), and other Japanese biologists played significant roles in including South Korean ornithology in the newly rising trans-Asian ornithologist and conservationist community in the 1960s. As Won recollected, it was due to the help of Yamashina, Kuroda, and Tokuda that he was able to obtain a doctoral degree at Hokkaido University.⁶ Also, the YIO was a training center for the first generation of Korean ornithologists, including Won Pyong-Oh and his students.⁷ Most significantly, as I will reveal in this paper, Won's first opportunity to enter the international conservation scene came thanks to an invitation from Yamashina for him to attend the 1960 International Council for Bird Preservation (ICBP) Conference in Tokyo-the ICBP's first event held in Asia-only having recently obtained his bachelor's degree in biology at the newly established university in Seoul, South Korea.8

⁵ For the introduction of Won Pyung Hooi's life and work, see Sungshil inmulsa p'yŏnch'an wiwŏnhoe, "Han'guk p'oyudongmurhagŭi kaech'ŏkcha Wŏn Pyŏng -hwi [Won Pyung Hooi as a Pioneer in Korean Mammalogy]," in *Inmullo pon Sungshil 100nyŏn* [One Hundred Years of Soongsil University Seen from Graduates] (Seoul: Soongsil University Press, 1992), 305-322.

⁶ Pyong-Oh Won, Saedŭri sanŭn sesangŭn arŭmdapta: saewa tŏburŏ 60nyŏn [The World of Birds is Beautiful: Sixty Years with Birds] (Seoul: Tosŏch'ulp'an Taum, 2002), 55-66.

⁷ Jaehwan Hyun, "Trans-Asian Origins of the Migratory Animal Pathological Survey, 1958-1966" (paper, History of Science Society Annual Meeting, Chicago, the United States, November 17-20, 2022).

⁸ Pyong-Oh Won only offered a detailed explanation about the Japanese con-

This paper focuses on the Won family's scientific activities—including Won Pyung Hooi's work-and their interactions with Japanese biologists from the colonial period to the 1960s. I argue that the Won family's natural history collection activities could be understood as what I call "science as a family affair," that is a division of scientific labor between senior and younger family members, with senior members taking on the role of principal investigator and the younger members that of assistant-cum-collector. These familial activities were hierarchical and highly controlled by the family structure but also allowed junior family members access to the senior's intellectual networks which they could then in turn exploit for their own academic career. By tracing these familial activities and their continued engagements with Japanese biologists, this paper will reveal that the emergence of Won Pyong-Oh's ornithological research and conservationist work in the 1960s occurred in the wider context of the reconstruction of Asian ornithological research networks at that time.

Historian Anika Culver has examined how Japanese ornithologists, including Yamashina and the Kuroda family, conducted ornithological research across the Japanese Empire in the first half of the twentieth century. According to her analysis, they established hierarchical research networks with local colonial fieldworkers in Manchuria, colonial Korea, and Taiwan, promoting the idea of what she calls "avian imperialism." These networks were temporarily disrupted after Japan's defeat in the Pacific War, but from the late 1950s and early 1960s, Yamashina and Japanese ornithologists promoted rebuilding the Asian ornithological networks within the context of the new postwar agenda

tribution to his career and South Korean ornithology in Japanese. Pyong-Oh Won, "Shukuga messeiji [A Congratulatory Message]," in *Nippon Chōgakkai hakunen no rekisi* [The One Hundred Years' History of The Ornithological Society of Japan], ed. the Ornithological Society of Japan (Hiroshima: Nippon Chōgakkai, 2012), 3-4.

⁹ Annika A. Culver, *Japan's Empire of Birds: Aristocrats, Anglo-Americans, and Transwar Ornithology* (London and New York: Bloomsbury Publishing, 2022).

of nature conservation.¹⁰ During the colonial period, Won Hong Gu and his oldest son Pyung Hooi were part of the Japanese-led research network, and they sought to reconnect with their preimperial collaborators for their own purposes in the 1950s and 1960s. The members of the Won family in both Koreas participated actively in rebuilding the postwar network and Won Pyong-Oh's engagement with Japanese scientists benefited from and was a part of these familial efforts.

Through the case study of the Won family and their long-term interactions with Japanese ornithologists, this paper revisits the US aid-centered historiography of South Korean ornithology and nature conservation.¹¹ In a short paper titled "The History of Ornithology in South Korea," Won Pyong-Oh himself stressed the importance of American conservationist Harold J. Coolidge's (1904-1985) financial and political support from 1960 onward and American ornithologist S. Dillon Ripley's (1913-2001) guidance during his postdoctoral research at the Yale Peabody Museum (1962-1963).¹² His overemphasis on the

¹⁰ Culver, Japan's Empire of Birds, 205-209, and 214-218.

¹¹ For the literature exploring the history of nature conservation and science in South Korea, see Manyong Moon, "The Politics of Science in Korean Biology: From the DMZ Ecological Survey to the Nature Conservation Movement," The Korean Journal of the History of Science 42, no. 2 (2020); Jaehwan Hyun, "Brokering Science, Blaming Culture: The US-South Korea Ecological Survey in the Demilitarized Zone, 1963-8," History of Science 59, no. 3 (2021); Jaehwan Hyun, "Negotiating Conservation and Competition: National Parks and 'Victoryover-Communism' Diplomacy in South Korea," The British Journal for the History of Science (2023); Chuyoung Won, "Hwan'gyŏngŭl wihan kaebal?— 1970nyŏndae naesumyŏn kaebalgwa han'gukchayŏnbojonhyŏphoeŭi chayŏnbojon undong [Development for the Environment? The Inland Fish Farming Development and Nature Conservation Movement in Korea during the 1970s]," Yŏksabip'yŏng 145 (2023). For the pioneering study of the history of South Korean ornithology, see Hanah Sung, "Han'guk chayŏnsaengt'aegyeŭi irwŏni toen yasaengdongmul: chayŏnhwan'gyŏngbojŏnjŏngch'aegŭi tŭngjanggwa pojŏn choryuhak yŏn'gu, 1956-1999 [Putting Wildlife in Korean Natural Ecosystems: Ornithological Research for Nature Conservation Policy in South Korea, 1956-1999]," Han'gukkwahaksahakhoeji 43, no. 3 (2021).

US influence in South Korean ornithology and nature conservation has led previous scholars to often overlook these transwar interactions—the scientific exchange spanning from the prewar to the postwar period—between the Won family and Japanese scientists and their role in the emergence of Won Pyong-Oh's ornithological research and conservationist approach.¹³ By shedding new light on Won Pyong-Oh's ornithological activities, this paper will contribute to the wider effort to decentralize the US-aid-centered picture of postwar South Korean scientific cooperation, aligning with the recent scholarship exploring the transwar dimensions of South Korean science, technology, and medicine.¹⁴

Won Hong Gu and the Japanese Ornithologists in Colonial Korea and Japan

Won Hong Gu, a natural history teacher at Songdo Higher Common School (松都高等普通學校) from 1919 to 1931 and Anju Public Agricultural School (安州農業學校) from 1931 to 1940, is remembered as being the sole Korean ornithologist during the colonial period.¹⁵ In 1929, he pub-

¹² Pyong-Oh Won, "Han'gugŭi choryuhaksa [The History of Ornithology in South Korea]," *Chayŏnbojon* 148 (2009).

¹³ Jieun Shin, "A Wildlife Paradise': International Collaboration on the DMZ Ecology in the 1960s," Smithsonian Institution Archives (blog), November 12, 2019, https://siarchives.si.edu/blog/"-wildlife-paradise"-international-collaboration-dmz-ecology-1960s; Hanah Sung, "Yasaengdongmul."

¹⁴ Jaehwan Hyun and John DiMoia, "[On This Topic] Korean Science since the Colonial Period: Environment, Medicine, and Technology in Transwar Korea," Korea Journal 62, no. 3 (2022); Reto Hofmann and Max Ward, eds., *Transwar Asia: Ideology, Practices, and Institutions* (London: Bloomsbury Academic, 2022).

¹⁵ Won Hong Gu shortly worked at his alma mater at Suigen (Present-day Suwŏn) after returning from Kagoshima, Japan, in the summer of 1915, and as a low-ranking governmental officer in Northern Korea from 1916 to 1919, but for most of the colonial period he worked as a natural history teacher. He was appointed principal at a missionary school Yŏngsaeng Girls' High School (永生女

lished his first bird-related academic article and in 1932 a checklist of Korean birds, with his private collection of 185 species. 16 Even during wartime, Won was active in reporting his ornithological discoveries to the Ornithological Society of Japan (日本鳥學會). 17 It is thus, not surprising that Oliver L. Austin (1903-1988), a US military government officer stationed in Korea and Japan and the author of *The Birds of Korea* (1948) and *The Birds of Japan* (1953), evaluated Won Hong Gu as the only one "among the sixty million Koreans" who had "made any attempt to do serious bird work, to contribute to the knowledge of the avifauna of his country and to publish his findings." 18

Various factors contributed to his reputation as the only Korean avian researcher during the colonial period. First, as Korean naturalist Cho Pok-Sung (趙福成, Cho Poksŏng, 1905-1971) noted in 1932, when Won first published the checklist of his personal bird collection, avifauna was the most extensively studied field of fauna survey in Korea. At that time, 398 species were identified by the Japanese ornithologists and this number remained unchanged more or less until Austin's publication in 1948. Already in 1914, Shimokoriyama Seiichi (下郡山誠

子高等普通學校) in Kankō (currently Hamhǔng) in 1940 and served in the position for a few months before the defeat of the Japanese Empire in May 1945. He was appointed principal at an agricultural school at Tokugawa (currently Tŏkch'ŏn) the same month, but soon lost the position following liberation. For his detailed profile, see Kyung-soo Chun, "Choryuhakcha Wŏn Honggu," 743.

¹⁶ Hong Gu Won, "Hakutō-san kōchitai ni okeru Chōsen kuroraichō no shūsei no ittan ni tsuite [On the Habits of Korean Kuroraichō Living in Highland of Mt. Paektu]," Bunkyono Chōsen 51 (1929); Hong Gu Won, "Yo no shūshū shitaru Chōsensan chōrui mokuroku [A Checklist of Korean Birds Based on My Private Collection]," in Sōritsu nijū go shūnen kinen ronbunshū [Collected Papers of the 25th Anniversary of the Establishment] (Suigen: Suigen kōtōnōringakkō sōritsu nijūgoshūnen kinen shukugakai, 1932): 27-48.

¹⁷ Hong Gu Won, "Shiberia mukudori no shin hanshoku chi ni okeru jō kyō kan satsu [An Observation on the Breeding of Sturnia sturnina]," *Tori* 11 (1941).

¹⁸ Oliver L. Austin Jr., "Historical Sketch," in *The Birds of Korea* (Cambridge, MA: Harvard University Museum of Comprative Zoology 1948), 20-21.

-, b. 1883, year of death unknown), a natural history officer working at Li Wong's Museum, published A Hand-List of the Birds of Corea, which included 200 bird species, with prominent Japanese ornithologists Kuroda Nagamichi, Takatsukasa Nobusuke (鷹司信輔, 1889-1959), and Iizuka Akira (飯塚啓, 1868-1938).20 From 1914 to late 1917, he expanded the museum collection by collecting 1,980 specimens of 318 species and published the result with the title "Catalogue of Korean Bird Specimens in Li Wong Museum" the following year.²¹ After that, Japanese nobleman ornithologists Yamashina, Takatsukasa, and Kuroda hired skillful Japanese field workers like Orii Hyōjirō (折居彪二郎, 1883-1970) and collaborated with local Japanese naturalist Mori Tamezō (森為三, 1884-1962) at Keijō First Higher Common School (京城第一高 等普通學校) and later the Preparatory Department of Keijō Imperial University (京城帝國大學予科) to expand their bird collections, collected from all over the Japanese Empire's territories.²² In 1923, Mori listed 371 birds in the Catalogue of Specimens at the Exhibition of Specimens of the Natural History of Korea (朝鮮博物學標本展覽會出品目錄), prepared by Chösen Natural History Society, and in 1931, he concluded that the

¹⁹ Pok-Sung Cho, "Kŭmsugangsan samch'ŏllie nalgo kinŭn ch'in'godŭl, chosŏnŭi tongmuljŏmgo [Reflections on Korean Animals]," *Dongkwang* 32, April 1, 1932.

²⁰ Akira Iizuka, Seiichi Shimokoriyama, Nobusuke Takatsukasa, and Nagamichi Kuroda, "Chōsensan chōrui mokuroku [A Hand-List of the Birds of Corea]," Dōbutsugaku zasshi 26 (1914).

²¹ Seiichi Shimokoriyama, *Riōke hakubutsukan shozō chōsensan chōrui mokuroku* [Catalogue of Korean Bird Specimens in Li Wong Museum] (Keijō: Riōke hakubutsukan, 1918). For the identification of the 1918 checklist authored by Shimokoriyama, see Chang-Yong Choi, Jong-Gil Park, Chung-Wu Lee, and Hyun-Young Nam, "Additions to the 'Catalogue of Korean Bird Specimens in Li Wong Museum' published in 1918: A New Discovery of the Personal Copy of Shimokoriyama Seiichi," *The Korean Journal of Ornithology* 22 (2015).

²² For Orii's collecting activity in colonial Korea and other colonial territories, Orii Hyōjirō Kenkyūkai, Chōjū saishū-ka Orii Hyōjirō saishū nisshi: torigaku. honyūruigaku o sasaeta otoko [Bird Collector Orii Hyōjirō's Collecting Records: The Man who was Behind Ornithology] (Tomoakomai, Hokkaido: Ichikōsha shuppan, 2013).

total number of bird species in Korea was 398.²³ From Korean naturalist Cho Pok-Sung's perspective, before more Koreans entered the field, there were too many Japanese participants, and the main game, that was, to identify the number of bird species in Korea, already seemed to have ended.

Second, there were already several checklists of Korean birds in existence, and related bird specimens were well-collected by Japanese ornithologists in both colonial Korea and Japan. In the 1930s, Kuroda, Yamashina, and at least two ornithologists in Japan were busy expanding their own Korean bird collections. Shimokoriyama's Li Wong's Museum collection and Mori's collection at Keijō Imperial University in colonial Korea became crucial passage points for Korean bird surveys. Each of the Japanese ornithologists and collectors also published their own checklists based on those collections. This meant that newcomers who wanted to identify their bird specimens had no choice but to establish good ties with Japanese collection owners. It was clear that the collections run by Japanese noblemen remained largely inaccessible to most colonial Koreans.

Won Hong Gu was fortunate to be able to gain access to those collections and become part of the network, albeit as a subordinate, and his career change to ornithology in the 1920s should be understood in this context. Won himself explained that he had begun to collect bird and botanical specimens immediately after he moved to Songdo Higher Common School in 1920, and he began to pursue his ornithological work more seriously in 1926.²⁴ In previous literature, his newfound in-

²³ Chösen Hakubutsugakkai, Chösen hakubutsugaku hyöhontenrankai shuppin mokuroku [Catalogue of Specimens at the Exhibition of Specimens of the Natural History of Korea] (Keijö: Chösen hakubutsugakkai, 1923), 27-46; Tamezō Mori, "Chösen no döbutsu [Animals in Korea]," Chösen 195 (1931).

²⁴ Hong Gu Won, "Yo no shūshū shitaru Chōsensan chōrui," 27-28; Hong Gu Won, "Chōsen chōrui mokuroku [A Check List of Korean Birds]," in *Kagoshima kōtō nōrin gakkō kaikō nijū go shūnen kinen ronbun-shū zenpen* [Bulletin of the Kagoshima Imperial College of Agriculture and Forestry Dedicated to the

terest in ornithology was often attributed to the encouragement received from Lloyd H. Snyder (b. 1886, year of death unknown), a newly appointed American missionary principal at his workplace.²⁵

While acknowledging Snyder's influence, I highlight Won's participation in the Natural History Expedition Summer Schools for schoolteachers, held at Mt. Hakutō (Mt. Paektu) and organized by the Chōsen Educational Society (朝鮮教育會) of the Government-General of Korea, in 1926. Mori Tamezō was a lecturer at the field-based summer school attended by Won Hong Gu and Cho Pok-Sung, natural history teachers and the first generation of Korean biologists.²⁶ It is well known that Cho's participation was critical in his path to becoming a professional entomologist. In 1924, Cho had met Mori for the first time at a summer biology education workshop for natural history teachers in Hwanghae Province. After that, he began to work as Mori's faithful assistant and during the 1926 summer school he collected 6,000 insects belonging to 600 species. His contribution was acknowledged in Mori's publication on the butterflies living on the high slopes of Mt. Hakutō, and in the same year, Cho became a member of Chōsen Natural History Society.27

Twenty-Fifth Anniversary Volume 1] (Kagoshima: *Kagoshima kōtō nōrin gakkō kaikō nijū go shūnen kinenkai*, 1934), 77-118; Hong Gu Won, "Nae ch'ŏngch'unsijŏrŭi kkumgwa p'obu [My Youthful Dreams and Aspirations]," in *Hyŏndae chosŏnŭi kwahakchadŭl* [Contemporary Korean Scientists], ed. Jeong Hyuk Im (Seoul: Kyoyukkwahaksa, 2003), 199-203.

²⁵ Austin, "Historical Sketch," 21; Tae-ho Kim, "Pundandoen sanha," 183. Austin did not mention 1926 but he argued that Won was "evidently encouraged and helped by Mr. L. H. Snyder, the American principal of the school," and Snyder became the principal in 1926. Chun Kyung-soo also contends that 1926 was Won Hong Gu's turning point toward ornithology, while he does not mention Snyder's role. Kyung-soo Chun, "Choryuhakcha Wön Honggu," 737.

²⁶ Jaehwan Hyun, "Reconfiguring Mountain Expeditions: The Transwar Origins of the Korean Nature Conservation Movement, 1926-1962," *Korea Journal* 62, no. 3 (2022): 87.

²⁷ Sung Won Kim, "Singminjisigi chosŏnin pangmurhakcha sŏngjangŭi maengnak:

Won also seized the chance of the 1926 expedition to assure his inclusion in the imperial ornithologist network. One year later, in *The Japanese Journal of Ornithology* (鳥, *Tori*), Kuroda and Mori published an article about the identification of three bird specimens collected in Northern Korea: a Eurasian three-toed woodpecker (*Picoides tridactylus*), a white-backed woodpecker (*Dendrocopos leucotos*), and an olive-backed pipit (*Anthus hodgsoni*). They explicitly acknowledged that "Won Hong Gu from Songdo Higher Common School, Kōrai machi, Kaijō, Keiki dō (currently Kaesong), who was a participant in the Mt. Hakutō expedition, hunted the birds" and gave them the specimens for species identification.²⁸ In the same year, Won was listed as a new member of the Ornithological Society of Japan.²⁹

It was through assisting Japanese collectors and conducting local researchers' fieldwork and specimen collection in colonial Korea that Won Hong Gu became part of the Japanese ornithologist circle. In 1928, when Mori wrote about Korean bats, Won Hong Gu was listed as the sole Korean supporting Mori's research on them.³⁰ In the same year, Won was given the opportunity to introduce his private collection of Tristam's bunting (*Emberiza tristrami*) to the Ornithological Society of Japan's members.³¹ In 1929, Won went on a one-month field trip to Northern Korea near Mt. Hakutō with Orii, a Japanese collector who was staying in Korea throughout the year to collect Korean birds at the request of Yamashina.³² In September of the same year, Won

konch'unghakcha choboksŏngŭi sarye [The Context of a Korean Naturalist's Career-building in Colonial Korea: Cho Pok Sung as an Example of Colonial Entomologist]," *Han'gukkwahaksahakhoeji* 30, no. 2 (2008): 359.

²⁸ Nagamichi Kuroda and Tamezō Mori, "Hokusensan no yōchō sono ta [*Picoides tridactylus* and other species in Northern Korea]," *Tori* 5 (1927): 291.

^{29 &}quot;Zappo [Miscellaneous News]," Tori 5 (1927).

³⁰ Mori Tamezō, "Chōsensan yokushumoku ni tsuite [On the Korean Bats], *Dōbut-sugaku zasshi* 40 (1928).

^{31 &}quot;Zappo [Miscellaneous News]," Tori 6 (1928).

³² Hong Gu Won, "Chōsen chōrui mokuroku," 77-78; Austin, "Historical Sketch," 21.

presented his first ornithological research on the black grouse (*Lyrurus tetrix*) living high on the slopes of Mt. Hakutō, which he had collected that summer, at the Chōsen Natural History Society meeting.³³

Through continued collaboration with Mori and other Japanese collectors visiting colonial Korea, Won finally gained fame as an ornithologist. He was able to share his bird specimens with Japanese settler researchers and this in turn gave him access to their collections. In 1933, the colonial government published A Comprehensive Survey of Colonial Korea (朝鮮総攬) and Mori wrote a section on Korean animals. Mori introduced Won Hong Gu as one of the researchers working on Korean avifauna with Kuroda, Taktatsukasa, Shimokoriyama, and Yamashina during the time when Korea was still under the control of the Japanese Empire.³⁴ It was around this time that Won was afforded free access to Keijō materials-Shimokoriyama's and Mori's collections—for specimen identification.³⁵ In the 1930s, he then began to share his specimens directly with nobleman ornithologists Kuroda and Yamashina in mainland Japan. In 1931, Won sent his bird specimen to Kuroda for species identification, and Kuroda confirmed that it matched the specimen of his little owl (Athene noctua plumipes) collected in Peking.³⁶ During a brief field trip to Korea in the summer of 1936, Yamashina and Won met in person for the first time. The following year, Won sent seven egg specimens from the Oriental turtle

³³ The result was published in the Korean Education Society's journal, *The Education of Korea* (文教の朝鮮) in 1929.

³⁴ Mori Tamezō, "Chōsenno dōbutsu [Animals in Korea]," Chōsen sōran [A Comprehensive Survey of Colonial Korea] (Keijō: Chōsen sōtokufu, 1933), 972.

³⁵ Mori, "Chōsenno dōbutsu," 972. According to Won's expression, "Mr. Mori Tamezō and Mr. Shimokoriyama Seiichi advised my aviary survey and allowed me to lend books and access specimen." See Hong Gu Won, "Chōsen chōrui mokuroku," 77-78.

³⁶ Nagamichi Kuroda, "Chōsensan kokinmepuropu no ichi hyōhon ni tsuite [On a specimen of *Athene noctua plumpies* in Korea]," *Dōbutsugaku zasshi* 44 (1932): 192-193.

dove (Streptopelia orientalis) to him as a gift.³⁷

The more he collaborated with Japanese ornithologists, the more frequently he was able to publish his work in Japanese academic journals. In 1931, Won published his collection of fairy pitta (*Pitta nympha*) on Saishū Island (now Jeju Island) in the Zoological Society of Japan's (日本動物學會) journal.³⁸ The following year, he published an article in *The Japanese Journal of Ornithology* for the first time, with his little owl specimen.³⁹ Following this first publication he then continued to publish records and reports interchangeably on a regular basis in both established journals until 1941.

It should be noted that this seemingly reciprocal relationship between Japanese ornithologists and the Korean researcher in fact perpetuated the imbalanced nature of colonial relations. As a colonial Korean, Won had to contend with Japanese ornithologists' continuous doubting of his reports. For instance, although Won reported his collection of little owls and Oriental pratincoles (*Glareola maldivarum*) to Kuroda in 1931, the Japanese ornithologist only allowed publication of the little owl record, as he was yet himself to receive any specimens for the Oriental pratincoles. Won Hong Gu personally published the information in 1932, but Kuroda and other Japanese ornithologists did not include the report in their checklists of Korean birds. The

³⁷ Eiji Aoki ed., *Yamashina Yoshimaro's shōgai* [The Life of Yamashina Yoshimaro] (Tokyo: Yamashina Institute for Ornithology, 1982), 120.

³⁸ Hong Gu Won, "Saishūtō ni okeru yairoteuno shūsei ni tsuite [On the Habits of *Pitta nympha* in Jeju Island]," *Dōbutsugaku zasshi* 43 (1932).

³⁹ Hong Gu Won, "Chōsen ni o te hajimete hokaku shitaru ni tsuite [On the *Athene noctua* First Captured in Korea]," Tori 7 (1932).

⁴⁰ For the critical analysis of hierarchical collaboration between Korean and Japanese botanists during the colonial period, see Jung Lee, "Mutual Transformation of Colonial and Imperial Botanizing? The Intimate yet Remote Collaboration in Colonial Korea," *Science in Context* 29, no. 2 (2016).

⁴¹ Hong Gu Won, "Chōsensan chōrurui mokuroku ni tsuikasuru ni shu no chōrui ni tsukite [About the Two New Species Adding to the Checklist of Korean Birds]," in Sōritsu nijū go shūnen kinen ronbunshū [Collected Papers of the

Japanese ornithologists' distrust indirectly appears in Austin's evaluation of Won Hong Gu. Based on interviews and discussions with Japanese ornithologists, including Yamashina, Kuroda, and Orii—Austin never met Won Hong Gu in person—Austin wrote:

Won seems to have been fired by a patriotic ambition (lamentably universal among enthusiasts of every nationality including the American) to compile as large a list of species and subspecies as possible, without regard for any comprehension of the modus operandi or raison d'etre of its component parts. By this time his own collection had reached 258 species, and he lists for Korea, including Dagelet and Ouelpart Islands, the staggering total of 416 species and subspecies. The number of forms he dogmatically states breed in Korea exceeds those that actually do, and as he makes other similar misstatements with no attempt at proof, it is difficult to know when to believe his more probable assumptions. The Japanese, though guilty to a lesser degree of the same negligence, solved the problem by not believing him at all, and by disregarding any of his records unless verified by Yamashina, Kuroda, Mori, or some other less impeachable authority.42

According to this evaluation, Won's collection activity was "fired by a patriotic ambition" as a colonial intellectual, but he lacked an understanding of the "raison d'etre" of taxonomical science. Won's reports and records of Korean birds are considered scarcely credible without the verification of Japanese authorities— "Yamashina, Kuroda, [and] Mori." The colonialist gaze, presuming colonial Koreans to be biased

^{25&}lt;sup>th</sup> Anniversary of the Establishment] (Suigen: Suigen kōtōnōringakkō sōritsu nijūgoshūnen kinen shukugakai, 1932), 49-52.

⁴² Austin, "Historical Sketch," 22.

by nationalism and thus incapable of objective research, clearly shaped the epistemic hierarchy between Won and his Japanese collaborators.

It is uncertain whether Won Hong Gu recognized his Japanese collaborators' colonial gaze as such, but he did have a strategy for making his place in the Japanese ornithologist community through his activities as a local colonial scientist: he sought to update or create the "local names (Korean names)" (地方名·朝鮮名)" of Korean birds that had already identified by his Japanese collaborators in the previous decades and endeavored to survey the local ecological aspects of those birds (e.g., food habits).⁴³ Although he could not compete with the nobleman ornithologists in mainland Japan or Japanese settler biologists who had already carried out a quick, but massive survey for the identification of new bird species in Korea, this niche survival strategy would have made him useful, as such specific types of local knowledge would not have been obtainable through short-term species identification-centered surveys. Indeed, in the 1940s, when Kuroda and Yamashina wrote monographs dealing with the Japanese Empire's avifauna, they cited Won's work to explain the empire-spread birds' local habits and ecologies in Korea.44

Won Hong Gu also tried to locate himself within empire-wide bird protection campaigns. The Ornithological Society of Japan had been active in bird protection since the 1920s. The society's presidents attended the meeting of the International Committee for Bird Protection, the former organization of the International Council for Bird Preservation, (ICBP) regularly, including the 1928 meeting in Switzerland, and they were particularly interested in the bird species designated as natural monuments (天然紀念物) and urged the protection of those bird species.⁴⁵

⁴³ Hong Gu Won, "Chōsen chōrui mokuroku," 78.

⁴⁴ Nagamichi Kuroda, *Genshoku Nippon honyūrui zusetsu* [A Monograph of the Japanese Mammals: Exclusive of Sirenia and Cetacea] (Tokyo: Sanseidō, 1940); Yoshimaro Yamashina, *Nipponno chōruito sono seitai dai ni ken* [A Natural History of Japanese Birds, Vol. 2] (Tokyo: Azusa shobō, 1941).

In 1928, the society submitted a petition to revise the construction of the Meiji Setsu Memorial Tower (明治節記念塔), which was originally planned as a 43-meter tower surrounded by tens of thousands bulbs on the top of Mt. Hiei (比叡山) near Kyoto, to protect the birds living on the mountain. Hie protection (鳥類保護) was a legitimate research theme for Japanese ornithologists, even though, at the time, they were insensitive to the fact that so many birds were being killed in the name of scientific research. In 1934, Japanese ornithologists expanded their bird protection campaigns with the establishment of the Wild Bird Society of Japan (日本野鳥の会), organized to promote bird protection and criticize the overhunting of wild birds for commercial purposes. Kuroda was one of the establishing members of the society, and Yamashina actively participated in the society's activities with other ornithologists, Takatsukasa and Uchida Seinosuke (內田清之助, 1884-1975), from the outset.

In colonial Korea, in 1933, the Conservation Decree of the Chōsen Treasures Historic and Natural Monuments and the Hunting Decree (朝鮮寶物古蹟名勝天然記念物保存令) was introduced allowing the designation of Korean fauna and flora as natural monuments. Mori played

⁴⁵ Nagamichi Kuroda, "Nippon no tennen kinenbutsu to shite no chōrui [Birds as Natural Monuments of Japan]," Tori 4 (1925).

⁴⁶ Takuya Uda, "Shōwa shoki no Hiei yama ni okeru kankō kaihatsu to shizen hogo 'seichi to shizen hogo' no kankei ni chūmoku shite [Tourism Development and Nature Conservation on Mount Hiei in the Early Showa Era: Focusing on the Relationship between Sacred Sites and Nature Conservation]," *Meiō daigaku kiyō* 24 (2019).

⁴⁷ Jūrō Henmi, "Chorui hogo [Bird Protection]," Tori 7 (1932).

⁴⁸ For the history of the Wild Brid Society of Japan and Japanese ornithologists' involvement with it, see Paul Kreitman, *Japan's Ocean Borderlands: Nature and Sovereignty* (Cambridge, UK; Cambridge University Press, 2023), 170-177. See also Akihisa Setoguchi, "Yachō o meguru dōbutsu-kan [Perspectives of Animals Surrounding Wild Birds]," in *Nihon no dōbutsu-kan: hito to dōbutsu no kankeishi*, ed. Osamu Ishida, Sayoko Hamano, Makoto Hanazono, and Akihisa Setoguchi (Tokyo: Tōkyō Daigaku Shuppankai, 2013), 157-170.

a large part in the designating of these natural monuments and in the same year he mentioned that the number of birds in colonial Korea was decreasing and raised the need to protect birds from commercial hunting.⁴⁹

In 1934, in the context of the apparent recognition of the new bird protection campaigns in mainland Japan and a similar message of bird preservation being transmitted via the natural monument decree, Won Hong Gu explicitly advocated for bird protection in two Japanese journals of colonial Korea (朝鮮農會報 and 文教の朝鮮). His choice of these two specific journals, both of which had connections to the Governor-General of Chösen, revealed his intended audience and the purpose of his writing. Won's intentions were not to enlighten the Korean public or even Korean intellectuals about bird protection but rather he wanted to self-fashion himself as an expert in this newly rising field. He advocated prohibiting the commercial exchange of species protected under the natural monument provision, including song and insectivorous species to those protected through the hunting law, and encouraged educating children to preserve "wild birds" (野生鳥類).50 Won argued that bird protection would benefit agricultural productivity due to the useful role of insectivorous species in the control of agricultural pests and he saw the first step for bird protection as the establishment of a research institution for avian surveys in colonial Korea.⁵¹ Indeed, Won similarly suggested the establishment of an avian research institution in colonial Korea for the study of the local ecologies of Korean avians.⁵² He might have imagined by promising his service for the avian empire, as

⁴⁹ Mori Tamezō, "Chōsen no chōrui [Korean Birds]," Bunkyono Chōsen 12 (1933).

⁵⁰ Hong Gu Won, "Nōgyōjō yori mitaru chōrui hogono kyūmu [Urgent Need for Bird Conservation from an Agricultural Perspective]," *Chōsen Nōkaihō* 8 (1934); Hong Gu Won, "Shotō kyōiku o tsūji yasei chōrui no aigo hō o nozomu [Desire to Protect Wild Birds through Primary Education]," *Bunkyono Chōsen* 15 (1934); Yoshimaro Yamashina, *Nipponno chōruito sono seitai*.

⁵¹ Hong Gu Won, "Nōgyōjō."

⁵² Hong Gu Won, "Chōsen chōrui mokuroku," 78.

a colonial researcher studying the local ecologies of Korean birds, and as a bird protection promoter he could secure himself a position working as the director of a colonial research institution. Although his hope was not fulfilled during the colonial period, his colonial activities would become useful resources for himself and his sons decades later.

Natural History Collection (博物採集) as a Family Affair

In his memoir, Won Pyong-Oh recalled playing with his father Hong Gu's bird specimens while growing up. He often joined his father on field trips and sometimes even helped him with fieldwork.⁵³ Won Hong Gu also remembered his youngest son showing interest in his ornithological work from a young age.⁵⁴ One should be careful to note that these accounts are memories recollected after Pyong-Oh's rise to fame as an ornithologist and the episode of the politically charged discovery of his ringed birds by Hong Gu in North Korea in the mid-1960s. But Pyong-Oh was not the only son who accompanied his father on his field trips. Indeed, when Hong Gu was at his most active in collecting ornithological specimens in the late 1920s and 1930s, Pyong-Oh, born in 1929, would have been just a child. Looking at his older brothers' activities in the same period, however, gives us an insight into the bigger picture of the Won family's commitment to natural history collection during the colonial period.

In the 1920s and 1930s, Won Hong Gu's children attended Songdo Higher Common School, where he was a teacher. Among them, the two elder brothers, Pyung Hooi and Pyong Su, became assistants to their father's natural history collection (*pangmulch'aejip*) activities.⁵⁵

⁵³ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 141.

⁵⁴ Hong Gu Won, "Kkumgwa p'obu," 205-206.

⁵⁵ It is not known whether Hong Gu's children, Hye-kyung, the third of five siblings, and Byung-Il, the fourth, were involved in any natural history activities.



Figure 1. The Won family in Anju during the 1930s. Source: "Hyujŏnsŏn nŏmŏ isan'gajok iŏjun soetchirŭregi [Across the Demilitarized Zone, Starlings Connect Separated Families]," Hankyore, September 14, 2017.

The first official record of the Won boys' participation in collecting specimens was the eldest son Pyung Hooi's contribution to collecting a *Parnassius bremeri* butterfly and passing it on to his school's natural history teacher Seok Joo-Myung (石宙明, Sŏk Chumyŏng, 1908-1950), in 1930.⁵⁶ According to Seok's explanation, the second son, Won

Their lives, along with Pyong Su's life in South Korea, could be researched further in the future through oral history interviews.

Pyong Su, collected butterfly specimens when his father and older brother, Pyung Hooi, went on a field trip to collect birds on Saishū Island during the school's summer break in 1931.

Indeed, if Yamashina had a trusty collector in Orii, Hong Gu's own trusty collector was his eldest son Pyung Hooi. Won Pyung Hooi was born in Suigen in 1911, during the transition period in Hong Gu's life, when he had graduated from the Agricultural School of the Government-General of Korea (朝鮮総督府農林學校, later Agricultural and Forestry College Suigen in 1918) in Suigen and entered the Kagoshima College of Agriculture and Forestry (鹿児島農林専門學校). Won Hong Gu used his students as assistants to collect natural history specimens, and naturally, Pyung Hooi also took on an assistant role after entering Songdo Higher Common School in 1926.⁵⁷ It is supposed that Pyung Hooi participated in his father's field trips to Mt. Hakutō, Mt. Chiri, Mt. Kongō (now Mt. Kumgang), Utsuryo Island (now Ullung Island), and Saishū Island during the summer break before his graduation in early 1931. In the 1932 checklist of Korean birds, Hong Gu acknowledged that, among 185 of the specimens saved in his new workplace Anju Public Agricultural School, 75 of them were collected by his eldest son.58

In 1932, Pyung Hooi entered the Department of Agriculture at Soongsil College (崇實專門學校), an American missionary college. It was there that he developed his interest in medical entomology—a field focused on the control of vermin and pests—while networking

^{56 &}quot;Chosŏnsan hojöp [Korean Butterflies]," Chosŏnilbo [Chosun Daily], February 1, 1931; D.L. Seok, "Chōsensan Aphantopus hyperantus LINNE ni tsuite [fu] me-jō mon oyobi gu hoka no hanmon kenkyū-jō no isshin [A new method for the study of ocular and other mottled patterns of Aphantopus hyperantus LINNE in Korea]," Dōbutsugaku zasshi 48 (1936): 995-996.

⁵⁷ Yangha Kim, "Pangmuryŏn'guga Wŏn Honggu sŏnsaeng: naŭi sŭsŭng [Natural History Researcher Mr. Won Hong Gu: My Teacher]," *Chogwang* 2 (1936): 55-57

⁵⁸ Hong Gu Won, "Yo no shūshū shitaru Chōsensan chōrui," 27-28.

with current and future Korean agriculturalists.

As historian of science Kim Geun Bae has recently contended, Soongsil College played a large role in the training of future scientists and engineers in postcolonial Korea. One of Pyung Hooi's senior colleagues, Kim Hon-Kyu (金憲奎, Kim Hŏn'gyu, 1910-1987), who was one year older, demonstrated exceptional leadership and academic prowess in their department. Kim Hon-Kyu obtained a bachelor's degree in agriculture from Hokkaido Imperial University in 1937 and went on to earn a master's in agricultural biology from Cornell University in 1939. Kim took a professorship at Ewha Women's University in 1954.60 As I will show below, Won Pyung Hooi's ties with Kim Hon-Kyu would play a significant role in his youngest brother's academic career in postcolonial Korea.

Immediately after graduation in March 1935, on Mori Tamezō's recommendation, Won Pyung Hooi obtained a research position at the Teikaton Office of Plague Survey (鄭家屯ペスト調査所) in Manchukuo.⁶¹ Pyung Hooi spent some productive years there until the end of the Pacific War. Although his major work was focused on the ecological survey of rodents in Manchuria and rodent control for the purposes of containing the bubonic plague, this did not stop him from collecting specimens of mammals and avians while in Manchuria. In the context of both research projects, the Manchurian rodent research and his fauna survey, Pyung Hooi sent animal specimens to Kuroda for species identification.⁶² These natural history collection activities in Manchuria,

⁵⁹ Geun Bae Kim, "Sungsiljönmunŭi kwahakkisuljadul ihakkwawa nonghakkwa kaesŏl, chorŏpsaengdurŭi taehak chinhak [The Scientists of Union Christian College Establishing the Departments of Sciences and Agriculture and Their Graduates' Entering Universities]," Han'gukkunhyŏndaesayŏn'gu 94 (2020): 101- 131.

⁶⁰ Sungshil inmulsa p'yŏnch'an wiwŏnhoe, "Konch'unghakcharo oegirŭl san Kim Hŏn'gyu [Kim Hon-Kyu who Walked a Single Path as an Entomologist]," in *Inmullo pon Sungshil 100myŏn*, 289-303.

⁶¹ Sungshil inmulsa p'yŏnch'an wiwŏnhoe, "Wŏn Pyŏng-hwi," 309.

⁶² Sungshil inmulsa p'yŏnch'an wiwŏnhoe, "Wŏn Pyŏng-hwi," 317-318.

continued along the same lines as the family business—just as Pyung Hooi had joined his father in the late 1920s, he recruited his younger brother Won Pyong Su to join him in his Manchurian fieldwork as an assistant collector.

While collecting bird and mammal specimens, Pyung Hooi actively engaged with the Japanese zoologist community in Manchuria. He was a member of the Biological Society of Manchukuo (満州生物學會), presented his work at the society's conference, and published several papers in the society's journal with his brother Pyong Su.63 Mori and Kuroda were also members of the society; Mori was especially active in it because he participated in Manchurian expeditions that were organized by Keijō Imperial University.64 In addition, due to his work on Manchurian rodents, Pyung Hooi also came into contact with prominent zoologist Tokuda Mitoshi at Kyoto Imperial University. Tokuda worked on biogeographical research on "Greater East Asia" (大東亜) mammals. As part of that research, he collected Manchurian rodent specimens in order to trace the evolutionary relationship between Manchurian-Korean and Japanese rodents, at the same time as Won Pyung Hooi's team at Teikaton was studying the ecological aspects of Manchurian rodents in the late 1930s and early 1940s.65 Pyung Hooi co-published articles with Kuroda and, in 1944 and he participated as co-author of an edited volume tentatively titled The Classification,

⁶³ Won Pyung Hooi's name is first to be seen in the member list in 1938. "Shinnyū kaiin [New Members]," *Manshū seibutsu gakkai kaihō* 2 (1938): 67. During the Pacific War period, Pyung Hooi and his father Hong Gu changed their names to Tanimoto Kentaro (谷元健太郎) and Tanimoto Kōkyū (谷元洪九) respectively.

^{64 &}quot;Manshū seibutsu gakkai Kaiin meibo [The Member List of the Biological Society of Manchukuo]," *Manshū seibutsu gakkai kaihō* (1938): 92.

⁶⁵ Satoshi D. Ohdachi, Yukibumi Kaneko, Masahiro A. Iwasa, Masaharu Motokawa, and Nobuhiro Minaka, "Honyū-ruigakusha. shinkagakusha Tokuda Mitoshi no ashiato [A Biography of Dr. Mitoshi Tokuda and his Influences in Mammalogy and Evolutionary Sciences]," *Honyūrui kagaku* 51, no. 1 (2011).

Distribution, and Ecology of Rodents in the Greater East Asia (大東亜 鼠類の分類, 分布, 及び生態), which Kuroda Nagamichi edited and Tokuda contributed to writing chapters; however, it was never published due to the Japanese Empire's defeat in the Pacific War.⁶⁶

Won Pyong-Oh's interest in natural history collection activities should be understood in this familial context. The youngest son of the Won family joined the family enterprise in the 1940s, albeit indirectly. In the late 1930s and early 1940s, while his two older brothers were busy collecting specimens in Manchuria—now independently from their father—teenager Pyong-Oh, living in Kankō, had just begun to participate in his father's field trips. His interest in biology followed in the footsteps of his two older brothers: he showed a passion for butterfly (like Pyong Su) and bird (like Pyung Hooi) specimen collections.⁶⁷ But contrary to the popular image today, Pyong-Oh was not a unique presence but in fact a regular member of the larger family affair. This familial division of labor would repeat itself once again in South Korea and would see the youngest Won benefiting from the same human networks and ties of his older family members, in particular, with Japanese biologists, as his eldest brother enjoyed during the colonial period.

The Family Division and the Won Brothers in South Korea

During the early period of liberation and following the Korean War period, the Won family faced significant political instability that greatly impacted both their personal lives and scientific pursuits. The family became divided along political lines, resulting in the separation of some siblings from other members of the family and the unfortunate deaths of others. Won Pyong Su, the second brother, chose to leave

⁶⁶ Sungshil inmulsa p'yŏnch'an wiwŏnhoe, "Wŏn Pyŏng-hwi," 301 and 317-318. 67 Pyong-Oh Won, *Saewa tŏburŏ 60nyŏn*, 22-23.

Manchuria for South Korea, while his sister also decided to move south. Unfortunately, his sister passed away before the outbreak of the war, and Pyong Su died in February 1963.⁶⁸ The third brother of the Won family, who had attended a medical college in North Korea, also died during the war.⁶⁹

Other members of the Won family, who had chosen to reside in North Korea, seemed to fair better, at least until the outbreak of the Korean War. Won Hong Gu faced political difficulties in North Korea at the outset due to his "pro-Japanese" profile, including having changed his Korean name to a Japanese one (創氏改名) and having worked as a school principal during the colonial period. However, because under the Soviet occupation (1945-1948) and the North Korean government's early regime there was a shortage of scientific personnel, he was able to settle safely in the North Korean socialist system.⁷⁰ Won Hong Gu was appointed professor at Kim Il-Sung University in 1946 and eventually became a leading scholar of biology in North Korea. In the same year, the North Korean Society for Biology (北朝鮮生物學會) was organized, and as a member of the new scientific organization, he participated in writing the first official checklist of Korean mammals in the Korean language. In the spring of 1950, he collected specimens of 320 bird species and exhibited them in the Biological Science Museum at Kim Il-Sung University.⁷¹

⁶⁸ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 142.

⁶⁹ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 24.

⁷⁰ For the shortage of scientists and engineers in the early liberation period of North Korea, see Geun Bae Kim, "Pukhan hamhunguigwadaehak kyosujinui kusong, 1946-48: sasangsonggwa chonmunsongui puranhan kongjon [The Construction of the Faculty of Hamheung Medical College in North Korea, 1946-48: An Unrest Coexistence of Political Ideology and Medical Expertise]," Uisahak 24, no. 3 (2015); Donghyun Woo, "Constructing People's Science-Technology: The Culture of Science and Technology in Early North Korea, 1945-1950," The Korean Journal of the History of Science 44, no. 2 (2022).

⁷¹ Hong Gu Won, "Kkumgwa p'obu," 201-203; Kyung-soo Chun, "Choryuhakcha Wŏn Honggu," 741.

The eldest brother Pyung Hooi, also had little choice but to leave Manchuria and return to North Korea, which meant abandoning his research materials and reports in his previous workplace. Initially, he worked at high schools, but he soon obtained the directorship of plague research at the Pyongyang Infectious Disease Institute. Pyong-Oh, the youngest of the Won family children, started studying at the Department of Animal Husbandry of College of Agriculture at Kim Il-Sung University in 1947 and graduated on July 18, 1950, in the first month of the Korean War.⁷²

The Korean War also had miserable consequences for the two brothers who had remained in North Korea. Pyong-Oh was quickly drafted into the North Korean army but stayed in Pyongyang with his oldest brother Pyung Hooi. The UN-South Korean army took occupation of Pyongyang on October 20, 1950, and it seems that the Won brothers quickly surrendered and defected to the South Korean side. Then, when the UN-South Korean army withdrew from Pyongyang due to the Chinese communist army's attack on December 4, 1950, the brothers moved to the South, to Busan, despite the fact that their parents were still living in North Korea. The course of this move, Pyung Hooi once again lost all his research materials and the papers he had written and collected during his stay in North Korea.

After moving to Busan, in 1951 Pyung Hooi found a teaching job at Kyŏngnam Women's High School and occupied various positions at Kyŏngnam Technical High School and later Paiwha Girls High School. It was not until April 1956, when Pyung Hooi was 45 years old, that he finally obtained a professorship in biology at Shinhung University (新興大學校, *Sinhŭng daehakkyo*, renamed as Kyunghee University 慶熙 大學校 in 1960).⁷⁴ Meanwhile, 22-year-old Pyong-Oh volunteered to

⁷² The College of Agriculture at Kim II-Sung University separated and became Wonsan Agricultural University in September 1948.

⁷³ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 29 and 103.

⁷⁴ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 103.

join the South Korean army in 1951, possibly due to his North Korean army background, and was in active service until 1956.⁷⁵



Figure 2. Won Pyung Hooi wearing glasses (left) and Pyong-Oh wearing a white gown (right) at the Kwangnung Forest Branch, the Forestry Experiment Station, in the late 1950s. Source: Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 50.

The year 1956 was a significant one for both brothers—Pyung Hooi was finally able to resume his academic pursuits and summarize his two decades of research, and Pyong-Oh returned to civilian life. With the help of the Vice Minister of Culture and Education Kim Ho-jik (金 浩稙, 1905-1959),⁷⁶ his father's junior colleague and biologist, Pyong-Oh obtained a position as a temporary government officer at the Central Forest Experiment Station (中央林業試驗場 and later 農事院林業

⁷⁵ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 31.

⁷⁶ In his memoir, Won Pyong-Oh wrote his name as Kim Ho-shik but Kim Ho-shik (金浩植, 1905-1968), agriculturalist and his eldest brother's teacher at Soongsil College did not serve as Vice Minister of Ministry of Culture and Education. Pyong-Oh Won, *Saewa tŏburŏ 60nyŏn*, 33.

試驗場 in 1957), in Seoul.⁷⁷ From this time until he was married two years later, Pyong-Oh lived at his older brother's house. The following year, he transferred as a third-year undergraduate student to the Biology Department at Shinheung University, where his brother was working as a professor.⁷⁸

In the mid-1950s and early 1960s, while their father was approaching the peak of his academic and political career in the North, the Won brothers were starting their academic careers in the South. Won Hong Gu was appointed Candidate Academician (候補院士) and Director of the Biological Research Laboratory at the Academy of Sciences of the Democratic People's Republic of Korea in 1952. He published An Illustrated Checklist of Korean Mammals (朝鮮哺乳類圖說) in 1955, The Distribution of Korean Birds and Their Economical Benefits (朝鮮 鳥類의 分布와 그 經濟的意義) in 1956, and the first volume of Colored-Illustrations of Korean Birds (朝鮮鳥類原色圖說) in 1958.79 After obtaining a doctoral degree in biology in 1961, Won Hong Gu committed to writing The Checklist of the Birds of Korea, which would be published and sent to Yamashina and Kuroda in 1964-1965.80 His two sons in South Korea would also write their own versions of checklists of Korean birds and mammals in the late 1950s. More importantly, they would use the ties established by their eldest brother in the colonial period to reconnect with Japanese biologists.

⁷⁷ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 33.

⁷⁸ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 50.

⁷⁹ Jeong Hyuk Im, Hyŏndae chosŏnŭi kwahakchadŭl, 68-72.

⁸⁰ A similar book titled A Classification Key of Korean Birds (朝鮮鳥類檢索表) was also published in 1961. I found the list of Won Hong Gu's book related to ornithology at the database of The Ministry of Unification's Information Center on North Korea (*T'ongilbu pukhanjaryosent'ŏ*).

Won Pyong-Oh Connecting with Japanese Biologists via His Eldest Brother

Although Won Pyong-Oh is alleged to have begun his career as an ornithologist, his career direction was not settled until at least the late 1950s. Indeed, Pyong-Oh himself confessed that he was strongly influenced by both his father and older brother, so he had always been drawn to the study of both birds and rodents.⁸¹ When it comes to his early activities in the Forest Experiment Station, Pyong-Oh dealt with birds and mammals together within the traditional Japanese category of *Chōjū* (鳥獸, *Chosu* in Korean). His earliest published writing was a series of three newspaper columns titled "The Urgency of Protecting Birds and Mammals," which appeared in *Chosun Daily* in May 1955, while he was still serving in the military.⁸² The columns were expanded to a short monograph and published under the title, *The Bird and Mammal Protection* (鳥獸保護), through his new workplace in October 1956.⁸³

This report did not contain any new or original empirical research; instead, it reviewed previous taxonomical and ecological research on Korean birds and mammals conducted by Japanese biologists, including Mori, Kuroda, and Yamashina, as well as his father Won Hong Gu, during the colonial period. Won Pyung Hooi's argument for the need to protect birds and mammals was more or less similar to that of his father and strongly echoed suggestions made by Yamashina and members of the Japanese Society of Wild Birds in *The Ecology and*

⁸¹ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 96.

⁸² Chosubohoŭi kin'gŭpsŏng (sang) [The Urgency of Protecting Birds and Mammals (1)]," *Chosun Daily*, May 25, 1955; "Chosubohoŭi kin'gŭpsŏng (chung) [The Urgency of Protecting Birds and Mammals (2)]," *Chosun Daily*, May 26, 1955; "Chosubohoŭi kin'gŭpsŏng (ha) [The Urgency of Protecting Birds and Mammals (3)]," *Chosun Daily*, May 27, 1955.

⁸³ Pyong-Oh Won, *Chosuboho* [Protecting Birds and Mammals] (Seoul: Central Forest Experiment Station, 1956).

Conservation of Japanese Birds (日本鳥類の生態と保護), in 1951.84 Indeed, in parts, Won Pyong-Oh's book seemed like a summary of Yamashina's 1951 publication. On his father and Yamashina's suggestion, Won Pyong-Oh identified overlogging and overhunting as the main causes of the rapid decline in wild bird and mammal populations in South Korea. He recommended introducing the regulation of hunting species, enacting wildlife conservation laws, and promoting child education to curb the decline.85 In previous studies, this report has been considered a pioneering study of nature conservation, one that resulted in "wild birds (野生鳥類, yasaeng joryu)" becoming a research subject for the first time in South Korea.86 If this evaluation is accepted, the first nature conservation-related research in South Korea can be seen as having a transwar origin, at least in part.

Meanwhile, in his memoir, Won Pyong-Oh expressed his gratitude towards Tokuda Mitoshi, Kuroda Nagamichi, and Yamashina Yoshimaro for their mentorship and for helping him kickstart his career as a professional ornithologist. They advised him on his dissertation work, and he went on to obtain a doctoral degree in agriculture from Hokkaido University in 1961. According to his own explanation, Won Pyong-Oh initiated his relationship with these Japanese biologists by writing letters to them while pioneering the field of ornithology at the Forest Experiment Station in the late 1950s. He described these Japanese biologists as "total strangers" (生面不知) and how he came to know their work while corresponding with them.⁸⁷

When considering the longer relationship between the Won family and the Japanese biologists since the colonial period, the portrayal of

⁸⁴ Hong Gu Won, "Nōgyōjō"; Hong Gu Won, "Shotō kyōiku"; Yoshimaro Yamashina, Nihon chōruino seitai to hogo [The Ecology and Conservation of Japanese Birds] (Tokyo: Kyoritsu Shuppan, 1951).

⁸⁵ Pyong-Oh Won, Chosuboho, 41-50.

⁸⁶ Hanah Sung, "Yasaengdongmul," 605-611.

⁸⁷ Pyong-Oh Won, Saewa tŏburŏ 60nyŏn, 55.

Won Pyong-Oh as a solitary pioneer endeavoring to connect himself with the Japanese biologist circle becomes problematic. When Pyong-Oh began his studies at his older brother's department, it seems that Pyung Hooi had resumed correspondence with Tokuda and Kuroda to aid completion of his systematic work on Korean mammals and rodent research to obtain a doctoral degree from a Japanese university. In March 1957, Kuroda Nagamichi, then president of the Mammalogical Society of Japan, wrote a preface to Pyung Hooi's publication "A Hand List of Korean Mammals" (韓國產哺乳類分布目錄), which was published in his university's bulletin in June 1958.88 In the checklist, Pyung Hooi expressed his gratitude that "Dr. Kuroda Nagamichi supervised the list" and to "Dr. Tokuda Mitoshi, Mr. Imaizumi Yoshinori (今泉吉典, 1914-2007), Mr. Cho Pok-Sung, and Lee Duk-Sang (李德象, Yi Tŏksang, 1906-1974) for sharing precious documents."89 Another paper dealing with the ecological investigation of rodents in Manchuria and Korea, which was published in the same issue of the bulletin, also acknowledged "Dr. Kuroda Nagamichi and Dr. Tokuda Mitoshi for advising [on] the classification of rodents."90 His gratitude to Kuroda and Tokuda was not unusual given his long-term relationship with them since the colonial period.

It is important to note that Won Pyong-Oh must have been aware of his older brother's relationship with these Japanese biologists, as he himself assisted his brother with the editing of his manuscript on the checklist of mammals.⁹¹ More interestingly, the same preface, written by Kuroda Nagamichi, was also attached to Pyong-Oh and his workplace colleague Woo Han Chung's (禹漢貞, Wu Han-chŏng, b. 1932,

⁸⁸ Pyung Hooi Won, "Han'guksan p'oyuryu bunp'o mongnok [A Hand List of Korean Mammals]," *Nonmunjip* 1 (1958): 427.

⁸⁹ Pyung Hooi Won, "Han'guksan p'oyuryu," 427.

⁹⁰ Pyung Hooi Won, "Chungguktongbukchibang mit Han'guksansŏlch'iryuŭi saengt'aehakchŏk yŏn'gu che 1 po [Ecological Studies on the Rodents of Manchuria and Korea (Part 1)]," *Nonmunjip* 1 (1958): 382.

⁹¹ Pyung Hooi Won, "Han'guksan p'oyuryu bunp'o," 427.

year of death unknown) A Distributional List of the Korean Birds and Mammals (韓國産鳥獸分布目錄).92 Won Pyong-Oh and his colleague also acknowledged the help of Kuroda, Tokuda, and the other Japanese biologists to whom Pyung Hooi had expressed his gratitude in his publications. Won Pyong-Oh and Woo's list contained checklists of both mammals and birds and was published three months after Pyung Hooi's publication of the Korean mammal checklist. However, their list's mammal section appeared to be an updated version of Pyung Hooi's checklist. So far, unfortunately, there is no historical material to confirm whether Pyong-Oh simply recycled his older brother's checklist, one that he participated in writing as an assistant, or if it was Pyung Hooi who had stolen his younger brother's work.

One way to make sense of this confusion regarding authorship is by understanding their postwar work within the context of the Won family's long tradition of specimen collection as a family affair. In the English preface, Won Pyong-Oh stated that he had "made collection trips in the past four years since 1955" and the collections "are kept in the Central Forest Station, Shinhung University, and Paiwha Girls High School."93 The latter two institutions were his older brother Pyung Hooi's workplaces, and many of the collection field trips, including trips to Mt. Sŏrak and Jeju Island, were made in tandem with his older brother. Indeed, many of the collection field trips were enabled by Won Pyong-Oh's involvement with the Korean Society of Applied Zoology (韓國應用動物學會), which Pyung Hooi's senior colleague Kim Hon-Kyu established in 1957 and in which Pyung Hooi had served as a vertebrate research team leader from the outset.94

⁹² Pyong-Oh Won and Han Chung Woo, preface to *Han'guksan chosu-bunp'omongnok* [A Distributional List of the Korean Birds and Mammals] (Seoul: Nongsawŏn imŏpsihŏmjang, 1958).

⁹³ Pyong-Oh Won and Han Chung Woo, preface to *Han'guksan chosubunp'omongnok*.

^{94 &}quot;Ungyongdongmurhakhoe ch'angnip [The Establishment of the Korean Society of Applied Zoology]," *Donga Ilbo*, July 27, 1957.

Considering the given contexts, I propose understanding the collection and listing work on Korean mammals conducted by the Won brothers in South Korea as a form of "science as a family affair." An older family member took the role of leading author and a younger member of assistant and collector—the family members worked as partners. This division of work was hierarchical according to the familial relationship but was reciprocal as the younger side also benefited from being quite naturally included in the wider research networks established by the older family member. This echoed the way their father, Won Hong Gu, had worked with Pyung Hooi in colonial Korea, and Pyung Hooi had continued this mode of functioning with his younger brother Pyong Su in Manchuria. Just as Pyung Hooi found an opportunity to become a prominent rodent researcher with the support of his father's network, Pyong-Oh also benefited from connecting himself to his older brother's network in Kuroda, Tokuda, and Kim.

In the 1960s, the Won brothers continued to carry out fieldwork together, but their careers and research directions diverged. Won Pyung Hooi moved from the Department of Biology at Shinhung University to the Department of Agricultural Biology at Dongguk University (東國大學校) in March 1959 and Pyong-Oh moved from the Forest Experiment Station to his brother's previous workplace to work as a full-time lecturer (專任講師) in early 1961, while working towards obtaining a doctoral degree in agriculture at Hokkaido University thanks to Tokuda's support. Pyong-Oh took a one-year postdoc at Yale Peabody Museum in 1962. In 1960, before obtaining these new positions and flying to the United States, Pyong-Oh would get a decisive opportunity to turn ornithology into his lifelong career.

The 1960 ICBP Meeting and Won Pyong-Oh's Ornithological Turn

Won Pyong-Oh's involvement with the Korean Society of Applied

Zoology via his eldest brother gave him a chance to engage with the Asian ornithological and conservationist network. As I briefly mentioned above, Won Pyong-Oh described his participation in the ICBP meeting held in Tokyo in 1960 as only made possible because of American conservationist Harold Coolidge's financial and political support. Besides Coolidge's financial support via the Asia Foundation, however, Pyong-Oh was invited to participate in the Tokyo meeting due to his position as the secretary of the Korean Society of Applied Zoology; Won attended the event with its president Kim Hon-Kyu. 96

Attending the Tokyo meeting gave him an opportunity to get involved with the work Japanese ornithologists were doing to reconstruct the Asian ornithological network with a focus on migratory bird survey and conservation at an early stage. At the previous ICBP meeting of 1958, Yamashina had taken the lead in discussing the formation of the Asian section, following the African, American, and European sections, with ambitions to make Japan a center of Asian bird conservation. Property At the 1960 Tokyo meeting held at his research institution, the YIO, his ambition was realized. First, the Asian section was established, and Yamashina was nominated as the Asian section's chairman and Kim Hon-Kyu as vice-chairman-auditor. The YIO became the section's headquarters, and the Asian survey of migratory birds was set as the main agenda for the Asian section. Additionally, several national subsections were established, including the Korean national section with Kim Hon-Kyu as chairman and Won Pyong-Oh as secretary-treasurer. Property is the secretary-treasurer.

⁹⁵ Pyong-Oh Won, "Han'gugŭi choryuhaksa," 5. See also Pyong-Oh Won, *Saewa tŏburŏ 60nyŏn*, 56-57.

⁹⁶ Before the meeting, Yamashina wrote letters to the President of Korea, Ripley, and the ICBP President to request that Pyong-Oh Won be invited to Japan as a Korean delegation. Pyong-Oh Won, "Shukuga messeiji," 3. For Coolidge's support of East Asian conservationists through Asia Foundation, see Hyun, "Brokering Science, Blaming Culture."

⁹⁷ Culver, *Japan's Empire of Birds*, 206-208; for Yamashina's role in the ICBP, see also Kreitman, *Japan's Ocean Borderlands*, 185-187.

For the Asian section's new agenda, Yamashina obtained a grant from the Japanese Ministry of Forestry to conduct national bird-banding surveys from 1960 to 1962. In 1963, the Migratory Animal Pathological Survey (MAPS), originally devised by Colonel C. M. Barnes at the US Armed Forces Institute of Pathology and later supported by the Walter Reed Army Institute of Research, was initiated and became a main funder for the fulfillment of the ICBP Asian section's Asian survey agenda from that year up to 1969. Aiming to "study the migration of Asiatic land birds and their relationship to the dispersion of diseases—especially Japanese encephalitis and scrub typhus—common to wild animals and man," MAPS planned to carry out bird-banding on a massive scale across Asian countries. The project leader was American civilian ornithologist Elliott McClure (1910-1988), who worked at the 406th Medical Laboratory, Japan, from 1950 to 1958 and then moved to the US Army Medical Research Unit located in Malaysia.

McClure was also an attendee of the 1960 Tokyo ICBP meeting as a representative of Malaysia and he was a strong supporter of Yamashina's Asian section plan within the council. 101 He used this ICBP's Asian section network when he was looking for regional collaborators for his pan-Asian bird banding project. 102 In July 1963,

^{98 &}quot;Formation of Asian Continental Section, 1960," VIII Bulletin of the International Council for Bird Preservation (New Haven: The International Council for Bird Preservation, 1962): 42-44; Hon-Kyu Kim and Pyong-Oh Won, "Cheshibihoe kukchejoryubohohoeŭi ch'amsŏk pogosŏ [Ministry of Education and the Ministry of Agriculture]," in A Report on the 12th International Council for Bird Preservation Meeting (Seoul: Ministry of Agriculture, 1960).

⁹⁹ Culver, Japan's Empire of Birds, 209-211.

^{100 &}quot;U.S., Asian Biologists Study Bird Migration Relationship to Diseases," Army Research and Development News Magazine, April 1968.

^{101 &}quot;Minutes: The International Council for Bird Preservation Twelfth International Conference, Tokyo, Japan 24th-29th May 1960," Cornell University Library Division of Rare and Manuscript Collections, H. Elliott McClure papers, 1947-1989, Box 3, Folder 4.

¹⁰² Ibid.

McClure visited Seoul to sound out Korean researchers' interest in joining his project, and the ICBP Korean section members—chairman Kim Hon-Kyu and secretary-treasurer Won Pyong-Oh—were the researchers that he chose to visit. Kim Hon-Kyu showed no interest in MAPS. On the contrary, Won Pyong-Oh, who had just returned from the Yale Peabody Museum, where during a one-year postdoc he had experienced the high-quality research conditions there, eagerly joined the pan-Asian bird-banding project in an attempt to improve his research situation and low wages. 103

After that, Pyong-Oh set about banding hundreds of thousands of birds in South Korea while working together closely with the Japanese MAPS team led by Yamashina and Kuroda Nagahisa (黒田長久, 1916-2009)-Kuroda Nagamichi's son-based in the YIO. Won Pyong-Oh's involvement in MAPS was crucial in shaping his career as an ornithologist and elevating ornithology as a discipline in South Korea. 104 Now he could train and employ graduate students, establish research stations in the field, produce massive amounts of data, and promote his workplace as a center of ornithological research in Korea through the ICBP community. Based on the collected data and financial support of the MAPS project and with American and Korean colleagues, Pyong-Oh published Check-List of the Birds of the Republic of Korea (韓國鳥類目 錄) four years after his father's publication of the North Korean version. According to the two Koreas' checklists, the total number of bird species was recorded as 363 (in Hong Gu's checklist) and 360 (in Pyong-Oh's checklist).¹⁰⁵

¹⁰³ Elliott McClure, "Trip to Seoul Area, Korea, Dec. 10-14, 1963," Cornell University Library Division of Rare and Manuscript Collections, H. Elliott McClure papers, 1947-1989, Box 16, Folder 19.

¹⁰⁴ Jaehwan Hyun, "Trans-Asian Origins."

¹⁰⁵ Hong Gu Won, Chosŏnchoryuji 3 [The Checklist of the Birds of Korea Volume 3] (Pyongyang: Kwahagwŏnch'ulp'ansa, 1965); Pyong-Oh Won, M.E.J. Gore, Han-Chung Woo, and Edwin L. Tyson, Han'gukchoryumongnok [Check-List of the Birds of the Republic of Korea] (Seoul: Institute of Ornithology,

Conclusion

In 1963, in the early days of MAPS, a few starlings (Sturnus sturninus, now Agropsar sturninus) were banded with the YIO ring by Won Pyong-Oh's team in the Forest Experiment Station, Seoul. A banded bird was found in Pyongyang and passed to his father Won Hong Gu around 1965. Won Hong Gu contacted the YIO to report recovery of the band, and Yamashina replied to him with the information that it was indeed his youngest son who had banded that particular bird. After that, Won Hong Gu indirectly participated in the ICBP Asian section's migratory survey and the MAPS project by reporting band recoveries and thus resumed his interactions with Japanese ornithologists. Won Pyong-Oh soon learned that his father had recovered one of his banded birds, though he did not explicitly mention the episode publicly until the late 1980s because of the political risks involved. The North Korean government's propagandistic use of this bird-ring episode made him known as the sole South Korean ornithologist equal to his North Korean father 106

The powerful and dramatic nature of this father-son episode has drawn the spotlight away from the larger context, leaving it unexamined. This paper shows that their encounter originated in the transwar interactions between the Won family and Japanese biologists. The Won family's scientific activities, which I call "science as a family affair," allowed the younger family members to integrate into a larger research network that had been pre-established by the older members. In Pyong-Oh's case, his older brother Pyung Hooi played a large role in the 1950s, starting his early research career and connecting him with

Kyung Hee University, 1968).

¹⁰⁶ Jaehwan Hyun, "The Yamashina Institute for Ornithology, Zainichi Scientists, and Trans-Asian Bird Diplomacy" (paper, The 3rd Conference of the DHST Commission on Science, Technology and Diplomacy, São Paulo, Brazil, July 21, 2023).

his Japanese correspondents, such as Tokuda and the elder Kuroda. Although I believe that this familial division of scientific labor was quite unique to the Won family, I do not believe that its implication is confined to the Korean history of ornithology: I want to propose to East Asian historians of science, especially those working on the history of ornithology and other field sciences that they focus on the familial aspects of those scientific activities. 107 Annika Culver suggested that historians of science pay attention to the intersections of social class, race, and gender in Japanese ornithology. While I agree with her suggestion of the need for a cultural analysis of these intersections, I propose that the inclusion of the familial dimensions within East Asian ornithology in this analysis will contribute to shedding light on the intricate transwar history of ornithological collaboration across Asia in the greater sense. 108

There is a remaining question about Pyong-Oh's silence on the role of his elder brother. I would like to interpret it as the youngest sibling's rejection of the hierarchical structure of the division of scientific labor. A structure which may have contributed to a senior family member monopolizing authorship for a publication they in fact worked on together. The tension between the two brothers, already visible in June 1958 when they published their own checklists of Korean fauna, saw Pyung Hooi sticking to the old family rule of not according Pyong-Oh full authorship, while acknowledging his contribution. By

¹⁰⁷ In her ethnographic study of blood banks and medical labs in Penang, Malaysia, anthropologist Janet Carsten proposed Science and Technology Studies (STS) scholars pay attention to the ways in which different socialites, such as kinship, are incorporated into laboratory life. My suggestion follows this same line of ideas. Janet Carsten, Blood Work: Life and Laboratories in Penang (Durham: Duke University Press, 2019).

¹⁰⁸ Culver, introduction and "The Practice of Ornithology: Birds, Hunting, and Social Class in Prewar Japan and the Anglo-American World," in *Japan's Empire of Birds*. In the Japanese case, the familial dimensions of Kuroda father and son's ornithological work have not yet been systematically examined.

publishing his own version with Woo Han Chung in September 1958, Pyong-Oh broke the family code concerning authorship, for the first time. It is notable that the previous familial divisions of scientific labor mostly occurred when a younger family member did not or was unable to develop his own independent academic career. Indeed, the academic gap between Pyung Hooi and Pyong-Oh was not great enough in comparison with the previous relationships between Won Hong Gu and Pyung Hooi (natural history teacher and higher common school student) in Kaesong in the mid-1920s and early 1930s, Pyung Hooi and Pyong Su (an employed researcher and a graduate of higher common school) in Manchuria in the 1930s, or Hong Gu and Pyong-Oh in Hamhung and P'yongyang in the 1940s. Although Pyong-Oh was an undergraduate student of Pyung Hooi's biology department at Shinhung, the youngest sibling had already more or less started his academic career as a researcher in the Central Forest Station, working there for at least two years from 1956. Given his position as an early career researcher, Pyong-Oh may have considered his elder brother's monopoly on authorship a violation of academic ethics rather than the continuation of a family tradition.

Won Pyong-Oh's silence on the role of his elder brother Pyung Hooi caused him to rewrite the history of how his Japanese networks were formed and its significance in his career-making as well. According to his new narrative, the senior Japanese scientists shared their research materials, advised Pyong-Oh's on research directions, checked his drafts, and helped him obtain a doctoral degree after a simple written letter to them on his part. His ornithological turn and nature conservation interests were also explained as being mainly due to his personal commitment that was stimulated by his father and the American scientific aid that started in the early 1960s. The whole narrative, consisting of Japanese biologists' depoliticized cosmopolitanism, the indirect scientific interaction of father and son across political boundaries, and an American benevolent aid, all fitted with the image of science viewed from a Cold War scientific internationalism perspective,

and so has remained persuasive until now.¹⁰⁹ The duty of historians is not to contribute to a reproduction of this Cold War narrative but to a decentralization of it, and I believe that attending to the transwar origins of Won's ornithological turn is a first step in this direction.

¹⁰⁹ For Cold War scientific internationalism, see David A. Hollinger, "Science as a Weapon in Kulturkampfe in the United States during and after World War II," *Isis* 86, no. 3 (1995); Geert J. Somsen, "A History of Universalism: Conceptions of the Internationality of Science from the Enlightenment to the Cold War," *Minerva* 46, no. 3 (2008); John Krige, "Atoms for Peace, Scientific Internationalism, and Scientific Intelligence," *Osiris* 21, no. 1 (2006).

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⟨Abstract⟩

Science as a Family Affair: Won Pyong-Oh and the Transwar Origins of South Korean Ornithology

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Won Pyong-Oh (1929-2020) and his ornithological research played a significant role in the emergence of South Korean ornithology and nature conservation, which previous scholarship has attributed to US scientific aid and the resulting interactions that occurred in the 1960s. Focusing on his family's scientific activities—including the work of his father Won Hong Gu (1888-1970) and his eldest brother Won Pyung Hooi's (1911-1995)—from the colonial period to the 1960s, this paper argues the crucial role played by transwar interactions between the Won family and Japanese biologists in Won Pyong-Oh's ornithological turn. In particular, it traces the Won family's natural history collection activities as what I call "science as a family affair," that is, a division of scientific labor between senior and younger family members as a principal investigator and an assistant/collector. By tracing these activities within the family as well as their continued engagements with Japanese biologists, this paper will reveal that Won Pyong-Oh's ornithological research and conservationist work developed in the wider context of the reconstruction of Asian ornithological and conservationist networks in the 1960s.

Keywords: Won Pyong-Oh, Won Hong Gu, Won Pyung Hooi, ornithology, South Korea, family affair, transwar history

〈국문초록〉

가업으로서의 과학: 원병오와 한국 조류학의 관전시적 기원

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원병오(1929~2020)와 그의 조류학 연구는 한국 조류학 및 자연보호의 발전에 중요한 역할을 맡았다. 선행 연구들은 1960년대에 원병오가 조류학 연구를 본격적으로 시작하게 된 계기를 미국의 과학 원조에서 찾는다. 이 논문은 식민지 시대부터 1960년대까지 아버지 원홍구(1888~1970)와 맏형 원병휘(1911~1995) 등 원씨 일가의 과학 활동을 검토하며 1960년대초 원병오가 조류학 연구에 본격적으로 전념하게 된 데에는 원씨 일가와 일본 생물학자들의 관전사적 교류가 중요하게 작용했다고 주장한다. 특히 원씨 일가의 자연사 채집 활동을 "가업으로서의 과학", 즉 가족적 위계에따라 가족 내연장자와 연소자가 과학적 노동을 분담하고, 가족 간에 인적 네트워크를 비롯한 여러 과학적 자원을 공유하던 활동으로 이해하고 살핀다. 이 논문은 이러한 가족적 활동 가운데 원씨 일가가 일본 생물학자들과 지속적인 교류해 나간 과정을 검토하면서 원병오의 조류학 연구와 자연보호 활동이 1960년대 아시아 조류학 및 자연보호 네트워크의 재구성이라는 보다 넓은 맥락에서 이루어졌음을 보인다.

주제어: 원병오, 원홍구, 원병휘, 조류학, 가업, 한국, 관전사