RICE CYCLES AND PRICE CYCLES: LOCAL KNOWLEDGE AND GLOBAL TRADE IN KOREA, 1870–1933

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This article examines a hitherto neglected aspect of the expansion of international trade in nineteenth-century East Asia—that of how ordinary people understood changing trade patterns. Rather than the political debates and imperial competition that have been the focus of existing research, I use the diary of Sim Wŏn'gwŏn (1850–1933), a farmer from Ulsan, southeastern Korea, to assess how knowledge shaped Sim's perception of, and response to, the international grain trade. Sim used his diary to develop an economic world view based on his observation of cyclical, seasonal changes in the weather, harvests, and prices. While this enabled Sim to anticipate some fluctuations, the international rice trade posed a challenge as local market prices began to reflect events beyond Sim's sphere of information. I argue that uneven access to knowledge influenced Sim's participation in international trade, which in turn cannot be understood without reference to Sim's existing understanding of the economy.

I. INTRODUCTION

How did ordinary farmers understand the incorporation of Korea into new trading networks in the late nineteenth century? And, how did farmers' access to economic information influence their responses to an expanding international market for grain? At first glance the answer to these questions might appear straightforward. Economic historians have long explored the relationship between global trade and economic knowledge, examining the evolution of influential theories of trade as well as the

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contribution of the telegram and other communications infrastructure to expanding trade in the nineteenth century (Lew and Cater 2006; Chilosi and Federico 2015). However, the question of how economic knowledge shaped ordinary people's responses to globalization has thus far remained largely unexplored. This article seeks to address this gap through a study of how one farmer, Sim Wŏn'gwŏn (1850–1933), understood the incorporation of Korea into new trading networks in the late nineteenth century. Sim's "ordinary" perspective on international trade holds important insights for our understanding of both nineteenth-century globalization and the significance of economic knowledge in shaping ordinary people's economic activity. A study of Sim's diary, which he maintained between 1870 and 1933, reveals not only the world view that framed his understanding of the rural economy but also how access to information about Korea's new trading partners, or the lack thereof, constrained his response to an expanding international market for grain.

Sim's interpretation of international trade, and its impact on the rural economy, is quite different from the theoretical and political understandings of trade that have formed the basis of much existing research. At a time of intense imperial and commercial competition, Korean elites and (later) colonial officials debated the merits of international trade in relation to its place within a modern, capitalist economy and its ability to serve as a mechanism of empire—themes also adopted in subsequent research. Seen from Sim Wŏn'gwŏn's perspective, however, debates over national sovereignty or the development of commercial agriculture fail to reflect Sim's own priorities and actions. Sim did not reject trade with Japan as a matter of nationalistic principle, but neither did he enthusiastically embrace colonial campaigns to specialize in commercial rice agriculture. Rather, Sim's engagement with international trade can be understood only by reconstructing his economic world view as revealed in his diary.

Sim Wŏn'gwŏn's world view is significant not only as an illustration of non-Western economic thought; it also provides a novel perspective through which to examine nineteenth-century globalization. In recent years a growing body of research has challenged the portrayal of local actors as simply passive victims of the disruptions of globalization, emphasizing instead how their interaction with global economic trends created heterogeneous results and movements among diverse populations (Ali 2018; Tagliacozzo and Chang 2011; Jakes and Shokr 2017). An understanding of the diversity of economic thought—in particular, that of an otherwise unremarkable farmer such as Sim—can contribute to this effort. In her recent address to the History of Economics Society, Evelyn Forget highlighted the need to capture a broad range of thought within economic history, including the ideas of knowledge brokers and ordinary economic agents alongside those of economists, in order to understand how the assumptions of economic theory diverge from alternative world views (Forget 2020, p. 16). In this regard, diaries such as Sim's and other account books or private papers can serve as an important source of information for an overlooked realm of economic thought, revealing cultural perceptions of economic life and the logic behind otherwise unexpected economic behaviors (Finn 2003; Vickers 2010). Here, a focus on Sim's understanding

¹ For a sample of Korean perspectives on the colonial economy, see Pang and Shin (2005). On economic aspects of Japan's colonial administration in Korea, see Myers and Yamada (1984), and Duus (1984). For examples of subsequent research into the political aspects of nineteenth-century trade, see also Duus (1995), Larsen (2008), Ha (2008), and Oh (2013).

of cyclical patterns in the rural economy can bring a fuller understanding of the disruptions of international trade and globalization in the late nineteenth century, as well as generate new insights into the relationship between economic knowledge and behavior, and the ways that differential access to information can shape perceptions of and responses to economic change.² For Sim, a lack of access to information about Korea's new trading partners limited his response to changing patterns in grain prices, even as he recognized the growing divergence between his existing economic world view and market activity.

At the core of Sim's economic world view was a belief in recurring, intertwined, cyclical patterns in the weather, harvests, and market prices that he used to anticipate future fluctuations. It should be noted, however, that Sim's understanding of economic cycles diverges from familiar accounts. Unlike attempts to calculate and theorize business cycles in twentieth-century European economic thought, Sim was less concerned with measuring the periodicity of cycles than he was interested in the general recurrence and intertwined nature of the cycles he traced.³ Sim's interest in cyclical patterns was also highly local and specific to the information he personally observed in his daily life; in his diary Sim displays little attempt to apply his ideas for a wider audience. Yet, while Sim's diary may not capture the evolution of economic ideas at the highest level, it is precisely the gap between Sim's world view and more familiar theories of cycles and international trade that affords insight into an important moment of economic change.

The second section of this article begins with an overview of the Korean economy and the changes surrounding the opening of Korean ports in 1876 to situate Sim Wŏn'gwŏn within the context of the nineteenth-century agrarian economy, including details of his socio-economic status, landholdings, and cultivation practices. Section III discusses Sim Wŏn'gwŏn's diary, its evolution over time, and its function as a store of local knowledge relevant to Sim's farming and commercial activities. The fourth section examines Sim's economic world view, with particular focus on how he used the information within his diary to develop his understanding of cyclical change, which he applied to his farming practices. The fifth section examines the changes to seasonal grain prices that followed the expansion of international trade with Japan, drawing on price data from Sim's diary as well as his own interpretation of the relationship between the grain trade and seasonal prices in local markets. Section VI returns to explore Sim's assessment of international trade, highlighting how he responded to an emerging contradiction between market prices and the prices that he expected based on local conditions and his understanding of cyclical price and weather patterns. The article concludes with a discussion of the significance of knowledge and the circulation of market information in the process of expanding trading networks. While Sim's economic world view enabled him to estimate

² This has resonance beyond the immediate case of Korea. As numerous existing studies have shown, the growth of commercial production for global markets brought profound changes to local communities across Asia as new flows of capital, and their attending cycles of boom and bust, brought both prosperity and economic dependence to small-scale producers, many of whom faced similarly uneven access to capital and knowledge of newly globalizing trade networks. For just a brief overview of this literature across the Asian region, see Adas (1974), Pomeranz (1993), Wigen (1995), Tagliacozzo and Chang (2011), and Ali (2018). ³ In this regard, Sim's appreciation of cyclical patterns in the economy shares some features with the early and mid-nineteenth-century observers detailed in Besomi (2010).

future price trends within the context of his local region and knowledge, the expansion of the rice trade to Japan and beyond created uncertainty for Sim, who lacked detailed information on Japanese harvests and demand. Economic knowledge thus played a significant role in shaping Sim's perception of, and response to, shifts in global trade, demonstrating the practical significance of "ordinary" economic thought amid familiar narratives of imperialism, globalization, and commercialization.

II. SIM WŎN'GWŎN IN LATE-CHOSŎN KOREA

Sim Wŏn'gwŏn was born in Ulsan in 1850. Located along the southeastern coast, the Ulsan region produced a wide range of goods including maritime products, salt, iron, and cows, in addition to agricultural staples such as rice, beans, and cotton, and various handicrafts such as pottery, pipes, and weaponry (Hŏ 2011, p. 67). From the fifteenth century, the Ulsan region was home to a provincial military command post (Kyŏngsang chwa pyŏngyŏng), which operated until a reorganization of government offices in 1894. Despite this, Ulsan was a relatively minor population center for much of its history. Seventeenth-century tax registers classified Ulsan as a medium district town (ip), with between 4,000 and 6,000 kyŏl of taxable land. Ulsan remained of middling size in the early nineteenth century, with just 8,000 recorded households, as compared with the larger regional town of Taegu, which was classified as large with some 13,000 households (Kim 2015, p. 9).

Within Ulsan, Sim joined the majority of the population in working as a farmer. Throughout the Chosŏn period (1392 to 1910), the Korean economy was largely agrarian, with agriculture comprising 90% of the country's economic activity. The vast majority of the population were commoners, although agriculture remained an important industry for even the hereditary aristocracy (*yangban*), who often owned sizeable estates cultivated by tenant farmers and slaves.⁵ By the nineteenth century, around 40% of farming households were tenant farmers, either renting from private landlords or in various categories of state-owned land. Others cultivated their own land (20%) or supplemented the cultivation of their own fields with additional tenant farming (35%). For the most part, private land was divided between the large estates of wealthy yangban families and the numerous small plots owned and farmed by individual households (Chung 2006, pp. 7–14; Gragert 1994, pp. 36–53).

Sim and his family claimed descent from one of Korea's aristocratic yangban lineages—the Ch'ŏngsong Sims—and maintained marriage ties with other local elite lineage groups such as the Yangsan Yi and the Ulsan Yi. In practice, however, Sim's daily life resembled that of an upwardly mobile commoner. Indeed, even the family claim to yangban status appears to have been fabricated.⁶ In his youth Sim attended the

⁴ The area of land measured by kyŏl varied in accordance with the land's productivity, ranging from 2.2 to 9.0 acres. James Palais estimates the average area per kyŏl at five acres (Palais 1996, pp. 106, 107, 1169).

⁵ It should be noted that the number of slaves in Korea declined sharply from the late eighteenth century (Palais 1996, pp. 208–270).

⁶ Sim's family claimed descent from Sim Kwanghyŏng (fl. late fifteenth c.) who was said to have been exiled to the Ulsan region. Sim's direct ancestors first presented records of their lineage branch in 1787, contradicting earlier Ch'ŏngsong Sim genealogies that listed Kwanghyŏng without an heir. This discrepancy was

local school where he studied the Chinese classics in the hope of passing one of the state exams, but Sim abandoned his scholarly training shortly after his father died in 1873 to focus on agriculture. As Sim's two younger brothers, Wŏnju (1852–1884) and Wŏnch'u (n.d.) grew older, they shared farming duties with Sim and other male relatives, including Sim's uncles and brothers-in-law (Sim had three sisters), alongside additional hired labor during the agricultural busy season.

Despite the claim of an aristocratic lineage, Sim's lifestyle was modest. Altogether, Sim and his family farmed between fifty-two to seventy *turak* of land each year (roughly eight to eleven acres). Initially Sim managed the family land as one household but appears to have divided the land with his brothers in later years. From the mid-1880s onward, Sim farmed roughly twenty to thirty turak per year (roughly three to five acres) —a relatively small area. The area that Sim farmed varied each year as he acquired the rights to different plots. Some years, Sim had more land available than he had seed for; in other years, the reverse was true and he eagerly sought out scraps of unused farmland where he could transplant additional rice seedlings. In particularly hard years Sim could barely produce enough food to feed his family, let alone cover his other obligations such as taxes and debt repayments. In such situations, Sim relied upon state-managed granaries, which provided seasonal grain loans and famine relief, as well as private loans from his network of acquaintances and local officials.

Most years, Sim farmed a combination of rice, beans, barley, and smaller amounts of cotton and tobacco. In addition to field crops, Sim cultivated persimmons, pine trees, and bamboo; raised and traded cows; and wove straw shoes and rush mats, which he periodically sold at local markets. In particular, Sim often relied upon the sale of pine branches (*songji*) used for firewood to supplement his income. Later in his life, Sim also amassed a large collection of fish in the pond near his home (by Sim's count, he collected 2,000 trout between 1909 and 1910 alone), although this seems to have been as much a leisure activity as it was a strictly economic enterprise. In sum, by most measures Sim Wŏn'gwŏn appears to have lived an ordinary life. Despite achieving some of the trappings of an aristocratic lifestyle—notably his claim to a yangban lineage and early education in local schools—in practice little distinguished Sim from the majority of commoners in late-Chosŏn Korea. Neither wealthy landowner nor landless wage laborer, Sim supported his household through agriculture and small-scale handicrafts.

noted in the 1843 edition of the Ch'ŏngsong Sim genealogy, which recorded the Ulsan branch in a special appendix, *Ch'ŏngsong Sim-ssi sebo* (1843, 23.1 a-b). Claiming descent from a long-lost heirless ancestor was a relatively common method for families to forge yangban status at this time. See Wagner (1987) and Park (2013).

⁷ According to colonial statistics, in 1919 the mean area farmed per household in South Kyŏngsang province was 2.89 acres. By this measure Sim was slightly better off than the average household, although at this time the majority of farming households in South Kyŏngsang were tenant farmers (64% among paddy field cultivators) and so this is still a somewhat limited measure of wealth (Chōsen sōtokufu shokusankyoku 1921, p. 14).

⁸ Sim Wŏn'gwŏn [1870–1933] 2004, *Sim Wŏn'gwŏn ilgi* (hereafter SWG) 1877.4.14; 1896.5.29. References to Sim's diary indicate the date of entry as recorded by Sim, i.e., according to the East Asian lunar calendar rather than the Gregorian calendar. Intercalary months are marked with an asterisk.

⁹ As Sim described his fish collection: "At noon, I went to Yongyŏn valley. I got over 100 mudfish and trout, and put them in the pond. Both this year and the last, I put over 2,000 trout in the pond, and caught over 300 fish. My intent in putting fish in the pond is to raise them; catching fish brings joy to my heart" (SWG 1910.10.3).

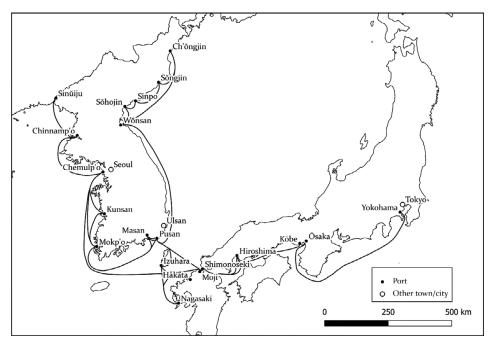


FIGURE 1. Major Trade Routes between Korea and Japan, Early Twentieth Century Source: Data on shipping routes from Harada (1903) and Ōsaka shōsen kabushiki kaisha (1919).

The time in which Sim lived, however, was anything but ordinary, as both domestic and international events brought significant changes to the Korean economy and society. After centuries of participation in a highly regulated system of tributary trade with China and Japan, the signing of the Kanghwa Treaty in 1876 opened Korean ports to new trade and diplomacy with Japan. In the decades that followed, Korea signed a series of treaties with China, the United States, and several European countries while also increasing the number of open ports, bringing an ever-wider swathe of Korea into contact with new products and markets (see Figure 1). Once restricted to official government representatives, international trade flourished in the open ports as manufactured goods—especially industrially produced textiles—flowed into Korea in exchange for the export of primary products such as beans and rice. In turn, local markets throughout Korea gradually became integrated into new trading networks based on their participation in international trade (Yi and Pak 2004).

Political changes served to bolster Korea's burgeoning trade. Competition between China and Japan over political influence and preferential trading rights challenged restrictions on foreign merchants. In particular, the Sino-Japanese War (1894–95) presented an opportunity for Japanese merchants to move beyond the treaty ports and engage in increasing trade in the Korean interior. ¹⁰ Though initially resisted by some, the convenience of foreign manufactures and the gradual adoption of modernization policies

¹⁰ Previously, this right was restricted to Chinese merchants; see Duus (1995, pp. 266–269), and Larsen (2008, pp. 117–119, 237–271).

within the Korean government fueled the steady growth of imports. A wide-ranging series of reforms begun in 1894 reorganized the government, while new commercial policies in the late 1890s further promoted both international trade and domestic commerce (Cho 2006).

Korea's subordination as a Japanese protectorate in 1905, followed by annexation in 1910, reshaped Korea's trading relationships once again. Subsumed within the Japanese empire, the colonial government sought to eliminate tariff barriers and promote commercial ties between the two countries. As Korea was a colony, its agriculture thus became closely entwined with the vicissitudes of the Japanese political economy; when the soaring price of rice spurred riots in Japan in 1918, colonial bureaucrats responded with a plan to increase the production and export of rice to Japan. By the late 1920s, Korean agricultural production, in particular rice cultivation, was deeply integrated with Japanese markets, enabling the global shock of falling agricultural prices to be felt throughout Korea. It is against this backdrop that Sim Wŏn'gwŏn and his diary provide an opportunity to reconsider the impact of Korea's incorporation into new regional and global markets from the late nineteenth century. Though the diary of a single farmer can provide only a limited perspective of the changes outlined above, a close reading of Sim's diary nonetheless reveals deep insights into how an ordinary farmer encountered, and responded to, broader economic trends within his day-to-day activities.

III. SIM WŎN'GWŎN'S DIARY AS A SOURCE OF KNOWLEDGE

Sim Wŏn'gwŏn kept a diary for nearly the entirety of his adult life, from 1870 until his death in 1933. With few exceptions—notably the periods of mourning following the deaths of his father and first wife—Sim wrote in his diary every day in the Classical Chinese he learned in the local schools. His entries followed a regular pattern, recording first the weather, then the basic details of his daily activities—where he went, what he did, whom he met, et cetera—followed by reflections on the day. Despite living through a period of major social and economic change, Sim rarely commented on the national or international politics of the time. Perhaps reflecting his age (Sim was sixty at the time of annexation) and relatively settled status in his local area, Sim made little mention of Japanese colonial policies or the growing Japanese presence in Ulsan. Instead, Sim recorded the details of his everyday life and his personal interactions as he farmed and attended local markets within the Ulsan region.

In terms of content, Sim's diary entries provide a glimpse of both his daily activities and personal priorities. Early on, Sim recorded the details of his studies: his reading, composition, and calligraphy practice; his attendance at local schools; and, occasionally, his inability to understand the texts he studied (SWG 1871.11.27). Amidst the details of his scholarly training Sim also kept record of various trivial events—a headache and a nosebleed one day, the sighting of a Japanese ship the next, a meeting with friends, a purchase of some lamp oil at the market, rumors about the coming harvest—as well as

¹¹ Tariffs on the rice trade were abolished in 1913, while most other tariffs (with the exception of liquor and textiles) were abolished by 1923 (Eckert 1991, pp. 17, 145).

¹² Entries from late 1922 to 1925 are also missing, although, given Sim's regular habit of diary writing, these appear to have been lost rather than not written at all.

scattered details of his family's financial transactions: a tax payment, a contribution toward the activities of a group organization (*kye*), or a loan from one of Sim's acquaintances. ¹³

Over the years the content of Sim's diary became more consistent, reflecting his changing circumstances and growing responsibilities. Entries about local schools and Sim's studies gave way to updates on the family's agriculture—which fields Sim visited, the status of transplanting the year's rice crop, and the amount of hired labor used—while Sim's financial records also became more detailed and frequent. From noting the prices of his irregular purchases, Sim began to record his attendance at local markets every ten days, if not more frequently, while also documenting the prices of a regular series of goods including white rice, beans, barley, and, to a lesser extent, pine branches, fish, and livestock. The increasing reliability and regularity of entries related to Sim's economic affairs reveals not only the change in Sim's primary occupation, from studying to agriculture, but also his assumption of new financial commitments as head of the household, responsible for the payment of taxes and managing the family's finances by borrowing cash or rice from local lenders when necessary.

Sim's diary was more than a simple factual record of his activities, however, and Sim frequently added commentary on his thoughts and feelings. On one occasion, when officials at the military command post refused to issue a receipt following the delivery of some firewood, Sim vented his resulting anger into the diary, describing in detail his altercation with the command post officials and lingering sense of mistreatment (SWG 1876.7.8). Later, at the age of seventy, Sim reflected on his habit of diary writing in the context of his life and the memory of his parents:

For fifty years, I recorded each of the 18,000 days: wind, rain, frost, and snow; sunny days and cloudy days; my comings and goings to the south, north, east, and west; I surely recorded all affairs. I know what has happened, but how can I know what is to come? On reaching seventy years of age, what else can I do with my stupid self? When I started learning the Thousand Character Classic I learned two characters a day, but even at the end of the day it was hard to master them. When the people beside me said, "Being a farmer will do for him," my departed parents always replied, "Even though he has no talents, encouraging him to study will do." Seeing and hearing this, I was lazy in my studies and even as an adult I still could not distinguish common characters. The Gods could know how unfilial my heart was. All my life, I have not forgotten my parents' desire to encourage me to study, and from 1870 to this day in this year, every day I take up my brush. My crime of being unfilial is incomparable—how can I fully express this? (SWG 1919.12.29)

As the above passage shows, Sim combined the factual details of his life with his own personal narrative of events—in this case how his regret at not fulfilling his parents' aspirations motivated his diary writing. Within the presentation of events in his diary, Sim's choice of which information to record also reveals his perspective on events and how he used his diary to construct a sense of order in the world around him. Even though he could not know what the future held, Sim assiduously recorded the weather, prices,

 $^{^{13} \} SWG\ 1870.3.12;\ 1870.4.4;\ 1870.11.2;\ 1870.11.27;\ 1871.6.29;\ 1871.10.11;\ 1871.11.15;\ 1872.11.28.$

his comings and goings, and other major events in his diary, creating a point of reference for his activities and decisions.

Often, on the final day of the year, Sim would summarize the key details of the previous year's agriculture, calculating the total amount of rain (measured in days with rain) and other notable weather events, his overall farming, and trends in the prices of major goods. ¹⁴ This was not simply an exercise in reflection, but the compilation of a body of knowledge to which Sim would return in future years. The details preserved within his diary were a point of pride for Sim, who contrasted his own record keeping with the farmers around him who trusted in folk sayings to forecast natural events. As he remarked in 1883:

Everyone talks of fear of a dry spell and so forget in recent days how they only knew the suffering of a lengthy rainy season. I, and I alone, am not so—how can that be? I have looked at the diary that I kept for fourteen years now, and in recent years the rain and dew have been uneven.... I looked at the previous volumes [of the diary], and therefore if there is drought then I worry about the rain, and if there is rain then I worry about drought. (SWG 1883.1.15)

For Sim, keeping a diary was not just an exercise in personal narration; his record of prices, weather, and other transactions and events was an important resource that Sim referred to when managing his agricultural activities. What is more, Sim's detailed record of prices and the weather enabled him to develop a world view based on his observation of cyclical patterns within the rural economy, which he used to guide his decisions in his own farming and his interpretation of local commercial activity.

IV. SIM WŎN'GWŎN'S VIEW OF ECONOMIC CYCLES

Throughout his diary, Sim Wŏn'gwŏn developed a consistent economic world view, based on an appreciation of cyclical patterns, which he described in terms of propitious and unpropitious fortune (*kwich'ŏn*). Using the information recorded in his diary, Sim applied his notion of cyclical patterns to understand current events and frame his expectations for the future. It is against this logic that Sim understood changes to grain markets in the late nineteenth century, and, as such, an understanding of Sim's notion of kwich'ŏn enables historians to reconstruct the impact of new trading patterns from Sim's own perspective.

Sim applied the logic of kwich'ŏn broadly to account for changing weather patterns and other natural phenomena, as well as the likelihood of a good harvest or fluctuations in prices. As he described:

There is a saying about the two characters of propitious and unpropitious [kwi and ch'ŏn]. Will next year's events be the same as this year's? If this year for six straight months there were long rains then, eight or nine times out of ten, the next year will surely

¹⁴ SWG 1876.12.30; 1878.12.29; 1879.12.29; 1883.12.30; 1884.12.30; 1885.12.30; 1886.12.30; 1889.12.30; 1892.12.30; 1895.12.29; 1896.12.30; 1897.12.29; 1898.12.29; 1899.12.30; 1900.12.30; 1901.12.29; 1903.12.30; 1908.12.30; 1912.12.30; 1914.12.29; 1915.12.29; 1917.12.29; 1920.12.30; 1921.12.30; 1926.12.29; 1927.12.30; 1932.12.30.

have a severe drought. Who can know this? Flourish and perish, prosper and decline, abundant wealth and mean poverty—their coming and going belongs to fate. The sun is warm and the moon cool, this is the principle of Heaven. The daytime is bright and the [evening] dark, that is [the sequence of] propitious and unpropitious.... All things, on reaching a low [ch'ŏn] must then reach a high [kwi], and if things are high [kwi] then in later days they will reach a low [ch'ŏn]. All things in Heaven are within this one principle. (SWG 1875.10.30)

While Sim's notion of kwich'ŏn could be applied to almost anything, for the most part Sim used it to describe economic affairs, in particular what he perceived to be regular fluctuations in the price of goods: "All things share equally in the cycle of fortune. Things that were expensive two years previously have returned to low prices, and the things that were cheap two years previously are now expensive" (SWG 1878.10.29). In Sim's world view, prices were subject to cyclical fluctuations in both the long run, as he expected prices to revert to normal levels after sustained periods of rise or fall, and within shorter, seasonal patterns of change, as the spring shortages that increased grain prices gave way to the harvest's sudden increase in grain supplies and lower prices.

Sim's view of kwich'ŏn thus linked several interconnected patterns of cyclical change. Patterns of rainfall influenced the fortunes of the harvest and, in turn, the price of various goods. As the price of one good rose, Sim also used the notion of kwich'ŏn to describe the changing value of other goods in terms of relative cost, ¹⁵ as well as through the direct influence of the price of one good on another. On several occasions, Sim also described an inverse correlation between grain and livestock prices, as prices for livestock tended to fall in famine years when the grain needed to feed cows was dear and struggling households sold their cows, only to rise again during good years when a greater number of households with surpluses of grain and cash sought to acquire cows (SWG 1876.6.25; 1881.5.24; 1883.7.25).

Sim's understanding of cyclical trends had deep roots in several East Asian intellectual traditions. At times, Sim used the Buddhist notion of *samsara* (*yunhoe* in Korean) to elaborate on the unceasing repetition of cycles of fortune. At other times, Sim related the cycle of fortune to personal morality, stressing the importance of cultivating Confucian virtues and diligent labor in the accumulation of material assets. Above all, Sim's notion of kwich' on drew on Daoist ideas that saw the universe as an unending cycle of change from one extreme to another: "Things in the universe are ever changing according to an endless cycle.... Because of this principle, everything that reaches a

 $^{^{15}}$ "To talk of what is propitious and unpropitious at this time, this year $100 \, s\bar{o}m$ of grain is not equal to $10 \, s\bar{o}m$ of salt, but two years ago how could $100 \, s\bar{o}m$ of salt equal $10 \, s\bar{o}m$ of grain?" (SWG 1878.9.30); $1 \, s\bar{o}m$ is equivalent to approximately 90 to 120 liters. In the cited passage, the year in which salt became cheaper than grain was a famine year.

grain was a famine year.

16 "Last winter and this spring there were great floods and the people met with continued bitter rain. Looking forward after this month, few people expect it to change, but Heaven and earth have samsara (yunhoe), and among men there is [the cycle of] kwich'ŏn—fear and respect them" (SWG 1903.5.27).

¹⁷ "The two characters of kwi and ch'ŏn mean that after a rainy spell there will surely be a drought. ...The affairs of men are all governed by Heaven. Profit belongs to those who make diligent efforts. Work diligently and then trust in the principles of Heaven. In times of drought, it will do to think of long rains, and in times of long rains it will do to think of the later drought. Working diligently and fertilizing the soil will do" (SWG 1913.3.29; see also SWG 1879.3.20; 1883.1.15).

certain peak must revert to its opposite." This expectation of cyclical patterns was at the heart of Sim's notion of kwich'ŏn, which he traced in the world around him through the data recorded in his diary.

In Sim's logic, any phenomena with two opposing outcomes—the temperature, amount of rainfall, occurrence of drought, quality of the harvest, or prices in local markets—lay along a spectrum of cyclical fluctuation between warm and cold, high and low, abundant and scarce, propitious and unpropitious. Considering the breadth of cycles that fell within Sim's conception of kwich'ŏn, it was hard—if not impossible, given the imprecision of the terminology of "propitious" and "unpropitious"—for Sim to measure aspects such as the frequency or amplitude of cycles. Rather, he relied on the intertwined relationship between different cyclical patterns to predict future changes in prices, in particular those related to seasonal changes or prompted by extraordinary weather events. In this way, Sim's careful notation of trends in weather, harvests, and prices became the foundation for an economic world view that could guide his decision

Sim's analysis of cycles of fortune in the rural economy involved more than passive reflection on the world around him, and he used his world view as a basis for his economic activity. This placed Sim within a long tradition of economic thought that similarly sought to use recurring price cycles as a guide for material wealth. As early as 100 BCE, in Records of the Grand Historian, Sima Qian commented on the skills of "money-makers" to accumulate wealth "by making the right moves at the right time" (Qian 1993, p. 433). Indeed, Sim's own version of the maxim "buy low, sell high"—"the principle of all things is that they have good and bad fortune. Storing things when they are cheap, and selling them when they are expensive, that is the way to make great profits" (SWG 1880.3.30)—echoed Sima Qian's commentary on wealth and trade:

If you study the surpluses and shortages of the market, you can judge how much a commodity will be worth. When an article has become extremely expensive, it will surely fall in price, and when it has become extremely cheap, then the price will begin to rise. Dispose of expensive goods as though they were so much filth and dirt; buy up cheap goods as though they were pearls and jade. 19

Using the logic of kwich'ŏn, Sim incorporated his expectations of changes in weather conditions or market prices into his future plans, choosing a mixture of fields and crops that might withstand anticipated rain or droughts, and waiting to buy and sell goods until prices became advantageous.²⁰ In this regard, Sim's daily record of the weather in his diary proved an invaluable resource as he considered his next move against past patterns: "People talk of the sweetness and suffering before their eyes, but I know of the kwich' on of later days. If something is propitious, then I think deeply that in later days it will be

¹⁸ Fung (1952, pp. 388, 389). This principle is most strongly expressed in the *I Ching*, or *Book of Changes*. See also Lau (1958) and Peterson (1982).

Qian (1993, p. 437). Original text accessed at https://ctext.org (accessed November 16, 2021). The correspondence between these two passages is all the more striking, given Sima Qian's use of the same characters for kwich'on: 貴賤. Similar ideas can also be found elsewhere in early Chinese texts, though not all use the same characters. See, for example, Paul Goldin's discussion of the discourse on "heavy" and "light" prices in the *Yuejue shu* [Documents on the Excellence of Yue] (Goldin 2021). ²⁰ SWG 1877.7.29; 1880.3.30; 1882.1.9; 1882.5.8; 1884.12.30.

unpropitious, and if something is unpropitious, then I can know that in later days it will return to propitiousness" (SWG 1883.1.15).

Sim carried this cyclical view of kwich'ŏn into his full range of economic activities. His income fluctuated with the seasons, as the abundance of the harvest gave way to scarcity in the spring and summer. Human activities complemented these seasonal patterns, in the timing of tax payments, loans, and other institutional and social obligations. Although the exact timing fluctuated, Sim generally paid his land taxes and the military cloth tax around the beginning of the lunar calendar year. Grain loans, the third major tax obligation in late-Chosŏn Korea, also followed seasonal patterns as Sim regularly received loans of rice and barley, which he repaid following the harvest of each crop.

Not all of Sim's expenses aligned with the seasons. Frequently, the local government imposed irregular and miscellaneous taxes on Sim that varied widely in both value and timing. Even without the burden of these additional expenses, a famine or a temporary prohibition against collecting the pine branches that Sim used to supplement his income could easily disrupt the balance of his household finances. In these situations, Sim had little choice but to sell his cows despite their temporarily depressed prices and borrow money from his peers, local merchants, and minor local officials. Although this contradicted the principles of Sim's economic world view, an awareness of the pattern of cyclical change in rice prices was often a crucial determinant in the affordability of Sim's loans. While private loans often carried high nominal rates of interest (as much as 60% over one year), the real interest rate could be mitigated by manipulating the length of the loan, as well as the denomination of the loan in cash or grain. Within an agrarian economy, a glut of rice coming onto the market in the autumn had the potential to decrease the cash price of rice, which could increase or decrease the real cost of repayment depending on the terms of the loan (Pak and Yi 2001). Sim's understanding of price and weather cycles was thus intimately connected to his farming decisions and practices, influencing his decisions to borrow or lend money in response to his tax obligations and expectations of regular price fluctuations.

V. PRICE CYCLES IN AN ERA OF INTERNATIONAL TRADE

Despite the consistency of Sim's understanding of kwich'ŏn, he was well aware of the rapid changes taking place around him. Given Ulsan's proximity—just twenty-eight miles—to Pusan, the first Korean port to open to international trade and the most significant for trade between Japan and Korea, it did not take long for Sim to note the effects of the new trade within Ulsan's local markets. As early as 1879, Sim commented on the grain trade between Korea and Japan, retrospectively referencing imports of Japanese grain in a previous famine year in contrast to that year's export of Korean grain to Japan (SWG 1879.7.29). As trade grew over the years, Sim saw with his own eyes the passage of rice and other agricultural products toward the ports, and by 1896 Sim could write of seeing "hundreds of loads of rice" each day, traveling down the eastern road toward the grain trading centers (SWG 1896.11.29).

Trade at the port of Pusan was linked to the surrounding area through networks of traveling merchants (*kaekchu*) and rural markets. By the nineteenth century, a system of

five-day markets (that is, markets held at five-day intervals) had developed within Korea, with merchants traveling between adjacent markets according to the scheduled market days. Following the opening of Korean ports, these itinerant merchants became one of the major conduits that linked Korean producers and consumers to the new international trade. Intermediary traders in the open ports connected international grain dealers with the merchants who circulated between the five-day markets, distributing foreign imports within local villages while also purchasing grain and other agricultural products for subsequent sale to traders in Pusan. ²¹ Presumably these are the merchants Sim referred to in his comment on the "hundreds of loads of rice" he saw traveling through Ulsan.

For his part, Sim Wŏn'gwŏn willingly participated in the burgeoning grain trade. While he criticized farmers and traders who, in his view, sought temporary profits at the expense of their long-term interests, this did not prevent Sim from benefitting from the increased demand for rice (SWG 1892.12.20; 1897.1.29; 1926.12.29). Indeed, in early 1885, he sold some rice to repay a debt of 100 *yang*, commenting afterwards that grain was as valuable as gold, thanks to the flourishing rice trade at the open ports (SWG 1884.11.20; 1884.12.30). Significantly, Sim expressed no major reservations about the trade with Japan, instead incorporating it as a natural extension of the principle of kwich'ŏn. Expanded to the international scale, Sim understood such trade as a matter of course when the availability of rice differed between the two countries: "Several years ago, in 1876, there was a great famine in Korea and a great harvest in Japan, so grain left Japan for Korea. This year, Korean grain will enter Japan" (SWG 1879.7.29).²² What is more, Sim recognized that such trade held the potential to enrich farmers: "Grain leaves for other countries, therefore the price of grain rises and the people in this region have profits from farming" (SWG 1897.1.10).

Rather than a concern over the destination of traded rice or the general principle of international trade, the influence of trade upon local prices was the most important consideration for Sim. Seasonal price changes were fundamental to his view of kwich'ŏn, and lay at the root of his critique of farmers who "only knew of profits in the present and did not yet know the harm of later days" (SWG 1897.1.29).²³ Here, Sim's censure of other farmers' interest in short-term profits was rooted in his assumption that the cyclical nature of kwich'ŏn would prevail, and he warned that farmers could not expect high rice prices to continue indefinitely but should pay attention to cyclical patterns in the rural economy instead.

On this point, the prices that Sim carefully recorded in his diary reveal one of the asyet-unacknowledged impacts of Korea's new trade: a decrease in the intensity of seasonal price fluctuations. As shown in Figure 2, which calculates the degree of seasonal variation in rice prices as recorded in Sim's diary, seasonal price fluctuations in the Ulsan markets decreased from the 1870s through the 1890s, with variations reaching a low in the 1900s. Although seasonal price fluctuations increased slightly in the late 1910s, perhaps due to the global economic boom and bust that accompanied World War One, in general seasonal price variations remained markedly lower than

²¹ This continued to be the case even after foreign traders gained the right to travel within Korea, as local itinerant merchants held linguistic and social advantages over their potential competitors. See P'yo (1996). ²² Sim also made similar remarks in 1897 (SWG 1896.12.30).

²³ As Sim continued, "The storage of grain is sufficient to lie between profit and loss; simply knowing to get profits from trading grain away will not do."

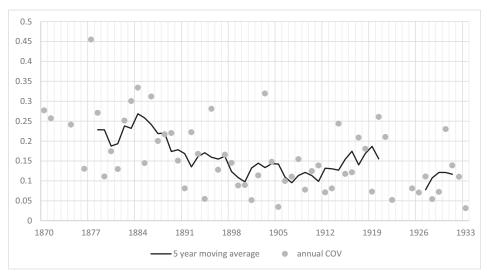


FIGURE 2. Seasonal Variation in Ulsan Rice Prices (Coefficient of Variation), 1870 to 1933 Source: Sim Wŏn'gwŏn ilgi.

those of the 1870s. While several factors may have contributed to this effect, Sim himself attributed the weakening seasonal price fluctuations to the new international trade in rice. As he wrote in 1899, "Today I thought to myself that each country communicates peacefully and truly there are no propitious or unpropitious events [kwich'ŏn]. Traded grain goes out and comes in, and it is hard to distinguish a famine from a good harvest" (SWG 1899.6.10). While Sim did not abandon his existing world view, and he continued to use the language of kwich'ŏn to describe prices, the weakening of seasonal prices noted by Sim here—the difficulties of distinguishing a famine from a good harvest in local markets—points to the issues Sim increasingly faced in accessing reliable information on which to base his future predictions.

VI. LOCAL KNOWLEDGE AND GLOBAL TRADE

Whether through the expansion of international trade, the spread of capital throughout the countryside, colonial policies that encouraged commercial agriculture, or some combination thereof, the prices that Sim encountered in local Ulsan markets became increasingly stable from the 1870s onwards. This follows standard understandings of the

²⁴ It should be noted that the precise reasons behind the changing price fluctuations are not yet fully understood, and prices may also have been affected by inflation or the rate of interest. However, what is important here is Sim's own understanding of the changes to seasonal prices as due to trade. Several studies support this interpretation of trade's ability to reduce price variation across both time and space, as market prices converge and increased trade volumes counteract the impact of harvest shortfalls and other seasonal or local fluctuations in supply. See Persson (1999), and Jacks, O'Rourke, and Williamson (2011).

ability of (properly functioning) trade to generate more stable prices across both time and space. According to most economic analysis, stable commodity prices should be favorable for both producers and consumers, who respectively benefit from greater certainty in income and prices, as well as bring general economic benefits through a reduction in swings of over- and underinvestment in primary production based on the uncertain expectations of producers. Indeed, the perceived desirability of stable prices has formed the basis for a wide range of economic theory and government policy, from the traditional East Asian ever-normal granary system to twentieth-century buffer-stock schemes and theories of international trade.²⁵

In Sim's own time the Japanese colonial government shared a similar understanding of trade, and it promoted stable agricultural prices as a way to incentivize farmers to increase commercial production and minimize rural poverty. One financial association (a government-linked rural bank) even adopted the slogan "the financial associations do not choose kwich'ŏn, but value steadiness; they do not prefer wealth or poverty, but respect industriousness." Given the potential for price fluctuations to increase the burden of his debt repayments, it would be reasonable to assume that the trend toward more stable prices was a boon to farmers like Sim Wŏng'wŏn as well. However, a close reading of Sim's diary reveals that in fact the opposite was true and Sim lamented the increasing stability of prices.

Key to understanding Sim's reaction is his economic world view based on the notion of kwich'ŏn. Sim expected seasonal variations in prices, the weather, and the harvest among different crops, and he prepared to farm accordingly. As Sim wrote in 1879, "every year in the summer months cash becomes extremely valuable. In the spring I consider affairs and the money I will use in the summer and prepare 30 to 40 yang" (SWG 1879.6.30). That year, Sim took advantage of the high prices and cut down forty loads of pine trees to sell at the prevailing high price of 1.4 yang per load in preparation for the summer (SWG 1879.6.10; 1879.6.20; 1879.6.30). A few years later Sim was not so fortunate. In 1881, Sim borrowed eighteen toe of rice in the spring but struggled to repay the debt, eventually having to plead with his debtor for relief from a portion of the debt (SWG 1882.11.29).²⁷ In both cases, Sim made arrangements on the assumption that prices would follow the seasonal pattern that the information in his diary and understanding of kwich'ŏn envisioned. But as the international grain trade led prices to contradict Sim's expectations, paradoxically the newfound stability in seasonal prices became increasingly unpredictable and jarring to Sim's established economic world view.

²⁵ On the East Asian model of the ever-normal granary (*sangp'yŏngch'ang*) in Korea, China, and Japan, see Palais (1996, pp. 696–703), Will and Wong (1991), and Ravina (2010). For examples of recent economic analysis that adopts stable prices as a goal of trade, see Rosselli (2017), Persson (1999, pp. 7–10), and Jacks, O'Rourke, and Williamson (2011, p. 800). For an interesting exploration of the intellectual connections between the East Asian ever-normal granary and twentieth-century buffer-stock schemes, see also Bodde (1946).

²⁶ Slogan of the P'ungdŏk financial association. From Chōsen kin'yū kumiai kyōkai (1930, p. 3). For examples of how the goal of stable prices became translated into colonial policy, see also Chōsen sōtokufu (1913 and 1915).

²⁷ One *toe* is equivalent to 0.596 liters.

As early as 1885, Sim had begun to note with apprehension the disruption to the relationship that he expected among weather, harvest, and price:

How can I know the logic of things? I do not know how much the grain price next spring will be. Everyone says that [this is] a bountiful year, [but] the grain price is like during a famine. Poor households and craftsmen in particular are at the utmost edge of fear. This autumn, everyone said that one toe of rice would be three chon. At the end of autumn and beginning of winter, they said it would not exceed four chon. Nowadays it almost reached five chon. (SWG 1884.12.30)

As the years passed and prices continued to diverge from Sim's understanding of price cycles based on patterns in the weather and seasons, he commented again on the problem that trade posed to his ability to predict prices: "Traded grain goes out and comes in, and it is hard to distinguish a famine from a good harvest" (SWG 1899.6.10). Such sentiments recurred throughout the remainder of Sim's diary as he remarked on the disjuncture between actual prices and his expected "summer" or "autumn" prices, repeatedly questioning to himself, "How can one know if grain prices will rise or fall?" 28

Sim's concern over weaker seasonal price fluctuations went beyond the persistence of customary behavior or a general antipathy to foreign trade. ²⁹ As already noted, Sim did not struggle to incorporate international trade into his world view or practices per se. Not only was his world view able to take into account the new flows of rice as an extension of kwi and ch'on, reflecting different patterns of abundance and scarcity in Japan and Korea, but he willingly took advantage of such trade to profit from increased prices within Ulsan (SWG 1879.7.29; 1884.11.20; 1884.12.30; 1897.1.10). Rather, it was the reason behind the price changes—the expansion of market networks to Japan and beyond—that posed a challenge, as prices in Ulsan began to reflect weather and production conditions far beyond Sim's frame of reference. While Sim occasionally heard of the prices in nearby towns and of harvest conditions in other provinces through his acquaintances, he had little way of learning about conditions within Japan, lamenting in his diary, "What about the sea routes of 100 ri?" (SWG 1899.6.10).³⁰ While Sim might have been able to adjust his understanding of seasonal prices to incorporate additional information, without regular news on Japanese prices and harvests, Sim could no longer reliably predict future prices even in Ulsan's local markets.

Sim Wŏn'gwŏn's experience of the impact of international trade thus points to a source of variation within a growing trading network that increasingly linked farmers and traders across regional and national boundaries. While the development of communications infrastructure has been identified as a significant contributor to global market integration in the late nineteenth century (Lew and Cater 2006; Chilosi and Federico 2015), the distribution of information about new trading partners or through new forms of communication cannot be assumed to have been equally accessible to all. For Sim, sources of information on Korea's new trading patterns were few and far between. While merchants with connections in Pusan and the other open ports could take advantage of a greater availability of information, Korea's burgeoning newspaper

²⁸ SWG 1908.12.30, 1919.1.15, 1925.12.30, 1931.6.20.

²⁹ On customary behavior, see Lamoreaux (2003, pp. 454–459).

³⁰ Ri is a unit of distance, approximately 3.3 miles.

industry only slowly came to circulate information on prices and conditions abroad to a limited readership.³¹

Moving into the colonial period, reliable information that spanned Korea's new trading networks grew to become an increasingly important resource. Trade papers such as the *Mibi ilbo* aimed to supply information from grain exchanges in Korea and beyond to entrepreneurial landlords seeking to maximize their profits (Hong 2005, p. 189). The colonial government also recognized the importance of such economic information, and often played a leading role in its dissemination within wider campaigns to encourage Korean farmers to participate in its new, empire-wide, commercial infrastructure. The government-sponsored Korean Agricultural Association (Chōsen nōkai), for example, published a monthly bulletin for its members that included updates on conditions in Japanese agriculture, global agricultural trends, and details of forthcoming regulations and government projects. Similarly, as part of their early work to encourage Korean farmers to increase commercial production and participate in the export market, the directors of the financial associations publicized various market prices among their members and offered to act as selling agents for members wishing to access "Pusan prices." ³²

The proliferation of these new channels of information did not guarantee that everyone could participate on equal terms, however. Even ignoring the question of farmers' willingness to join agricultural organizations sponsored by the colonial government, journal subscription charges and membership fees for the agricultural and financial associations functioned as a barrier for many households, effectively limiting the circulation of information to wealthier farmers (Yi 2002; Kim 2003). In his diary, Sim Wŏn'gwŏn did not mention subscribing to the newspapers or journals that increasingly reported on international agricultural trends, and neither was he a member of the agricultural or financial associations that shared price information among their members. As such, it is difficult to conclude with accuracy how far this information would have allowed him to adjust his model of kwich' on to account for the wider trade network that he found himself within. Sim's willingness to benefit from increased prices due to trade with Japan and his ready incorporation of the principle of international trade into his view of kwich'ŏn imply that he was engaged in some degree of updating beliefs. Rather, it was Sim's access, or lack thereof, to information on Korea's new trading partners that simultaneously challenged his existing world view and limited his ability to develop an alternative. Insofar as the newly expanded rice trade was shaped by various institutions—the trading routes that converged at open ports, merchants with superior knowledge of conditions outside of Ulsan, and, increasingly, media and agricultural organizations that disseminated new forms of economic information—these institutions could equally help or hinder farmers like Sim as knowledge accrued unevenly across the rural population. Lacking a reliable source of information that might help him predict future changes in the rural economy, Sim farmed a traditional mixture of crops as he sought to minimize his reliance on

³¹ Cho (2006). For rare examples of news reports on grain production in Japan, see "Chosŏn syŏ Ilbon ŭro nagan ssal," *Tongnip sinmun*, April 15, 1897; "Kümnyŏn ŭn Ilbon e p'ungnyŏn," *Tongnip sinmun*, September 23, 1897; "Ilbon syŏ Ch'ŏngguk chŏngbu," *Tongnip sinmun*, May 7, 1898; "Kyesa nyŏn taehan muyŏk," *Tongnip sinmun*, August 10, 1898; "Kigŭn yebi," *Taehan maeil sinbo*, June 25, 1908.
³² Chōsen sōtokufu (1913, p. 188); Chōsen sōtokufu (1915, p. 88).

uncertain commercial transactions. From Ulsan, Sim Wŏn'gwŏn could keep track of weather, harvest, and price patterns visible only within his local region, even as he recognized the limits of his view of price cycles amid a growing market for rice.

VII. CONCLUSION

This article has examined the economic thought of Sim Wŏn'gwŏn, and how it influenced his understanding of the effects of international trade on local markets in the late nineteenth and early twentieth centuries. Sim Wŏn'gwŏn's response to the growth of international trade contradicts assumptions of Korean opposition to rice exports rooted in nationalism, pointing instead to the significance of seasonal price variation and the availability of information on Sim's assessment of the benefits of international trade. Sim Wŏn'gwŏn expected to encounter cyclical patterns in the weather, harvests, and prices, and he structured his farming decisions accordingly, using his diary to keep track of conditions that would have affected prices in local markets. However, as new trading networks expanded beyond the Ulsan region, Sim was unable to apply his local knowledge to markets absorbed within a wider network of international trade, and the increasing stability of rice prices paradoxically became a source of instability within Sim's economic world view.

The incorporation of Korea into international trading networks in the late nineteenth century thus posed several challenges for farmers like Sim. His economic world view and subsequent understanding of trade were fundamentally different from that envisioned by government officials and economic theorists. Moreover, the divergence between Sim's highly local knowledge of agricultural conditions and the expansion of the market he was trading within created a knowledge gap that increased the perceived risk of participation in the international grain trade. Without knowledge of conditions in Japan that Sim could have used to estimate future price changes, he sought to protect himself from uncertainty by minimizing his reliance on rice production for the market and cultivating instead a broad range of crops. His conservative response was not the result of unchanging traditionalism, however, but was rooted in contemporary affairs. While in earlier years Sim gladly acknowledged the profits of the international grain trade, in the long run his lack of access to information limited his ability to adapt his world view to an increasingly globalized and commercial market for rice.

Though Sim's world view was undoubtedly idiosyncratic, and he proudly claimed his diary as a point of difference between himself and neighboring farmers who relied on custom and folk sayings to interpret the weather, the changing market conditions that he faced were not limited to Sim, or even Ulsan. Sim was not alone in relying on cyclical patterns within the rural economy, and similar frameworks were common within East Asian intellectual history. What is more, where Sim suffered from the weakening of seasonal price cycles or a lack of information about the new factors that came to influence the rural economy, so, too, did many around him. The question of who did, or did not, gain access to information on new markets and trade routes, and how new information was incorporated into existing bodies of knowledge, was just as meaningful to farmers across Korea. In this case, understanding the conditions that structured Sim's understanding of the rural economy opens new possibilities to understand the expansion

of trade within East Asia and beyond, the factors that shaped participation in new markets, and how farmers like Sim interpreted and experienced the gains and losses of the new trade.

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