Science as a source for the formation of modern Korean literature

Despite all the reservations about Ch’oe Namsŏn’s achievement as a poet, there is good reason to think of his “Hae egesŏ sonyŏn ege” (From the Sea to Young Men) as defining an epoch in the history of Korean poetry. Published in November 1908 in the inaugural issue of Ch’oe’s magazine Sonyŏn (Young Men), the poem not only introduced a fresh rhythmic pattern and contemporary diction by way of imitating Japanese shintai-shi (new-style poetry), but more importantly, it presented a new vision of the world particular to his generation that resulted from their first-hand, eye-opening contact with the globally expanding West. In its six stanzas, each of which begins and ends with an onomatopoetic description of the sound of wild waves crashing against the seashore, the poem speaks in an admonitory tone of the personified sea of an entirely new and wonderful world that is approaching the people on land. The world announced and materialized by the sea, incessantly roaring and bragging of its own titanic powers, is unfathomable and threatening yet also captivating. It sounds like nature in its most sublime form. Its impending presence is especially auspicious for the “daring and pure-minded young people,” whom the sea declares it loves the most. It seems to promise them heroic lives, lives of which their ancestors never even dreamed.

Needless to say, the sublime vision of the new world set forth in “From the Sea to the Youth” indicates how Ch’oe understood the situation faced by his country after it opened its doors to foreign powers. His vision casts what appears to be foreign encroachment as the promise of rejuvenation and empowerment for an old and weak nation like Korea. Ch’oe’s sense of this new world as sublime can be taken as evidence of his ignorance regarding the threat of imperial aggression faced by his country. It is possible, though, that his fascination with Western civilization and in particular its science and technology disarmed his sense of caution. Indeed, the sublime may have been evoked in the sensitive and excitable mind of young Korean readers of Sonyŏn by the miscellaneous body of new information set forth on its pages derived from the various disciplines of astronomy, physics, engineering, geography, and history. The mysteries and wonders of the cosmos, an abundance of biological marvels, mesmerizing spectacles of the continents and oceans, panoramas of great heroes and nations, the splendors of modern cities and architectures, and the awe-inspiring accomplishments of scientific and industrial technology
would have combined to excite the imagination of the young readers of the magazine, contemplating a natural and human world seeming to exist beyond language and reason.

As was the case in other countries, the formation of modern literature in Korea was contemporaneous with great changes in the ways of perceiving and knowing the world. In Korea, this transformation was supported predominantly by an increasing body of scientific knowledge imported through China and Japan from the West. As demonstrated by the example of Ch’oe, the experimentation with forms and genres that led to the emergence of modern literature occurred in concert with a campaign aimed at inculcating scientific thinking in the Korean population. However, this does not mean that modern Korean literature came into being as a paraphrase of scientific truths. That literature differs in kind and purpose from science was among the central ideas that dominated writing and reading in Korea from the early twentieth century on. The modern notion of literature took shape in Korea when literature began to be retheorized with reference to Western concepts and recognized as an area of practice differentiated from that of science and that of morality. But the historical truth is that literature and science together released Korean culture from the fetters of traditional Confucianism and that literature found a source of knowledge and inspiration for its advancement in the theories and discoveries of science. Darwin’s theory of evolution was among the most influential examples of scientific thinking in early-twentieth-century Korea. Major writers positioned across a wide-ranging intellectual and political spectrum between neo-Confucianism and anarchism paved the way for the formation of modern Korean literature as they struggled with the implications of the theories of Darwin and his followers.

A Confucian appropriation of evolutionism

Although Western science continued to interest Korean Confucian literati after it was first introduced into their kingdom in the sixteenth century by royal envoys to Beijing, its influence was largely confined to small circles of scholars and reformers. One exception was Ch’oe Han’gi (1803–77), in whose work Western cosmological concepts were integrated into neo-Confucian metaphysics. By the late nineteenth century, when it had become obvious that the development in science had enabled Western Europe and the United States to acquire tremendous economic and military power, a large stratum of Korean bureaucrats and intellectuals developed a deep interest in various branches of science. In the late 1880s, the reform-minded government dispatched a number of students to China and Japan at its own expense and even endeavored to disseminate the basic concepts of modern science through government–run media, such as the newspaper Hanseong sunbo, the first of its kind in Korea. After the Japan–Korea Protectorate Treaty was concluded in 1905, with the result that Korea’s political sovereignty was in greater peril than ever before, many scholarly societies emerged both inside and outside the peninsula whose periodicals often devoted a great deal of space to the topic of science. As it became widely recognized that the universalization of scientific training would be necessary for Korea to build an enlightened and competent nation, the traditional Confucian curriculum became the subject of suspicion and criticism. In those scholarly society journals, patriotic reformers often asserted that science, rather than Confucianism, ought to be granted primary importance in school education, labeling the former new teachings and the latter old teachings.2

For Korean bureaucrats and intellectuals keenly aware of the weakness of their country, the growing demand that Western science be the primary object of study seemed more than reasonable. Darwin’s theory of evolution was a synonym for science among Korean students of Western culture, who contended that it demonstrated that human survival necessitated breaking with
old doctrines and practices. Under the influence of Chinese proponents such as Liang Qichao (1873–1929), Darwin in Korea was often regarded as a preacher of progress. In an August 1909 article in *Taehan mae’il sinbo*, an influential newspaper of the time, the great biologist was even credited with the more rapid progress recently observed in human civilization, with his theory of competition and evolution having allegedly encouraged individuals and societies to make improvements based on reason in their daily lives. In late 1900s Korea, Darwinism brought the old idea of a permanent and balanced cosmic order founded on cyclical change to the verge of collapse and contributed to the normalized of what Reinhart Koselleck calls the temporalization of history. This turned out to be ideologically effective as well, since it explained to Koreans why their nation had succumbed to imperial powers and provided them with the grounds on which to demand political and cultural reform.

The impact of Darwinian theories, along with an ever-deepening sense of national crisis, precipitated the rise of a reformative mindset in some Confucian circles. Pak Ŭnsik (1859–1925), a leader of the so-called self-strengthening movement of the early twentieth century, represented a group of Confucian scholars responsive to the need for intellectual change. Born in 1859, the son of a peasant-class school teacher in Hwanghae province to the northwest of Seoul, Pak had been an ardent disciple of the teachings of Zhu Xi before extending his interests to include Western science and religion and gaining a reputation as an exponent of intellectual and educational reform in his forties. He criticized Confucians for their indulgence in useless dogmas and the petty debates that divided them, for their indifference to practical matters and adherence to old moral decorum, and for their preoccupation with self-preservation while ignoring the national and public interest. He pushed for the establishment of a science and technology education program to increase the power and wealth of the nation and to better people’s lives. He undergirded his call for reform by drawing on the propositions of social Darwinism, in which the struggle for survival is a natural law and the victory of superior over inferior the way of the world.

Although he was critical of the traditional Confucian habitus, Pak never doubted the relevance of Confucian teachings to the contemporary world. *Yugyo kusin ron* (On the Renewal of Confucianism) and his other proposals for a new type of Confucian practice show that he believed the will for self-renewal to be among those moral virtues cherished by the Confucian sages and that he trusted in the capacity of Confucianism to adjust itself to the new circumstances, for which he found evidence in the great Chinese scholars of his times, such as Kang Youwei (1858–1927). Pak maintained that Confucian teachings and scientific training were both necessary elements of national education, arguing that the former worked toward the cultivation of a moral mind and the latter produced practical knowledge and familiarity with industrial technology. He thought that Confucianism was compatible with science and even that Confucian metaphysics did not contradict Darwinian naturalism. In his *Mongbae Kŭm T’aejo* (A Dream of an Audience with the Founder of the Jin Dynasty), written in 1911, shortly after he went into exile in Manchuria, he declared that the theory of natural selection did not repudiate the Confucian notion of humanness. In his view, the inequality between races or classes was not naturally determined but instead depended on the effort made to exercise yŏngnŭng, the spiritual and moral power immanent in all human beings.

The gist of Pak’s proposed reform was, then, not to invalidate Confucian teachings but to preserve them by recasting them to fit the needs of his times. His *Hakkyu silhou* (A New Treatise on Principles of Education), an essay-length treatise presumably written when he was participating in some kind of government-led teacher training program, argues that since the “Great Teachings” (chonggyo) were necessary for the state, the Korean government should
institutionalize national reverence for Confucian teachings. When he mentions chonggyo in the context of institutions of national education, he does not mean the concept of religion, which is generally accepted as its English equivalent today. At this time, though, some like-minded scholars were sympathetic to Kang Youwei’s project of consecrating Confucius’s teachings as the national religion of China, and in 1909, Pak headed the promulgation of Taedonggyo (Great Unity Teachings), which relied on Kang’s revisionary reading of Confucian scriptures as one of its philosophical sources. According to Pak, the notion of great unity combined Buddhist deliverance and Christian love in seeking to achieve peace in the world and envisioned a utopian social space that would allegedly come after the age of division and competition.

Pak’s attempt at the renewal of Confucianism was connected to new currents in Confucian theories and practices across late-nineteenth-century and early-twentieth-century East Asia, best illustrated by Kang Youwei’s new interpretation of Confucius. Pak was much interested in developments in Confucian thought outside Korea and in particular in the Wang Yangming School in Japan, a body of doctrines that must have seemed heretical from the viewpoint of the Korean Confucian tradition. Pak acknowledged that he had drawn on the works of Japanese disciples of the great thinker in Ming China for his own biographical essay, Wangyangmyŏng sīgi (A True Account of Wang Yangming), serialized in 1910 in Ch’oe Namsŏn’s Sonyŏn. But Pak’s cosmopolitan outlook should be understood as serving his ultimate goal of effecting a national turn in Korean Confucian culture. He used Korea’s historical past to inspire a national self-consciousness and patriotic passion in the minds of the Korean people and did not hesitate to exploit Confucian teachings in his propaganda works on behalf of Korea’s political independence and cultural autonomy. During his years of exile, he grew even more committed to the notion of Korea as a sovereign nation whose progenitor was the legendary Tangun, and he devoted his literary talent to the telling of heroic stories of Korean ancestors who had fought against the invasions of foreign powers.

Pak’s Mongbae Kŭm T’aejo, one of the richest among his writings from his exile period in literary terms, consists of a fictional dialogue between a Korean on journey and the founder of Jin. It is written in a style commonly exploited in the past for the purpose of unorthodox speculation, as classically illustrated by Hong Taeyong’s Uisan muntap, the late-eighteenth-century philosophical tale written in Chinese, and it uses a structure based on a Korean literary convention in which a dream functions as a frame for recounting the strange and the marvelous. This dialogue stands out for the way it combines imaginative interpretations of historical events in Korea and China with a didactic discourse aimed at stirring Koreans to take pride in their country and defend it against military threats. In the text, the founding king, of Jurchen descent, is introduced as an offspring of Tangun and advises his Korean interlocutor on urgent issues of history and politics. For example, he levels severe criticism at Yi-dynasty Korea, which he believes to have lost the self-reliant spirit of Tangun, and extolls Korean ancestors whose accomplishments in all areas of civilization remain exemplary for their present-day descendants. He goes on to argue that the basis of human society is currently evolving from the principle of oppression to the principle of equality and that the “Great Asian ethno-nations,” two of which are the Jurchen people, who threw off Han Chinese hegemony, and the Korean people, presently waging an anti-imperial struggle, would take the lead in realizing the ideal of equal relations between the states or nations. Pak’s eclectic incorporation of Confucianism, evolutionary theory, and nationalism is significant because it culminated in the discovery of a geopolitical entity that would become central to the national imaginary of the latter-day Korean people: China’s northeast periphery.
A romantic refraction of Confucian metaphysics

Pyŏn Yŏngman (1889–1954), thirty years younger than Pak Ŭnsik, was the first-born son of a high-ranking government official and received as good an education as an aspiring bureaucrat could in those turbulent times. He studied the Chinese classics together with Sin Ch’aeho (1880–1936) under the direction of Yi Namgyu (1855–1907), an illustrious Confucian scholar, and majored in law at a public school for training judges and at Posŏng Professional School. Well versed in Confucian scriptures and precociously good at writing in literary Chinese, he composed his first work in Chinese in his late teens on the Confucian concept of the chung (the Middle), which was published in the monthly journal of the Taedong hakhoe, an association of bureaucrats and dignitaries formed to promote Confucian teachings. He rose to prominence on the basis of two books, Segye ŭi sam koemul (Three Monsters in the World) and Isipsegi ŭi taech’angik chegukchu’i (Imperialism: A Great Tragedy of the Twentieth Century), both of which were published in 1909, a few months before he took up office as a judge. These two works of translation introduced Western social sciences to Korea, and there is some evidence that both were probably secondhand translations of books authored by Anglophone scholars known in China and Japan, such as Goldwin Smith and Paul S. Reinsch.8

There was a tendency among the Korean intellectuals of the 1900s to not only accept imperialism as a normative form of international politics but also see it as a model for Korea to emulate. Yu Kilchun (1856–1914) took the triumph of imperialism in contemporary international relations to mean that the Confucian political ideal of taedong (great unity) had gradually become a reality, and Sin Ch’aeho maintained that the present-day international politics of mutual struggle required Korea to embark on imperialist expansionism as a strategy for its survival. Pyŏn’s work of translation, on the contrary, had the intention of exposing imperialism for what it truly was. He wanted to lead his compatriots away from the old ideal of taedong toward political realism and also inform them that imperialism was nothing more than a thinly veiled barbarianism through which the strong nations had brought great misfortune to the rest of the world. His point was that Korea should take up nationalism as its guiding political principle in order to not be victimized like India or Vietnam. He criticized Sin Ch’aeho’s expectation for Korea’s development as an imperial state for being unrealistic and premature, but he did endorse the effort to revive the Korean “national spirit” made by his friend Sin with his biography of Ŭlchi Mundŏk, a military hero in ancient Korea.9

Although Pyŏn did in the late 1900s support the self-strengthening movement, which was based on an ideological interpretation of biological evolution, he did not concur with the Darwinian naturalization of an eternal mutual struggle between humans. In a passage from Three Monsters in the World that may in fact be his own interpolation, he writes that Darwin’s theory of evolution is responsible for imperialism, which has dispensed with morality as a guiding force in the relations between nations. In particular, he warned against the naturalist reductionism that cropped up occasionally in the analyses of human cultures by Darwin and his followers. One of Pyŏn’s short journal articles in 1908 calls into question a prevailing trend among scholars and students in which evolution in a Darwinian sense was accepted as the single universal law governing all creatures, while the difference between the natural world and the human world was ignored. He maintained that the law of evolution was not applicable beyond the area of physical science and that it was absurd for law students like him to reject religion on the basis of Darwin’s discoveries.10 Apparently aware of the criticism of Darwin raised by Chinese intellectuals such as Zhang Bing-lin (1868–1936), Pyŏn was extremely skeptical of the significance of Darwin for humanistic scholarship. His anti-Darwinism is more prominent in some of his
wrings published after 1918, the year when he ended his six-year exile in China. In these Korean-language essays, his familiarity with Western literature and philosophy is conspicuous.

In the 1920s and 1930s, Pyôn, already recognized for his knowledge of classical Chinese poetry and prose, gained public acclaim for his expertise on European and American literature. He was a great admirer of Goethe, Shakespeare, and William Blake; in one of his short essays, he compares Goethe’s literary achievements and the author of *On the Origin of Species* in order to praise the German poet’s literary achievements. Pyôn acknowledges that Darwin’s theory of evolution had brought about a great change in European thought, but it did so in relation to religion and thus was not comparable to Goethe’s literary art, which presented a new understanding of humanity. In his view, Goethe was well acquainted with all varieties of thought and feelings and succeeded in presenting “a panorama of agonies” characteristic of modern humankind. Not surprisingly, he concludes this piece with a eulogy of Goethe as “an immortal modern man.” Although his comments on Goethe’s works are rather vague, it appears that he was fascinated with the images of freedom and adventure that are described in the story of Faust. His admiration for Goethe runs parallel to the inclination of the intellectuals of his generation toward the Western ideal of the free and creative individual, an inclination often coupled with their resistance against their own despotic Confucian fathers.

However, Pyôn’s encounter with Western thought did not lead him to an iconoclastic negation of traditional Korean elite culture. Rather, it renewed his love for the Confucian classics and strengthened his zeal for religious and spiritual pursuits. He became engrossed in the *I Ching* (The Book of Changes) as an explanation of the genesis and evolution of the universe to such an extent that he even claimed that had Bergson ever read it, he would not have attempted his *Creative Evolution*. Although Pyôn failed to carry out his plan for a new commentary on the Confucian canon, he did leave here and there in his essays some fragments of his anti-Darwinian and anti-naturalist *Lebensphilosophie*. His Chinese-language work “Yósigwan” (“This Is How I See”), published in 1923 in Ch’oe Namsôn’s Korean-language weekly *Tôngmyông* (The Light from the East), offers a synopsis of his cosmological hypothesis derived from a passage in the *I Ching*, according to which, at the beginning of all things, a single formless *ki* (vital, material energy) acts vigorously and produces basic substances, from which myriad things originate. Evolution, as he understands it, is a process not of mutual struggle but of proliferation without distinction between the high and the low. Since all things come from the same single origin, they form a unity despite their difference in appearance.

What is interesting from the viewpoint of neo-Confucian cosmology is that Pyôn rejects the distinction between *ki* and *ryŏng*, the material and the spiritual. For him, *ryŏng* is not different or separate from *ki* but instead constitutes a “shining” side of the latter and thus exists in all things that are made of it. This argument for the universal immanence of *ryŏng* contradicts Wang Yangming’s metaphysics, in which *ryŏng* is granted only to humankind. Whereas for Wang seeing the unity of all things is a matter of cultivating and maintaining one’s spiritual mind, for Pyôn it demands connecting oneself to the primordial vital energy that has endowed both humankind and all things with spirituality at the outset. The origin of all things, designated by him as “Mr. In’ôn” in his essay “This Is How I See,” is renamed *taeryŏng* (great spirit) in another essay, “Mongdam” (Discourse on Dreams). Pyôn’s revisionist interpretation extends to the central Confucian concept of *in* (ren in Chinese). While for Chinese neo-Confucian philosophers like Ch’eng Ho in means a kind of benevolence with which to see all things as forming one body, for Pyôn it refers to a state of communion between things. In effect, Pyôn released basic Confucian terms such as *ki*, *ryŏng*, and *sin* from the hermeneutic control of orthodox neo-Confucian philosophy and made them resonate conceptually with Christian theology. He never mentions the Christian god, but his concept of *ryŏng* recalls the pan-spiritualism of
the Christian tradition. In fact, his *taeryŏng* is similar in meaning to Ralph Waldo Emerson’s *Oversoul*.12

Pyŏn failed to produce Korean-language works comparable in literary merit to his Chinese-language works. His spiritualism, or what he called *taesimhak* (doctrine of great mind) in his own words, never saw a full articulation in terms of philosophy and literature. But his conception of the unity of the material and the spiritual, the human and the nonhuman, can be properly seen as adumbrating the possibility of poetry as opposite of science for the first time in Korean literary history. His formulation of all things existing in communion conjures up a nature full of symbols and illuminations rather than determined by a system of mechanical laws, and it places the poet in the role of a shamanistic genius who can translate those ethereal things into human language. Like Kitamura Tōkoku (1868–94), the Japanese admirer of Emerson, Pyŏn adhered to a Romantic belief in natural mysteries as a source for poetic creation and was pleased to find a nascent Korean William Blake in Chŏng Chiyong (1902–50), a poet often credited in the 1930s for writing the first modernist Korean poems. He was probably a heretic from the viewpoint of Chinese-language literature and a dilettante from that of Korean-language literature, but he was more unique and visionary than any other writer of his generation. He initiated a unique challenge to the increasing hegemony of scientific reason, a challenge that merged Western Romanticism with a singular interpretation of the local Confucian philosophical tradition.

The rise of the Korean enlightenment

It was as a critic of social and moral conventions in Korea that Yi Kwangsu (1892–1950) came to prominence in the literary world of the 1910s. He attacked the institutions of the family, marriage, education, and religion with recourse to the then-influential Western-originated discourse on civilization as well as his first-hand experience of life in Japan. In so doing, he held considerable appeal for Korea’s younger generation, who, having come of age through the course of Western-style learning, had become disillusioned with the traditional Korean way of life and had been exposed to the allurements of industrial capitalism. One of the institutions that Yi Kwangsu denounced vehemently was Confucianism. He ascribed all of Korea’s perceived problems—political incapacity, economic poverty, and moral decay—to the ruling ideology of the six-hundred-year-old dynastic state. His 1918 article “Sinsaenghwallon” (An Argument for a New Life), which earned him the reputation as one of the leaders of the enlightenment movement, describes the evil effects of Confucianism on Korean society under as many as eleven headings, beginning with “antiquarianism and Sinophilia.”13 Like Pak Ónsik in the previous decade, he centers his accusations on the unpatriotic and impractical nature of Confucianism in Korea, but unlike Pak, he does not believe that there is anything in the Confucian legacy that can cure Koreans of all that ails them. Critical of Christianity as well, he insists that of all the systems of thought, science alone can be “effective” for Korea and, indeed, all other nations.

Yi Kwangsu put forth these critiques with an alternative way of thinking in mind, one grounded in Darwin’s theory of evolution. Historical studies on introducing theories of evolution into Korea tend to draw attention to their sociological rather than biological versions, but both were known to Koreans in the 1900s and 1910s. In the years when Pak Ónsik and Sin Ch’aeho were encountering the concepts of social Darwinism through Liang Qichao’s works, Korean students abroad in Japan, including Chang Óngjin (1880–1950), were becoming acquainted with Darwin’s biological thinking. During his years as a student at Waseda University Yi Kwangsu was an ardent advocate of Darwin’s theory of evolution. He believed that Darwin’s theory would replace the Bible and counted a book by Oka Asajiro (1868–1944), a well-known Japanese disciple of Darwin, as among the most essential books for Korea’s development of a
new civilization. He was convinced that an organism’s will to live, as expounded by Darwin, constituted the foundation of modern politics, education, and ethics, and he continually attacked the social and moral conventions in Korea that seemed to him impediments to that will. It is no exaggeration to say that his primary framework of reference for criticizing Confucian and traditional Korea was derived from Darwin’s theory of evolutionary biology.

Yi acknowledged that his encounter with Darwin and Darwinism had been a significant event in his intellectual life. In his autobiographical work, he writes that he was enraptured—as if he had learned the truth for the first time in his life—while reading The Riddle of the Universe by Ernst Haeckel (1834–1919). A biologist, Haeckel was renowned in Germany and the United States in the late nineteenth century for his popularization of the theory of evolution. In his later years, he devoted himself to a synthesis of science and philosophy with Darwinian formulations, culminating in 1899 with the original German-language version of the book that Yi Kwangsu so admired. The objective of The Riddle of the Universe is to establish a system of naturalistic and mechanical explanations of the universe, which Haeckel calls the system of monistic philosophy, accompanied by his characteristic, harsh repudiation of Christian theology. Yi Kwang-su seems to have read the book in an English translation of 1902, with the experience being liberating for him; he had felt oppressed by Christian doctrine ever since he had attended a mission school in Tokyo during his teens.

This phase of Yi’s thinking can be traced in his first novel The Heartless (Mujŏng), which presents a fictional Korean society in which the center of ideological gravity moves from Christianity to science. In the first part of the novel, Christianity appears to represent the culture of the newly emerging upper class in Korea. Kim Kwanghyŏn, one of the wealthiest men in Seoul, who hires the protagonist Yi Hyŏngsik to be his daughter’s English tutor and eventually sets him up with her, is a leading figure in a Christian church, as indicated by his title of elder. According to the narrator, Kim has been enthusiastic about imitating the Western lifestyle ever since serving as the Korean minister to the United States, and he is widely reputed to be “the most progressive” of Korean men at that moment. Yet in Yi Hyŏngsik’s eyes, Kim is no more than a vulgar imitator of Westerners, and his Christian demeanor has little to do with the need of his country to civilize itself in its true sense. There is no place in the narrative of The Heartless for Christian ideas such as providential design. Rather, through its main story centered on the trials and tribulations of Yŏngch’ae, an embodiment of feminine virtue, it depicts a human society dominated by the “heartless” Darwinian law that the strong necessarily prey upon the weak. It is no surprise at all, then, that at the end of the novel, Yi Hyŏngsik decides to study biology abroad to deliver his compatriots from ignorance and poverty in the future.

Yi Kwangsu was eager to use contemporary idioms, including those deriving from Japanese that had come into Korean language through translation and that included a number of terms from natural science. For example, “ether” appears in the often-discussed chapter of The Heartless, where Yi Hyŏngsik’s experience of becoming conscious of his own self is narrated at length. The narrator of the novel details the scene of God’s creation as imagined by Yi when he simultaneously becomes aware of his own self and then uses the phrase “infinitesimally minute molecules of ether” to describe the space of primordial chaos, in which God begins to do his work of creation. The scene invites different interpretations; I suggest that here is an element of blasphemous parody, as it could be read as an encoded questioning of the Christian myth of creation. Another remarkable example is found in the description of Seoul on a winter’s night from Yi’s second novel, The Pioneer (Kaech’ŏkcha). There the narrator compares the city to a biological entity that functions in accordance with the natural rhythm of circulation, not because of patterns of human behavior that have accumulated over centuries. Yi especially uses biological
or evolutionary metaphors such as a “protozoan” to convey a sense that the city is a kind of organism that lives and dies according to its own causality.16

The Pioneer is the first work of Korean fiction to feature a student of science as the main character. Back home, after years of study in Japan, protagonist Kim Sŏngjae is absorbed in his chemical experiments in a private laboratory, secluding himself from almost all worldly affairs and even declining a teaching position at a professional college. This eccentrically dedicated man of science is contrasted with two characters who represent the male elite in the period immediately after Japan’s annexation of Korea. One, Chŏn Kyŏng, was once a wandering chisa (noble-minded patriot) in Northwest China, but he has now declined into a superfluous man, and the other, Yi Ilwu, a lawyer and to all appearances a good-looking sinsa (well-cultured Western-style gentleman), is in fact an unabashedly self-interested person. On the one hand, Kim resembles Chŏn in his patriotic passion and mad devotion, but on the other, he is similar to the lawyer as the privileged beneficiary of modern education and of upward social mobility. For this reason, he might be best understood as a dialectical synthesis of chisa and sinsa.17 Kim, the Korean man of science, is thus an example of a new hero brought forth by the conditions of life under Japanese rule.

In The Pioneer, the portrayal of the young chemist as a hero is meant to release Koreans from the grip of what enlightenment thinkers like Yi Kwangsu believed to be superstition. The narrative of disenchantment presents itself very clearly in an episode in which Chŏn suddenly begins acting like the ghost of Kim’s recently deceased father to frighten Ham the pawnbroker, who is presumably responsible for his death. Struck with horror, Ham goes to seek help from a shaman, as average Koreans at the time used to do in such cases. Even though this episode is presented in such a farcical tone that it feels like nothing but the casting of the actions of miserably ignorant people as pathetic, it nonetheless offers a chance for scientific reason to present itself in a luminous way. Kim gives a rational explanation for this strange incident: Chŏn is not possessed by the ghost of Kim’s father; he suffers from a hereditary mental illness.

Given the interest invested in scientific or rational ways of life in The Pioneer, special attention should be given to Kim Sŏngsun, a younger sister of the chemist Kim. She is a striking contrast to Pak Yŏngch’ae, the female protagonist of The Heartless, in that she refuses to yield to the demands of her family. Although she is in love with an artist named Min, her mother and brother arrange a marriage between her and another man, whom they expect to give economic support to their family. Determined to follow her heart, she does not consent to their decision, running counter to the norms of behavior to which female family members were expected to adhere. When Min turns out to be a married man, she claims the role of a morally autonomous individual by killing herself. It is tempting to compare her suicide to her brother’s work since they are both experiments, although the former experiments with her own self while the latter works with natural elements. If the world depicted in The Pioneer is becoming disenchanted and accordingly expelling gods, demons, spirits, and ghosts from all its spheres, Kim Sŏngsun represents the will of an individual to self-determination, a will encouraged and valorized in such a world.

Yi Kwangsu’s early essays and novels demonstrate that the introduction of Western science provided Koreans with a new system of practical knowledge and the impetus to start a kind of intellectual revolution. Yi Kwangsu wanted to liberate his country from the old moral conventions and cultural authority and to help it enter the orbit of the universal development of human history by borrowing the disenchanting power of natural science. He sought to establish a new literature, simultaneously opening up a mode of philosophical thinking that deserves the name of enlightenment. At the same time, he never felt at home in that world, which he considered “heartless” and subject to the mechanical laws of nature. For Yi, literature existed in order to
answer the need for chǒng (feeling), a need that science could not hope to meet.\textsuperscript{18} His deep interest in radical liberation led him in the 1920s and 1930s to read the Lotus Sutra and other Buddhist texts and write imaginative biographies of legendary Buddhist figures of Korea. And yet one of the reasons he inclined to Buddhism was that its doctrines, such as that of cause and effect, seemed scientific to him. He was at once an originator of modernism and a pioneer of science advocacy in Korea.

### An anarchic elan in the human animal

As it had for Yi Kwangsu, Darwin’s biological thinking provided for Yŏm Sangsŏp (1897–1963) a strong reason to doubt the existence of God. In his 1922 philosophical manifesto “Chisangŏn ūl wihayŏ” (For the Highest Goodness), Yŏm argues that the God of creation is not real but an idea and that humankind is not the work of God but vice versa. The main point of his argument is that God came into being out of the need for evolution in human saenghwal (life or life-activity). The word saenghwal, which had come into Korean from Japanese, was something like intellectual jargon when he used it in the early 1920s. In contradistinction to saengmyŏng (life or vitality), often used in a biological or a religious context, saenghwal refers to human life with an emphasis on its material and practical aspects. The popularization of the word in 1910s and 1920s Korea reflected the ascendancy of materialist, secularist, and socialist discourse over an idealistic, religious, and Romantic discourse.\textsuperscript{19} The idea of saenghwal, of a materially progressive and politically active life, put Yŏm in an advantageous position to criticize Korean society under Japanese rule. He perceived the absence of such a life or vitality to be a characteristic malady of Korea—hence the bitterly cynical denunciation of Korea as a graveyard in his novella “On the Eve of the Uprising” (Mansejŏn).

The novella relies for its much-praised realism on the unique perspective of the first-person narrator Yi Inhwa, who partially identified and partially disidentified himself with his ethnonational and class position. On a trip back to Seoul from Japan, where he has been studying at “W University in Tokyo,” Yi casts an intelligent, relentless, and defamiliarizing gaze on what he encounters, thereby revealing a Korean society that is crumbling under its failure to make progress and avoid annexation by Japan. Through his eyes, it is revealed that while lower-class Koreans have been driven out of their land and trapped in vile human trafficking, middle- and upper-class Koreans, such as Yi’s family members, are unabashedly taking advantage of new opportunities and privileges that have arisen under Japanese rule. In contrast to Europe, where people seem to have begun to seek “a new life” with end of World War I, in Yi’s view, there is little hope of change in the rule of the “embroidered black sword”: the oppressive Japanese colonial regime on the Korean Peninsula. In its cool-hearted and critical representation of colonial Korea, “On the Eve of Uprising” produces an intense emotion in the reader characteristic of naturalist writing that its Japanese exponent, Hasegawa Tenkei (1876–1940), famously dubbed “the sadness of revealing the real.” In his despair and fury, Yi utters sarcastic remarks regarding his compatriots, calling them “maggots in tombs” wriggling in the chains of “evolution.” It remains one of the most unassuming and self-deprecating descriptions of Koreans under Japanese rule.\textsuperscript{20}

Indeed, the theory of evolution paved the way for naturalism in Japanese literature. Like their French precedents, Japanese naturalist writers found one of their sources of inspiration and information in nineteenth-century natural science. In particular, they were encouraged by Darwin’s biology to see human nature as it is without regard to moral laws.\textsuperscript{21} Oka Asajiro, a popular and influential biologist in Meiji Japan, flatly put an end to the old Confucian theory of human nature by declaring that humans are neither good nor bad; Kosugi Tengai (1865–1952),
an early practitioner of Zolaesque realism, shared the same belief. Hasegawa Tenkei declared in his programmatic essay for naturalist writing that a new form of art that possesses truthful imagination had become possible, thanks to natural science’s destruction of all the delusions humans held about themselves.22 The close relationship between natural science and naturalist writing was obvious to Yŏm Sangŏp as well. He contended that the idea of the “enlightened self” underlying naturalist literature should be an outgrowth of the development of natural science and that naturalist realism had not been rendered outmoded by the emergence of proletarian literary realism.23

Yŏm’s Love and Crime (Sarang kwa choe), first serialized in Donga Daily (Tonga ilbo) from August 1927 to May 1928, one of his masterpieces abundant in the dark naturalistic imagery of human animality, was misunderstood and undervalued for a long time. The novel begins with a detailed description of the neighborhood of Namdaemun (the Great South Gate) in Seoul, where squalid coolies on a construction site are singing resentment-filled songs while a syphilis-stricken beggar is showing his rotten genitals to ask for charity. It augurs the social landscape of Seoul that Yŏm describes as full of “the feeling of darkness, danger and obscenity” in a later part of the novel.24 The city is inundated by a severe flood, understood by the narrator as both a physical and a moral catastrophe. At one end of the deeply stratified society depicted in the novel is a promising graduate of the Fine Arts School in Tokyo, who has inherited the noble title conferred upon his father by the colonial government, in all likelihood for his assistance with Japan’s annexation of Korea. At the other extreme is a middle-aged person with an addiction to opium and former kisaeng in the city of Pyŏngyang, who is a mistress of the artist’s father and is now trying to swindle money out of him by taking advantage of her own daughter, who is working as a model for him. Between the two extremes is a group of young men and women engaged in the underground resistance to Japanese imperialism along with similarly minded people in Shanghai and Tokyo. Their activities take place in a room of the Severance Hospital, a medical institution founded in 1904 by American Presbyterian missionaries and located in the street crowded with the poor and the sick near Namdaemun. The hospital seems to symbolize a source of moral light that will save the city from the darkness of corruption and sickness.

The prime example of human animality in Love and Crime is the character Chŏng Maria. A typical new woman in terms of her school education, profession, consumption habits, and sociality, she displays a chameleonic virtuosity throughout the novel, giving a recital as one of the pioneering Korean women trained in the vocal arts in Japan and the United States, working in secret allegedly for the intelligence bureau of the government-general, assuming the persona of a hysterical Cinderella anxious to win the heart of a Korean noble and rolling in luxury by serving as a mistress to an old lascivious moneylender. Her identity is a puzzle quite difficult to solve; in fact, she is a collage of various dramatis personae. From a historical perspective, she performs a vulgar parody of Taishō democracy through her sexual promiscuity and excessive consumerism, such that she can be thought of as a Korean version of Tanizaki Junichiro’s fictional character Naomi. Just like her character, her name also emblematizes the loss of Korea’s cultural purity. Shimch’o Maebu, a mysterious Japanese settler in the novel, seems to speak for the author when he says that Koreans are no longer who they used to be, their culture having become metaphorically impure, of “mixed breed.” As her name implies, Chŏng Maria embodies this situation of cultural hybridity, together with another character of mixed parentage, Ryu Chin, whose father was Korean and mother Japanese. The author highlights the problematic, immoral nature of her confused character or nonidentity by showing her as becoming obsessed with jealousy and hatred and finally committing murder.
Yŏm Sangsŏp, far from being the moral idealist that Yi Kwangsu was, considered low instincts—what one of his characters sarcastically calls siksaekhuŭi (the principle of food and sex), playing on a Chinese maxim from Mencius—as essential to human drama, but he avoided naturalist reductionism as a way of explaining human actions. What the Darwinian theory of evolution meant to him was that humans were always working hard to better themselves—for example, by humanizing themselves beyond the limit of their natural instincts. He saw in human culture not submission to natural law but rather progressive self-creation. This is amply evident in the experience of the self-transformation achieved by two characters in Love and Crime: Ryu Chin and Yi Haech’un. Painfully aware that his mixed-blood is symbolic of a colonized, fouled Korea, Ryu has developed a nihilistic philosophy and the art of self-contempt. As he becomes more sympathetic toward his friends engaged in anti-Japanese underground activities, however, he begins to embrace the idea of a human individual who is self-reliant, devoted to their own ideals, and opposed to the establishment. Yi Haech’un, on the other hand, vacillates between the socialist credos of his close friend Kim Hŏyon and his inherited social position and privileges and between Chi Sunyŏng, an embodiment of morally upright Korean womanhood and Chŏng Maria, an irresistible sex animal. Reportedly influenced by “radical ideas of liberty” while in college in Japan, he brings his vacillation to an end by deciding to turn his back on his own family and social class: he relinquishes his noble title and seeks political asylum in Shanghai. The novel offers an impressive story of the politicized friendship between men (and also between women, though less pronounced), expanding even across classes and ethno-nations, and because of this, it exceeds the bounds of the naturalist narrative of biologically and socially determined human lives.

Early-twentieth-century Korean writers generally saw the theory of evolution as serving Western imperialism in its self-legitimation, an interpretation that has continued to enjoy wide currency over the course of the intellectual history of modern Korea. However, this explicit or implicit collusion of the theory with imperialism does not sufficiently explain its political and cultural development in the twentieth century. In the context of East Asia, it should not be overlooked that evolutionary theory inspired much revolutionary political thought even while helping to rationalize the imperial-centered ordering of the global world. Ōsugi Sakae (1885–1923), an eminent leader of the anarchist movement in Taishō Japan, states in his autobiography that Oka Asajiros book on evolution awakened him to natural science and helped him find his way into socialism.25 Ōsugi published his translation of On the Origin of Species in 1915, continuing to pursue his interest in the subject by studying Henri Bergson’s critique of Darwin. Exposed to the fever of the anarchist campaign in the late 1910s while attending school and college and then participating in the labor movement in Japan, Yŏm adhered to his individualist anarchism as late as when he was completing Love and Crime. He shared with Ōsugi the admiration for Max Stirner and the same inclination to accept Bergson’s philosophy of evolution.

Yŏm’s embrace of Bergson is reflected in Love and Crime, especially in the dispute between Yi Haech’un and Ryu Chin over the question of human nature. In opposition to Ryu’s utilitarian focus on food and sex, Yi argues that human life distinguishes itself from animal life by its mental dimension, in which an élan vital drives it toward something higher, something divine. The Bergsonian concept has a political implication as well as a spiritual implication in Yi’s case. His betrayal of his social class expresses an élan vital in the life of his mind that is the power of his individual self to evolve in an undetermined and creative way. By abandoning his peerage and venturing on an exodus, Yi begins to raise his ego above its compromised relationship with the Japanese imperial state, and in that sense, his final venture is close to an insurrection, a prototype of the anarchistic act as formulated by Max Stirner.26
The opposition of poetry and science

Contrary to the so-called civilizing mission that the Japanese colonial government often claimed in order to legitimize its rule over Koreans, it had little interest in supporting the teaching of science in formal school institutions. In 1916, the government-general founded Kyŏngsŏng kong’op hakkyo, a school that would be the flagship institution of higher science and engineering education in colonial Korea until 1941, when the division of science and technology was established at Keijō Imperial University. The Kyŏngsŏng technical school was under the control of Japanese administrators, who preferred to use their resources to support Japanese students in engineering. Koreans were admitted at the ratio of one to every three Japanese students throughout the school’s history and were even subjected to restrictions when choosing their specialties. The number of Korean graduates did not exceed ten per year on average.27 That said, among the small number of graduates were Kim Yonggwan, Pak Kilyong, and An Tŏnghyŏk, who would take the lead in popularizing modern science in Korean society. In 1933, Kim and his fellow students organized Palmyŏng hakhoe, a society aimed at the autonomous industrialization of Korea, and the following year, they went on to organize a kwahak dei (day of science) with the support of prominent intellectuals and activists of the time.28 The event purposely coincided with the anniversary of Darwin’s death, and its success lead to the organization of a nationwide society for science promotion, Kwahak chisik pokŭp hoe (The Society for the Dissemination of Scientific Knowledge). Quite a few famous people from various realms of society joined and became members, including the poet Kim Ŭk and the writer Yi T’aegun.

Although Darwin remained a popular icon of the scientific spirit among educated Koreans in subsequent years, his theories were by the early 1920s no longer cited by advocating for the transformation of Korean literature and thought. They began to be overshadowed by various versions of Lebensphilosophie that gained currency in Korea by way of Japanese translations and appropriations and finally gave way to Bergson’s philosophy of life force, Kropotkin’s theory of mutual aid, and, above all, the materialism of Marx and Engels. However, the decline of interest specifically in evolutionary theory did not mean that Korean enthusiasm for modern science had waned. A theory or doctrine being “scientific” still determined its validity and reliability. Many followed Engels’s suggestion in his preface to the 1888 English edition of The Communist Manifesto that Marx had achieved with the human world as his subject what Darwin had previously done with the natural world. In fact, Korean socialist intellectuals in the 1920s found a quasi-scientific mentor in the mechanical and deterministic Engels. Sakai Toshihiko, the author of some Japanese-language books that became veritable textbooks on socialist thought, was such an ardent admirer of Engels that he regarded Socialism: Utopian and Scientific—a book by Engels first translated into Japanese by Sakai himself—as forming a triptych of the “three great socialist scriptures,” along with The Communist Manifesto and Capital. The pages of Kaebyŏk (Beginning), a magazine richly demonstrative of the early phase of the Korean socialist movement, bore the influence of historical materialism along the lines of Engels and Sakai. Kim Kijin published his militant argument for proletarian literature, based on Sakai’s Engelsian notion of historical development, in the magazine as it simultaneously serialized Sakai’s lecture on socialist thought in Korean translation.29

However, while something akin to scientism did become prominent in the Korean intellectual world in the 1920s, there followed a reactionary move from a variety of writers and scholars, major figures of literary modernism as well as religious and Romantic Confucians like Pyŏn Yŏngman. One example is the poet Pak P’alyang (1905–88), whose deep interest in avant-garde politics and art led to his membership in a Seoul-based circle of young socialist intellectuals as
well as to his poetic compositions in a Dadaist style. He went on to join the proletarian literature movement but relinquished his belief in science and revolution toward the end of the 1920s. In a 1931 poem, he declares a Whitmanian will to find and sing the great mystery in all the small things of the universe, asserting that nature and human life are spheres of the unknown placed for eternity beyond the reach of scientific reason. In contrast, Kim Kirim was convinced that Korean poets should discard sentimental Romanticism in order to become truly modern, and he placed the endeavor of giving order to individual and collective experience at the center of poets’ creative work. He found the model for such work in modern science, going as far as to say that a book on Albert Einstein might be more salutary for a poet’s self-cultivation than one on aesthetics or poetics. Those who want to see a dialectic movement in the history of modern Korean literature as rule take up the issue of realism versus modernism or "sunsu munhak (pure literature) versus ch’amyŏmunhak (littérature engagée); the opposition of poetry and science is hardly less important. We should try to understand how the antinomy of modern culture presented itself variously in both canonical and noncanonical works of twentieth-century Korean literature. Only by doing so can we free those works from the old aesthetic dichotomies ideologically reproductive of Korea’s national division and produce a historical reconfiguration that would bring into view their changing and multifarious connections with global modernism.

Notes
1 Along with the onomatopoetic lines, these words are omitted in Peter H. Lee’s translation of the poem in Poems from Korea, from the Earliest Era to the Present. In his chapter on early twentieth-century Korean poetry in A Cambridge History of Korean Literature, Lee reads the poem as a moralizing piece of literature for children, but sonyŏn was also commonly used to mean “youth” before ch’ongnyŏn, the Korean transcription of the Japanese word seinen, gained wide currency—in the late 1910s (the two-syllable Japanese word was originally coined around 1880 to translate the English words “young men” of YMCA). Therefore, it is more appropriate to read Ch’oe’s poem as an exhortation to the people of his generation to awaken to the hope dawning for them with the presence of the foreign powers in Korea.
2 The opposition of the new teachings and old teachings was a clear sign of the implosion of Korea’s time-honored intellectual regime of Confucianism, to which much historical work has been devoted, beginning with Yi Kwangnin’s “Kuhanmal sinhak kwa kuhak kwai ni nonjang,” 1–16.
3 Reinhard Koselleck, Futures Past, 236–48. By “temporalization of history,” Koselleck means a process in which history undergoes a conceptual structuration, taking on the dynamic character of secular time, the consequence of which is the modern sense of history, that it “no longer occurs in, but through, time” (ibid., 236).
4 For an example of the latest historical work on the first generation of Confucian-educated reformers who took the lead in what is generally called the cha’gang (self-strengthening) movement, see No Kwanbŏm, “Taehan chegukki.”
5 A few samples of Pak Ênsik’s reform proposals are available in English, notably “Essay on Education” and “Essay on Technological Innovation.”
7 Pak’s discovery of China’s northeast periphery can probably be best understood by considering it in tandem with Sin Ch’aeho’s conception of Manchuria as the birthplace of the Korean ethn-o-nation. See Andre Schmid’s analysis of Sin’s historiographical texts in his Korea Between Empires, 224–52.
8 For a more detailed account, see Ch’oe Ki-yŏng’s, Hankuk kŏndaek, 66–8.
14 Haeckel, Riddle of the Universe, ix.
Western science in post-Confucian Korea

17 Some readers may see in his evidence of Yi’s notorious compromise with Japanese colonialism.
18 See Yi’s essay “Munhak iran hao,” 107–12. I offer an analysis of this text in my “The Emergence of Aesthetic Ideology in Modern Korean Literary Criticism: An Essay on Yi Kwang-su.” Yi’s modern conception of literature is, of course, part of a greater transformation occurring in the literary culture of early-twentieth-century Korea. In relation to this subject, Kwŏn Podūrac’s book remains the most comprehensive. See her Han’guk kŏndaesa sosŏl ŭi kiwŏn.
19 Yi Ch’ŏlho offers an indispensable historical account of the words saeng, saengmyŏng, and saenghwal in his Yonghon ŭi keyo. The uses of those words cannot be properly analyzed without reference to their Japanese precursors. For an informative survey of a variety of Japanese discourses on life, see Suzuki Sadami, Taiso seimeishugi to gendai.
25 Ōsugi Sakae, Jijoten, 421.
26 Stirner, The Ego and Its Own, 280. Ch’oe In’Suk’s 2013 dissertation, “Yŏm sangsŏp munhak ŭi kaeinchu,” is the first to demonstrate that Max Stirner was one of the major sources for Yŏm’s philosophical thought.
28 Iim Chong’ae, “Kim Yong-kwan,” 237–73.
29 I discuss what I call the Engels-Sakai channel of socialist thought in my “Munhak esŏŭ yŏksa wa panyŏksa,” 178–85.
30 Pak P’alyang, “Chisangsŏm’s philosophical thought. For an informative survey of a variety of Japanese discourses on life, see Suzuki Sadami, Taiso seimeishugi to gendai.

Works cited
Ch’oe In’Suk. “Yŏm sangsŏp munhak ŭi kaeinchu” [Individualism in Yŏm Sangsŏp’s Literary Works]. PhD diss., Inha University, 2013.
Im Chong’ae. “Kim Yongwan ŭi Palmyŏng Hakho ŭi kwahak undo” [Kim Yong-kwan’s Palmyŏng Hakho and Science Promotion Movement]. In Kŭnhyŏndaes Han’guk sahoe ŭi kwahak [Science in
Jongyon Hwang

Kim Künbae. Hanguk kŏndae kwa hakh kisul illyŏk ŭi ch’uhyŏn [The Emergence of Human Resources in Science and Technology in Modern Korea], Seoul: Munhak kwa chŏisŏng sa, 2005.
Western science in post-Confucian Korea


