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An Atomic Age Unleashed

Emancipation and Erasure in Early Korean Accounts of the Hiroshima and Nagasaki Bombings

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While tens of thousands of Koreans were subject to the atomic attacks on Hiroshima and Nagasaki, early peninsular analysis of the bombings rarely grappled with the existence of these individuals. The general exclusion of colonial subjects from the story of the atomic bombings has long been identified as part of a nationalization of the wartime years, a move that situates the history of the attacks as a specifically Japanese experience. Less understood is how postcolonial intellectuals in Korea encouraged this historiographical trend. Across the peninsula, a common commitment to the idea of science as emancipatory enabled postcolonial Korean writers to conflate political liberation with advancements in the field of atomic science. This fusion of postcolonial developmentalism and atomic scientism, common in both the North and the South between 1945 and 1950, drowned out the critical temporalities introduced by peninsular survivors of the atomic attacks. The sections below first highlight the forms of atomic liberation that appeared in North and South Korea after 1945. Themes of historical emancipation are further investigated by way of descriptions of "Science War." A final section outlines the historiographical obstacles Korean bomb victims posed to emancipatory accounts of the attacks. This is done through a reading of one of the few early narratives of the Hiroshima bombing by a repatriated Korean survivor. As this singular source illustrates, postcolonial bomb victims were interpolated into a postwar community that was physiologically unable to leave the fact of the bombings in a colonial past.

Introduction

In early October 1945, three researchers from Kyoto University took the train to Hiroshima. Pak Ch'ŏlchae, Ree T'aegyu, and Ri Sŭnggi were three of the most distinguished Korean scientists of their day. Each held doctorates in the discipline, occupied prestigious laboratory posts in the Japanese metropole, and would go on to have prolific careers in the postcolonial academies of North and South Korea. Their trip was part of a larger pilgrimage by scientists in Japan to the recently devastated city that, along with Nagasaki, had become stark curiosities of an impending atomic age (Kim D. 2005). Months later, following their repatriation to the Korean peninsula, an

account of the trip by Pak Ch'ŏlchae appeared in one of Seoul's recently established popular science magazines. The article opened with a description of the devastated city, but this was only a brief prologue. Pak was clearly fixed on the future and, in particular, the possibilities portended by an atomic tomorrow. "The unleashing of the atom is revolutionary," he explained, "not simply because the particle is cut in two, but because of the enormous energy that is released by doing so" (Pak C. 1946: 21).

Excitement over the transformative potential of the atomic attacks fit well with the forward-looking character of the day. After decades of Japanese rule, the Korean peninsula unexpectedly encountered the promises and perils of Cold War decolonization and division. For the writers and translators who took up the subject of the bombings at this time, the atomic age and the postcolonial era were more than just synchronic chapters of history; the two fused into a common mode of articulating political and historical advancement. Amalgamated in this way, early Korean accounts of the Asia-Pacific War emphasized the liberatory utility of atomic weapons, with intellectuals suggesting causal linkages between science, conflict, and progress. These could be powerful sequences of emancipation that brought together stories of national and global advancement. However, by staging the bombings as a preface to a new era of history, intellectuals helped conceal the critical narratives and temporalities repatriated to the peninsula by the Korean survivors of the Hiroshima and Nagasaki attacks. This was a significant act of erasure. The experiences of colonial atomic bomb victims often undermined the political lines ascribed to the end of empire and resisted the sense of rupture assigned to the post-liberation period. However, rather than take up the challenge to the future posed by Korean bomb survivors, writers and translators from across the peninsula tended to sidestep the violence of the

attacks and their aftermath. In doing so, Korean intellectuals participated in the omission of colonial subjects from their stories of the bombings, relegating the active and critical anxieties of this group to the past.

Themes of exclusion and erasure have long framed scholarship on Korean atomic bomb survivors. Largely focused on struggles with the Japanese state, research on this group has effectively demonstrated the multivalent forms of discrimination that first brought Koreans, often as forced laborers and draftees, to the metropole and then, following the bombings, forced them to leave (Tong 1991; Toyonaga 2001; Palmer 2006; Takahashi 2018; Wake 2021). A manifestation of what has been termed an "ethnic-epistemological trap," the Japanese state structurally marginalized colonial populations in official documentation, which in turn facilitated their disappearance in later historical accounts (Kawashima 2009). This absence effectively buttressed a political approach to the commemoration of the atomic attacks that nationalized the bombings as a specifically Japanese experience (Saito 2006; Orr 2001). During the 1960s and 1970s, minority histories, restorative activism, and commemorative events developed by and around the Korean community of Japan agitated against this erasure. Such interventions often employed biographical narratives that connected the experience of the bombings and their aftermaths to persistent structures of colonial relations (Yoneyama 1999; Ropers 2015; Saito 2017; Takahashi 2018; Duró 2018).

By the 1990s and early 2000s, an increased number of South Korean works on and by peninsular bomb victims further underlined the links between the experience of the atomic attacks and imperial legacies (Oh 2018; Yang 2019). By way of this enriched scope, the story of Korean atomic bomb survivors has contributed to the broader reckoning with the politics of

narration, memory, and empire that has defined the past generation of research on twentieth-century East Asia. It is in this broader context that the removal of colonial populations from accounts of the bombings can be convincingly taken as emblematic for the broader avoidance of empire in histories of modern Japan itself (Schmid 2000; Choi 2021). Such instances of erasure illustrate the ways that nationalism persists as an organizing mechanism in the histories of former empires. Here the exclusive scope of the nation fits squarely with the political conventions of a polity eager to leave the story of empire behind.

This article does not contest the critical focus on the ways Japanese nationalism has channeled accounts of the bombings. However, singular attention to this theme does simplify the broader dynamics that played into the erasure of Koreans from histories of the atomic attacks: in particular, the broad appeal among postcolonial intellectuals of model modernization, scientism, and developmentalist success (Ki 2015). The template for these modes of narration drew from a well-entrenched line of thought that reduced a state's political status to its purported standing in the sciences. With research staged as a national trait, global empire was naturalized as a by-product of technological superiority (Adas 1990). These whiggish articles of faith in historical progress were widely adopted by Korean writers during the 1920s and 1930s and flourished during the Cold War years. As such, intellectual and historical cultures rooted in the progressive authority of science contributed to the persistence of transimperial formations in Cold War East Asia (Yoneyama 2016).

By contrast, the experience of subaltern atomic bomb survivors resisted the departures encouraged by common introductions to a postcolonial and atomic era. For the Koreans who had made Hiroshima and Nagasaki their home, liberation, both as a historical rupture and as a

prolonged state, was embedded in their experiences of the attacks. Coerced repatriation to the peninsula often stood as a major facet of their dislocation, one now imposed by new imperial arrangements (Mun 2018; Oh 2018; Shin 1992). As portions of this population returned to the peninsula, Korean bomb survivors encountered the consequences of their unshakable membership in a community rooted both in historical place and moment. Certainly, one expression of this was the social stigmatization of former residents of the bombed cities in post-1945 Korea (Kong 2011; Wake 2021). However, another was a sense of commonality with fellow victims that cut across the colonial divide. Aside from the trauma of the attacks themselves, this sentiment was rooted in the indiscernible and irreversible effects of atomic weapons. Radiation exposure imposed on bomb victims a shared futurity that was radically different from the emancipatory themes more commonly assigned to the attacks. Atomic weapons had left Korean bomb victims physiologically altered. Learning what that meant was a question of time.

Pak Ch'ŏlchae's article on his day trip to Hiroshima was just one of hundreds of works on the bombings printed in Korea's rejuvenated post-1945 press. In both the Soviet-occupied North and American-controlled South, an array of new media outlets, freed from the restrictions on the use of Korean language that characterized the final years of Japanese rule, circulated a popular discourse on the atomic attacks and their connection to a new historical age. Much of this writing was made up of foreign-sourced translations and wire service articles from the Soviet Union, the United States, and Japan. Arrayed as such, the press was firmly a part of a broader cultural and intellectual fixation on the atomic that characterized the postwar world (Hamblin 2021; van Lente 2012; Jones 2010).

A stage to world history on a national scale, between 1945 and 1950 the peninsula saw the establishment of two contrasting political orders and two contending client states. Together, North and South Korea marked a sustained descent into civil conflict along these global Cold War lines. However, Korean writing on the atomic age was more than simply a peninsular recitation of a global phenomenon. Situated within multiple hegemonic formations, between 1945 and 1950 the peninsular was the scene to a unique intersection of narratives on the atomic age. This was an explicitly inter-imperial discourse; and as translations abounded, so, too, did bricolages of these various lines. The outcome was a postcolonial discussion on the atom defined by the reorientation of Korea within the new geopolitical formations of the Cold War world (Kwon 2010). As such, Korean writing on a new atomic age was enmeshed in the complexities of Japanese decolonization, revolutionary impulses, and divided occupation by divided allied powers. The forms of emancipation that writers and translators discerned through the bombings bespoke the contours of this postwar order. Their accounts became an integral part of a discourse on liberation, on science, and on what was to come next.

Examining this milieu, the discussion below demonstrates how the Cold War divergence of the two Koreas did not prevent a vectoring in how writers in both polities conceptualized the atomic attacks. To emphasize this point, the following section takes up a plurality of North and South Korean accounts on liberation to show how discussion of the atom was bracketed by a shared utilitarian outlook on science in history. The calculus used in these works varied widely, but the common denominator for many writers at this time was that the atomic bombings could be justified by the more progressive outcome that the attacks facilitated. A second section frames this fixation on research and progress through a discussion of science in the recently ended Asia-

Pacific War. After 1945, multiple Korean works turned to the liberatory notion of the "Science War" (*kwahak chŏnjaeng*) to account for the Japanese Empire's recent demise. The causalities at work in these accounts linked a polity's science with outcomes both on the battlefield and in the arena of historical competition. In this capacity, atomic weapons illustrated the backwardness of the former metropole and also helped establish the unlikely conditions for Korean writers to view Japan as equally eligible for liberation. With the fighting over, proponents of this view fixated on a new developmentalist process of economic, technical, and political refinement that they held to be universal in scope. To them, atomic science and technology at this time often functioned as an abbreviation of this process of progress.

These accounts of emancipation were complicated by the figure of the peninsular atomic bomb survivor. For the thousands of Koreans who survived the attacks on Hiroshima and Nagasaki, the psychological and physiological specter of radiation introduced visions of the future radically different from the forecasts suggested by the postcolonial developmentalism of North and South Korea. This point is explored in a final section through a reading of a singular account from 1950 by a Korean survivor of the Hiroshima bombing. One of the only widely circulated narratives of the attacks by a Korean published at this time, the account stresses how the shared membership in the category of atomic bomb victim challenged distinctions between colonizer and colonized that underpinned the logic of national liberation. This section further introduces the survivors' particular sense of postcolonial temporality. In particular, it focuses on how radiation exposure and its unknown aftereffects inculcated individuals with a view of the future defined by the lurking agency of the past.

Liberatory Futures and the Atomic Attacks

In the months that followed the bombings of Hiroshima and Nagasaki, Korean writers and translators put forward a diverse collection of arguments that conflated the use of atomic weapons with national liberation (Kim D. 2009). These authors often justified the bombings through their correlation with the resolution of colonial rule and the promise of political autonomy. Elsewhere, pundits stressed the technology's future liberatory applications either as a source of boundless energy or as a force heralding a new age of global peace. According to another line of thought, the loss of the two cities constituted a historical, for some even ecclesiastical, sacrifice that marked the start of a new age for humanity. For others, the fact that the Americans had used the weapon at all was taken as positive proof of capitalism's decline. Here the construction of the bomb was conflated with America's systemic fixation on armaments, and the bombings, a gruesome preface to that system's end. This section sketches the range of different emancipatory potentials Korean intellectuals discerned in end of the Japanese Empire and emphasizes how this proliferation of liberations converged. Namely, by way of a common understanding of the atomic attacks as redeemed through the futures they appeared to have unlocked.

As the print media markets of post-1945 Korea reemerged from the war, the question of the atomic bombings was couched in a broader focus on the Japanese Empire's collapse. A contributor to the December 1945 issue of the Seoul-based magazine *People's Voice* stated this in the bluntest of terms. "The fear of racial annihilation brought by this new and powerful weapon led to Japan's surrender and allowed our beautiful land to be cleansed of the Japs (*waein*)" (*Minsŏng* 1945: 6). Other authors took the bombings to be a violent deposit on a Cold War peace.

For instance, in a 1949 issue of the South's *Congressional Gazette*, one author claimed that "if the Americans hadn't bombed Hiroshima and Nagasaki, World War Three would have already started and the land, liberty and sovereignty of the weak nations of the democratic camp would be lost" (Yi Y. 1949: 80). Elsewhere, in a 1950 article for the Seoul-based *New World*, the bombings were introduced as a limited way to quickly bring an end to the mass violence of the conflict. "The bombs dropped on Hiroshima and Nagasaki were at that time all the Americans had. Of course, we marvel at the destruction, but it was not that much after all when compared to that caused by the continuous use of incendiary bombs dropped from B-29s" (Pak Kijun 1950: 148).

Elsewhere in the Korean press of the day, early introductions to atomic weapons popularized apocalyptic scenarios that were resolved by equally encompassing depictions of global emancipation. Optimistic voices suggested that the attacks on Hiroshima and Nagasaki had set the conditions for humanity to advance into a stage of history that was free of conflict itself. For instance, the southern sector was scene to the publication of a sizeable body of literature on the post-1945 world peace and world government movements. These included works by activists and public intellectuals like Bertrand Russell, Norman Cousins, and Albert Einstein. At their core, these works maintained that the threat of nuclear weapons would mandate the emergence of world federalism (Russell 1949; Cousins 1950; Russell 1957; Smith 1965). Similar assertions were circulated in the South through the 1946 translation of Oppenheimer and Masters's famed work, *One World or None*. In that work, appeals for the immediate establishment of a global polity posited the bombings of Hiroshima and Nagasaki as proof of the decisive moment confronting humanity. In this role, the cities took on a utility as plausible

illustrations of the future. The destruction of the attacks, the authors hoped, would awaken readers to what was, ultimately, a false choice between total war or total peace.

Translations of two of the most canonical records of the bombings furthered this view. In 1949, Korean-language versions of both John Hersey's *Hiroshima* and of Nagai Takashi's *The Bells of Nagasaki* were published in Seoul. Circumventing the censorship that framed the works' publication in occupied Japan, the translations marked a particular intersection of two of the most widely circulated American and Japanese narratives of the bombings (Braw 1991). Together, Hersey and Nagai posited depictions of the attacks as a form of historical, even sacramental, sacrifice for an emancipated future. As comparative studies of the texts have shown, overt references to Christian theology as well as narrative structures that mimic biblical motifs furthered a transcendental understanding of the attacks (Yuko 2012). In these works, the story of the bombings were depoliticized events, akin to a force of nature. Instead of the result of specific systems and agents, the bombings were cast as encounters with the sublime (Nye 1996). Of the two, *The Bells of Nagasaki* was most explicit in this regard. In the work, Nagai suggests that the destruction of the city, with its comparatively large population of Christians, was a particularly suitable form of recompense for the past violence of the war; a national sacrifice offered in exchange for a future of world peace (Diehl 2018; Shibata 2012; McClelland 2019; Otsuki 2016). This channeling of the transcendental was consistent with the postwar fetishization of the cities as a signifier of both nationalist victimhood and of a universal yearning for global peace (Yoneyama 1999; Igarashi 2000; Lee 2018). In the case of these two texts' postwar translations into Korean, the attacks appear as depoliticized accounts of sacrifice, taken in as part of a redemptive down payment on a tranquil tomorrow.

Contemporaneous impulses in North Korea set out similarly utopic outcomes. In the years immediately after the bombings, Soviet-led peace campaigns attempted to channel critiques of nuclear weapons into a politics of anti-capitalism and anti-imperialism (Koo 2014). Set against the backdrop of the Soviet Union's own atomic weapons program, these initiatives expressed the postwar conviction that only the socialist sphere was capable of harnessing the developmentalist potential of atomic technology (Dobson 2016). Readers in the northern sector were extensively primed for these arguments through coverage of events like the Paris World Peace Conference of 1949. Once more, the heightened violence of the domestic context, paired with rumors of American-controlled uranium mines in the southern sector, further buttressed the suggestion that the atomic-armed American presence on the peninsula was also an imperial one. Socialist opposition, the argument held, had the capacity to overcome this intervention and produce an atomic future free from militarism and colonial oppression (Kim Ŭ. 1949; C*hayŏn'gwahak* 1949; *T'aep'ung* 1949; *Kwahaksegye* 1950).

So framed, the bombings retained their symbolic potency as a marker of the liberatory character of socialist science but only insofar as they illustrated the reactionary nature of the American system. Stock depictions of science under capitalism in the North suggested that the progressive and utilitarian nature of research was restrained by the system's monopolistic and militaristic orientation (Kim M. 1949). While the Americans may have been the first to develop an atomic arsenal, market forces precluded them from accessing the developmentalist potential of the technology. These assertions were not simply by-products of the Soviet occupation of North Korea. An integrated account of historical progress of science through socialism had circulated in the peninsula since the 1920s (Bukharin 1927; Deborin 1927;**{AU: Please see**

query about this reference in your works cited list.} Yi Hua 1933). The post-1945 years were simply witness to a revival and expansion of this critique into the field of atomic technology. For instance, the discussion of American science in *The Neanderthals of the Atomic Age*, a 1947 publication by the propaganda and agitation department of the North Korean Worker's Party, depicted an American research field systemically frustrated by the impulses and interests of both the market and a backward population (*Wŏnja sidae ŭi neandat'arin* 1947). The work presents the Americans as driven by the desire to develop weapons but reluctant to explore atomic technology in any other way. In order to account for this, the author stressed institutional pressures from industries like coal, steel, insurance, and finance on atomic science in market-driven states. Concurrently, the pamphlet suggested that the American people had grown hostile to technological change and its potentially negative effects on employment. "The modern Neanderthals," the pamphlet concluded, "are at all levels of society holed up in their caves. They have no objections to using the atomic bomb and other weapons of slaughter they have at hand for their profit. At the same time, they fear the use of the technology for peaceful ends. The rapid development of science and engineering fills them with dread" (13).

Counterintuitively, this argument maintained that the nation that had fueled the most advances in atomic science was also the most retrograde. However, for proponents of this view, the progressive potential of an atomic age was synonymous with the political orientation of a socialist model. According to ranked researchers in the North like the Japanese-trained physicist To Sangrok, only a socialist science could yield an atomic program for civil use (To 1949a). "Inevitably, the only strategy for monopolistic capital is to divert attention from the peaceful use of atomic power. Their only aim is to protect their profits" (To 1949b: 6). By contrast, the

continued development of atomic technology by the Soviet Union, To Sangrok maintained, would undermine this dynamic and set the stage for a new industrial revolution delineated by a socialist mode of research. While nominally critical of its violent application, this understanding of atomic technology still narrated the bombings as a marker of the progressive transition away from the capitalist epoch (O Y. 1949; *Kŭlloja* 1955). Indeed, the fact that the bombs were dropped at all was proof that a historical break with a market-driven past was fast approaching.

By situating the bombings of Hiroshima and Nagasaki as markers of emancipation, writers and translators in both North and South Korea projected a multifarious image of an atomic age that redeemed the violence at its starting point. These accounts could liken the atomic attacks to a form of sublime payment that would balance the scales of past debts or serve as a deposit on future, even revolutionary, gains. The closure delivered by these accounts came at a steep price. To sustain their accounts of liberation, writers frequently embrace forms of utilitarianism that were overtly prejudiced in their scope. Their justifications for the attacks often elevated an arbitrarily constituted set of concerns about the nation, science, and the future. This passively concealed the indiscriminate and illegal violence of the attacks and negated the subjective autonomy of the bomb victims. The violation of their individual sovereignty was left by the wayside by writers more intent on maintaining a progressive story of science, the nation, and of war itself.

Histories of the "Science War"

Post-1945 descriptions of the new atomic age in North and South Korea did not just frame the attacks by way of references to historical emancipation or revolutionary progress. Authors and translators from this time also accessed a particular form of scientism that connected the

development and deployment of atomic weapons to a universal plain of competitive research. Across a burgeoning Cold War divide, numerous writers maintained that the weapons bespoke a more decisive domain, a contest referred to as the "Science War." The term itself was not a post-1945 neologism. Throughout the 1930s, colonial-era popular science publications fixated on the relationship between the laboratory and military affairs, priming readers to associate technology with contention and conflict (Han and Yi 2018). This discursive trend was part of a larger culture of wartime mobilization that continued to shape science discourse in both Koreas as well as in Japan during the post-1945 period (Bronson 2016). However, the collapse of the Japanese Empire also facilitated shifts in discussions of science and warfare, converting the topic into a form of postcolonial critique. According to this reading, the former empire's defeat exposed the fictitious character of its claims to historical primacy. In these later Science War histories, the outcome of the Asia-Pacific War was not the result of strategic hubris or systemic failure but a rout in the contest of historical development. Tracing assertions that had gained traction in occupied Japan at this time, this move allowed some Korean writers to suggest that the former metropole, too, was now eligible for liberation, an unlikely result of the empire's dismemberment. However, such scientism also reiterated precarious assumptions about a sustained Euro-American superiority, now underpinned by a Cold War captivation with atomic weapons.

New translations on the Science War encouraged this conflation of research and conflict. This body of writing often imbricated the contours of Korea's entanglements within the American and Soviet empires. It also conveyed the continued legacy of colonial-era patterns of knowledge circulation (Glade 2013). Sourced from Japanese, American, and Soviet publications,

these works produced a particular mingling of voices that fused the victors and vanquished through a shared valorization of research. Two examples of this dynamic are Pak Kyŏngho's *The Secret Story of the Second World War: Conflict, Science, Strategy* (1948) and Chŏn Im's *The True Story of Science and the Defeat* (1950). These edited translations were not altogether uncritical of the role of research in the recent conflict. For instance, an entire section of Pak Kyŏngho's book is devoted to a discussion of the studies conducted by Axis scientists in the death camps (Pak Kyŏngho 1948: 137–80). However, these critiques also functioned as a foil in the normalization of the research that facilitated the Allies' own atrocities. The best example of this is Pak's account of the Manhattan Project and the bombing of Hiroshima. In two sequential chapters, clearly drawn from Anglo materials, the text narrates first the development of an atomic weapon and then its use as conjoined triumphs of Allied science. The first chapter focuses on the supposed race to complete a bomb before German researchers (Pak Kyŏngho 1948: 72–79). The second introduces the crew of the *Enola Gay* and follows their dialogue and actions as they conducted their attack (80–86). Together, the two chapters trace the story of the Science War from the research institute to the bomb run. The result is a bloodless account of victory where tens of thousands of noncombatant victims are concealed by the abstractions of the laboratory, the distant vantage of the bomber, the billowing haze of the explosion, and the celebratory laughter of the aircrew.

In contrast, the Science War as seen through loss is presented in Chŏn Im's *The True Story of Science and the Defeat*. The work is made up of a series of translated accounts of the war by Japanese authors. Fusing reportage with instances of the absurd and grotesque, the book captures a plurality of defeats by liberally traversing the dispersed registers of conflict. In one

chapter, there is an animated description of Japanese cabinet-level debates over surrender; in another, the story of a gunner on a convoy ship helplessly manning a fake cannon made of wood. The book included essays on kamikaze attacks, cannibalism, jungle fighting, and the bombing of Nagasaki. While the Science War was not a constant theme in every chapter, it was central to the essay that opened the text. In this introductory piece, Chŏn Im channeled the writing of Tomizuka Kiyoshi to express the exasperation that accompanied the end of the war. "Japan's unparalleled defeat! When one looks at the end result, the analogy between the 'atomic bomb and bamboo spear doesn't even suffice" (Chŏn 1950: 5–6).

The definitive feature In both Chŏn's and Kiyoshi's discussion of the Science War is the theme of temporal unevenness. Accounts of victory, like those presented in *The Secret Story of the Second World War*, channeled narratives of achievement in the laboratory and on the battlefield as outcomes of a developmentalist advantage. A similar premise drove accounts of loss. According to *The True Story of Science and the Defeat*, the outcome of the war for the empire was rooted in a temporal immaturity expressed materially, martially, and scientifically. In this context, the logic of uneven historical advancement accounted for the metropole's collapse in much the same way that it had justified its expansion decades earlier. North Korean publications of Soviet works shared this developmentalist logic in explaining the war's end. For instance, the 1947 translation of E. M. Zhukov's *The Destruction of Japanese Imperialism*, linked the ill-advised expansionism and eventual defeat of the empire to anachronisms in the Japanese economy and culture. Zhukov argued that the Japanese agrarian system retained determinative structures of feudal exploitation. The collective precarity that these anachronisms

produced circulated through the rest of the economy, synthesizing a version of capitalism that, the author maintained, was particularly expansionistic (Zhukov 1947: 4, 40–41).

Such narratives of the war permitted Marxist analysis and whiggish liberalism to sing in unison. This shared emphasis on historical underdevelopment allowed science writers and intellectuals in both Koreas to sustain a common understanding of the role of research in both the war and liberation. For instance, the famed Seoul-based chemist and science publicist, An Tonghyŏk was particularly drawn to the logic of the Science War. In a two-part series for *Modern Science* titled "The Atomic Bomb Explained," An presented the conflict as both science-centered and historically progressive. "The victory of the war was a victory of science. The world's scientists were brought together, and nothing spiritual or material was spared in their research. This was America's victory and the establishment of a new world" (A. D. H. 1946). Leading Korean Marxists similarly endorsed this view of competitive research. For instance, Yun Haengjung, a prominent theoretical economist at this time, similarly naturalized competitive research as simply a matter of fact. Writing for the first issue of the radical-leaning *Science for the Masses* in 1946, Yun reduced the Japanese defeat to its underdeveloped basis in research. "One look at this unprecedented conflict shows that it was a science war and that the allies' great victory was won on that front" (Yun 1946: 7). In the words of another contributor to a 1948 issue of the Seoul-based *Scientific Age,* these features were simply part of Japan's anachronistic character, a defect of time that the war had helped to resolve. "It's just like the Americans say, the outcome of Japan's defeat is actually their liberation from the oppression of feudalism and, for that reason, the burden of the war was actually a happy thing for the Japanese people" (O C. 1948: 7).

Channeled in this way, the Science War called into question the former metropole's previous claims to historical agency in relation to Korea. To a degree, it also challenged the diffusionist logic that situated modernity as empire's primary export. However, critiques of science under the Japanese at this time were also frequently paired with descriptions of backwardness rooted in ethnic character. These depictions of culture and language tended to conflate the historical position of the former metropole and former colony alike. For instance, the education activist Kim Mangyu suggested that regional character had restrained research in Japan and Korea both, arguing that: "Not having science is the misfortune of the eastern races (*tongyang minjok*) and so we in Korea are unfortunate" (Kim M. 1949: 35). Others pointed to the region's linguistic characteristics when describing the comparative weakness of the sciences in the former empire. Cautioning readers to reflect on the current state of the Korean language, the famed academic Yi Hŭisŭng argued that the comparative deficiencies of science under the Japanese was rooted in the defects of the empire's common tongue. "The meagre mind of the Japanese scientist finally resulted in their homeland descending into the pit of a brutal and unparalleled defeat. This must serve as an important lesson for us" (Yi Hŭisŭng 1946: 12). Yi claimed that the Japanese language expressed psychological and social traits that prevented its utility in research. Specifically, he argued that the scientific jargon was not sufficiently precise and that translated vocabulary was not effectively standardized. The same terms varied widely across subfields and the Sino characters selected in the process of translation were too obscure. With Japan serving as a warning, writers in Korea frequently took up the Chinese script as the common denominator in their accounts of the region's comparative disadvantage in the sciences (Yi K. 1946; Schmid 2002).

These assumptions over what was shared through language, culture, and geography suggested a surprising likeness between Korea and Japan. Defeat in the Science War had, by these measures, placed the constituent parts of the empire on an apparent equal plain of technoscientific inferiority. That the former colonizer was now viewed as eligible for liberation certainly upended the claims to racial and historical dominance that underpinned the Japanese Empire. What it did not do was provincialize Euro-America's or the Soviet Union's place in the advance guard of history. The two appeared as separate pinnacles on a common historical horizon. Indeed, as the possibilities of atomic technology became more widely discussed, the primacy of these new global metropoles was only further reified.

Surviving the Present

As Korean writers and translators explored the liberatory potentials of a postcolonial atomic age, the stories of repatriated bomb survivors fell by the wayside. Tens of thousands of Koreans were in Hiroshima and Nagasaki on the days of the attacks. They represented a vast cross-section of the peninsular population, an outcome of over three decades of migration between the colony and the metropole. Wartime mobilization had further ballooned these communities as colonial soldiers, drafted laborers, and migrant workers flooded the cities. Recent studies suggest that roughly seventy thousand Koreans were subject to the bombings. Of these, forty thousand were killed on the days of the attacks and in the weeks that followed. Out of a population of thirty thousand survivors, it is estimated that twenty-three thousand returned to Korea. Discrimination toward this population led many to remain silent about their experiences for decades. However, a coetaneous silencing was also imposed by the resounding nature of the progressive ends that so many Korean intellectuals linked to the atomic attacks. While many intellectuals discerned future

emancipations in the bombings, the lingering effects of radiation meant that, for the survivors, the Hiroshima and Nagasaki could never be relegated to the past. This section focused on how, for some of these individuals, the future ceased to be an open vista for developmentalist projections. Rather, it stood as a venue for the final realization of a mortal trajectory set in motion by the atomic attacks (Cazdyn 2012).

A rare exception to the post-1945 erasure of Korean accounts of the atomic attacks was "Hiroshima's Last Day" (Y-Saeng 1950). Published in the winter of 1950 by the popular Seoul-based monthly *New World*, the story was a biographical account of the Hiroshima bombing written under the pseudonym Student Y. The piece was a bricolage composition of memories of the bombing, interspersed with recent findings by researchers on the effects of radiation. The author mediates an empathetic encounter with the attacks, guiding the reader through a departure from the colonial binary in their consideration of the event. Once more, for Student Y, more important than the forms of liberation and rupture commonly ascribed to the bombings was the event's continued salience in the present. Radiation exposure introduced a distinct concern over the latent impacts of the bombings that haunted the postcolonial era. For survivors like Student Y, the attacks filled the future with an unseen specter that, like the weapons themselves, could strike without warning. The end of the war, and of the old empire, was now infused with even greater uncertainty over what was to come next. Student Y conveyed these themes by purposefully channeling the same scientific authority that informed contemporaneous accounts of the bombings as liberatory. However, in their account scientific knowledge was no longer an independent force of historical progress, it was simply a secular tool by which to render visible the effects of radiation.

"Hiroshima's Last Day" opens with the author at home on the morning of the detonation. Recently released from the hospital, Student Y was resting under a mosquito net when he was interrupted by a sudden flash. From here the author's narrative flows through the common markers that tie together accounts of that day: the violent concussion of the blast, the minutiae of a domestic setting thrown into disarray, the search for family members, and the gradual realization of the attack's scope. Emerging from his ruined home, Student Y presents the reader with another tableau as across the city fires began to flare while canals and streets filled with a growing body of the fearfully burnt, wounded, and dead. The author comments on the confusion of the survivors, the muted shock that fell over neighbors, the image of a platoon of soldiers caught shirtless by the flash, and rumors that circulated into the evening (Y-Saeng 1950: 172–74).

Throughout the text, the author continuously returns to scenes of the bombing's aftermath. Spatially, Student Y first experiences the blast, then leaves the city to seek refuge, and then returns months later to witness what was left. At each stage of this movement, the reader is confronted with Student Y's encounters with death. The text is filled with descriptions of the grotesquely killed and wounded that interweave with depictions of the living. The author repeatedly shows the survivors and the ruined city through menacing, dehumanized forms of language. Narrating the night after the bombing, Student Y likened himself and other survivors to goblins (*tokkaebi*) with bloodied and swollen faces, gathered together as fires engulfed the city and rained down fist-sized embers (Y-Saeng 1950: 175). Later, when leaving Hiroshima, Student Y opens his description of the city's environs by pointing to the blackened and bony trees, windswept branches swaying a danse macabre (*chugŏm ŭi mudo*) (Y-Saeng 1950: 178). Finally,

on his later return to the city, the author again underlines the alienated appearance of the survivors. Moving through Hiroshima on streetcar and bus, Student Y described the sight of the maimed, wounded, and keloid-marked bomb victims. Young women with faces pulled by scars, appearing as though they were wearing goblin masks (Y-Saeng 1950: 181).

This pattern of the dehumanized survivor carries across the most pronounced transition in Student Y's account. Midway through the article, the author notably alters the tone of his narrative and begins to borrow from the language of freshly produced scientific studies on the bombings. The shift in the narrative is predicated by the arrival of experts to Hiroshima and the authority and anxiety that Student Y connects to their presence. These researchers, who included in their number Pak Ch'ŏlchae, Ree T'aegyu, and Ri Sŭnggi, traveled to Hiroshima both to survey the bombings and also to study the new disease connected to the blast. In a poignant intersection of timing, Student Y's account brings together the end of the war, the appearance of the scientist, and the arrival of the spectra of radiation sickness and death. "University professors from Tokyo and Kyushu, along with chemists, physicists, doctors and newspaper reporters all gathered in Hiroshima and started to produce interim reports. It was around the time of Japan's surrender and the end of that tedious war that until then healthy people started to die miserable deaths from radiation poisoning" (Y-Saeng 1950: 176).**{AU: Quotes of 80 words or fewer are run into the text.}** Accessing the language of these reports allowed Student Y to assert descriptive order onto his memories of suddenly unrecognizable surroundings. Setting his own experiences aside, the author assumes an aerial view of the city (Yoneyama 1999). Citing recently published findings by scientists like Tsuzuki Masao, Student Y spatially outlined a bull's-eye crossed at the bomb's epicenter, tracing the effects of the blast according to a gradually

decreasing proximity. In this section, the author details the differences between the Hiroshima and Nagasaki bombs, introduces cases of radiation sickness and flash burns, and discusses the effects and extent of the blast and fallout.

Student Y's shift away from a biographical narrative form is abrupt, but this turn to academic authority is no less personal. Citing scientific research allowed the author to broach the techno fetishism that framed writing on the subject without fully assuming the same scientistic assumptions. This was central to the author, given that, for Student Y, writing about radiation was writing about the physical self. Radiation remained an unknown source of harm to the survivors and the uncertainty connected to it could be all consuming (Chang 2017; Lindeem 2008). In Student Y's account, the possibility of death through exposure takes on a subjectivity in its own right. The author's first encounter with radiation poisoning occurred while outside of Hiroshima. Staying with family in a nearby village, the malady appeared in the narrative as an apparition. "Starting around August 28th, a strange dead body started to visit this village. At every home there were people afflicted with burns and wounds. Yet, after coming to the village, even those healthy people fortunate not to have been harmed in the bombing randomly began to lose their hair, bleed from within, grow pale, and die" (Y-Saeng 1950: 176). A tone of personal frustration clearly emerges when the author begins to discuss the limited response to this new specter. "The Japanese government does not have any policies in place for the victims. The people in charge don't think the bombing has anything to do with them. They just see it as an unresolvable outcome of the war" (Y-Saeng 1950: 180). Likewise, many common citizens had no interest in the bomb victims. Student Y explained that even the people of Hiroshima, terrified by their exposure, did not want to turn to science to bring light to the subject. In an affected tone, the

author expressed the nature of the fear that accompanied his uncertain existence. For the survivors, even more terrifying than the bombing is what comes next. “By a fluke we avoided death on that day, but now we could die at any time” (Y-Saeng 1950: 180).

To Student Y, like many victims of the attacks, the bombings could not be contained in a historical past, nor was their trauma limited to the graphic scenes of death that dominated memories of the attacks’ immediate aftermath. They were a lingering presence that was poised to visit again. This feature of “Hiroshima’s Last Day” is one of the most striking contrasts with liberatory narratives that convey resolution by way of reference to the future. For the survivors, the attacks were not a violent opening to a liberated future; they introduced a foreboding that had become a new constant. The post-bombing world that the survivors wandered through was also a postcolonial one; and it is telling how little this registered in Student Y’s article. In the story, news of the empire’s surrender was only employed as a marker of the first deaths caused by radiation sickness. Similarly, the author’s subalternity within the Japanese Empire is almost an afterthought. The text rarely distinguished the nationality of the many subjects described in the account; and when the question of the nation does arise, it was channeled through Student Y’s sense of concern for his former home. “What would have happened if Japan had not surrendered! From city to city, atomic bombs would have continually been dropped. Tokyo, Osaka, Kyoto, Kōbe . . . in this way most lives would be lost to the atomic bomb disease. Only an extremely small number of invalids would remain. Through this kind of process of fate, could these survivors really bring the nation back to life?” (Y-Saeng 1950: 180). This apprehension illustrates how post-bombing anxieties over the effects of radiation had the capacity to bypass recently forged national boundaries and postcolonial ruptures. What is unclear was the nature of

this transcendence. The trauma of the attacks and the character of exposure prevented a clear demarcation between the event and its aftermath. The bombings may have marked a departure from the colonial era; but for many Korean victims, exposure was as much present in the future as it was confined to the past. Once more, the indiscriminate and indecipherable reach of radiation blurred the lines between solidarity and interpellation. One's subjection to the bombing and membership in the population of survivors was certainly not voluntary. Nor, for that matter, was one's place in empire or its aftermath. With this in mind, the empathy that drives accounts of bomb survivors like the one written by Student Y suggests an active recognition of likeness through exposure that could not be uprooted by the end of the colonial relationship or by revolutionary forecasts of a new atomic age.

Conclusion

Forecasts of a future made possible by atomic energy presented a potent mode of historical narration to the postcolonial states of the Korean peninsula. In both the North and the South, a common story of an emancipated tomorrow was charted through accounts of the recent past. Here decolonization and the collapse of the Japanese Empire came together with scientistic and developmentalist assumptions connected to the atomic attacks. Writers and translators who approached the bombings through the prism of the Science War saw in the recent conflagrations the unambiguous conclusion of a competitive test of research. Now with the war over, the former metropole and colony met on a plane of comparative anachronism upon which developmental visions could be fulfilled.

An analogous logic was at work in accounts of the bombings as emancipatory. These discussions sought to resolve the moral and ethical violations of the attacks through references to

a perfected tomorrow. Intellectuals writing in this vein pointed to the restoration of the nation, the conclusion of the war, or the promise of a post-capitalist world to come. While the outcomes could differ, in each of these cases an atomic means were redeemed through progressive postcolonial ends. These early versions of atomic utopianism stressed how science and technology would alter the material conditions of life in ways indicative of the newly christened epoch. Often such depictions would simply blend markers of scientific modernism with atomic power. Cars, rockets, trains, and aircraft were all suddenly elevated through the inclusion of propulsion systems based on minute portions of fissile material. Through the application of the atom, incurable diseases would be healed, mountains moved, weather systems altered, and snowcapped poles melted. In the early Cold War Koreas, atomic scientism was a straightforward return on modernity's pledges, made all the more promising by the concurrence of the post-liberation moment. Suddenly, the fantastic potentials of a nationalized futurism, conveyed through a revived vernacular press, were far less fanciful.

These tomorrows were not the marginal musings of public intellectuals, nor were they simply instances of popular science sensationalism. Some of the most credentialed members of Korea's divided scientific communities advertised liberation through the atom. Confronted by the disruptions of decolonization and the gradual onset of civil war, the interwar years of 1945 to 1950 saw many Korean scientists turn their energies to publishing and translation. In doing so, they lent their intellectual authority to programs of national reconstruction and revolution that sought to mobilize science for the future. By the late 1950s, many of these same individuals were assuming administrative roles in elite institutions of teaching and research. While the forms of

atomic utopianism envisioned by these intellectuals never came to fruition, the basis for Korean national nuclear programs certainly did (Koh 1992; Kang H. 2010).

Isolated from these accounts of the atomic age were the thousands of Korean nationals who had witnessed its commencement firsthand. Trapped in a foreboding over what was to come next, the accounts of the survivors of Hiroshima and Nagasaki failed to coincide with the forward-looking optimism and developmental hopes common in the intellectual worlds of post-1945 North and South Korea. Experiencing a foreboding that was felt on the physical level, their uncertainty over the effects of exposure paired with knowledge of the arbitrary timing of the atomic bomb disease. This combination resulted in a view of the future haunted by the specter of the past. As seen in the account by Student Y, this dynamic also exerted an elision of the present. Korean survivors' experience with atomic technology solicited uncertainty over common assumptions relating technology, society, and the plausibility of a progressive future. For these individuals, the end of Japanese colonization was entangled with the apprehension of death through radiation exposure. Once more, coerced repatriation to a peninsula meant that few could sympathize with an experience specifically related to their time in the former metropole. The erasure of this group from Korean accounts of the atomic bombings was not just an instance of silencing, it also stands as a lost opportunity. The particular subject position of the postcolonial atomic bomb survivor offered meaningful avenues by which to engage with the critiques of scientism, developmentalism, and the logic of geopolitical contestation. However, in the new Cold War contests over the future, this opening was concealed.

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