1. Introduction

Both WWII and the subsequent Cold War changed urban and rural landscapes around the world. The changes included the construction of walls and other types of defensive architecture such as nuclear fallout shelters, many of which were built in countries including the US, the Soviet Union, and Germany. Although the threat of nuclear war was lessened by political changes in the 1990s, it continued in a certain sense to loom in Korea, where the end of the Korean War of 1950–53 was never actually declared, the fighting officially ending in a cease-fire. In South Korea, bunkers and underground shelter spaces were constructed to be used in the case of an airstrike; their exact locations and sizes were not disclosed to the general public. While some of the bunkers were accidentally discovered during the construction of urban infrastructural projects, some have been reserved for military use, off-limits to civilians. Following the end of the Cold War (symbolized elsewhere by the fall of the Berlin Wall and the disintegration of the Soviet Union), many bunkers were converted into new uses.

Controversy has emerged surrounding the adaptive reuse of these spaces, and it has partly focused on the question of how to deal with traumatic and difficult memories associated with wartime. Some (e.g., Morgan 2017) have praised the repurposing of bunkers as a sign of a hopeful future, while others (e.g., Stromberg, 2106) have expressed worries about the trivialization of traumatic histories. Most studies of bunkers have been carried out in a European or North American context, where the threat of nuclear war may have been real enough, before the end of Communism in Europe in 1989–91, but, except in Berlin, the potential adversary posing the imminent threat was not so close. There, the matter has become rather less complicated, as a result of the political unraveling that resulted in the fall of Berlin Wall and the disintegration of the Soviet Union. In the context of the still-divided Korean peninsula, where the Cold War was fought as a “hot” one, addressing memories of the Korean War remains something of a challenge, and the bunkers are reminders of such challenge. But repurposing a bunker does not necessarily mean that the history that they are bound up with is discarded or forgotten, for the bunkers carry a symbolic weight involving the idea of seeking protection against attack. How can these spaces representing the violence of war and, in this case, the ideological animosity underlying it be incorporated into the contemporary urban fabric, while preserving the memories relating to the particular political moment to which they refer? If this can be done, what are the possible design strategies that can enable the successfully carrying out of this task?

Today, despite the continuing possibility, at least theoretically, of renewed armed conflict, the threat of nuclear war today has been diluted, given that their actual use is discouraged by the principle of mutually assured destruction. Yet, rather than evaluating the effectiveness of bunkers in times of war, which is outside the scope of this research, this paper analyzes bunker as a symbolic space where different spatial
meanings are embedded. At the same time, the continued threat of war on the Korean peninsula makes these bunkers especially poignant indices of conflict-related memories. This paper aims to contribute to the larger academic discussion of how to preserve difficult memories while repurposing historical forms, by analyzing the Korean context in terms of both wartime and post-war mentalities.

This paper examines three bunkers in Seoul – the Yeouido, Kyeongheegung, and Daebangdong bunkers, and discusses their significance in relation to subway stations and other underground spaces designated as potential shelters in the case of nuclear war. Now accessible to anyone, looking at these spaces can suggest ways of repurposing them in a time of peace when they are hopefully no longer needed for their original purpose. Although there more bunkers in Seoul, they are off-limits to civilians, and information regarding their exact locations and entrances is classified. Thus, this study is limited to sites that are open to the public (Figure 1). Also, I have limited the focus to bunkers that have been in disuse for a long time, abandoned and deteriorating, in order to contrast them to those sites of everyday use that are indicated as able to be used as underground shelters during an emergency. Although these underground facilities, which include subway stations, are primarily nodes of transportation that millions of Seoul residents use daily, they acquire a new meaning when examined as potentially protective sites for use during catastrophic events. I analyze these bunkers and undergrounds spaces as spaces of exception, and illustrate how these spaces, when viewed in light of a different possible use, provide insight into urban organization and spatial practices in Seoul. I will argue that bunkers can be incorporated into uses of everyday life through small-scale design interventions that encourage resident participation, and that this incorporation need not entail a loss of memory or a trivialization of history.

2. Structure and method

This paper is structured as follows. First, I examine arguments regarding the conversion and reuse of historically problematic sites, including bunkers. Different positions regarding the conversion of bunkers and other sites of “difficult heritage” are discussed. Then, I compare bunkers in the West (such as the US) with those in South Korea, showing the distinctive character of bunkers in South Korea as influenced by its political economy. Although the technology and the rationale involved in the construction of bunkers are similar, the psychological landscape differs among cultural contexts. I consider two different categories of bunkers. First, there are bunkers that have been in disuse for a long time. These are forgotten spaces that were designed to function as underground bunkers and have not been used for a long time, until recently, when they were re-discovered. This first type includes the three sites aforementioned. The second type is bunker-like spaces that people encounter every day, such as subway stations and underground tunnels.

Figure 1. Bunkers in Seoul with known locations.
Although the primary purpose of these spaces is not as shelters, their potential use as emergency shelters has been spelled out in policy documents, and this provides a reason for considering them as bunkers. Differentiating these two types of bunker is important, because they are radically different in terms of what they signify to residents. Everyday bunkers do not instill a sense of fear or security since they are used for different purposes during peaceful times. However, those bunkers that have fallen into disuse make the continuation of military conflict apparent to visitors. Thus, while both are bunkers that can be used as shelters during military violence, they occupy very different positions in the mental landscape of South Koreans, thus justifying the distinction. Also, it is important to examine them together, because the comparison encourages different ways of envisaging disused bunkers. Potential bunkers that are used for a very different purpose can shed light on how to creatively adapt bunkers in disuse for more meaningful spatial purposes.

This paper makes use of several methods. First, it uses archival research to understand the construction processes involved in making the bunkers (both the everyday and the exceptional bunkers). Studies of the “consumption” or use of bunkers in Korea are almost non-existent. This paper relies on both media analysis and the virtual ethnographic method to analyze the perception of the bunkers in South Korean context. Virtual ethnography refers to conducting ethnographic research online, by relying on textual information in online communities and portals. While this method is limited in the sense that it precludes non-textual cues such as facial expressions and body language, it is considered advantageous in terms of evaluating topics that people in general avoid during face-to-face interactions for reasons such as possible stigmatization, social backlash, or simply being uncomfortable subject (Domínguez et al. 2007). Since bunkers are strongly associated with war and chance of survival, the discussions around bunkers can potentially generate uncomfortable feeling, partly justifying the use of this method. For the virtual ethnography, I chose three military-related hobbyist websites and searched for bunker-related posts. The websites were chosen based on the number of their members, their accessibility, and their reputation as relatively “well-known” among military hobbyists. The sites chosen are the DC Inside Military Gallery, Naver Military and Military Weapons Café, and Bemil Yu Yong Won’s Gunsasaegae [Military Worlds]. I placed a post asking if one could survive in the underground subway space after a nuclear blast, assuming that the person has enough food and water. Then I waited for members to reply. This process was repeated three times at two-week intervals. The number of total replies was 71 (22 from DC inside gallery, 19 from Naver Café, and 30 from Bemil Yu Yong Won’s Gunsasaegae). Although most members are hobbyists rather than experts, something of the popular discourse about bunkers and the ambivalent feeling toward bunkers could be glimpsed from posts on these sites.

3. Issues surrounding bunkers and war-related sites

Academic discourse about bunkers varies, perhaps as much as the discourse on modernist architecture. This is due to the nature of bunkers originating from a military purpose, which makes them a “difficult heritage” (MacDonald 2008) or a “dissonant heritage” (Tunbridge and Ashworth 1996). In other words, they are part of a past that is filled with violence and trauma. Such trauma may explain the relative reticence about the bunker as an academic subject until very recently. Yet, Boyd and Linehan (2018) have argued that a bunker is “as emblematic an architectural space of modernity as … the machine-inspired domestic environments advocated by Le Corbusier” (243). Boyd and Linehan describe how bunkers, designed for sheer survival, yet making a very efficient use of resources, represent “simultaneously both the apotheosis and antithesis of modernity” (253). The bunker’s dual role as both a womb-like protective space and a site of death has been noted by scholars such as Beck (2011) and Duffield (2011). Defined as indicating “environmental terror” (Duffield 2011), the presence of bunkers is essentially ambivalent, as it reminds onlookers of both an impending annihilation, and its necessitating a possible safe place where one could survive it. Some do not regard the popularity of bunkers or the underground mentality favorably. For instance, Foster (2016) examined the marketing of doomsday scenarios in popular media, or what she terms the “apocotainment” (apocalypse + entertainment) business, propagating racial and gender stereotypes. She argues that apocotainment is becoming more mainstream, whereas such cultural consumption was associated mainly with “rednecks” in the past. Benton-Short (2007) has argued that the over-militarization of urban spaces, as in the case of National Mall in Washington DC after 9/11, may discourage the use of public space by activist movements, as the issue of security takes precedence over democratic representations of different political voices.

Yet the traumatic past and/or insecurities invoked by bunkers can also become a source of inspiration and creativity for some. Diane Morgan (2017) has noted how converted bunkers such as The Der Kegel Bunker in Berlin, have become playgrounds where a community can share certain activities. She further argues that “even commercialization of bunkers as souvenirs could also be a way of putting to work the negativity of the past with the hope of gaining
something more positive for the future." (1351). Strömberg (2013) discussed the possibility of “funky bunkers,” those bunkers turned into radically new spaces such as design hotels and stages for performances. Yet there is a limit to the degree of recontextualization, as the mental distance from the cold war varies among individuals. Pointing out the provocative practice of some people role-playing as repressive KGB officers in a former Soviet bunker in Lithuania, Stromberg admits that the possibility of “destructive creativity” also exists where profit-making activities can render trivial memories of war. Strömberg (2013) have observed that the “radical reuse of buildings as makeovers and promiscuous re-appropriations might physically damage or trivialize the cultural heritage to the point it can lose its context” (79). Stromberg notes that the reenactment of Soviet repression in former bunkers (as part of a show that includes dinner) is marketed to military hobbyists, like dark tourism. Carr (2010) has noted that the lack of representational balance in German bunkers on the British Channel Islands has caused controversy. He observes that whereas the German experience and military equipment are highlighted in order to grab tourist attention, the experiences of the forced workers who constructed the bunkers are rarely depicted.

Unlike bunkers in the US or Europe whose location is well-known, a fact that may provide a certain sense of security, the locations of nuclear shelters in South Korea are unknown, despite the officially ongoing character of the Korean War (again, it ended with a technical cease-fire, and so theoretically continues). Privately built bunkers and shelters are virtually nonexistent, while those bunkers built by the state or local government are reserved for military and official use. While the bunkers in the US represent what has been called an “architecture of paranoia” (Boyd and Linehan 2018) or “a utopian vision of invulnerable America” (Mascio 2009), the bunkers in South Korea have occupied a less conspicuous space in the mental landscape of most South Koreans. Even during the 1960s and 1970s, when tensions with North Korea were at their height, bunkers were rarely discussed in South Korean policy documents or popular media. Unlike in the US, where popular magazines have analyzed life underground and contemplated possible nuclear attacks from a distance, which arguably made it possible for them to be romanticized to some degree, the memories of war in South Korea were too real for bunkers to be appreciated thusly as safe havens. Practical difficulties also prevented even the contemplation of building a household bunker. Whereas the white, middle-class, and suburban lifestyle in the US made the idea of a family bunker a possibility for some enthusiasts to consider as actually making practical sense, most South Koreans live in either urban or rural environments. Building a small bunker for a family is impractical in an urban area, while most families in rural towns have lacked the skill and resources to build one were they to so desire. At the same time, the large-scale nuclear bunkers are rarely discussed, as the public has no access to them. Thus, the inability to contemplate the chances of survival by constructing one’s own bunker have contributed to the absence of public discussion about a life underground, or a “bunker society.”

The bunkers in South Korea are forgotten places, both literally and symbolically. Yet, they do exist. Underground spaces that could be used for evacuation are everywhere in Seoul, including in subway stations. Yet, their possible alternative use as shelters is largely absent from the minds of residents. Contrary to the assertion of King (2018, 130) that subway stations “remind the commuters of the dual role of the subway as nuclear shelter,” most South Koreans are aware that the subway station and underground spaces encountered daily are vulnerable to nuclear attacks, although they might provide a temporary shelter from conventional bombs or natural disasters. The dismal prospects of using bunker-like spaces for survival in the event of a nuclear war is supported by research results showing that most stations could not provide adequate shelter in case of a nuclear attack (Kim 2018).

4. Bunkers in disuse

In contrast to everyday underground spaces that are used primarily as transportation nodes or basements, many bunkers have not been used for a long time, although their presence may have been known to at least a few individuals. The bunkers with known locations were in disuse for a long time due either to a lack of funds (either to repair them or assess their safety level) or a lack of consensus about what to do with them. Others were discovered accidently, after most people involved in their use failed to mention their existence to others. Even the “known” bunkers are known only to a relatively small group of experts or special personnel, as their access is controlled due to safety concerns.

The Yeouido Bunker is located underneath the bus transfer center in Yeouido, a newly developed urban area around the National Assembly Building. It was discovered accidentally during the construction of a bus transfer center in 2005. The city government could not find any records of this site, and opened the space to the public after doing some safety checks and maintenance work. The size of the bunker is approximately 600 square meters, in addition to which there is a separate room equipped with shower and toilet facilities. Based on a comparison of aerial photographs, the city government has surmised that it was constructed around 1976–77 (Eum 2015). The popular media conjectured that it was intended for
use in evacuating important government personnel in the case of a North Korean military attack (Eum 2015).

In 2013, it was designated a Seoul Future Heritage site, and after being remodeled as an exhibition space, the bunker reopened to the public with the new name “SeMa [Seoul Museum of Art] Bunker.” The Future Heritage project includes artefacts from the recent past that are not designated as Cultural Heritage sites, but are considered to have the potential to become such in the next one hundred years. After extensive retrofitting and repair work, the bunker space was converted to an art museum (Figure 2). It’s big hall is being used for temporary exhibitions, and the auxiliary room (where a sofa and a toilet facility were found) houses a permanent exhibition on the bunker’s history. The auxiliary room, which had been intended as a space for VIPs, was restored with the original sofa and toilet (Figure 3). According to a journal article, the museum’s first special theme project, titled “Yeouido Modernity,” drew about 1,000 visitors in the days immediately following its opening, and has drawn about 500 visitors on average thereafter (Jeon 2017).

Although it is used as an art gallery with changing exhibitions, there is no mistaking the original context of the space, which reflects its construction in a context of existential terror. Once a visitor enters the bunker, he is surrounded by the damp air of the subterranean space, and despite the best efforts having been made (with the help of many mechanical devices) to keep moisture out, a part of the floor in the permanent exhibition contains a small puddle. The bunker is unlike a typical basement floor in a larger building in not being connected to other spaces. Along with the darker interior, the smell of the underground and a damp feeling mark this as a place that hides a more sinister past. Unlike in bunkers with prominent entrances or other physical markers, the entrance to the Yeouido Bunker is almost invisible, with the glass box of its entrance not very different from typical subway entrance elevators. It’s very hidden location, along with the fortress of office buildings nearby, make this bunker seem surreal. The presence of this bunker cannot be easily detected, even with the glass door marker, as one hardly imagines an underground space in the center of Yeouido, where a forest of banks and hotel towers dominates the skyline. Like the DMZ (demilitarized zone), it has an eerily otherworldly character. The Yeouido Bunker is a chilling reminder that the busy urban lives that residents of Seoul take for granted can be reduced to a dark space of terror, if not to total annihilation.

Even those bunkers with a relatively long history, such as the bunker near Gyeonghee Palace, exude a sense of otherworldliness, even though they may seem less absurd than the Yeouido Bunker. The bunker

Figure 2. Floor plan of the Yeouido Bunker (left), with the exhibition hall (right), in the collection of the Seoul Museum of Art (SEMA) inside the bunker (Source: Author).

Figure 3. The History Gallery contains a permanent exhibition showing the sofas (left) and toilet (right) discovered at the time (Source: Author).
near Gyeonghee Palace was built in 1944 during the Japanese colonial occupation (1910–45), for use in case of an air strike by the allied forces (Figure 4). Gyeonghee Palace was demolished by the Japanese Imperial government, and a junior high school for Japanese nationals was built on the site. Thus, the bunker was probably intended for the protection of Japanese students and other civilians living nearby.

Although this bunker predates the first use of nuclear weapons, the massive wall and the extensive underground interior space suggest that this bunker was designed to withstand a significant level of air attack. The plan of the bunker is roughly in the shape of a T, with six ground level rooms. As one goes deeper into the space, a stair leads the visitor down to the underground chambers, which are connected to each other by a single corridor. The presence of multiple rooms and a toilet facility suggests that this bunker is intended to house people for a long duration, rather than serving as a temporary evacuation shelter for a few hours. Visitors with military expertise have noted that the presence of supporting structure for an electric generator demonstrates that this bunker was intended to house its occupants for a prolonged stay (Jeong et al. 2016). People who attended Gyeongsong Junior High School as students during the colonial period have noted that they were often mobilized to aid in the construction of the bunker. Choi Jun Hee, a student at the time, noted that it was the Communication Ministry of the colonial government that mobilized the students to finish the bunker’s construction (Kil 2005). Choi suggested that, as this bunker was located near the Communication Ministry, it may have been meant for use as a military headquarters with emergency communications. At the height of the Pacific War, students had to participate in frequent evacuation drills, as the Japanese colonial government prepared for an attack on the peninsula.

Unlike with the bunker at Yeouido, in the case of the bunker near Gyeonghee Palace, those who participated in building it were willing to share their memories. While the baby boomer generation and their descendants do not have memories of the war, older Koreans (those born in the 1930s and early 1940s) remember the militarization of civic spaces in the later years of the Japanese occupation. The Japanese colonial administration invested much effort in mobilizing and engaging Korean ethics in war preparation. Although some remained skeptical or even hostile to the brainwashing (or wondered, why would allied forces attack a colony instead of the mainland?), the constant lectures and drills they were subjected to as students made younger Koreans susceptible to doomsday scenarios. Many elderly Koreans recalled civilians being forced to labor, and students having to do so in lieu of educational activities and leisure (Jeong 2018; Noh 2016).

The Gyeongheegung bunker is currently open only periodically for selected tours, which have to be arranged in advance. The underground space has walls and a concrete vault that can be used for the projection of images. A video of Japanese war planes flying overhead was projected onto the vault, along with war propaganda (Figure 5), which heightened the sense of terror and anxiety associated with the construction of the bunker. Currently, the bunker is managed by the Seoul Museum of History, its intended use being for storage of cultural assets, although the space’s potential for use as an exhibition space is being explored.

The Seoul metropolitan government has taken a more ambitious approach with another bunker located in Seoul. The Daebangdong Bunker (Figure 6) is located in Noryangjin Park, in the southwest corner of Seoul. The park itself is near residential and educational facilities, with many local residents using the place for simple walks or for playing tennis. The hilly landscape leads to the top of Yongma Mountain, a small hill about 341 meters high. The bunker’s total floor area is about 1300 square meters, and consists of two stories. The date of its construction is unknown, as with Yeouido Bunker; it has been used as a storage facility since its discovery in 1997. After it had been in disuse for quite some time, the city government decided to convert this bunker into a cultural space for adolescents. In November 2019, the Seoul city government held a nomination-based competition in

![Figure 4. View of the entrance to the bunker near Gyeonghee Palace (Source: Author).](image-url)
which eight young architects (who were registered in Seoul as public architects) were invited to submit proposals. The winning proposal by the architect Jinman Jo utilized the bunker’s surface as an indoor rock-climbing facility as well as makerspace where youths can design and make new things (Figure 7). The construction is expected to be finished by June 2021. The park where the bunker is located is surrounded by six schools (three high schools, one junior high school, and two elementary schools) and residential complexes, making it a suitable place for a recreational facility for youths.

All the bunkers examined so far are being used passively, and this passive use as a storage or a small display space is partly due to environmental factors. With the exception of the Daebangdong bunker, minimal design interventions are planned to be carried out. Although several possibilities for reusing bunkers, including as exhibition spaces or for storage, are being explored, the SEMA and Gyeongheegung

Figure 5. The interior of the Gyeongheegung bunker being used as exhibition space with media wall. (Source: Author).

Figure 6. Daebangdong Bunker, with its tunnel-like entrance (left, photo by author) and interior showing the vault inside (right, courtesy of Daeyang Engineering).

Figure 7. Proposal showing the location of the bunker (inside red line, added by author), and perspective drawing of the proposal (Source: https://project.seoul.go.kr/, Courtesy of Seoul Metropolitan City).
bunkers are not very welcoming to visitors, due to the damp air and dark ambience. While such qualities may be appreciated as an appropriate way to recall cold war memories, maintaining such a facility on a long-term basis may be challenging, since the relatively cramped interior space of the bunkers limits the scale of exhibitions. Yet using them simply as storage facilities is too facile a solution. Reusing underground space is especially suitable in Korean geological conditions, as bedrock is well-distributed even in big cities (Chang 2016). In contrast to the marshland foundation of many coastal cities, most of the larger cities on the Korean peninsula the soil contains solid rock and so is safer to build on.

Examining potential bunkers that are currently being used for other functions provides valuable insight on how to reuse a disused bunker. Everyday bunkers that are normally used for non-emergency purposes tend not to evoke the same special feelings, although foreign visitors may sense something ominous in their designs (Jeffries 2010; King 2018). Some of the productive ways in which these “everyday bunkers” have been used illustrate how the functions of a shelter and creative activities can coexist in the same space. This paper now turns to examine the more mundane underground spaces that are generally used for purposes such as subway transfers and community gatherings.

5. Everyday bunkers

Seoul’s Metro stations, with multiple lines and many transfer points, are in deeply sunk spaces with concrete walls, and can theoretically function as shelters in times of emergency, including a military attack. Bunkers in South Korea have been divided into four levels of protection capacity. Most Seoul residents can access bunkers at Levels 2 through 4. There are only a few first-level nuclear bunkers. Most of the “everyday bunkers” are Metro stations, underground shopping malls, and underground parking spaces for large concrete buildings.

The standard floor plan and section of an underground shelter, prepared in 2018 by the Civil Defense Emergency Planning Director of Seoul, shows the general features of an underground shelter, based on a model whose exact location is not specified (Figure 8), apart from the fact that the facility is located underground and is equipped with blast door. According to a study, this state-supported shelter as a type accounts for only 0.04% of all underground shelters in South Korea. The same study revealed that civilian spaces such as Metro stations and underground parking structures, which make up the majority of the nation’s underground shelters, lack proper management and care when considered as shelters (Park 1998). Another news article supported this skepticism, noting that it is very difficult to seal the very bottom spaces near subway tracks although it is possible to seal the doors located on the first underground level. (Kim 2013). Thus, public confidence in the plans for possible use of such facilities is limited.

In addition to bunkers in subway stations, underground spaces legally designated as shelters for multi-family developments (such as apartment complexes) exist in many places, although they may not provide sufficient protection against nuclear explosions. Most are being used as storage spaces, additional parking spaces, or, sometimes, leisure facilities such as fitness centers. Although most are not distinguishable from underground spaces, they retain the vestiges of their origin as an evacuation space/shelter in several ways. The exact location of these everyday bunkers or shelters can be found using digital technology. The South Korean state developed an app titled Anjon Didimdol (meaning “Safety Steppingstone”), onto which safety related news and information can be continually uploaded and viewed.

For instance, the Ahyeon Metro Station has a shelter sign (a house icon with three gabled roofs) at its entrance (Figure 9). There is an indication that some spaces could be separated by fire doors, but there is no indication of a separate space for emergency shelter. Rather, it is the whole underground space that could be so used. Ambivalence and limited confidence in the use of subway station as shelters could be glimpsed from the data gathered through virtual ethnography. Online military hobbyist communities were divided on the question whether subway stations could function as a protective shelter against a nuclear attack. The response that received the highest number of recommendations by other members in Yu Yong Won’s Gunsasegae noted that since the subway space lacks a pressurizing system, hiding there would only postpone death rather than help one survive. Naver Military and Military Weapons Café members concurred, noting that it is unlikely that subway underground space could provide protection against radioactive dust, which can be as tiny as 10 microns in diameter or smaller. DC Inside Military Gallery members presented counter-arguments to this, saying that there were cases of survival of the atomic bombing in Hiroshima, although the survivors were near ground zero. Some claimed that it is safer to hide in any underground space, since getting to the designated shelters such as subway stations is riskier due to exposure to radioactive elements along the way. Even the reports prepared by the Korean Research Institute for National Strategy gave no conclusive answer, mainly reporting shortcomings of the existing subway as shelters such as lack of bathroom facilities and hermetic doors, although it may be possible to use some deeper level
Spaces as shelters (Korea Research Institute for National Strategy 2016). Such ambivalent perception of bunkers should be understood in context of unpredictability of nuclear scenarios.

Cases of adaptive reuse of under-used underground space suggest a way for disused bunkers and underutilized shelters to become a part of a lively urban community. While underground spaces are usually dark and damp, these are characteristics that can be used to advantage. Tunnel-like and underground spaces have been used in immersive media art. For instance, Bunker de Lumières in Jeju (Figure 10) has been successfully converted from an old bunker facility into an exhibition space for projected art images. Using bunkers for media art displays is an effective use, as they require minimal physical changes in the layout of the underground space. The case of Musistance (Figure 11), an underground music venue in Seoul, illustrates a possible way of reusing bunkers in more creative and interactive ways that benefit residents and artists in the community. Formerly an underground passageway across six lanes of traffic, the

Figure 8. Standard floor plan and section drawings for an underground shelter supported by the state (Source: Seoul Metropolitan City 2018, 53–54).

Figure 10. Bunker de Lumières, Jeju, a converted bunker facility into an exhibition space for projected art images.

Figure 11. Musistance, an underground music venue in Seoul, reusing bunkers in creative and interactive ways.
space was used by the Mapo Cultural Institute for a brief period before it was converted into practice rooms for musicians. This was a joint project carried by the Mapo District Office, the Ministry of Culture, Sports, and Tourism, and the Korea Music Development Corporation Aggregate. Since opening in December 2014, it has served as both a work studio and a social space for young musicians. Underground passageways are common in Seoul, where places with multi-lane automobile traffic and long intervals between crosswalks necessitate the use of an underground pedestrian tunnel.

The cases of Bunker de Lumière and Musistance show that bunkers can be remade into more usable spaces, with a more focused interior space. While using bunkers for storage or as simple exhibition space can be one option, such a strategy limits the adaptation of bunkers, since most bunkers in Seoul are small in scale and located far from one another. The successful conversion of some bunkers, such as Sammlung Boros in Berlin, into art galleries has been largely due to their
highly visible position within a city as well as their capacity to hold many art objects, along with, sometimes, a residential space on top. With a limited number of exhibited objects and high maintenance costs, small bunkers used as exhibition spaces present constant risks of closures or repairs. Rather than passively using a bunker space as a storage or small exhibition space, some more active adaptations better suit Seoul’s busy metropolitan environment. Bunkers’ histories need not be forgotten or trivialized. Small design interventions in both everyday and exceptional bunkers could make these forgotten spaces more memorable, without the danger of trivializing history or unnecessarily provoking existential terror. For instance, Krzyzanowska (2016) has shown that the installation of stolpersteine, or small metal plaques, on sidewalks can serve as memorials to Holocaust victims without trivializing their sufferings. Even in spaces through which one passes quickly can induce a different feeling when small interventions are introduced. While the Yeouido, Gyeongheegung, and Daebanding bunkers are located in busy areas of metropolitan Seoul, this does not mean that they cannot be integrated within a more familiar urban setting. The three bunkers in Seoul are located near the existing subway station, and they can be introduced to residents as sites of everyday experience if proper and careful design interventions are made.

6. Conclusion

Bunker spaces, although not much discussed in current architectural discourse in the post-Cold War era, continue to haunt the urban and rural landscapes of many countries. As of early 2020, bunkers of “preppers” have gained new media attention, as the media have reported some cases of rich people in the US purchasing bunkers and fleeing cities to escape the Covid-19 outbreak. While bunkers are usually far from the minds of most people, and are considered as remnants of the Cold War era, they have tendency to resurface in times of emergency. On the Korean peninsula, bunkers that have been discovered and made public by conversion to museums or other cultural functions have served as reminders of the conflict and violence of the Pacific and Korean Wars. The secrecy and anonymity of these spaces of anxiety have contributed to the lack of attention given to them. However, less conspicuous spaces of refuge remain, and serve as remnants of the peninsular cold war that continues to this day.

This study has examined the underground spaces, both the forgotten and everyday spaces that are the remnants of the Korean War, and which have been largely absent in the discussions of architectural and planning history. Bunker spaces around the world have become targets of adaptive reuse, particularly in Germany and the U.S. This paper has argued that the status of bunkers in South Korea is more ambiguous, as they are not merely remnants of the war, and even when reborn as spaces of adaptive reuse, they are reminders of a conflict that continues to exert influence in many aspects of the social and political spheres. Although this study is limited by the inaccessibility of those military bunkers currently still in use, it sheds some light on uses of bunkers at lower levels of security, by examining uses of selected bunkers in Seoul. They can be incorporated into uses in everyday life by small-scale design interventions that encourage resident participation, and this incorporation need not mean the loss of memory or the trivialization of history.

Some South Koreans are hopeful that a declaration at last of the end of the Korean War will usher in a new era of prosperity. Successful negotiations may render the bunker spaces, both known and unknown, obsolete, and thus also make their adaptive reuse an important project. In that case, how to remodel bunkers to make them useful without trivializing their history will become an important task for planners and architects. On the other hand, the bunkers may remain as they are, impractical though of psychological importance, if the diplomatic efforts go awry and military tension rises.

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