EXPLORING A UNIFIED KOREA

ACH 346_COMPETITION ELECTIVE by EMILY GUO

The demilitarized zone, or DMZ, between North and South Korea is a long standing symbol of the history of this peninsula, spanning 250 km coast to coast and 2 km on either side of the border. For over 60 years it has been a cause of great tension and and conflict for both sides and is the most heavily militarized border in the world with a barbed wire fenced path that runs along both sides. This competition asks us to envision the future of a unified Korea in which the Korean demilitarized zone is reconciled through a series of proposed observation platforms that responds to the history and look towards the future of this country in the aftermath of war.

"The DMZ is a land torn apart by the ravages of war, a conflict that occurred due to ideological clashes. As a land devoid of culture and civilization for the past sixty years, it is a site which must regain its closeness to humanity in preparation for a peaceful reunification."

- Kim Hyejung

The natural isolation of this area has created what author Bruce Sterling calls an 'involuntary park' thriving with wildlife that are "...reasserting themselves in areas of political and technological collapse. ... [Involuntary parks] are, for instance, very green, and probably full of wild animals. But the species mix is no longer natural. They are mostly fast-growing weeds, a cosmopolitan jungle of kudzu and bamboo, with, perhaps, many genetically altered species that can deal with seeping salt water. Drowned cities that cannot be demolished for scrap will vanish wholesale into the unnatural overgrowth" Although the DMZ is an example of an involuntary park, it does not quite exhibit the sci-fi dystopian feel as described by Sterling. However, it cannot be denied that political and social unrest has allowed the wildlife to reclaim the land for themselves creating a unique site to develop for the future with very stringent conditions.

The Korean demilitarized zone is recognized as one of the most well preserved areas in the world home to over 3,000 species of plants and animals, with at least 67 of the worlds most endangered animals including the red crowned crane, white naped crane, Asian black bear, amur leopard, and the Korean tiger. The zone owes its immense biodiversity to the geography of the land, as the zone crosses mountains, prairies, swamps, and lakes from coast to coast. Due to the dangers that the demilitarized zone poses in regards to landmines, the ability to completely reclaim the land back for human use is next to impossible. However, due to the rarity of such a preserved landscape, our proposed vision for the future of this area aims to preserve the majority of the zone as a wildlife refuge by maintaining the area as a national park. As seen in **Fig. 1**, there are key areas along the border that should be protected in terms of the environment, wildlife, culture, and water.



Fig. 1 - DMZ Areas of Protection⁴ Green - Environmental Red - Wildlife Yellow - Cultural Blue - Water

¹ CNB Media, "Space Prize for International Students of Architectural Design", *Space*, http://www.vmspace.com/eng/sub_archprize_2.asp

² Sterling, Bruce, "Viridian Note 00023: The World is Becoming Uninsurable, Part 3", http://www.viridiandesign.org/notes/1-25/Note%2000023.txt

³ National Geographic, *News*, "Pictures of Wildlife in Korea's Demilitarized Zone", http://news.nationalgeographic.com/news/2013/08/pictures/130820-wildlife-korea-dmz-war-culture-biology-science/

⁴ eco blog, http://ecoblog.tistory.com/m/post/71



Fig. 2 - Distribution of Endangered Animals⁵

With nature and wildlife as the major influence in how we bring human presence into the demilitarized zone, the design behind the observation platforms had to be one that would interact subtly with the landscape without distracting the viewer from the beauty around. By using the information in **Fig. 1** and **Fig. 2**, the starting site circled in red in **Fig. 3** was picked in regards to wildlife found there, indicated by the blue dots, as well as the terrain, accessibility, and landmarks around. Located nearby is the 2nd Tunnel, one of four known incursion tunnels dug by North Korea running across the DMZ that visitors may visit even today. Looking to the future, as the old border breaks down and connections are created between the major cities from the north and south through the DMZ, more nature trails can be planned and another series of observation platforms erected while still leaving most of the area untouched.

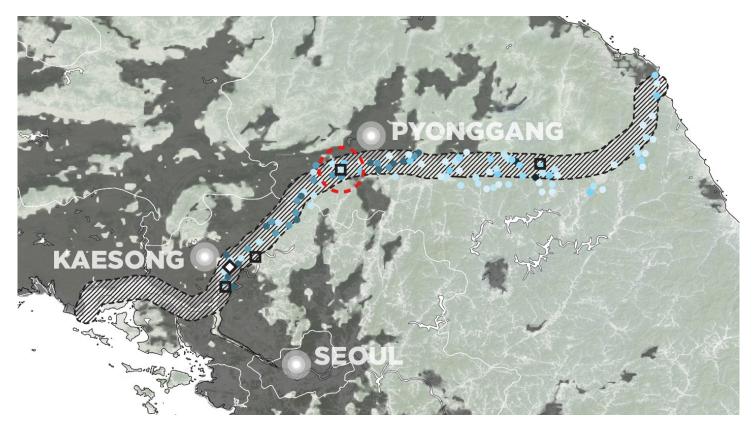


Fig. 3 -Site Location

⁵ dongA.com, "[이달의 생태지도]<6·끝> 비무장지대의 생태계", http://www.donga.com/news/print.php?n=200506240176

⁶ Pike, John, "Korea Demilitarized Zone Incidents", http://www.globalsecurity.org/military/ops/dmz.htm

By creating a trail that runs across this section of the DMZ, we connect what was the former North Korea to the former South with three individual observation platforms that sit and interact subtly with the landscape. Using the existing barbed fire fence that runs along the entire DMZ as the borders for the nature reserve, the fence is repurposed to mark as the start and end points for the trail. Looking at works from Richard Serra, **Fig. 4**, we can take inspiration from how his sculptures in the Qatar desert sit and create a visual connection across the landscape as you walk through it. However, Serra's use of metal would feel too alien in the vibrant and luscious landscape found within the DMZ so a light concrete became the material of choice due to how it compliments nature without blending in, **Fig. 5**. Using SANAA's minimalistic approach to design, **Fig. 6**, we took inspiration from their Serpentine Pavilion to create three typologies for the observation platforms that were both light and unobtrusive to the surroundings. These platforms sole purpose are to be for observing the landscape.



Fig. 4 - Richard Serra⁷



Fig. 5 - Kjeska Viewpoint, Norway⁸

⁷ the creators project, "Richard Serra's Newest Installation Is In The Middle of the Qatari Desert", http://thecreatorsproject.vice.com/blog/richard-serras-newest-installation-is-in-the-middle-of-the-qatari-desert

⁸ Clemson University, "Kjeska Viewpoint", http://www.roberthewittasla.com/landscape-architecture/4735-kjeksa-viewpoint.html



Fig. 6 - Serpentine Pavillion by SANAA9

The three typologies, **Fig. 7**, create three different vantage points in which visitors can stop and look out across the landscape. The first is an elevated platform with a ladder supported on two beams and four columns. This typology is an "information artifact" with writing on the underside that teaches visitors about the history of the area. The second is an extension of the land where the platform thrusts out on a hillside supported by two beams and two columns. The last typology is a slightly elevated platform that sits just a step or two above the ground, supported by two beams. These platforms highlight the landscape and give hikers the chance to pause and reflect upon where they are and what they are seeing by providing a place to sit, lie down, or to stand.

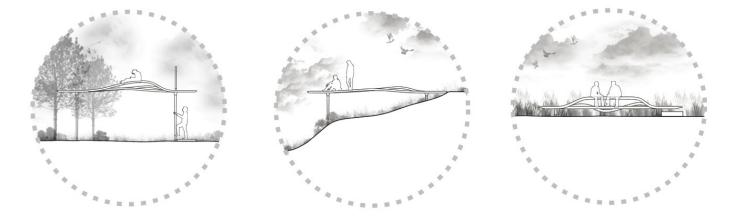


Fig. 7 - Observation Platform Typologies

It was important that the design of these platforms could be continually reused as the DMZ nature reserve continues to develop and more paths crop up across the landscape. The simplicity of the forms lent itself to how we understood how it would be constructed. Using pre-fabricated parts, each typology consists of 3 pre-cast pieces of reinforced concrete, 12 mm thick, locked together and supported on steel beams and columns. There are six different forms for the concrete pieces, **Fig. 8**, that can then be put together to create numerous combinations for each typology, ensuring that each set of three platforms are unique to its location. The design and construction of these observation platforms are purposely simple and strive to be as efficiently cost effective as possible, while still maintaining an elegant minimalistic form.

⁹ Cheiru de Ceu, http://cheirodeceu.blogspot.ca/2012_02_01_archive.html

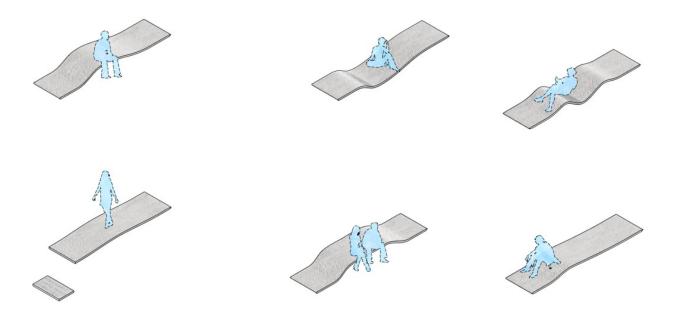


Fig. 8 - Concrete Forms

Due to the nature of the competition being an ideas competition, handrails were omitted in the final images although they were taken into consideration. Polished aluminum balusters and steel wire handrails would be used on the perimeter of the platforms, however for the sake of maintaining the grand parti of the idea we have chosen to omit them in these drawings and renders.



Fig. 9 - Render 1



Fig. 10 - Render 2

"Changing consciousness through architecture is possible. Sharing and inhabiting a common space means as much as sharing the same ideology and philosophy of life. Can architecture claim its own powerful sense of ownership to peacefully resolve the conflicts of ideology and religion?"

- Kim Hyejung

The ability to look towards the future and envision a unified Korea where the DMZ is no longer needed is a difficult task that requires delicate handling. We can remind people about the history and significance of the zone and what it stood for as they journey through the newly founded nature reserve through architecture. The observation platforms act as a place of repose for visitors to stop, learn, and appreciate the past, present, and future of Korea.

Bibliography

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