

# Strategic Surprise from the Bike Trail

## The Republic of Korea and the Bicycle

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Strategic surprise is often a goal of nation-states that are considering engaging in an internationally unpopular course of action. A good strategic surprise, if capitalized upon, can change the course of history. Consider Russia's "little green men"—by inserting troops without insignia and denying all responsibility for the operation, Russia surprised Ukraine and seized the Crimean region. The world had no response to Russia's thinly deniable act, and as a result, the region has been plunged into an ongoing crisis, to Russia's benefit. Nation-states that are not considering initiating unpopular acts but are in areas of the world that have unsettled situations, such as territory claimed by many nations or armed cold conflict, may create plans and develop options that can cause strategic surprise. Such nations, rather than initiating a crisis, may prepare plans and options in hopes that diplomacy or time will resolve problems or improve their situation. South Korea is a nation in such an area of the world. While the United States, South Korea's most significant ally, often depends on strategic advantage based on technical innovation, such as stealth or precision weapons, as shown by Russia's employment of little green men, strategic surprise does not require advanced technology. South Korea is building a low-tech system around bicycling that sets the stage for effective strategic surprise in case of a North Korean incursion.

Japan used a concept based around bicycling to execute a low-tech strategic surprise early in World War II, while simultaneously attempting a rapid knockout punch at Pearl Harbor with what was then modern tech. The Japanese used the even then venerable bicycle to outmaneuver and surprise the British. In Singapore, the Japanese "accomplished the invasion of the entire 1,120-km-long Peninsula in less than 70 days and triumphed over the allied British, Australian, Indian, and Malayan defenders while moving forward through Malayan jungle."<sup>1</sup> The defenders used typical efforts to slow the invasion, blowing up bridges and roads to make them impassable for invaders, but the Japanese "were able to use narrow roads, hidden paths, and improvised log bridges. Even when bridges were missing, soldiers waded across the rivers carrying their bicycles on their shoulders."<sup>2</sup> Ultimately, imperial hubris, as "victory for the British forces was considered a foregone conclusion," combined with the loss of airpower after the Japanese "bombed the Royal Air Force bases to the north of Singapore on the Malay coast," resulted in what some British historians have termed "The worst defeat of all time for British-led forces."<sup>3</sup> In an offensive that ran from 8 December 1941 through

15 February 1942 General Tomoyuki Yamashita led his 23,000 troops to move 700 miles and claim victory,<sup>4</sup> with British Lieutenant-General Arthur Percival surrendering more than 130,000 allied forces.<sup>5</sup> Also of note, during the invasion of Singapore, the Japanese did not land their troops with bicycles; they planned and successfully used captured civilian equipment.<sup>6</sup> This major Allied defeat occurred as a direct result of the Japanese making unexpected and extensive use of stolen bicycles in terrain impassable to other vehicles. However, it is often said that amateurs talk tactics, while experts consider logistics.

The Japanese used bicycles for tactical operations and unpredictable maneuver, but during the Vietnam War, the North use bicycles for logistics. This enabled Hanoi to outlast the United States in the conflict. During congressional testimony,

Laughter erupted at the idea of vast numbers of sophisticated American aircraft hunting down bicycles in the thick jungles of Vietnam. In contrast to the smirks and snickering, the stone-faced silence of the uniformed members of the U.S. military in attendance was revealing. They, along with their bosses in the Pentagon and in Vietnam, knew that the enemy's employment of bicycles in the war in Southeast Asia was hugely significant to sustaining their war effort against the United States. It was no laughing matter. The bicycle had survived the most modern weapons in the American military arsenal.<sup>7</sup>

Before US involvement in Vietnam, French Army general Henri Navarre attempted a knockout blow on the Vietnamese logistics hub at Dien Bien Phu. In his favor were French air superiority and comparatively significant financial and military strength. In contrast, North Vietnamese general Võ Nguyên Giáp utilized bicycle porters and inconspicuous trails, greatly undermining the French technological advantage.

The French had unchallenged air superiority over the Vietnamese and could bomb any road or convoy at will. Giáp chose to bypass easily targeted roads in favor of inconspicuous trails. He moved hundreds of thousands of tons of materiel into the hills ringing the valley of Dien Bien Phu using Peugeot bicycles.<sup>8</sup>

This technique proved decisive against the French, and the Vietnamese did not abandon it. When the United States entered the war to contain communist expansion, the Vietnamese had a network of 64,000 pack bikes, which could handle nearly 1,000 lbs. apiece, pushed by as many as 200,000 porters.<sup>9</sup> The Vietnamese understood not only bicycles but also the effect a distributed, resilient logistics network could have on countering US effort to interdict supply. These historical examples of the skillful use of low-tech to achieve decisive strategic effect have echoes in modern South Korea.

The Republic of Korea (ROK) exists in an area of the world with multiple unsettled situations; its immediate neighbors include Russia, China, the Democratic People's Republic of Korea (DPRK), and Japan. There are ongoing territorial disputes among Russia, China, Japan, the ROK, the DPRK, and Taiwan. There are emotionally charged issues of colonial history and unresolved political issues arising from World War II. The ROK has historical experience and good reason to prepare for a rapid devolution of stability in its neighborhood. Japan brutally colonized Korea prior to World War II, China and Russia intervened in the Korean War to support the DPRK, and the DPRK itself tried to conquer the ROK. According to written international agreement and consensus, a state of war exists between the DPRK and the ROK; and only one of those nations possesses nuclear weapons: the DPRK.

The ROK Ministry of Environment is staffed by strategists who, perhaps unknowingly, are engaged in implementing the lessons of Vietnam and Singapore with respect to the bicycle. In the early 2010s, the ministry began investing in the construction of a network of bicycle routes across and along the peninsula. In addition to the physical infrastructure, the government established a competitive reward system, including easily obtained helmet stickers, more difficult medals, and a top-tier plaque that anybody can earn by riding the entire system. Currently, this network consists of approximately 1,500 kilometers of mountainous, well-maintained trails supported with covered benches, bathrooms, and campsites—all supporting civilian recreation and fitness activities. As a means for strategic surprise, this all may seem quaint in an age of electronic, space, and airborne warfare. However, I submit to the reader a few thoughts.

During the initial stages of a renewed conflict in Korea, the greatest problem will be controlling the flow of refugees south while enabling military assets to flow north. A robust system of bicycle paths and a citizenry self-trained in their use reduces the problem. Well-prepared and physically fit citizens can, and many will, immediately begin moving south on their bikes and will not be affected by any roadway nationalization, traffic jams, or limitation in the supply of fuel. Establishing the paths now, along with the award system, which visibly rewards use and achievement, encourages ROK citizens to learn how to use the trails and habituates them to the physical effort involved in riding long distances. The author recently took a trip from Kunsan Air Base to the port of Busan, crossing roughly 700 km of this network, earning four helmet stickers, and making a little over half the progress needed to earn a medal, and somewhat less progress toward the final trophy. En route, she saw hundreds of Korean citizens on the trail each day, even workday afternoons. Elderly citizens were out getting exercise, completing multi-hour rides of 20 or more kms for fun, often doing so faster than the

author. Men and women were riding bikes loaded with gear for fishing, picnicking, or other activities. Youth were out on smaller bikes, earning scabbed knees and developing skills in basic first aid, route navigation, rapid repair, and bike maintenance. After receiving four stickers, the author immediately began to calculate how to complete the remainder of the trail network prior to permanent change of station. “A soldier will fight long and hard for a bit of colored ribbon” ~Napoleon Bonaparte. The motivation technique is effective, and riding the trail develops physical fitness and practical skills—all without a training course or onerous mandate. Thus, for Korea’s citizens, evacuation away from areas of conflict may be unexpectedly swift and orderly. Compare that to images and stories of evacuation from hurricanes in the United States, which come with days to weeks of fairly unambiguous warning.<sup>10</sup>

There is more advantage generated by this network beyond easing civilian evacuation. In a renewed Korean conflict, bicycle infantry soldiers are more agile than any tank or other military vehicle in the mountainous terrain that comprises much of Korea. The Swiss military retained bicycle infantry until 2003, and figure 1 illustrates the volume and weight of equipment troops would train to haul through and use in the environment of the Swiss Alps.<sup>11</sup>



Source: Campfire Cycling

**Figure 1. Agility and lethality.** A Swiss soldier poses with his MOdell-93 bicycle, circa 1999. One could expect ROK forces would carry a similar load in the mountain trails of the ROK.

The US military considered bicycle infantry and maintains a limited capability in the special operations community. According to Dr. Kevin D. Stringer, then an Army infantry officer, “Bicycle infantry is an ideal operational tool for a defensive strategy that is focused on a small geographical area...more responsive than mechanized and foot infantry for short distance . . . traverse areas where tracked or motorized vehicles have difficulties . . . range and endurance advantage over foot infantry . . . rather quiet . . . low logistical support requirement.”<sup>12</sup> These listed advantages are heightened in Korea; the Demilitarized Zone is only 250-km long, rideable in a single day for a fast bicyclist on a good bike, and the ride from Seoul to Busan is only 325 km. Most of Korea is mountainous and impassable for vehicles except along roads, which necessitates the extensive use of tunnels and bridges that are easily interdicted. As noted in both Singapore and Vietnam, interdiction does not significantly affect the use of a bicycle, which can be carried across a crater or floated across a river and only needs a narrow uneven trail to swiftly haul war fighters or thousands of pounds of equipment. Stringer continues, “Three possible uses for a modified bicycle infantry unit . . . would be rear area combat operations, occupation or pacification duties, and peacekeeping or peace-making operations.”<sup>13</sup> The alliance of ROK and US forces in the Korean theater is heavily concerned with rear-area combat operations, as the alliance is defensive in nature.

The bicycle trail network has become ingrained in ROK recreational culture. As a result, today’s ROK leadership have granted their successors a physically fit and prepared citizenry, a military filled with personnel habituated from childhood to long, even multi-day bike rides, using and camping in the prebuilt sites established along the trails. In case of a war, this force will be able to move in and through mountains inconspicuously and swiftly, with a small support requirement. The camping sites that already exist at intervals along the trail will easily transform into resupply nodes or defensible strong points. The force will consist of personnel fully capable of maintaining its own means of transport with a few pounds of tools and supplies, eliminating the need for specialized maintenance units and facilities. In defending the rear, this creates conditions for decisive strategic surprise.

There is the possibility of the DPRK taking advantage of this trail network to bypass defenses on the main road network. Given what we know about the DPRK, it is unlikely that North Korea is inclined to build an equivalent network of recreational trails for its citizens; however, its road network lends itself more to biking than vehicle traffic. This means the two nations may well be fairly even in the widespread use of bicycles. In addition, as seen with the Japanese, an invading force can easily procure high-quality bicycles from what the local citizens already

possess. That said, the ROK is not the same as World War II–era Singapore. If established, ROK bike infantry forces would be deeply acquainted with their assigned region, could remove or alter path signs and markers without becoming lost, could easily direct any invading force or invading logistics convoys into prepared ambushes, and could transport supplies across a network that can absorb and circumnavigate any attempt at disruption. Furthermore, ROK defensive corps will be able to engage invading forces with little worry regarding civilian safety, as civilians will be capable of riding to a safe distance in a matter of hours, and well into the rear in a matter of days.

This is how a network of recreational bike trails becomes a tool to generate strategic surprise. The ROK, by the simple act of building recreational trails and tangibly rewarding citizens who use them, have begun to ready generations of robust, skilled defenders, a uniquely surprising strategy of defense and a transport system nigh invulnerable to interdiction. ♣

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#### **Notes**

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