CHAPTER 1

Divine Ships of a Bluewater Navy

The snowy wind, unspeakable weather and so dark ...

The Kagerō nikki (the Mayfly Diary or Gossamer Years, 974)

E START WITH IMPERIAL NAVY WARSHIP NAMES, including *Yukikaze*'s, and what they reveal about Japanese nationalism in the twentieth century. As they steamed into battle, Imperial Navy warships became emblematic of Japan's divine landscape, over which the Emperor, both head of state and Shinto's chief priest, reigned supreme. Destroyer names, in particular, tapped into ancient Japanese aesthetics, ones often tied to classical poetic conventions, and they often evoked an ancient melancholy that suited wartime. These names, such as *Yukikaze*, resembled the "scripture of the gods" and served as "spirit words" that linked sailors and the Japanese public to the aesthetics of Japan's imperial nationalism.

These warships deserved divine names, given their colossal cost in national treasure. But, if Japan was to become a world power at the end of the nineteenth century, defend itself from predacious great nations, and ultimately become one, it needed a blue-water navy. Starting in the Meiji period, Japan's government spent untold treasure to build this floating divine arsenal, one that could assert Japan's national desires across the sea and help create and defend an empire. These warships became dramatic symbols of the Japanese nation, celebrated on post-cards and taught in schoolbooks; they became celebrities of a sort. Their purpose, however, from the beginning, was to defeat the US Navy in a hypothetical war with Japan's Pacific rival.

In the opening months of the war, the Imperial Navy deployed these heroic warships with nearly religious intensity in the idea of an Alfred

Mahan-style "decisive battle" with the US Navy, one that would knock the Americans out of the war. But, ironically, World War II was rarely about decisive battles (though it had some), and the Imperial Navy found itself adjusting to a war over lines of communication, shipping routes, and fuel transports.

Nonetheless, it is with these colossal warships, prides of a nation, mechanical celebrities with their "spirit word" names, and their doctrinal pursuit of a "decisive battle" with the US Navy, that we begin *Yukikaze*'s war.

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Yukikaze means "snowy wind" in Japanese. In 1939, yard workers at the Sasebo Naval Arsenal painted that name in four bold white kana characters on the starboard and port beams of a newly constructed warship. The navy-gray vessel splashed into the water on March 24 of that year. With draping garlands of Japanese sakaki leaves, rising-sun battle flags, ceremonial bunting, and, dangling from her bow, an ornamental paper kusudama bursting with streamers like a giant upside-down tulip, the destroyer Yukikaze, fully dressed in signal flags extending from her bow up to the tip of the mast and then down to her stern, prepared for her first sea trial and shakedown. She would need it. Within two years of launching, she plunged into total, unrestricted warfare in the deadliest conflict the world has ever seen. The ferocity of World War II could never have been anticipated.

Guests and dignitaries received two commemorative postcards at *Yukikaze*'s launching, packaged together in a neat decorative envelope. The first is a highly stylized depiction of *Yukikaze* sliding down the slipway (see Figure 1.1). The image evokes a sense of technological progress more than it does a war machine designed to break bones and boats. *Yukikaze*'s bluff red bow looks as if she's on rails, heading inexorably into a limitless, preordained future. Snowflakes float and swirl around her, much as her name, *Yukikaze*, evoked. From her bowsprit, the *hinomaru*, or Japanese national flag, and the *kyokujitsuki*, or the rising sun flag (battle ensign of the Imperial Navy), also wave proudly in the wind, a reminder of the national obligations that transcended the cosmopolitan artistic trends that inspired the postcard's unknown artist. It's nationalistic, but not overly so: it's more celebratory.



Figure 1.1 The postcard reads: "In commemoration of the destroyer *Yukikaze*'s launch." March 24, 1939. Sasebo Naval Arsenal (author's collection).

The second postcard depicts *Yukikaze* under way, with thick lines and rich colors more akin to traditional Japanese woodblock printmaking than to early-twentieth-century Italian futurism. In this postcard, snow blankets the destroyer, a little reminiscent of a winter scene by Utagawa Hiroshige, the Edo-period master. She charges through heavy seas in a snowstorm surrounded by frothing whitecaps, the black exhaust from her funnel blending with the gathering dark clouds in the sky. The rising sun battle flag flutters from her transom (see Figure 1.2). Together, the two postcards



Figure 1.2 The commemorative postcard reads the same as the one in Figure 1.1 (author's collection).

are optimistic, almost light spirited. Nothing in them hinted at the havoc the little warship would unleash in the Pacific in some two years, or the trials and tragedies that would be reciprocated on her by her enemies.

Indeed, nobody fathomed on that early spring day in 1939 that *Yukikaze* would become known as Japan's "unsinkable destroyer," but only after she had survived some of the most harrowing naval warfare of World War II. She was part of what naval historian Samuel Eliot Morison labeled Japan's "perimeter of steel," a formidable armada of warships designed to defend its southern oceanic empire of natural resources, particularly oil, from Allied attempts to reclaim it. Her role in the world was a violent one, and her history belies her quaint depictions on those two commemorative postcards.

Over the course of the war, *Yukikaze* sailed nearly everywhere in the Pacific. The warship escorted troops during the invasion of the Philippines and launched torpedoes at Allied cruisers at the Battle of the Java Sea. She escorted Midway invasion forces, screened the aircraft carrier *Zuikaku* during the Battle of the Santa Cruz Islands, and her main guns blazed and torpedo tubes hissed during the ferocious night fighting that occurred in the waters around Guadalcanal.

Yukikaze fought almost always at night in the Solomon Campaign, including at the Battle of Kolombangara, where by moonlight she and other warships launched Type 93 torpedoes to devastating effect against Allied cruisers. She guarded valuable assets, including Kawasaki-style refueling tankers at the Battle of the Philippine Sea, and tangled with escort carriers twice her size at Leyte Gulf. She escorted flattops, including the super-carrier *Shinano*, when torpedoes struck the carrier and sank her. *Yukikaze* battled submarines and aircraft as well, in numerous locations throughout the Western Pacific, and with several different commanders, each of whom had his own style and all of whom survived the war, much like their destroyer did.

On April 7, 1945, she escorted *Yamato* on the battleship's final suicide mission. A famous US Navy photograph shows *Yamato* vaporizing into a mushroom cloud after sustaining repeated torpedo and bomb hits from hundreds of US aircraft that descended upon the behemoth. *Yukikaze* is the destroyer holding station just to the left, her bow facing the explosion (see Figure 1.3). The photograph speaks volumes about the intrepid little warship. She fought until the bitter end. No longer is her bow facing a limitless horizon, as depicted in her commemorative postcard; now she faces certain defeat and an uncertain future. For the Imperial Japanese Navy, the war was over in that explosive moment, even if the war's story still required two bigger mushroom clouds for it yet to truly be over.

After Japan surrendered, engineers removed *Yukikaze*'s two amidships quadruple torpedo launchers, the two remaining twin 12.7 cm (5-inch) .50 caliber Type 3 naval guns, and the over twenty-five double and triple 25 mm Type 96 antiaircraft mounts and transformed the warship into a toothless refugee transporter, as thousands of demilitarized Japanese troops fled the once-occupied territories of the Greater East Asia Co-Prosperity Sphere. She brought home hungry, desperate, and disheveled men in droves in this manner, with makeshift living quarters erected on her deck, traveling to Rabaul, Saigon, Bangkok, and Okinawa, as well as the eastern coast of Guangdong and the southwestern coast of Liaoning in China.

On July 6, 1947, after designated war reparations, she departed Nagaura Bay bound for Shanghai. As she cleared the breakwater, her white wake fanning outward in the blue water behind her, the crew heard shouts of "Banzai!" and "Japan's best ship!" from yard workers ashore. It proved her last sortie for Japan, but not her last sortie as a warship. As the newly

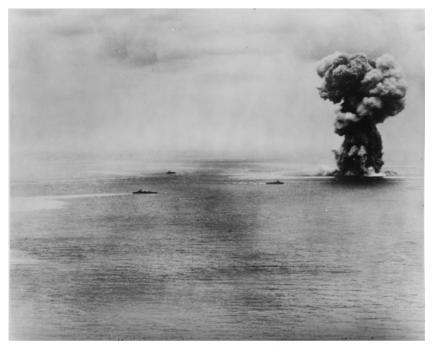
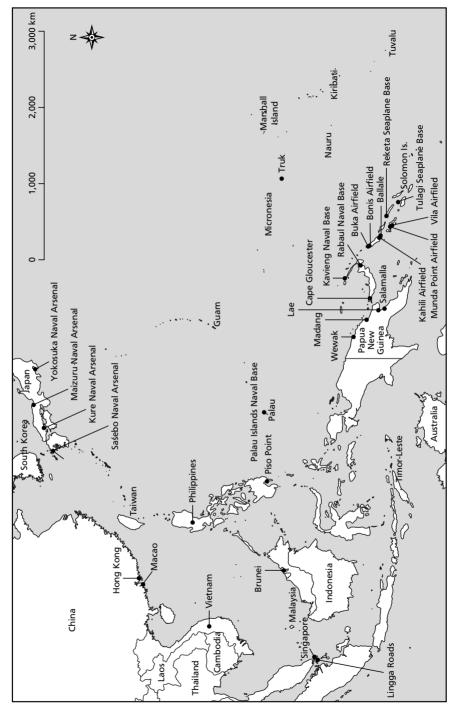


Figure 1.3 The explosion of battleship *Yamato* on April 7, 1945. *Yukikaze* (Snowy Wind) is the first vessel on the left, then *Hatsushimo* (First Frost) and *Fuyutsuki* (Winter Moon). Official US Navy Photograph, National Archives, Catalog #: 80-G-413914.

renamed *Dan Yang*, she became a cold warrior for the Republic of China, serving for decades after the evacuation of the Nationalists to Taiwan.

Scuttlebutt has it that, after the war, the US Navy had initially drawn *Yukikaze* as war reparations, but acquiesced that the Nationalist Chinese needed her more. Despite her weapons and combat systems being hopelessly outdated, the loving care lavished upon her by her crew caused this ship, even with her systems nearing obsolescence, to be carefully maintained and combat ready. When Allied officers overseeing the transfer ceremony at the Shanghai Wharf inspected the warship, one allegedly remarked, "I've never seen a naval vessel from a defeated nation in this kind of impeccable order!" When the Nationalists succumbed to the Chinese Communist Party and evacuated mainland China for Taiwan in 1949, *Yukikaze* fled with Generalissimo Chiang Kai-shek. Ultimately, she was scrapped in 1970.

At the outbreak of World War II, the Imperial Navy had eighty-two Special Type and First Class destroyers, of which *Yukikaze* was one (Map 1.1).



Map 1.1 Imperial Japanese naval bases, Spring 1943

She was one of precious few to survive the war intact. *Yukikaze* logged 96,000 linear nautical miles. But destroyers seldom traveled linear miles. Imperial Navy destroyer captains zigzagged to evade submarines, as well as dodged and weaved to avoid bombs dropped from the air an estimated 30 percent of the time, which meant that *Yukikaze* actually sailed some 120,000 nautical miles on the water.

This is what destroyers do in battle. They typically navigate with a destroyer squadron, usually designated with the acronym "Desron," under the command of a squadron commander, while operating as part of a larger task force. They launch torpedoes, hunt submarines, and evade aerial assaults. They guard and then aggressively attack. They do so while covering maritime territory quickly. They epitomize the saying "dynamite comes in small packages."

Four captains commanded the unsinkable destroyer during the war: Tobida Kenjirō, from Sendai City in southern Japan; Kanma Ryōkichi, from a different Sendai City, this one in northeastern Japan; Terauchi Masamichi from Tochigi City; and Koyō Keiji, from Kamakura City, south of Tokyo. The four captains not only survived the war, which is more than can be said for most Imperial Navy destroyer captains, but lived to ripe old ages. *Yukikaze*'s story, like that of her commanders, is the tale of a "lucky warship," and not all Imperial Navy vessels carried such fortunate monikers.

Imperial Navy sailors, like their counterparts in other navies, came to believe in luck on the water, and it became a tangible asset while fighting. Sometimes, desperate war plans actually depended on a certain degree of luck. Naval warfare can be whimsical in this way, and random misfortune could sink even the best warships. Sailors aboard *Yukikaze* knew she was a lucky warship – in fact, they openly spoke of it, as did Imperial Navy brass – and *Yukikaze*'s officers and crew always assessed new commanders on whether they were lucky, too. The Imperial Navy commissioned plenty of unlucky ships, such as the carrier $Taih\bar{o}$: they never lasted long.

The Kawasaki Kobe Shipyards had built $Taih\bar{o}$ to be the most powerful carrier on the water. She was 855 feet and displaced over 37,000 tons fully loaded, which included 65 combat-ready aircraft. She sported the newest defenses and a thick plate of high-tensile steel covered her entire flight deck. Rather than a teak flight deck – elegant to be sure, but also dangerously flammable – engineers painted a thick coat of latex over

the steel deck covering. Engineers designed her to survive the kind of aerial pummeling that decimated the flattops at Midway. *Yukikaze* had escorted *Taihō* during her shakedown at Tawi-Tawi Island in the southern Philippines. Her officers and crew knew the flattop well.

But the carrier proved woefully unlucky. The US submarine *Albacore* fatally holed her with a single torpedo on June 19, 1944, at the Battle of the Philippine Sea. Imperial Navy planners had meant for $Taih\bar{o}$ to serve as the centerpiece of a newly constructed Combined Fleet, one that could halt the Allied advance in the Mariana Islands. Instead, she sank ingloriously, six and a half hours after her torpedo hit, blown apart by two massive internal explosions, a result of design flaws.

In his novel *Citadel in Spring*, Imperial Navy veteran Agawa Hiroyuki described the carnage aboard $Taih\bar{o}$ when she exploded and sank. In the galley, one sailor had the "bone of a broken leg, jutting up like a crutch," with "pieces of dark red flesh adhering to it." One sailor's head had "split open like a pomegranate, wedged between the door and the jamb." As sailors abandoned the stricken flattop, their open wounds throbbed in the seawater. Nonetheless, $Taih\bar{o}$'s demise was relatively peaceful: the "forty-four-thousand ton vessel thrust its stern up into space and slipped beneath the waves in a twinkle of an eye." With her sank the Imperial Navy's dreams of winning a decisive battle against the US Navy before Saipan fell and US bombers could reach the home islands and burn them to the ground. It was good to be a lucky warship in World War II.

"Really," wrote Itō Masanori, a respected wartime journalist and author of numerous books on the Imperial Navy, including the one that has guided my story, *Yukikaze's* history remains "miraculous in the entire world of naval warfare." It was a miraculous career indeed. It begs the question of the boat biographer, though: where should we start in telling her story?

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I start with her name. "Snowy wind" is weather that should not be confused with a blizzard. In the Imperial Navy, there was an entire class of destroyers called *Fubuki*, or the Blizzard class. They were built about a decade before *Yukikaze* and her sister ships, between 1926 and 1932. Armed with three twin-mounted 5-inch guns and sporting a flat foc's'le and flared deck, the boats sliced through even the heaviest seas and

delivered a serious punch. In historian Morison's estimation, in their day they "led the world's navies in design and armament." ⁵

Mutsuki, or the Harmonious Moon class, had preceded them, a name that refers to the first month of the Lunar Calendar. Japan had followed the Lunar Calendar until the Meiji Restoration of 1868, when the country modernized along Western lines. Hatsuharu, or the Early Spring class, succeeded the Fubuki vessels. After these vessels came the Shiratsuyu, or the White Dew class, built until 1937. Then came the Asashio, or the Morning Tide class, built for only two years between 1937 and 1939. There is an entire pantheon of Japanese destroyers and many with elegant names, but none celebrated more accomplishments on the water, or more elegant names for that matter, than the Kagerō, or the Gossamer class, of which Yukikaze was one of nineteen built.

There is a lot to a warship name, and Japan's naming practices reveal something important about Japanese culture, particularly in wartime. The Imperial Navy named destroyers after weather or atmospheric phenomena, ones often with classical poetic references. They named battleships after ancient provinces, or on occasion ancient references to Japan itself, such as Fusō or Yamato. They named heavy cruisers, such as Atago and *Chōkai*, after mountains and light cruisers after rivers and streams. Atago is a mountain near Kyoto with a Shinto shrine where the local avatar protects Kyoto from fire, for example. Chōkai is an active volcano in northeastern Japan. Atago was also a Takao-class heavy cruiser that the US submarine Darter holed prior to Leyte Gulf. It had served as Rear Admiral Kurita Takeo's flagship, and he ended up swimming for his life. *Chōkai* was scuttled following the Battle off Samar, also part of the Leyte operation. In essence, the Combined Fleet, with black smoke belching from its stacks, became a steel maritime reflection of Japan's divine landscape, one rooted in Shintoism.

Two years before Sasebo launched *Yukikaze*, the Education Ministry launched a campaign to highlight Japan's "unparalleled national polity" by tying it to the natural landscape. The *Cardinal Principles of the National Polity*, a highly nativist text, wove Japan's "beautiful nature not seen in other countries" together with its people's unique "national essence." While "Natural features overpower India, and in the West one senses that man subjugates nature," the Japanese lived in "constant harmony with

nature." So did their warships, apparently, given their names. Even on the blue expanse of the high seas, the Imperial Navy became a reflection of an exceptional landscape, over which the Emperor reigned supreme. Such names reminded sailors of Japan's unique qualities, the lofty nature of their sacred cause, and their spiritual invincibility on the battlefield. They must have thought, hopefully, that some of the Emperor's divinity rubbed off on them.

Japanese destroyer names linked ships to a divine landscape, and were wistful and poetic, even ephemeral – they named things that were temporary, not long for this world. They reflected the inherent change in the natural world, much like their wavy reflection on the water. They evoked a sense of impermanence, as fleeting as white dew or snowy wind. To this day they evoke a wistful, melancholic quality, even though they were machines of war and unleashed unspeakable terror on the water.

In this manner, destroyer names evoke traditions of Japanese aesthetics that, more than national anthems and flags, tied all Japanese to a common past. To be Japanese is to know this aesthetic, to feel it reverberate inside ancient words that move through the centuries and into one's conscious through shared learning. They evoked connections to Heian-period (794–1185) notions of *mono no aware*, a sensibility that evokes the "melancholic nature of things." *Mono no aware* defined early Japanese poetry, a Buddhist-inspired notion born from the fleetingness of life. Early Buddhism taught that we know only one truth in life – that it's impermanent, and therefore painful – and this melancholy colored Heian life in dark, broody hues. The names of Japanese destroyers conjure this sentiment as well.

Admittedly, *Fubuki*, or a Blizzard, can be dangerous. It's true that not all atmospheric phenomena are wistful and poetic; but still, most Japanese destroyer names evoke scenes of impermanence, beautiful precisely because they are not long for the world. Japanese didn't name their destroyers things like "typhoon" or "tsunami" because the names were never meant to conjure the destruction they could unleash. Unlike a howling blizzard, snowy wind evokes the sense of a late fall day, when blustery winds bring intermittent snowflakes, a signal that winter is coming. It signifies cyclical change: renewal, life, and death. Nothing is stable

for long in the world. The Chinese classic *Book of Changes* saw change as the fundamental pattern of the universe. Similarly, the Buddha said, "All compounded things are subject to decay." This proved particularly true of Imperial Navy destroyers during World War II.

Seasonal change and ephemerality have long been poignant emotions in Japanese culture, and served as a frequent theme in classical poetry. Starting in the Heian period, court poets often wrote in *kana* rather than *kanji* script, purposefully choosing a vernacular Japanese rather than classical Chinese style. The *kana* script encouraged a largely native Japanese poetics, which became common in *waka*, a thirty-one-syllable form. In large part, destroyer names conjured this native vernacular, and naval yard workers customarily painted their names in *kana*. Just to name two, *Shiratsuyu*, or White Dew, was a destroyer constructed in the Sasebo Naval Yard and launched in May 1935, four years before *Yukikaze*. Heian poets frequently meditated on white dew because of its impermanence. Few things are more ephemeral in this world than a delicate drop of dew. Certainly, this poem from a tenth-century anthology evokes this idea.

If the white dew must vanish, let it vanish: even if it stayed no one would care to make it a string of gems.⁷

Similarly, a poetry competition from the Kamakura period featured the theme of another destroyer, *Shigure*, or Autumn Showers. Poets in the competition wrote their poetry inspired by the evocative word. The Uraga Dock Company built *Shigure* and launched her in 1936. The warship celebrated a distinguished service record until January 1945 when the US submarine *Blackfin* torpedoed her. Today, she rests quietly at the bottom of the Gulf of Siam; but poetry on autumn showers resonated with Japanese readers.

When winter comes the oak leaves in the garden scattered

echo the autumn showers in a village by the foothills.⁸

The *Kagerō* destroyers evoked these native Japanese sensibilities as well, with celebrated vessels such as *Amatsukaze*, or Celestial Wind, *Isokaze*, or Seashore Breeze, and *Tokitsukaze*, Favorable Breeze. In fact, you need to be either a meteorologist or an expert in classical poetry to know the differences between a Sea Breeze (*Urakaze*), a Beach Wind (*Hamakaze*), a Seashore Breeze, a Favorable Breeze, a First Wind (*Hatsukaze*), and a Valley Wind (*Tanikaze*), all names of *Kagerō* vessels. Similarly, you need training in tidal sciences and Japan's offshore currents to discern the differences between a Black Tide (*Kuroshio*), a Father Current (*Oyashio*), a Swift Tide (*Hayashio*), and a Summer Tide (*Natsushio*) – again, all names of *Kagerō* destroyers.

The name *Kagerō* itself, though written with different *kanji* characters when referring to destroyers, is a homonym for one of the most famous diaries of the Heian period – the *Kagerō nikki*, or *The Mayfly Diary* or *Gossamer Years*, depending on the translator – the dark, broody lament of a lonely aristocratic woman who lived in Kyoto in the tenth century. The third volume contains the melancholic line "The snowy wind, unspeakable weather and so dark," illustrating the unsettling place of "snowy wind" in Heian writing. The author experienced the weather during an autumn visit to the Kamo Shrine in Kyoto, a "miserable trip" during which time she "caught cold and languished in bed." This is the genesis of *Yukikaze*'s name.

By the late eighteenth century, a handful of Japanese scholars had started rejecting traditional Chinese learning and imported Buddhism, submitting that only by reading early vernacular poetry written in *kana* could Japanese commune with the native Shinto deities of the divine land. Some words proved more powerful than others, moreover, and these became known as *kotodama*, or "spirit words." Scholar Kamo Mabuchi, the son of a Kyoto Shinto priest, wrote that "Yamato, the several islands that have been transmitted to us, is the country blessed with the language of the gods." Motoori Norinaga, another nativist scholar, called such early writings, the very ones evoked by later destroyer names, the "scripture of the gods." Soon, such spirit words became inexorably

tied to early forms of imperial nationalism. Indeed, you would be wrong if you concluded that such "spirit words" proved less nationalistic than the masculine bombast of flags, drums, and trumpets. Often, they proved more so.

Destroyer names often resembled the "language of the gods" or the "scripture of the gods," linking sailors to the aesthetics of imperial nationalism, and they proved just as ephemeral. Famously, Admiral Yamamoto Isoroku, on the eve of the Pearl Harbor operation, had cautioned the prime minister that Japan's naval victories would be ephemeral, too. "If you insist on my going ahead,"11 he warned, "I can promise to give them hell for a year or a year and a half, but can guarantee nothing as to what will happen after that." The admiral proved prophetic as usual. As the war ground on, mercilessly, this sense of impermanence began permeating the cultural fabric of the Imperial Navy as a decisive battle with the US Navy became more elusive. Initially, Japanese victories in the Central and Western Pacific led some observers to diagnose the navy with what they called "victory disease" within the ranks, an infection that culminated with the Japanese defeat at the Battle of Midway in early June 1942. Basically, Japan had come to expect victories on the water. But that soon changed.

With four fleet carriers lost, the fever of the "victory disease" broke after Midway. Then, slowly but noticeably, new spirit words began to enter the Imperial Navy's cultural lexicon, ones that again tapped sensibilities of impermanence. Historically resonant phrases such as "special assault" and "floating chrysanthemum" operations, references to forms of ritual suicide steeped in samurai traditions and imperial nationalism, began to appear attached to naval orders, none grimmer than the final run of battleship Yamato. As referenced by Kamo Mabuchi above, the battleship had been named after the Japanese islands themselves. When she got under way for Okinawa in Operation Ten-Gō, or "Heaven-One," war planners had designated hers a special assault operation and Imperial Navy Headquarters ordered that she be given only enough fuel for a one-way trip. It hardly mattered. Most of the holding facilities in its tank farm were long since empty anyway. But, in Japanese culture there is nobility in this kind of futility and failure - long live the tragic hero! and Yamato certainly captures this ethos.

Some scholars, such as Ivan Morris, have linked the "nobility of failure" to traditions of radical Confucianism, where demonstrations of sincerity of the heart, an important virtue, weighed heavier than actual success, even in battle. Many Japanese respect sincere losers more than opportunistic winners. In Japan's samurai traditions, Minamoto Yoshitsune remains an object of adoration, even though his brother, Yoritomo, became the first Kamakura shogun in 1185. Brutally, the latter had forced his younger brother Yoshitsune to commit ritual suicide. Nobody would ever question Yoshitsune's sincerity, willing as he proved to die for it, as well as for his brother's rule. *Yamato*, too – symbol of the entire nation; named after the divine land – oozed sincerity from her every bulkhead and carried such pure motives on her massive, reinforced hull. "Ours is the signal honor of being the nation's bulwark," mused Ensign Yoshida Mitsuru, a young sailor aboard *Yamato* who survived her final mission. "One day we must prove ourselves worthy."

He did, and *Yamato*'s wreckage now rests quietly at Latitude 30° 22' 0.0016" N and Longitude 128° 4' 0.0016" E. Her barnacle-encrusted hulk still captures the imagination of millions. But her cause was lost before she ever shot a single shell in anger.

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Building these Imperial Navy warships came at the expenditure of mountains of national treasure. When the navy lost destroyers such as *Shiratsuyu* and *Shigure*, cruisers such as *Atago* and *Chōkai*, battleships such as *Fusō* and *Yamato*, and fleet carriers such as $Taih\bar{o}$ and *Shinano*, it proved not only demoralizing and strategically disastrous for the Imperial Navy, but ruinous for the nation. Warships are expensive to build and maintain, and represent multigenerational investments, but they are indispensable for empire building and national defense, particularly for an island nation. It is estimated that *Yamato* cost approximately ¥137,802,000 to build, while *Nagato* cost ¥43,900,000.

The Meiji regime came to this realization, if slowly. Two powerful slogans drove Japan's Meiji period (1868–1912), when the country abandoned its feudal past in favor of becoming a modern nation, with an empire of its own. The first, *bunmei kaika*, or "civilization and enlightenment," symbolized Japan's embrace of Western notions of historical

progress and culture, from the Gregorian calendar and clock time to beer and the writings of John Stuart Mill. The second, *fukoku kyōhei*, or "rich country and strong military," represented the importance of privileging an industrial economy over an agrarian one in order to support an army and navy, ones capable of empire building. In the early Meiji years, the Imperial Army received the lion's share of national attention. Indeed, until the Sino-Japanese War in 1895, Meiji leaders exhibited scant interest in becoming a great maritime power. One historian has labeled this period under the direction of the Military Ministry the "army first, navy second" stage of Japan's military development. Mainly, the Meiji regime concerned itself with strengthening its hold on power, not projecting power overseas. This meant conscripting an Imperial Army to maintain domestic order.

In 1893, the year the Imperial Navy came into its own, Japan's countryside shouldered 85 percent of the total tax burden. The toil of farmers built these warships and armed them. One Imperial Navy postcard noted that, alongside ballistics information, a single shell for *Nagato* cost ¥4,250, which would have nearly tripled what an urban worker made annually in 1935. It exceeded seven times what farmers brought in annually. The government taxed the countryside into a place of filth and squalor to build and arm these warships. Often, farmers sold their daughters to textile mills and brothels, only to have them sent home with tuberculosis. Fukuzawa Yukichi, the leading intellectual of his times, observed, in the early Meiji period, "The purpose [of government] seems to be to use the fruits of rural labor to make flowers for Tokyo." Had he lived a decade longer, he might have said "to make warships for the Imperial Navy," such was the high percentage of national expenditures that went to the navy budget.

Unsurprisingly, the countryside carried the burden of conscription, too, what farmers referred to as the "blood tax." The Meiji regime, tapping into European traditions that dated to the French Revolution, submitted that, "If people want freedom, they must take part in military service." Farmers paid a high price for this freedom and, before long, rumors swirled in the countryside that the Imperial Army "will draft young men, hang them upside down, and draw out their blood so that Westerners can drink it." Riots and disturbances rocked the Meiji countryside, nearly 200 such incidents by one count, as a result of

excessive taxes and conscription, a hallmark of the bumpy transition to imperial power after 1868.

But the Imperial Navy always relied less on conscription than the Imperial Army did, and so had a different flavor. In 1874, 90 percent of the cadets at the Hyōbushō, the early naval academy, hailed from samurai backgrounds. But still, the Imperial Navy sought anyone "who desired a naval career, regardless of their social and geographical origin," and implemented an entrance examination to lure in talented young men. By 1891, commoners constituted 21 percent of naval cadets. A decade later, that number had risen to 34 percent. It was a veritable meritocracy.

In 1871, the Meiji government split the umbrella Military Ministry into the Army Ministry and the Navy Ministry. That year, the Imperial Navy commanded 14 warships, manned by over 1,500 personnel, with a total displacement of over 12,000 tons. In 1885, the Meiji government issued wildly popular public bonds to expand the navy. Two years later, even the Imperial family donated generously to the bond effort. Nonetheless, in 1893, on the eve of the First Sino-Japanese War, the Imperial Navy budget was a mere half that of the army, and under 1 percent of the national budget.

But 1893 was a banner year for the Imperial Navy. In that year, it established its own General Staff, one independent from the army. There were objections from the army, of course. One Imperial Army staffer quipped, "the army has been the mainstay of Japan and the navy is an aid to it ... The army decides the fate of Japan." But war overseas changed that terrestrial mindset; so did the Imperial Navy's advocacy of the "southern advance" campaign. The southern advance strategy gave the Imperial Navy a raison d'être in a larger, philosophical sense. In 1893, the Colonization Society pitched that, "If Japan wants to secure command of the seas, Japan must extend her trade routes," and this meant "strengthening her navy." Soon, the navy received as much as the army from national coffers, often far more.

The first battle test of the Imperial Navy came when it confronted China's modern Northern Fleet in the Battle of the Yellow Sea in September 1894. The impressive Northern Fleet had visited Yokohama only four years earlier, and China's maritime progress startled gawking Japanese. In the battle, the Imperial Navy sank eight of ten Chinese

warships at the mouth of the Yalu River and then finished the job at Weihaiwei in early 1895. The victory proved decisive. It intoxicated the public and demonstrated to the Meiji government the importance of a modern fleet for national security and protecting Japan's newly acquired colonial interests. The warships also became objects of nationalistic veneration. Many Japanese knew these ships by name.

By 1898, Imperial Navy expenditures exceeded army ones, and represented some 26 percent of the national budget. In the coming decades, Imperial Army and Navy budgets fluctuated, but, as the navy nurtured ties to the Seiyūkai Party and pushed the southern advance campaign, it enjoyed a larger portion of the budgetary pie. It also benefited from ties to Satchō men – predominantly ex-samurai from Satsuma, Chōshū, and other powerful feudal domains – who had orchestrated the overthrow of the Tokugawa shoguns in 1868.

In 1905, in the Battle of Tsushima Strait, Admiral Tōgō Heihachirō, with the "help of heaven and providence," destroyed the Russian Baltic Fleet after months of indecisive fighting near Port Arthur, securing Japan's victory in the Russo-Japanese War. The Imperial Navy paraded the handsome Tōgō and the glorious fleet in front of the Meiji emperor and the public, orchestrating nothing less than a public relations coup. The Imperial Navy became Japan's salvation, and its ships celebrities. Echoing the discontent over the settlement of the Russo-Japanese War in Portsmouth, New Hampshire, for which President Theodore Roosevelt won a Nobel Peace Prize, one Japanese newspaper trumpeted, "If Japan has failed in diplomacy, the glorious navy has done more than make up for such failings." The next year, the Japanese public celebrated its first Navy Day, an official holiday.

In the navy budget, warship construction represented a substantial portion, and overseas developments often drove Japanese warship development and construction. After the British built the battlecruiser *Invincible* in 1907, for example, Japanese engineers set out to build a superior version of the new fast ocean fighter. But, before the ink had dried on Japan's battlecruiser drawings, the newly launched *Lion* had outclassed *Invincible*. In 1910, the Imperial Navy decided to hire the British naval architect George Thurston to design the first *Kongō*-class battlecruiser, and Vickers Shipbuilding and Engineering, a British company

founded in 1871, built the prototype at their shipyard at Barrow. By having $Kong\bar{o}$ built overseas, Japanese engineers could learn the newest in hull design, weaponry, and shipbuilding techniques. She was launched in May 1912. Her sister ships, starting with Hiei, Japanese shipyard workers built in home ports. That same year, the Kure Naval Arsenal laid the hull for the battleship $Fus\bar{o}$, with her six twin 356 mm (14-inch) gun turrets and, after 1933 refits, towering pagoda bridge. Her profile is striking, some say ugly: she looked like a preying mantis. But all agreed she could deliver one hell of a broadside.

In 1912, Japan's shipyards built some of the most famous battlecruisers and battleships of the Imperial Navy, while its budget was 15 percent of national expenditures. By 1917, when the Kure Naval Arsenal laid down the hull for *Nagato*, the navy budget was a full 22 percent of the national budget and towered over Imperial Army expenditures that year. *Nagato* had four twin 41 cm (16-inch) naval guns that fired a Type 91, 1,020 kilogram (2,250 pound) armor-piercing shell over 20 miles – one every 21 seconds. That's about the weight of a 2021 Toyota Prius. Admiral Yamamoto had cut his teeth aboard the cruiser *Nisshin* at the Battle of Tsushima, where Japan sank Russia's Baltic Fleet. Despite being the "father of naval aviation," he always expressed an affinity for capital ships. Not surprisingly, he hoisted his flag aboard *Nagato* on occasion.

The battleship *Nagato* saw no action at Pearl Harbor with Yamamoto's flag aboard, but did cover the withdrawal of the carrier task force as it raced back to the safety of the Western Pacific. The battleship was at the Battle of Midway, but didn't see any action there, either. Later, she fended off aircraft at the Battle of the Philippine Sea. *Nagato* mostly found herself moored or anchored in home waters until the Battle of Leyte Gulf, where she first unmasked her big guns in combat. Like most Japanese battleships, she was named after an ancient Japanese province. The ancient provinces, unlike today's prefectures, evoke a strong sense of imperial authority. Nagato Province is located on the southernmost tip of the main island of Honshu, near the strategically important Shimonoseki Strait, where the Sino-Japanese War was concluded by treaty.

Nagato was the only Japanese battleship to survive the war, but the US military chose to use her, along with a handful of other warships, as a target during Operation Crossroads, a series of nuclear tests at

Bikini Atoll in mid 1946. The US battlewagon *Nevada* met her inglorious fate together with *Nagato* at this Pacific radioactive wasteland. A US Navy crew under the command of W. J. Whipple limped the neglected dreadnought to the atoll at ten knots, her hull leaking like a sieve. *Nagato* sank after the second nuclear blast, the underwater Test Baker, on July 29, 1946. That night, she listed, and finally rolled over and sank. In so many ways, her radioactive demolition symbolized the fate of Japan as well, as her biographer, the novelist Agawa Hiroyuki, cleverly recognized.

Some, such as Japan's Navy Minister Katō Tomosaburō, saw such reactionary warship building as a recipe for disaster. Given its natural resources, he reasoned, Japan could never hope to compete with the US in warship construction. Even with private companies, such as Mitsubishi and Kawasaki, investing in shipyards, they couldn't keep pace with the resource-rich United States. The two ingredients most essential to warship construction were high-grade steel and oil, and Japan had neither.

In 1917, 90 percent of Japan's steel came from the United States. Katō believed that Japan's inability to construct ships at the pace of the United States would "create such a disparity" as to reduce the Pacific Ocean to an "American lake." It didn't until 1945, but this sense of desperation, that Japan needed to do something, and do something quickly, to counter the threat posed by the United States, became an ever-present theme in the build up to war. From Japan's side, the war always had the flavor of being a war of desperation, a desperate need for steel and oil, which is a major thread woven through *Yukikaze*'s war.

Katō's concerns made it necessary that Japan participate in the Washington Naval Treaty of 1921, a post-World War I warship-reduction regime designed to stem a naval arms race among the Great Powers. Katō believed, correctly, that the agreement would put the brakes on Japan's naval race with the United States, making the situation less desperate. Importantly for the next chapter, the stipulations in the Washington Naval Treaty established the international framework for warship design and construction around the world, including in Japan. Nowhere were the influences of the agreement on naval engineering seen more visibly than in destroyer design.

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In the late nineteenth and early twentieth centuries, Alfred T. Mahan, a US Navy officer and historian, ruled the waves of strategic thinking on both sides of the Pacific. Famously, in his *The Influence of Sea Power upon History, 1660–1783*, published in 1890, he emphasized the importance of the "decisive battle" between adversaries, and he quickly became a favorite on course syllabi both at Japan's prestigious Etajima Naval Academy and at the US Naval Academy in Annapolis, Maryland. In his writings, Mahan emphasized decisive battles and blockades, and such thinking drove the procurement practices and strategic thinking of the Imperial Navy. The colossal twins Musashi and Yamato serve as the ultimate artifacts of this belief in a battle of annihilation with the US Navy, as the carriers $Taih\bar{o}$ and Shinano did later in the war.

In some respects, Imperial Navy planners had good reason to adhere to this doctrine. After all, Admiral Tōgō, hero of the Russo-Japanese War (1904–1905), had destroyed the Russian Baltic Fleet at Tsushima in the mother of all decisive battles aboard the battleship *Mikasa*, securing Japan's victory in 1905. It was textbook naval warfare, a classic crossing of the "T" with big battleships slugging it out. Eventually, such thinking led Admiral Yamamoto to his fateful decision to lure the US Navy into an engagement at Midway, and Admiral Chester W. Nimitz shrewdly obliged.

The Etajima Naval Academy would have benefited from balancing its curriculum with the British strategist Julian Stafford Corbett. In *Some Principles of Maritime Strategy*, published in 1911, he pointed out that "Command of the sea ... means nothing but the control of maritime communications, whether for commercial or military purposes," not necessarily victory in a decisive battle. Indeed, the "object of naval warfare" lay not in the "faith" of a decisive battle, but rather in the "control of communications" – by which he meant the importance of securing shipping lanes. After the war, the US Strategic Bombing Survey concurred, acknowledging that Japan had been "desperately vulnerable to attack on its shipping." Indeed, "Japan's geographical situation determined that the Pacific war should in large measure be a war for control of the sea and to insure control of the sea." Yet, the Imperial Navy remained fixated throughout the war on fighting Mahan-style decisive battles.

Japan had started the war with 6 million tons of merchant shipping of over 500 tons gross weight. (To put this in some context, a 32-foot Nordic Tug pleasure boat weighs about 25 gross tons. A World War II PT Boat, like President John F. Kennedy's *PT-109*, weighed about 300 gross tons. By contrast, the *Oasis of the Seas*, a new Royal Caribbean Cruise ship, weighs 226,838 gross tons.) It then gained an additional 4 million over the course of the war. Of the 10 million tons of shipping, nearly 9 million tons were "sunk or so seriously damaged as to be out of action at the end of the war," noted the US Strategic Bombing Survey. By the end of the war, Japan possessed little more than 10 percent of its former shipping tonnage. Imperial Navy planners pinned the entirety of their war strategy on a decisive battle, and failed to invest in the defense of the territories and shipping channels they had secured at such high cost. In many ways, the story of the two unlucky carriers, *Taihō* and *Shinano*, encapsulates this narrative. They never had a chance.

As the war in the Pacific ground to a conclusion, the conflict revolved around destroying Japan's merchant shipping, tankers, and troop transports, and *Yukikaze*, as always, navigated right in the thick of this oil-covered water.