CHAPTER 2

German Naval Strategy in World War I and World War II

EPKENHANS Michael [1]

The Kaiser's Naval Passion

German naval expansion is difficult to explain without mentioning the influence of the new emperor, Wilhelm II, who succeeded the throne in 1888. In contrast to his predecessors, the Kaiser was the first member of the imperial family who was both really interested in naval affairs and willing to acknowledge the need for a powerful navy. In the course of his reign, the Navy was to benefit greatly from this imperial favour. In 1888, the victorious German Army consisted of 19,294 officers and 468,409 non-commissioned officers and men in peacetime, whereas the Navy's total strength at the time amounted to only 15,480 men, including 534 executive officers. The fleet itself consisted of 18 armoured ironclads, as well as 8 large and 10 small cruisers. In 1913, when Wilhelm II celebrated his silver jubilee, the Navy's size had grown to 2,196 officers and 59,991 non-commissioned officers and men. Moreover, the *novelle* (amendment) to the naval law in 1912 stipulated that the fleet was to consist of 61 capital ships, 40 small cruisers, 144 torpedo boats, and 72 submarines. In comparison to 1888, this was indeed a powerful military instrument that was capable of both offensive and defensive warfare.

"A Place in the Sun"

One of the reasons for this huge expansion of the Navy was Germany's intention to become a real world power. In the eyes of the Kaiser, as well as his many contemporaries, this meant the creation of a colonial empire overseas equal to that of the British Empire. Whereas many European powers had begun building

---

[1] Prof. Dr. Michael Epkenhans was Head of Research at the German Armed Forces Center for Military History and Social Science. This paper is a version of the keynote he presented for the Joint Japanese German Military History Project in Tokyo at NIDS in September 2019. Important references are mentiones in the text and could be identified. A list of literature for further reading is provided at the end.

their colonial empires since the 16th century, Germany was a latecomer in this respect. While Bismarck eventually opened the floodgates for colonial enthusiasts by establishing colonies in Africa and the Pacific region in the mid-1880s, he had always been a very reluctant imperialist.

The new Kaiser was one of the most important protagonists of a more offensive colonial policy that aimed to turn Germany into a world power. Again and again, he gave voice to this conviction in public speeches. However, the Kaiser was not alone in his demands for a reorientation of German foreign policy. Like him, many of his contemporaries felt that Imperial Germany was a vigorous young nation that had to become more imperialist in order to preserve the nation's status among the Great Powers, as well as its future in a globalising world. Looking back to the 1920s, one of Germany's leading liberal historians, Friedrich Meinecke, described this public perception quite accurately: "Given how the world looked at that time, a nation like Germany, with its narrow and, due to its expansion, increasingly narrowing existence, was forced to come to the conclusion that the creation of a larger colonial empire was indispensable to secure its future." This conviction was further strengthened by the attempts of other powers to enlarge their spheres of influence in the Middle and Far East in the mid-1890s. In addition, the situation seemed favourable. Tensions between Germany's most important rivals – Britain and France in Africa, as well as Britain and Russia in Asia – seemed to allow Germany the almost unique position of being a *tertius gaudens* among the Great Powers. As a result of all these deliberations, it was obvious that entering into the arena of global power politics offered more advantages than remaining a continental power.

Germany's Sea Interests

However, the traditional motives of power politics and power projection into distant areas where German interests seemed at stake, as well as those of the defence of Germany's coastlines along the North or Baltic Seas, along with the Emperor's naval passion, only partly explain the build-up of the Navy from the 1870s, and moreover, its expansion from the late 1890s. Since the late 1840s, Germany had been undergoing an almost dramatic change from an agrarian to a modern industrial country. After unification, the pace of change accelerated;

new laws further freeing industry and commerce of century-old regulations on standardising measures, weights, and even time zones supported the rapid expansion of industry and commerce. German gross domestic product had risen from 9.4 million marks in 1850 and 17.6 million marks in 1875 to 33.1 million marks in 1900. In 1913, it amounted to 48.4 million marks. Similarly, the output of traditional industries like the coal and iron ore industries increased enormously. The production of iron ore, for example, had risen from 0.2 million tons in 1850 to 2.2 million tons in 1873, 5.4 million tons in 1895, and eventually, 19.3 million tons in 1913. Soon, the industrial latecomer began to catch up with, or in some cases, even overtake, the leading country of the industrial revolution, Great Britain, in old industries like the iron ore and steel industries, not to speak of the new optical, chemical, machine building, and electrical industries.

These industries needed both markets to sell their products, as well as raw materials from many regions in distant parts of the world. Shipping companies like Norddeutscher Lloyd, Hamburg-Amerikanische Packetfahrt Actiengesellschaft (Hapag), and Hamburg Südamerikanische Dampfschifffahrts-Gesellschaft (HSDG) transported these goods and materials all across the oceans of the world. After modest beginnings, and partly subsidised by the German government in the 1880s, they helped build up a considerable merchant fleet. Though most of their vessels were still built in Britain, the proportion of those built on German shipyards slowly increased. So did the number and size of Germany's shipbuilding industry, which also included thousands of bigger or smaller suppliers scattered all over the country. Lagging behind Britain in the 1870s and 1880s, this industry also made a great leap forward. Shipyards in Hamburg, Bremen, Kiel, Stettin (Szczecin), and Danzig (Gdansk) eventually acquired the necessary skills to compete with their rivals in Britain. Orders for warships, as well as packet boats, greatly supported this development, however many engineers spent years in Britain learning how to construct and build ships.

Most importantly, Germany's population had risen from 33.7 million in 1850 and 39.2 million in 1870 to 56.3 million in 1900. In 1910, Germany, with 64.9 million inhabitants, had the second-largest population in Europe.

This population needed food. Whereas Germany had been an agrarian, self-sufficient country until the mid-19th century, it had increasingly begun importing

food towards the end of the century. Though figures vary, these imports made up between 20 and 25 per cent of the food supply at the eve of war in 1914. Most of these imports – meat as well as grain – were transported by ship. The same applies to raw materials. Though Germany was able to export iron ore and coal, it had to import other materials to keep its industries running. Most important were palm seeds; later, oil, metals like nickel and tin, cotton for the textiles industry, and saltpetre for the chemical industry had to be imported as well, just to name a few.

In an era of rival imperialist powers, safe trade routes were a prerequisite for the provision of food to a growing population and the continuous flow of imports into and exports from a prospering and dynamically expanding industrial nation. In contrast to earlier centuries, where German states more or less left the protection of their merchant vessels against pirates or of its citizens overseas to the Royal Navy, a powerful nation-state like Imperial Germany now had to protect these, and its interests in general, itself. As a result, German cruisers were protecting German merchant vessels in Chinese, South American, African, and Mediterranean waters from the 1870s, intervening on the spot if necessary. Moreover, as the conflicts with Denmark in the 1840s and 1860s showed, only a navy would be able to break a blockade to protect its industry and commerce from serious economic consequences, as well as its people from starving.

World Politics, Naval Build-up, and Domestic Politics

A prospering economy was not, however, only an aim in itself; in an era of rapid political and social change, economic wealth seemed the best means of guaranteeing domestic stability. The late 19th century economic crises had repeatedly fragmented each of the countries in Europe. These crises had caused political upheavals that partially threatened the existing political and social order, as they supported the conviction of socialist parties that only revolutions could improve the lives of the large majority of the population. Imperial Germany was no exception in this respect. However, in contrast to neighbouring countries in Western Europe, Germany was still partly premodern. During the Wars of Unification between 1864 and 1871, the monarch and the old elites, which had ruled the country for centuries, had been able to defend many of their prerogatives in politics, the army, and within society. Though they had increasingly come

under pressure from the bourgeois, as well as the working classes, they were still unwilling to yield. Instead, a successful social-imperialist policy that would bring about economic prosperity and political prestige, and thereby open up a bright future for everybody, offered a solution that made political and social reform unnecessary.

World Politics, Sea Interests, and Sea Power

In the eyes of the Kaiser, as well as many of his contemporaries, 'more ships' was the only solution to becoming a world and colonial power, securing political stability at home, and safeguarding German sea interests. As the Kaiser told his American friend Poultney Bigelow in 1894, having devoured the 'Bible' of all naval enthusiasts at the turn of the century, Captain USN Alfred T. Mahan's series of books titled *The Influence of Sea Power upon History*, he became deeply convinced of the interrelationship between naval power and global power, which, in turn, was a prerequisite for power and national prestige, economic wealth, and social stability. Both the Sino–Japanese War of 1894–95 and the obvious impending collapse of the Chinese Empire and its ensuing division among the Great Powers bolstered this conviction and newly spurred on his ambitions.

However, while the Kaiser was a naval enthusiast full of ideas, he would not have succeeded had he not had a young naval officer at his side who was able to systematically develop these ideas: Admiral Alfred Tirpitz. Belonging to a generation of naval officers who had been educated in the Prussian and Imperial Navies, Tirpitz soon showed exceptional qualities as both an organiser and a political and strategic thinker. These qualities had attracted the Kaiser's attention in the early 1890s. It was undoubtably Tirpitz who eventually provided the ideological framework necessary to gain support for expanding the Navy. Tirpitz's letter to the former Chief of the Admiralty Admiral Stosch, written in late 1895, best summarises his cast of mind – a mixture of power-political, maritime, and social-Darwinist convictions: "Up until 1866, our maritime interests were completely prostrated: sea trade, the export industry, transatlantic colonies, sea fisheries, transatlantic-Germanism, the Navy. Anything that survived out of these had a 'parasitic character.' This issue mostly still remains. In my view, Germany will swiftly sink from her position as a great power in the coming century if

these maritime interests are not brought to the forefront positively, systematically, and without losing any time: in no small degree also because there lies in this new great national task, and the economic gain which is bound up with it, a strong palliative against educated and uneducated social democrats. […] The aforementioned interests," he continued, "can only be placed upon a sound basis by power, and indeed, sea power. Otherwise, we shall lack the courage to draw cheques on the future. The 'parasitic idea' must be changed on the principle of *civis Germanus sum* (I am a German citizen). One particular difficulty lies in the fact that the expenditure on military sea power must be made opportunely and in full realisation of the economic advantages that will be accrued. Narrowmindedness and the shopkeeping spirit – which only consider the personal gain of the moment – must be added to this."

Political Success, Public Support, and Naval Law

Whereas the early 1890s had still been years of transition, contradictory plans, and political setbacks at home as well as abroad, the Kaiser, with the support of Tirpitz, who was appointed Secretary of the Imperial Navy Office, and Bernhard von Bülow, an ambitious young diplomat who became foreign secretary in 1897 and chancellor in 1900, eventually succeeded in reorienting German foreign, naval, and domestic policy. For almost two decades, world politics and naval building dominated German politics in almost every respect. The demand for equal rights (*Gleichberechtigung*) and a larger "place in the sun," which Bülow had postulated during his famous first speech at the Reichstag in December 1897, appealed to many of his contemporaries for years to come. The occupation of an outpost in distant China – Jiaozhou (formerly Kiaochow) – at the same time and the purchase of a number of islands in the Pacific from Spain only a year later clearly showed that the government was on this track.

Success overseas, however, can only partly explain how the Imperial Navy became popular so quickly. In order to achieve this aim in a country with a long history of land power thinking, Tirpitz, supported by a Navy League which soon had almost one million members, organised a modern propaganda campaign when he took office in 1897. Naval officers, professors, and teachers had begun travelling all over the country explaining the "dire need of a navy," as the Kaiser

had phrased it. At the same time, the Navy itself began organising all kinds of public events, which in turn excited the imagination of an increasing number of people: public ship launches, visits to watch naval manoeuvres, and mock naval battles in specially built basins.

Within two years (1898 to 1900) the Reichstag passed two laws that greatly increased the strength of the Navy. Three more were to follow in 1906, 1908, and 1912, accelerating the pace of naval building. These laws were by no means unique at that time, as many countries influenced by Mahanian ideas had begun to build up navies as well. However, no government did it as systematically and energetically as Germany. Moreover, nowhere else would the government eventually deprive parliament of its budget law by stipulating that the Navy would renew itself automatically at a building rate of three capital ships per year, all in as little as 20 years' time.

A Navy Against Great Britain

Though the final aims of the Kaiser's new men in replacing the *Pax Britannica* by a *Pax Germanica*, either through a cold war or, if necessary, even a hot war against the supreme world and sea powers were probably unknown, the "risk theory" and public speeches made by the Kaiser left no doubt that the new course of German foreign policy was directed against Great Britain. In 1899, Tirpitz assured the Kaiser that after completion of the High Seas Fleet, Britain would lose "every inclination to attack us, and as a result concede to Your Majesty such a measure of naval influence and enable Your Majesty to carry out a great overseas policy."

At first glance, these promises also seemed reasonable from a strictly naval point of view. Due to Britain's commitments all over the world, the building of a navy in the North Sea also seemed promising. Britain, Tirpitz always argued, would neither be able to deploy its whole fleet in home waters, nor would it have enough funds and men to outbuild Germany by more than one third. The ratio of 3:2 between the two fleets would give the German fleet a fair chance in a war against the Royal Navy, especially if this war took place under the guns of Heligoland, which would give the fleet an even better chance against the enemy.

It was this conviction – that it would be possible to successfully place a dagger

at Britain's throat – that would eventually not only prove to be one of the reasons for increasing tensions between Germany and its neighbours, but also change the fragile European power system. Instead of becoming a *tertius gaudens* who had her choice of the biggest and most powerful allies, Germany was soon isolated.

Anglo–German Naval Race

While at the turn of the century, Great Britain had no reason to worry about Germany's naval building due to the great superiority of the Royal Navy over all other navies, worries about both Germany's aims in general, as well as its naval building in particular, steadily increased as a result of misunderstandings or direct clashes over differing interests in world affairs. When the Royal Navy started to build a new type of battleship, the *Dreadnought*, in 1905, with Germany not only following suit in 1906, but even accelerating the building tempo in 1908, a naval race began with disastrous consequences for Anglo–German relations. Eventually Germany lost this race, which reached its peak in 1908–1912. The imperial government proved unable to keep up financially with the pace of British naval building. More importantly, however, German chancellors Bülow and Theobald von Bethmann Hollweg, Bülow's successor in 1909, were increasingly convinced that a reorientation of both German foreign and naval policy was inevitable. Instead of achieving the desired place in the sun, Germany had suffered a series of diplomatic setbacks, leaving the country isolated on the Continent. An open conflict had to be avoided. Whereas Germany's Army seemed strong enough to fight both France and Russia, an open conflict with Great Britain could only end in disaster. Despite all efforts, the Imperial Navy was still inferior to the Royal Navy, as Tirpitz secretly had to admit.

Attempts at negotiating an agreement with Britain failed. Whereas Germany had much to demand from Britain politically but nothing substantial to offer as far as the naval question was concerned, the British government in London was only interested in naval concessions and had nothing to offer politically. For the German government, naval concessions, if not accompanied by an agreement securing Britain's neutrality in a continental war, would shatter its foundations after the great expectations raised in the years before and the costs of the naval building programme. For the British government, on the other hand, any political

concessions would leave Britain isolated in a continental war, which Germany was then likely to win, thus establishing a full hegemony on the Continent – a nightmare for every British politician.

In the end, despite several attempts at coming to some kind of agreement, things remained as they had been before. Most importantly, it was more than doubtful that any chancellor would have got consent from both the Kaiser and Tirpitz. Again and again, Tirpitz told the Kaiser in the years of crisis not to yield to the mounting pressure upon him and exchange a political agreement against an arms limitations agreement that would not provide the necessary measure of security, as "it is the backbone of Your Majesty's naval policy that the German fleet must be so strong that a British attack would become a risky undertaking. The position of the German Empire as a world power rests on this risk, as does the influence our fleet has in maintaining the peace," he argued during an *Immediatvortrag* (personal report to the Kaiser) in October 1910.

Similarly, he summarised his social-Darwinistic view of the course of world history, which had always been one of his driving motives, in a secret speech to the officers of the Imperial Navy Office in October 1913: "Generally speaking, the question of whether Germany should fight for its place in the world against England […] or whether it should be content with the status of a second-rate power on the Continent is a question of one's political faith. For a great nation, however, it seems more honourable to fight for the most important aim and to go under honourably, rather than renouncing it for a future without glory."

Failure

These were indeed bold aims and assertions, but they could hardly disguise the fact that Germany's turn to the sea had failed on the eve of war in spite of Tirpitz's success in introducing another *novelle* in 1912. Soon he had to admit that he did not have the financial resources to build the ships stipulated by the naval law. More importantly, the deterioration of Germany's position on the Continent had strengthened the conviction of Germany's leadership that the nation's fate did not depend upon the navy but, as before, upon the army. Consequently, the latter was increased in 1912, then once again in 1913, whereas the Navy asked for new funds in vain. Even the Kaiser, Germany's most important naval enthusiast,

had begun to lose interest in his navy. Most importantly, the Navy realised on the eve of war that its strategic assumptions had also been proved wrong. Reports about manoeuvres of the Royal Navy left no doubt that it would not seek battle right after the outbreak of war. Instead, it would establish a distant blockade that the High Seas Fleet would be unable to break, unless it was willing to risk self-destruction.

Détente

However, though the future seemed bleak from Tirpitz's point of view, it was an open question as to whether the road Germany had taken at the turn of the century would lead into the abyss. Rather, the two years following the Haldane Mission in 1912, during which the German chancellor and the British secretary of war had tried in vain to find a solution to the naval question, were in fact years of a kind of détente. Neither Grey nor Bethmann Hollweg thought it wise to touch the naval question again. Both of them were convinced that negotiations would do more harm than good. Moreover, they had realised that more confidence was necessary to deal with such difficult matters as reducing naval expenditure or concluding some kind of political agreement. As a show of confidence, in June 1914, a British squadron took part in Kiel Week for the first time in 10 years. When the squadron left Kiel, Admiral Warrender signalled to the ships of the High Seas Fleet lying in harbour: "Friends today, friends in the future, friends forever!" This was a very astonishing signal after years of intense conflict.

Naval War Plans

However, what role were navies to play in the war? For the High Seas Fleet in the years immediately preceding the outbreak of war, the outlook was bleak. In early 1914, even Tirpitz admitted that under the leadership of the new First Lord of the Admiralty, Sir Winston S. Churchill, the Royal Navy had won the naval race despite the enormous financial strain that this entailed, whereas Tirpitz was unable to finance the vessels the German Navy was supposed to build according to the naval law. More importantly, whereas the Army had its Schlieffen Plan, which determined the deployment, as well as the movements of troops, according

to a timetable and which had been carefully worked out and updated in the years prior, the Navy did not have such a plan. Since the German Navy had been built up only for the purpose of helping to overcome Great Britain and her naval supremacy at almost any cost, everyone expected the Navy to have a plan of operation for implementing a strategy that promised success, or at least told the Commander-in-Chief of the High Seas Fleet exactly what to do in a war against its most dangerous enemy: the Grand Fleet.

What had happened? Since 1898, German Imperial Admiralty staff, the Command of the High Seas Fleet, the Imperial Navy Office, and the Kaiser had discussed a number of plans of operation against Great Britain. These plans were all based on the assumption that the Royal Navy would establish a close blockade along the German coast and that, sooner or later, a decisive battle would take place in the "wet triangle" off Heligoland.

This scenario, however, seemed very unlikely on the eve of war. In 1912, the German Navy had concluded from a number of observations that the British Admiralty was beginning to change its strategy with respect to Germany. Battleships had become too vulnerable to submarine attack and damage caused by torpedoes and mines to risk them in a battle that seemed unnecessary for one important reason: geography. As a result, the British side gave up the idea of establishing a close blockade, or at least an observational blockade, which would have sooner or later forced the German Navy to break it by challenging the Grand Fleet. Instead, a distant blockade of cruisers between the Orkneys, Shetlands, and Faeroes covered by the Grand Fleet from its new war base at Scapa Flow seemed sufficient to achieve the Royal Navy's main aim, which was to cut off Germany's line of communications. It is true that many officers in the Royal Navy had difficulties in coping with this change in naval strategy, which not only forced them to give up on a decisive Trafalgar-like battle right after the outbreak of war, but also to accept that – as Churchill put it in September 1914 – the Navy's main role would be to provide "the cover and shield" that would allow Britain to create an army "strong enough to enable our country to play its full part in the decision of this terrible struggle." In this, they hardly differed from their enemy on the other side of the North Sea, who, for lack of hard knowledge about the operational implications of the new technology now at sea and more complex ideas of sea

control and trade protection, still also clung to traditional ideas of naval warfare, which were no longer feasible.

German naval leadership had only very slowly come to realise the consequences of this change in Britain's strategy in its war plans, leaving it somewhat stunned. When first asked what the High Seas Fleet would do "if the Grand Fleet does not come," the Chief of the Admiral staff, Admiral August von Heeringen, simply responded, in 1912, with, "then our submarines will have to make it." Two years later, the Imperial Navy still had no idea how to solve this dilemma. In May 1914, during the last manoeuvres of the High Seas Fleet before the outbreak of war, its commander-in-chief, Admiral Friedrich von Ingenohl, only shrugged his shoulders when Tirpitz asked the same question.

These reactions are in fact easy to explain. In 1912, 1913, and once again in the spring of 1914, the Navy had looked for alternative manoeuvres and war games. The results were disappointing: the party representing the High Seas Fleet always lost. Due to its geographical disadvantage, the German Navy had no chance of breaking such a blockade or forcing the Royal Navy to engage in battle close to the German coast without risking total disaster.

With regard to Russia, due to the overall importance of the North Sea theatre of war, as well as Russian numerical and material superiority, the Imperial German Navy had no option but to stay on the defensive. However, the Kiel Canal, which had become operational on July 30, 1914, after many years of reconstruction made necessary by the larger size of the new German capital ships, enabled German naval planners to reinforce its forces in the Baltic Sea to either meet Russian challenges or even launch offensive strikes itself. This possible scenario had, in return, prompted the Russian Navy to stay on the defensive. Though Russia had begun to rebuild its fleet in 1912, its forces were still too weak to take an offensive role, even against a smaller German fleet. More importantly, still suffering from the traumatic experience of the Russo–Japanese War in 1904–05, the prospect of losing the new fleet in a sudden encounter with numerically far superior German units caused the leadership of the Russian Baltic Fleet to be cautious. A German strike against Russia's long coastline and at the rear of its armies, not to speak of a direct attack on its capital, St. Petersburg, could have a disastrous impact upon the future course of war.

The North Sea

Many contemporaries who, following the speeches and writings of naval officers before 1914, had expected a great and decisive battle in the North Sea, were soon deeply disappointed. Instead, the Grand Fleet, as well as the High Seas Fleet, restricted their actions to watching each other in wait of an opportunity for one's own forces to strike under favourable circumstances. Due to an overwhelming superiority in terms of its modern, as well as pre-dreadnought battleships and battle cruisers, the Grand Fleet, with its new commander-in-chief, Admiral Sir John Jellicoe, could afford a wait-and-see-attitude. Safeguarding the transport of the British Expeditionary Force to the Continent after the outbreak of war proved successful. Implementing and keeping up the blockade was more difficult. First, the strain of service in war experienced by smaller craft of the Northern Patrol, and even many modern ships, in the rough waters of the North Sea was indeed great, as the deficiencies in machinery and need for repairs soon made apparent. Second, so long as the British government hesitated in forcing neutrals like the Netherlands or Norway not to re-export contraband for political reasons, all efforts to cut off Germany's lifelines proved at least partly in vain.

The High Seas Fleet was in a more difficult position. Due to the change in British naval strategy, operations plan number 1, which finally became effective on July 31, had no choice but to simply give the order to wear down Britain's naval strength first, seeking battle only under favourable circumstances. Anything else would have been suicidal. Accordingly, submarines and smaller vessels were to attack the Grand Fleet and infest the North Sea with mines.

As a result, the High Seas Fleet remained on the defensive in the North Sea, leaving the initiative to the Grand Fleet in the vague hope that an opportunity might arise that would be successful. This *guerilla war*, or as the Germans called it, *Kleinkriegs* strategy, suffered a severe blow only a few weeks after the beginning of hostilities. On August 28, three small German cruisers and a torpedo boat sank after they had been surprised by superior British forces off Heligoland.

The impact of the outcome of this first encounter between the two fleets was far-reaching: for many months to come, German naval and political leadership would discuss alternatives to the Navy's plans of operation, a problem which, as it soon turned out, was closely related to the question of leadership in particular.

What alternatives did the German Navy actually have? As far as the North Sea was concerned, the number of options was indeed very limited. They simply amounted to a kind of hit-and-run-strategy against the British East Coast that aimed at enticing parts of the Grand Fleet to come out and engage in battle under more favourable circumstances for the German fleet than in the open or even northern parts of the North Sea, where the risk of meeting superior forces was simply too great.

The first of these strikes was planned in September 1914, but cancelled at the last minute. German naval intelligence had received reports on the location of the Grand Fleet, from which it appeared too dangerous to leave port. In the following months, German battle cruisers raided the East Coast several times; they did not, however, achieve any strategic success. Though both fleets came close to each other and eventually exchanged fire, either poor visibility or Hipper's conclusion that it would be wiser to run for home than run into a trap prevented a more serious encounter. Moreover, the Battle of Dogger Bank in January 1915 clearly demonstrated the risks of this strategy: while the Grand Fleet reached home without losing a single vessel, the High Seas Fleet lost the armoured cruiser *Blücher*.

As a result of this disaster, the High Seas Fleet remained on the defensive for more than a year. It would, however, be wrong to assume that only the High Seas Fleet was dissatisfied with this development. In Britain, important voices time and time again demanded a more active role for the Royal Navy in the North Sea by suggesting the need to occupy one of the Frisian Islands, Heligoland, and the Danish port of Esbjerg.

It was only as late as April 1916 that Admiral Reinhard Scheer, who had only been appointed commander-in-chief of the High Seas Fleet three months prior, again ordered more offensive strikes in the North Sea. Scheer hoped to find an opportunity to challenge smaller parts of the Grand Fleet, which he hoped to annihilate. For reasons of morale, as well as political considerations, namely the justification of the Navy's existence, a more active role seemed of the greatest importance after two years of fighting during which the Navy had not proven that it was worth the money that had been spent on it thus far. It was one of those strikes that, more or less by accident, led to the Battle of Jutland on May 31, 1916,

almost two years after the outbreak of war.

Regardless of what German Naval officers would later say or write about this "Glorious first of June," as Kaiser Wilhelm II first wanted to call the battle, it was no German victory, although British losses of men and material were higher. Strategically, the battle had changed nothing, as Admiral Scheer frankly admitted in a memorandum to the Kaiser in early July. Nevertheless, after repairing his vessels, which had been severely damaged at Jutland, Scheer left his base at Schillig Roads two more times in the hopes of meeting and annihilating parts of the Grand Fleet. These hopes were, however, not fulfilled. Despite the Grand Fleet feeling great disappointment at the outcome of the Battle of Jutland, which had been no Trafalgar, it saw no use in giving battle, which, even if it resulted in a great victory, would not change anything strategically. Neither its commander-in-chief, Admiral Jellicoe – transferred to the post of First Sea Lord in 1917 not due to his merits but as a result of loss of confidence in his leadership qualities – nor his successor, Admiral David Beatty, were willing to risk so much for nothing. Like the Grand Fleet, albeit in a much worse position, the High Seas Fleet stayed in port, only leaving again in April 1918 to make a raid in the northern North Sea to attack Allied convoys. For this it paid rather dearly, for one of its most modern battlecruisers, the *Moltke*, was hit by a torpedo fired by a British submarine; the Grand Fleet, or a part of it, however, did not come into sight. Subsequently, the Imperial German Navy again restricted its role to that of a fleet in being that protected Germany's coast from invasion and supported the increasingly difficult task of sweeping mines in the German Bight to allow submarines to exit into the North Sea for operations against Britain's merchant fleet.

At the verge of collapse of the German Empire in October 1918, the newly established naval command under Admiral Scheer, the *Seekriegsleitung*, again made plans for an offensive strike against the Grand Fleet. Fully aware that such a strike was both an unnecessary political provocation of the Allies and strategically useless, the *Seekriegsleitung* nevertheless hoped that an attempt to gain victory in a final great battle would help save the honour of the naval officer corps through their willingness to sacrifice their own lives and ships, thereby paving the way for the build-up of a newer, more powerful navy after the war. This was, of course, pure nonsense. It was hardly surprising, then, that sailors on vessels that were

doomed to sink if they left port in the last days of October mutinied. Angry about the way they had been treated by their officers in many respects during the war, they saw no purpose in sacrificing their lives for a system that had denied them equal rights in politics, not to speak of the increasingly disastrous situation with regard to the provision of food and other goods. Starting at Germany's main naval bases at Wilhelmshaven and Kiel, mutinying sailors, who quickly united with soldiers from the Army and other workers, brought down the existing political and social order.

The Naval War in the Baltic Sea

Geography, special hydrographic conditions, and climate had a deep impact on naval operations in the Baltic Sea. Unlike the North Sea, the Baltic Sea is merely a large lake with only one narrow entrance at its western edge. The hydrographic conditions and climate, however, had both advantages and disadvantages for all parties. Whereas the former was favourable for the deployment of submarines and the use of mines, the long nights and ice made operations very difficult, especially at the eastern parts of the Baltic Sea between October and March. Since no modern means of reconnaissance were available at that time, enemy forces could advance and strike without being detected early, if the ice allowed any operations at all.

In contrast to the North Sea, where German forces were in an inferior position, the situation in the Baltic Sea was, by and large, advantageous for the Imperial German Navy. Though the number of vessels stationed at Kiel and other forward positions like Danzig or Pillau (Baltiysk) (8 mostly old light cruisers, 8 torpedo boats, and 3 submarines) was smaller than the Russian Baltic Fleet, which consisted of 4 older pre-dreadnoughts, 5 armoured cruisers, 4 light cruisers, 63 torpedo boats, and 12 submarines, as well as 4 modern capital ships, which would become operational in less than a year, the Imperial German Navy could always rely on the High Seas Fleet to support either defensive or offensive operations.

It was precisely this situation that caused the German Baltic Fleet to start an offensive right after the outbreak of war. First, to prevent the Grand Fleet from entering the Baltic Sea, the commander-in-chief of the German Baltic Fleet, Prince Henry, the Emperor's younger brother, issued an order to mine its entrance. This measure was, however, only advantageous for the German Navy at first

glance. It could of course prevent its direct enemy, the Russian Baltic Fleet, as well as indirectly prevent the Grand Fleet, from forcing the Danish Straits. This notwithstanding, the closure of the Danish Straits also had serious repercussions on Germany's grand naval strategy. By limiting the possibility of a raid by the High Seas Fleet out of the Kattegat and into the North Sea, the German naval leadership carelessly discarded a strategic option which would have kept the Grand Fleet in suspense, thus making their defence measures more complicated. Second, to discourage the Russian Baltic Fleet from carrying out offensive strikes along the long German coast, German cruisers and torpedo boats were dispatched to the eastern parts of the Baltic Sea as a show of force. Unfortunately, this strike turned out to be a disaster with far-reaching consequences. The small cruiser *Magdeburg* ran aground in the Gulf of Finland and had to be abandoned while the rest of the squadron made a narrow escape. It was, however, not the loss of the *Magdeburg* itself that proved disastrous, but the fact that the Russian Navy found the top secret signal book of the Imperial German Navy in the wreckage. Handed over to the British very soon, this signal book enabled the Grand Fleet to detect the movements of the German fleet at a very early stage and remain "master of the situation" in the North Sea until the end of the war by taking precautionary measures.

Though the Russians refrained from openly attacking their enemy, they were nevertheless quite successful in causing damage. In the autumn of 1914, several German warships were severely damaged or lost after passing over Russian minefields. The situation became more complicated for the German Baltic Fleet when, after the end of winter, it successfully moved east with the victorious German armies. The scouting forces of the Baltic Fleet, established in April 1915 and based at the Russian port of Libau (Liepaja), conquered in May, were now in a better position to try and secure the lines of communication in the Baltic Sea, especially the important sea routes to Sweden. This task, however, soon proved more difficult than previously expected. The Russians were masters in laying mines, and supported by British submarines, they launched a successful campaign during which, from the Germans' point of view, merchant vessels and warships were sunk at an alarming rate. The failure of German attempts to force entrance into the Gulf of Riga in 1915 and the sinking of seven torpedo boats, which, upon

advancing into the Gulf of Finland in December 1916, had passed over a minefield, illustrate that the Russian Baltic Navy knew how to fulfil its task. Unlike in the North Sea, where the Royal Navy remained a staunch opponent, the Russian Baltic Fleet was soon on the verge of collapse after the outbreak of revolution in 1917, thus paving the way for a combined amphibious operation by both the German Army and Navy to conquer the Baltic Islands in October 1917, only weeks before the outbreak of the Bolshevist revolution. Though successful, the Navy's losses – two modern capital ships were hit by mines – were an unnecessarily high price to pay for the operation, which, as some commanding officers rightly surmised, had only been ordered to first prove to the Army that the Navy was capable and willing to make a successful strike if necessary, and second, to divert attention away from the mutinies that had seriously affected morale in the summer of 1917. The German naval expedition to Finland, which followed the request of the new government of this former part of the Russian Empire and which was supposed to support Finnish forces in their attempts to prevent Bolshevists from invading the country, saw no combat action. Nevertheless, damage to the battleship *Rheinland*, which had run aground onto rocks, was another severe and unnecessary loss in a situation that was already difficult enough for the Navy.

The War in Distant Oceans

In naval history, cruiser or commerce warfare has always been a strategy implemented by numerically weaker navies to inflict losses on an overwhelming enemy. By destroying enemy merchant vessels, thereby causing serious problems for trade, industry, and the provision of food, or the destruction of vessels transporting troops and war materials from distant parts of the British and French Empires to the main theatre in Europe, fast cruisers could help force a powerful opponent to sue for peace. Consequently, it would have been an obvious strategy of the Imperial German Navy to devise plans for cruiser warfare. Such a strategy would not only have seriously threatened Britain's, and even France's, lifelines, but would have also forced the numerically far superior Royal Navy to disperse its ships. In that event, the number of British vessels available to engage in a decisive battle in the North Sea might have been much smaller than it actually was in 1914.

Remarkably enough, however, due to the great impact of Mahanian ideas on naval warfare, cruiser warfare had not played an important role in preparing for the war at sea, and neither did it after war had actually broken out. The lack of bases and coaling stations had been one reason why Tirpitz had always emphasised the need to build a battle fleet rather than a fleet of cruisers waging commerce warfare on the oceans. It is true that on the eve of war, Tirpitz seems to have toyed with the idea of forming two "flying squadrons" consisting of battle cruisers to wage cruiser warfare in the Atlantic. He even picked up this idea again in mid-August 1914, however he dismissed it soon after. After the unexpected success of the U-boat *U-9* against Royal Navy ships in the English Channel, the secretary of state of the Imperial Navy Office was convinced that submarine warfare would deliver results more quickly than traditional cruiser warfare.

Against this background, Germany's cruisers, scattered over distant parts of the world, were doomed to be sunk sooner or later. Although German Admiralty staff issued orders to the German East Asiatic Squadron in the spring of 1914 recommending an attack on the British forces in East Asia immediately after the war only "if circumstances for the cruiser squadron […] are particularly favourable," Admiral Count Maximilian von Spee, the commander of Germany's most powerful squadron overseas, consisting of two armoured and four small cruisers, decided to try and reach his home base. On the way back, he defeated an inferior British squadron led by Admiral Sir Christopher Cradock off the coast of Chile in November 1914. However, the Admiralty, which had at first underestimated the potential danger of a powerful German squadron threatening important British trade routes in the South Atlantic and let the German ships escape from its naval base on the Chinese coast, struck back by dispatching a superior force to hunt them down. Only a month after the battle, Coronel Spee's squadron was sunk off the Falkland Islands while preparing for an attack on Port Stanley. The remaining small German cruisers, such as the famous *Emden* (sunk in November 1914), the *Dresden*, and the *Königsberg*, which were waging commerce warfare in the Indian and Pacific Oceans and off the coast of East Africa, were all hunted down by the spring of 1915.

Whereas the Royal Navy had had no apprehensions concerning the impact on Britain's lifelines of Germany's cruisers overseas, the prospect of fast German

passenger and merchant vessels being converted into auxiliary cruisers became a growing worry of the Admiralty. Due to their great speed and number, these vessels were expected to pose a much more serious threat to British trade routes than any German warship. In the event, these fears were, by and large, proved to be unjustified. Though most of Germany's auxiliary warships were sunk in the first few months of the war, they could claim some successes. For example, one of Britain's newest dreadnoughts, the *Audacious*, fell victim to a mine laid by the German auxiliary cruiser *Berlin* in the Irish Channel in October 1914. After an interlude of almost two years, the lack of success in the main theatre of war eventually caused German naval leadership to resume the war against Britain's trade routes using auxiliary cruisers. Hoping to force the Admiralty to weaken its forces in the North Sea, the German Navy again sent out several converted merchant vessels, including the old steamships *Möwe* and *Wolf*, as well as the *Seeadler*, a slow sailing ship. Whereas Seeadler was soon hunted down and sunk, *Möwe* and *Wolf* successfully waged commerce warfare in the Atlantic, Indian, and Pacific Oceans for almost two years before returning to Kiel in early 1917 and 1918, respectively.

New Forms of War: The Submarine Challenge

The only serious threat to British superiority in the Mediterranean, the North Sea, and of course, the Atlantic Ocean, was submarines. Realising that a Mahanian blue water strategy would bring no success, in late 1914, the German naval command at least partially reverted to a different strategy: that of submarine warfare. The submarine had been invented in the mid-19th century. During a slow process of trial and error involving many accidents and setbacks, every navy had been developing this new type of vessel since the turn of the century, with Britain having the largest submarine fleet – 72 vessels – on the eve of war, with the German Navy having only 28 operational vessels.

This notwithstanding, and despite proving their seaworthiness and capabilities in naval warfare prior to the war, submarines were still not regarded as an important weapon in future wars at sea. Though submarine warfare remained a question of trial and error for all navies throughout the war due to manifold technical problems with either the boats themselves or their armaments, the

success of the German submarine *U-9* was something of a turning of the tide in this respect in spite of the many reservations held by the adherents of battleships. Under very favourable circumstances, *U-9* had sunk three old British armoured cruisers within one hour off the coast of Dover in September 1914. However, attempts in 1915 and 1916 to introduce submarine warfare on a larger scale and in a more effective manner by sinking Allied ships without warning met with severe opposition from Germany's political leadership. Until 1917, the danger of the United States of America entering the war on the side of the Allies with all its repercussions on the Allied war effort outweighed the promise of a quick and decisive success against Allied ships by German Imperial Admiral staff. Only in February 1917, when victory on land was not yet in sight and hunger, as well as a lack of raw materials, had become a serious domestic problem that threatened political and social stability, did Germany's leadership unanimously decide to bet everything on one last card to force Britain to its knees – and in doing so, it lost everything. Though German submarines inflicted heavy losses on Allied ships in the first months of 1917, the introduction of the convoy system soon helped the Allies improve the situation. Moreover, new forms of anti-submarine warfare and a large-scale mining offensive that effectively blockaded exit routes proved successful in fighting against German submarines, which soon suffered increasing losses totalling 178 vessels and 4,474 men out of a total of 335 vessels in service.

Scuttling of the High Seas Fleet in 1919

In June 1919, at least from its own point of view, the High Seas Fleet achieved its only victory: by scuttling itself at Scapa Flow, Britain's main naval base in the Orkney Islands, it prevented the humiliating distribution of its vessels between the victorious Allies.

A New Beginning

When World War II broke out on September 1, 1939, due to Germany's attack on Poland, the German Navy, the *Kriegsmarine*, was in a very difficult position. Although the *Kriegsmarine* had eventually shaken off all the restrictions of the Treaty of Versailles of 1919, the build-up of the fleet had only just started. From

the Navy's point of view, it was, without a doubt, important to have Hitler's support. This support had even led to an agreement with the Navy's greatest rival before 1914, Great Britain, in 1935. This agreement permitted the Navy to build a fleet that had roughly one-third of the strength of the Royal Navy. Regarding submarines, the *Kriegsmarine* was eventually even allowed to become equal in strength. Against the background of Germany's naval aspirations prior to 1914, this seemed very little. However, this treaty did help to improve Anglo–German relations – for the time being. Thus, in contrast to the events leading to the outbreak of World War I, an arms race, with its disastrous consequences for German foreign and domestic politics, could be avoided, at least at present. Moreover, a higher building rate to diminish the huge gap between the German and British navies was simply not possible due to a lack of resources, as well as shipbuilding capacities. Last but not least, neither Hitler, nor the Navy, ever intended to keep the treaty, planning to increase the strength of the *Kriegsmarine* whenever possible. Thus, in late 1938 to early 1939, the *Kriegsmarine* secretly passed a new building programme: the so-called *Z-Plan*. This plan not only accelerated the tempo of the building of a newer and more powerful fleet, but also greatly increased its strength. According to the plan, in 1947 the *Kriegsmarine* would consist of 10 battleships, 3 pocket battleships, 4 aircraft carriers, 21 heavy and light cruisers, and 249 submarines, not to mention a considerable number of other vessels. It is doubtful as to whether this would have been sufficient to fight a combined British and US fleet. Naval staff estimated that Britain would possess about 22 to 25 battleships, 12 aircraft carriers, more than 80 cruisers, and 200 destroyers by 1942. When adding the building programmes of the French and US navies, the *Kriegsmarine* would still be inferior in every respect. However, since Hitler continued to argue that he would only need the fleet at as late a date as 1946, there seemed no need to worry about any conflict in the near future. Rather, if Hitler first attacked in the east and succeeded in establishing continental hegemony, there would be enough time, shipyards, and resources to further enlarge the Navy in order to fight a stronger Anglo–American fleet.

Raeder and Naval Strategy

Numbers are, however, only one aspect in judging German naval policy before and during the war. Rather, they are inextricably connected with naval strategy. Only a homogenous fleet can be successful in wartime. So, what strategy did Germany's naval leadership try to implement in respect to a future war? Before 1914, Germany had built up a Mahanian battlefleet in order to achieve naval supremacy. During the war, this strategy soon proved futile. The possession of a powerful fleet was useless if it did not go hand in hand with a favourable geographical position. As a result, Britain had established a blockade that effectively cut off Germany from all sea lanes. Attempts to break this blockade failed. Unrestricted submarine warfare, which began in 1917, had also failed to turn the tide, despite great losses inflicted upon Allied trade.

Disappointed by this lack of success, younger officers had already begun discussing new ideas during the war. In their eyes, only a sea denial strategy aimed at destroying the economic lifelines of the enemy with modern cruisers and submarines seemed capable of solving Germany's strategic dilemma: the lack of free access to the oceans. The era of powerful battleships – which, while increasingly vulnerable to torpedo attacks and too costly to be sacrificed in battle, did not change the course of war – seemed over.

However, discussions among German naval officers in the interwar years show that the Navy's leadership was still split between advocates of a sea denial strategy, and those who advocated for a strategy of sea control. For many officers who started their careers in the Tirpitz era, only big ships seemed to promise success in a future naval war.

Grand Admiral Erich Raeder, the commander in chief of the German Navy since the late 1920s, though no doubt also deeply influenced by Tirpitz's ideas, had developed a different strategy. In his analysis of German cruiser warfare during World War I, Raeder came to the conclusion that all naval theatres of war formed a homogenous whole. As a result, all operations had to be viewed in terms of their correlation with other sea areas. In practice, this meant building a fleet that was able to both protect Germany's coastlines and inflict severe losses on the enemy by attacking its lines of communication across the world's oceans with pocket battleships and submarines.

Implementing this strategy, however, proved difficult. When it became clear in 1938 that Hitler regarded not only France and Russia as Germany's future enemies, but also Great Britain, the *Kriegsmarine* faced a serious dilemma. Whereas Raeder, still under the assumption that the Navy would be given enough time to prepare for such a war, would have preferred an oceanic strategy, parts of the naval leadership opted for a sea control strategy. So did Hitler, who eventually gave the order to step up battleship building in late 1938.

The Kriegsmarine at War

Less than a year later, after war had eventually broken out and the Navy had to face Britain again, Grand Admiral Raeder was in a very difficult position. Against the background of a building programme that had only just been implemented, the future of the navy seemed bleak. Fully aware that neither the small number of U-boats nor surface forces would have a decisive impact on the outcome of the war, he almost helplessly resigned himself to his fate. "All the Navy can do is show that they know how to die gallantly," he recorded in the official war diary of the *Seekriegsleitung* on September 3, 1939.

Raeder's conviction – that is, to die in vain with no military purpose – was the result of his experiences in 1918. The debacle of the last sortie in October 1918, which had to be given up after the sailors of the battlefleet, unwilling to die at the very last moment of war, began to mutiny, had shaped the memory of many officers. They had suffered enormously from this event and their failure to die honourably for the fatherland. Moreover, in the eyes of many of their contemporaries, since the Navy was responsible for the ensuing revolution, it was to be blamed for all the upheaval and humiliation that had followed.

In contrast to 1914, open battle against the Royal Navy was out of the question due to the great inferiority of the *Kriegsmarine*. Instead, the *Kriegsmarine* could try to destroy as much of Britain's maritime transport capacity as possible. This would require an oceanic strategy, which was implemented at the outbreak of war. In the last days of August 1939, two of the Navy's most powerful surface vessels – the pocket battleships *Deutschland* and *Graf Spee* – were deployed to the Atlantic Ocean to wage cruiser warfare. For almost three months, both ships successfully raided British merchant ships in the Atlantic Ocean. Whereas the

Deutschland returned home safely in December, the *Graf Spee* scuttled itself after an indecisive encounter with British vessels at the mouth of the River Plate in December 1939, very much to the embarrassment of Hitler, as well as the chief of the *Seekriegsleitung*. Besides the loss of the *Graf Spee*, the results of these operations were also unsatisfactory: since only 11 ships had been sunk, it is difficult to argue that Britain's lifelines were thereby seriously threatened. Moreover, it had become obvious that the pocket battleships, specially designed for long-range operations in distant waters, had reached the limits of their sustainability. However, as so often before and afterwards, the *Seekriegsleitung* had no interest in sober analysis. Instead, whereas it had still been arguing in September that commerce warfare was a means to achieve success by sinking as many merchant vessels as possible, the *Seekriegsleitung* now maintained that the main aim of the deployment of raiders was to disrupt British trade and force the Royal Navy to disperse its vessels all across the oceans, thus relieving the situation for the German side in home waters.

The pessimism of naval leadership in 1939 was, however, soon replaced by a more optimistic assessment of the future. Following Raeder's demands, Hitler eventually decided to conquer Denmark and Norway before attacking France, Belgium, and the Netherlands in the west in the spring of 1940. The occupation of these two Scandinavian countries opened the gate into the Atlantic Ocean for the Navy, which it had lacked in 1914–18. It is ironic, however, that while the *Kriegsmarine* now possessed the bases it had longed for at that time, it had nearly lost the fleet it needed for successful operations against Britain. In battles with the Royal Navy, the *Kriegsmarine* had paid a high price for this operation, for almost a third of its surface vessels – 10 destroyers and 3 cruisers – were destroyed by superior British forces. However, the occupation of the French Atlantic coast further improved the position of the *Kriegsmarine* in the war against Britain.

Against this background, and despite the losses the *Kriegsmarine* had suffered during the campaign in Norway, the *Seekriegsleitung* believed that its chances in a commerce war against Britain were good. In the summer of 1940, and again in the spring of 1941, Raeder deployed the remaining vessels of the surface fleet to the Atlantic Ocean. In November 1940, the pocket battleship *Admiral Scheer* attacked a British convoy, sinking five ships and severely damaging others. As

a result, the Admiralty stopped all convoys for the time being. Soon afterwards, both battleships *Scharnhorst* and *Gneisenau*, as well as the heavy cruiser *Hipper*, also began raiding British convoys in the Atlantic Ocean and off the West African coast. Though they sunk 115,622 tons of British shipping, this success would not force Britain to its knees, as more than 800,000 tons of goods reached Britain at the same time. The attempt to repeat these successes by sending Germany's most powerful battleship, the *Bismarck*, to the Atlantic Ocean proved disastrous. Although the *Bismarck* sank the British battlecruiser *Hood*, it was itself sunk by superior forces only a few days later.

After the loss of the *Bismarck* in May 1941, all surface operations more or less came to a standstill. Astonishingly enough, it was not Raeder but Hitler who had taken this decision. Whereas Raeder had still hoped to resume commerce warfare in the Atlantic Ocean from the German Navy's new French base, Hitler had rightly come to realise that the days of big surface ships were over. More importantly, after severe setbacks in the east, he was unwilling to risk further unnecessary losses without considerable gains. Faced with the option of either redeploying the remaining surface vessels to Norwegian waters, where Hitler feared Allied landings, or simply decommissioning them, thus freeing up thousands of men for other duties, Raeder eventually gave in. In February 1942, the battleships *Scharnhost* and *Gneisenau*, as well as the heavy cruiser *Prinz Eugen*, returned to their German home bases from Brest after a very risky, though successful, operation (Operation Cerberus). British air attacks on Kiel, however, impeded any new deployments after repairs were made to the damage they had incurred while crossing the Channel. It was only the *Scharnhorst* that would eventually leave port, doing so in 1943 to attack British convoys to Russia in the Arctic. However, it was sunk by superior British forces in December. The *Tirpitz*, once the pride of the *Kriegsmarine*, suffered the same fate a year later. Damaged by several British attacks, it finally sank after severe air attacks in a Norwegian fjord in November 1944 without ever having used its big guns against the enemy. The era of big ships was finally over: those that had survived Allied attacks were used as floating artillery platforms in the East to shell Russian forces or – in the last weeks of the war – to rescue German citizens from the Russian onslaught.

Submarine Warfare

With the lack of a powerful surface fleet, it was hardly surprising that U-boats were the backbone of the war in the Atlantic Ocean right from the beginning of the war. Consequently, like the pocket battleships, all available U-boats were deployed to the North Atlantic. There they achieved a remarkable level of success. 1.3 million tons of Allied shipping were sunk between September 1939 and June 1940. Moreover, the flagship of the Royal Navy, *HMS Royal Oak*, as well as one aircraft carrier, *HMS Courageous*, fell victim to German U-boat attacks. The start of the war could hardly have been better. A closer look, however, shows that the *Kriegsmarine* would barely be able to sustain this level of success unless the number of U-boats could be greatly increased. To be effective in winning the tonnage war by sinking ships at a faster rate than the Allies could replace them meant deploying at least 100 to 150 U-boats at the same time. Taking into account vessels undergoing repairs, maintenance works, or resupply, the Navy required a force of 300 U-boats. It did not, however, have the capacity for this at that time. Accordingly, the *Seekriegsleitung* demanded the submarine fleet be increased by building at least 29 new submarines monthly.

However, implementing this strategy proved more difficult than expected. Though Hitler had approved the Navy's plans to increase the rate of submarines built per month, numerous shortages – such as a lack of materials, building capacities, and skilled workers – barely covered their losses. First, Hitler was concentrating on the conquest of the Continent, and from 1941 onwards, the defeat of his most important enemy, the Soviet Union. Second, from 1940 to 1941, the dictator was hesitant to launch a full attack on Great Britain both at sea and by air to destroy its economic potential as Raeder had been demanding again and again. It was clear that Hitler still regarded Britain as a potential partner in the future, just as he had done before the war. Third, unlike Raeder, Hitler seemed to realise that the Navy's aim of waging economic warfare, and thus helping win the war, was at best a vague hope, and by no means a recipe for success. It is true that during the succeeding campaigns of 1940 and 1941, the U-boats, operating from their new bases in France in so-called 'wolf packs,' had again achieved remarkable successes, sinking 3.5 million tons of Allied shipping. Attacks by the *Luftwaffe* had further increased British losses. This notwithstanding, British

efforts to overcome the clearly serious crisis by increasing the rate of shipbuilding, improving the convoy system, developing new anti-submarine weapons, cracking the German 'Enigma' code, strengthening ties with the United States, which directly and indirectly began to support Britain, and increasing U-boat losses were a clear indication that it might take much longer than expected to win the tonnage war. Moreover, all efforts to force Britain to its knees by stepping up U-boat attacks on convoys entailed the risk of luring the United States – with its huge amount of resources – into the war. This was not in Hitler's interest, for it would make it almost impossible to win the war on the Continent. "To secure the continental zone," Hitler told the chief of the Naval Staff, Vice Admiral Kurt Fricke, in October 1941, was now the "prime necessity of the hour."

The extent to which political considerations influenced submarine warfare in the Atlantic became even more visible when Hitler decided to transfer 23 U-boats to the Mediterranean in order to support Italy, which was suffering from increased serious setbacks, as well as concentrate additional U-boats off the coast of Gibraltar or in Arctic waters. Fully in line with these decisions, only six U-boats were assigned to the American East Coast after the German declaration of war against the United States in December 1941.

For the *Kriegsmarine*, these developments were unsatisfactory, as Germany's sea denial strategy would hardly work under these circumstances. Moreover, the number of U-boats ready for operation in the Atlantic was still small. For example, in April 1941, only 28 out of the 100 U-boats of the Kriegsmarine could be deployed in the Atlantic. The remaining 230 were still undergoing trials and the training of their new crews was yet to be completed. Though the situation was slowly improving, at the end of the year, only 91 U-boats out of a submarine fleet of 249 were ready for operations. However, due to the deployment of U-boats in other theatres of war, only 22 out of a total of 55 were available for the tonnage war in the Atlantic. Against this background, and in spite of the great success of U-boats under his command in 1940 and 1941, Admiral Karl Dönitz, Flag Officer U-boat Command, was seriously worried in early 1942 that, "we will finally arrive too late for the Battle of the Atlantic." As a result of this pessimistic analysis, Dönitz radically demanded that all U-boats be concentrated in the West Atlantic as soon as possible. Only in the areas that were then still out of range of

British air surveillance could success be achieved. In order to achieve this success, however, Dönitz needed more U-boats. Due to the lack of far-reaching German reconnaissance aircraft to help locate the convoys, it seemed that it was only a greater number of U-boats formed in a line across the huge ocean that would be able to eventually detect and hunt down convoys before the latter reached home waters, after which superior naval vessels and support from fighter aircraft would cover their further voyage.

The German declaration of war against the United States in December 1941, however, would eventually change this situation. After severe setbacks for Germany in the West – which were due not least to the impact of *Ultra* on the tonnage war, due to which British losses were reduced by an estimated 65 per cent, as convoys could now be diverted to less dangerous routes – the new year began with a 'drumbeat.' During Operation Drumbeat, German submarines sank almost 400 vessels carrying two million tons of shipments within six months. When the U-boats were eventually withdrawn after the introduction of the convoy system along the US Coast, submarine attacks were again concentrated on Allied convoys in the Mid-Atlantic Ocean. Here they again achieved remarkable successes. Nevertheless, the increasing number of losses made clear that the situation was slowly getting worse. Whereas in the first six months of 1942, only one U-boat was lost for every 40 merchant ships sunk, this ratio fell to one for every 10 merchant ships by that summer.

For the *Kriegsmarine*, this was no reason to worry. Rather, Raeder's dismissal as commander in chief of the *Kriegsmarine* and the appointment of Grand Admiral Karl Dönitz as his replacement in January 1943 seemed to improve the situation in several aspects. First, the era of powerful capital ships, symbols of sea power that had failed to justify their own existence, was definitely over. Now, all efforts had to be concentrated on the U-boat war. Second, admired by his men and having a very special relationship with the Führer, Dönitz seemed the right man to win this war against all odds. With Hitler's support, and in close cooperation with the powerful minister of armaments, Albert Speer, he accelerated the building of U-boats, destroyers, minesweepers, and coastal vessels. By building 40 U-boats a month, the U-boat fleet alone grew to 2,400 submarines. Like cars, these U-boats were now built in sections, with different modules constructed by

various contractors, and eventually put together at experienced shipyards. Huge shelters, like Valentin in Bremen, were built to protect the production of U-boats against air attacks. Moreover, new types of U-boats were developed, such as type XXI and type XXIII, which had completely new propulsion systems that not only increased the submerged speed, but also the range while diving.

Though Dönitz tried to improve U-boat production, the Battle of the Atlantic would reach its climax in the spring of 1943. In March 1943, Dönitz's U-boats achieved remarkable successes in fighting Allied convoys. A total of 82 ships and 476,000 tons were sunk. As a result, the supply situation became so desperate that some on the Allied side even talked of losing the war. However, within two months, the situation changed completely. In April, Allied losses amounted to only 39 ships and 235,000 tons. Most importantly, this lack of success coincided with an alarming increase of losses on the German side. Whereas in March, only 12 U-boats had been lost, the number of vessels lost rose to 15 in April, reaching the astonishing number of 43 in May; roughly 25 per cent of the operational strength of the U-boat arm. As a result, Dönitz had no choice but to break off the Battle of the Atlantic. Though he resumed it again in September, he once again had to recall his U-boats after severe losses, which were not made up for by the victories they had gained. An indication of the cost of a submarine war is the ratio of U-boat losses to sunk Allied shipping. Whereas in 1941 and 1942, only one U-boat had been lost per 148,032 (1941) and 132,526 (1942) tons of shipping sunk, this ratio fell to one U-boat per 18,587 tons in 1943. Against this background, success in the tonnage war was completely out of reach.

What were the reasons for this defeat? First, of course, was the renewed success of the code breakers at Bletchley Park, which enabled the Royal Navy to once again track down and hunt the wolf packs, as well as divert convoys in time, after a short period of blindness caused by the Germans changing the encryption system of the Enigma machine. Second, the Allies succeeded in closing the 'mid-Atlantic air gap' in the spring of 1943 by long-range *Liberators*. U-boats were now subject to attacks from the air. Of a total 258 U-boats lost in 1943, 90 were sunk and 51 damaged by RAF Coastal Command. Third, new technological means like radar, ASDIC, and high-frequency direction finding (huff-duff) systems, as well as anti-submarine mortars and depth charges, similarly contributed to this

success. Fourth, in contrast to the *Kriegsmarine*, which increasingly suffered from a lack of raw materials and men and whose bases were soon to be under almost continuous air attack, the Allies could mobilise almost unlimited resources, both in terms of building new merchant ships and new weapons, as well as procuring men.

Dönitz's hopes in turning the tide by building a greater number of U-boats would therefore soon prove futile. Losses, however, did not make him rethink either his position towards the Führer, whom he almost blindly admired, or his strategy. On February 20, 1945, when the Allies had already invaded the western and eastern parts of the Reich, he was still convinced that it would be possible to build 87 XXXI and XIII-type U-boats. His emphasis on building 600 *Seehund*-type midget submarines is just one example of Dönitz simply ignoring what was going on for as long as possible. His deep-rooted loyalty to the Führer and his conviction that the *Kriegsmarine* should "fight to the last cartridge" in order to overcome the traumatic experiences of 1918 may explain this attitude. About 30,000 German sailors and almost 73,000 Allied sailors and merchantmen paid a very high price for this attempt at winning the tonnage war in the Atlantic Ocean.

Summary

To sum up, over two world wars, Germany tried to achieve not only world power status, but also status as a sea power. In both wars, it utterly failed. Though Germany was no doubt a strong naval power, it had never been a sea power. Its disadvantageous geographical position, as well as its tendency towards land power-thinking, made this impossible. As Tirpitz rightly argued in his *Memoirs*, the Germans had never understood the sea. It was only after 1945, when Germany became an ally of the Western powers, that the country achieved sea power status. However, this is beyond the scope of this paper.

Further Reading

Bird, Keith, *Erich Raeder: Admiral of the Third Reich*, Annapolis, MD, 2006

Epkenhans, Michael, *Grand Admiral Alfred von Tirpitz: Architect of the German Battle Fleet*, Washington D.C., 2008

Epkenhans, Michael, "Imperial Germany and the Importance of Sea Power," *Naval Power in the Twentieth Century*, ed. by Nicholas A. M. Rodger, London, 1996, pp. 27–40

Hansen, Kenneth P., "Raeder versus Wegener – Conflict in German Naval Strategy," *Naval War College Review* Vol. 58, No. 4 (2005), Article 8. Available at: https://digital-commons.usnwc.edu/nwc-review/vol58/iss4/8 (22.08.2021)

Herwig, Holger H., *"Luxury" Fleet: The Imperial German Navy 1888–1918*, Atlantic Highlands, NJ, 1980

Rahn, Werner, "German Naval Power in the First and Second World Wars," *Naval Power in the Twentieth Century*, ed. by Nicholas A. M. Rodger, London, 1996, pp. 88–100