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This collection of essays was drawn from a public seminar hosted by the Sea Power Centre Australia (SPCA) and the Australian Centre for the Study of Armed Conflict and Society (ACSACS) at the University of NSW (Canberra) in November 2014. The seminar presentations have been revised, enlarged and edited. An additional two papers, those by **Dr Peter Overlack** and Mr Michael Wynd, have been included to broaden and supplement the collection. The editor has also added an introduction covering a series of events between 1901 and 1914 that led to the establishment of the Royal Australia Navy and which gives the less informed reader a sense of the considerable challenges facing the new navy.

The origins of the Great War of 1914-18 are the subject of continuing debate: why did the major Europe powers plunge themselves into a conflict that would produce such unprecedented death and destruction? The maritime aspects of this debate are no less complex with long-running arguments about the cogency of the strategies devised by the nations with substantial navies for the project of power at sea. This collection of essays is a snapshot of international naval affairs on the eve of war. The contributors assess the operational readiness of the combatants and the thinking behind the deployment of their ships once war was declared in August 1914. The editor, **Professor Tom Frame**, is Director of the Australian Centre for the Study of Armed Conflict and Society (ACSACS) at UNSW Canberra. He joined the RAN as a junior entry cadet midshipman in 1979 and served until 1993. He has been a member of the Council of the Australian War Memorial, judged the inaugural PM's Prize for Australian History and is the author or editor of 26 books on a range of subjects.

# Chapter 2

# The Function of Commerce Warfare in an Anglo-German Conflict to 1914

#### PETER OVERLACK

In a war with industrial England, every struggle for the sea lanes will of necessity concurrently become a war of trade and commerce.<sup>1</sup>

Vice-Admiral Wolfgang Wegener

After the last limited Western European conflict, the Franco-Prussian War, ended in 1871, it became increasingly clear that the development of future wars in the future would be checked by economic exhaustion, which conflicts on a national scale would generate. From the start, a nation would draw heavily on its economic strength to enable it to fight on a broad national basis, involving all aspects of industry and manufacturing. In this scenario, a maritime power possessed great advantages over a land power, as long as it could maintain its trade routes to sources of food and raw materials, and export markets.

After the dismissal of Otto von Bismarck and the abandonment of his cautious policies towards Britain, the 'New Course' under Wilhelm II was designed to effect British acknowledgement of and respect for Germany as a world power. As a result of what in some German naval circles saw as an inevitable clash with Britain, commerce warfare came into its own. This essay argues that despite the emphasis on battleships, a vocal element among German Admiralty Staff planners regarded the interdiction of imports to Britain as possible, with the aim of disrupting the economy, and causing social unrest, forcing the negotiation of terms advantageous to Germany.

#### The German Rationale

As Avner Offer has argued, any treatment of strategic matters must acknowledge the economic dimension, and Paul Kennedy observed that the most profound cause of the Anglo-German antagonism was economic.<sup>2</sup> Germany possessed neither a world-wide trading network nor a strong creditor position that justified its claim to be a world economic power.<sup>3</sup> Nevertheless, it consistently sought an elusive *Gleichberechtigung*, an rightful place on the world stage, and was seeking her destruction as an economic rival. Germany's interest in economic matters was closely related to strategic aims. In all ages food has been a munition of war as well as a commodity of peace.<sup>4</sup> Along with blockade, cruiser or commerce warfare (*guerre de course*)<sup>5</sup> had long been regarded as one of the appropriate methods of damaging or destroying an enemy's economy in order to hasten victory. In its narrowest sense commerce warfare was directed against trading vessels, and neutral vessels carrying contraband goods.<sup>6</sup> Rudolf Troeltsch has defined it as 'naval warfare which attacks only enemy trade, and avoiding open battle, attempts to force the opponent to a peace by economic damage alone'. Theoretically, commerce warfare could be expected to bring a quicker result against a nation whose economy was dependent on the sea, and which would find 'the disruption of trade exerted an unsustainable pressure on its economic life'.<sup>7</sup>

The vulnerability of Britain's vital import routes was regarded by German Naval planners as the 'Achilles heel' by which she could be crippled economically and quickly brought to terms. The

threat of attacks on shipping would force up insurance rates to the extent that the profitability of British shipping would be destroyed and the national economy seriously damaged. The losses to commerce and industry and the resultant effect on the public would cause popular agitation. pressing the government to seek peace. In this context commerce interdiction was an important complement to the anticipated main clash of battleship fleets in the North Sea. As a report by the British Colonial Defence Committee in 1910 made clear, the result of such a great battle would be decisive, because having disposed of the enemy's battleship force, the victor would be able to destroy or capture shipping and halt commerce. The threat was taken seriously. Admiral Sir Arthur Wilson, who succeeded Sir John Fisher as First Sea Lord, stated in a memorandum he prepared for the Army Council in 1910 that 'the really serious danger that this country has to guard against in war is not invasion, but interruption of our trade and the destruction of our merchant shipping'. 9 The effects of an interdiction of trade clearly would be felt at the extremities of the British Empire and affect he naval operations. In June 1912, Reginald McKenna, former First Sea Lord, commented that German cruisers could quickly capture merchant ships coming from South America, Africa, Australia and New Zealand, and Asia. The disposal of the German battle fleet in the European theatre of war would not solve the problem: ' ... the Germans are as much alive to the function of a navy as we are'. 10

As Sir Julian Corbett pointed out, the object of naval warfare always had to be directly or indirectly to secure command of the sea, or prevent the enemy from securing it. This primarily meant control of maritime communications, and for this cruisers were indispensable. However, although cruiser warfare could inflict considerable economic damage, it could never win command of the sea from which all else would follow, and this concept was crucial in the thinking of Admiral Alfred von Tirpitz. While he rejected large-scale cruiser warfare in favour of battleships to gain a quick and decisive victory, he accepted that the use of cruisers in economic warfare would be appropriate under certain conditions. Volker Berghahn states that it is questionable whether the requirement for a battleship fleet concentrated in the North Sea would have been so clear had Tirpitz not been at the helm, with his forceful personality.

There was considerable opposition. Vice-Admiral Karl Galster deprecated the Navy Office's preoccupation with battleships and ensuing limited battle plans. He advocated the use of torpedo boats and submarines, and systematic attacks on merchant trade by fast cruisers which would have refuge in colonial bases.<sup>14</sup> His appointment as State Secretary of the Navy Office in 1897, along with that of Bernhard von Billow to the Foreign Office, marked the beginning of Germany's striving for that equal status with Britain which it felt was being denied. This had as its unspoken corollary the negation of British naval supremacy, and in this the Imperial Fleet came into its own as an instrument of foreign policy. Hans Hallmann wrote that the naval construction program 'was never a purely military matter, it was intended as ... assistance for a great policy ... to produce political results'. 15 The greatest influence on Tirpitz, Admiral Albrecht von Stosch, head of the Navy from 1871-83, advised him that the Navy had to be 'electrified for the offensive ... It would be a great thing if we could smash the English at sea ... '16 The nation whose cruisers were most widely dispersed on the outbreak of war would have the advantage, and for this there needed to be an urgent increase in the overseas fleet; this was 'a definite necessity and consequence of German world-policy'. 17 German commerce warfare thinking as an adjunct to a clash of battleship fleets, is thus placed in a world-political context. It is clear from German documents that the trade of Britain, its Empire and its anticipated allies would be a prime target. By 1914, there was to be the adoption of all measures 'by which we can affect the general economic life of England' and thus 'considerably influence its capacity to continue the War'. 18

Vice-Admiral Viktor Valois, a former commander of the Cruiser Squadron, believed attacks on commerce would be especially effective against Britain, given her dependence on maritime trade. As the foremost exponent of cruiser warfare, Vice-Admiral Curt von Maltzahn wrote 'control of the sea meant control of sealanes to achieve economic and military aims'. Whereas land warfare required a general superiority of strength in order to cripple the enemy's entire national life by controlling his land area and forcing peace, naval warfare worked specifically by damaging economic activity and food supply. The advantage over land warfare was that its effects were felt more quickly and from the beginning of hostilities. In its widest sense, naval warfare also included action against enemy coastal installations and the destruction of cables and radio-telegraph stations. What made it attractive for Germany was that while the use of blockade could

be exercised only by the strongest power, control of the seas was not a prerequisite for effective commerce warfare. It was not bound to a specific region, and individual cruisers could change their area of operations quickly. German naval strategists, while basing their construction of a great battleship fleet on AT Mahan's theories, did not overlook what he had to say about cruisers:

It is generally accepted that a country can be brought to a state of destitution by the systematic destruction of its trade. Economic warfare is without doubt an extremely important secondary activity, and it is improbable that one would not implement it ... Its effect is especially fatal if a nation against which it is implemented ... has a widely-dispersed, rich trade and a powerful navy, like England ... <sup>21</sup>

British concern over a possible German threat was carefully monitored. In June 1906, the Naval Attache in London informed Tirpitz that The Standard had run a series of articles on the dangers to Britain's import trade and finances in the event of war, and that there was considerable public discussion of the matter.<sup>22</sup> Although Tirpitz was preoccupied with the construction of a battleship fleet for the 'deciding battle' in the North Sea,<sup>23</sup> the use of cruisers still had strong supporters even if their application was not widely seen to be as valid as among the earlier enthusiasts of the *jeune ecole*, the school of French thought advocating commerce warfare. Indeed, the Kaiser had been a somewhat reluctant convert to Tirpitz's views, always in his heart of hearts favouring cruisers because they carried the German flag – and his reflected glory – to wider fields than did the battleships locked up in Kiel and Wilhelmshaven.<sup>24</sup>

In early 1911 Admiral Georg Alexander von Muller, Chief of the Naval Cabinet, following the Kaiser's discussion of cruiser warfare with Tirpitz, wrote to Chief of Admiralty Staff Max von Fischel seeking his views on ways the Navy could be used in attacks on enemy merchant trade.<sup>25</sup> The Germans accepted that a complete blockade of the British coasts, or cruiser warfare in close proximity, where all trade routes converged, had to be rejected due to the superiority of the Royal Navy. However, the Chief of the Cruiser Squadron, Vice-Admiral Gunther von Krosigk, stated in a memorandum in 1911 that it was certainly within the real of possibility to cause widespread panic by means of commerce attack on overseas stations, which would force the dispatch of considerable forces and provide relief for German operations in European waters. Operations involving broad attacks on commerce were expected to make the British government amenable to a peace in line with German aims. In order to achieve this, action had to be primarily against the import of mass commodities.<sup>26</sup> Such embargoes were easiest to enforce since all the critical raw materials were needed in large tonnages, making interdiction guite effective.<sup>27</sup>

### Britain's Vulnerability

British observers were not unaware of their nation's vulnerability.<sup>28</sup> Already in 1867, JCR Colomb indicated the necessity of an Empire-wide naval strategy. The Royal Navy's primary function was seen as the defence of trade, by barring enemy naval forces from the widespread trade routes which were the arteries of the British Empire. If it were deprived of trade and supplies, the nation would perish.<sup>29</sup>

From the 1870s, decreases in shipping costs enabled bulk grains to be imported from North America and Australia and still be sold at prices below those of domestic producers. Lacking tariff protection, British grain production declined dramatically: population growth had not been matched by a corresponding increase in domestic food production.<sup>30</sup> What significantly affected Britain's position at this time was the Continental imbalance of power that came with German unification in 1871. Germany's rapid growth in population and heavy industry increased both the economic and military gap between it and its Continental neighbours, and the start of the naval construction programme brought with it the prospect of the strongest land power also possessing a maritime force capable of challenging the Royal Navy. If Britain's ability to import food and raw materials, financed by its international trade, were cut by loss of command of the sea for any considerable period, its economy would collapse. Large numbers of cruisers to protect trade were constructed from the 1870s, but it was clear that from the onset of hostilities, and for months thereafter. merchant vessels would be subject to enemy cruiser attack. Until this threat could be neutralised, a scenario of severe disruption to Britain's essential trade threatened. While this theme has been examined by other authors, it is worthwhile emphasising several points that relate to a specific German threat.31

In a major address to the Royal United Services Institution in 1901, Captain SL Murray, who was an authority on food supply, mooted the idea of a Food Supply Department. Modern industrial conditions had created a situation where 'the exhaustion of the food supply, by forbidding the export of food-stuffs, by financial operations, and by force will be one 'of the chief weapons of future warfare'. He considered it remiss that until then Britain had no body responsible for food supply, an issue at the very foundation of any defence scheme 'because it determines our staying power in the event of European war'. A mighty Navy and strong Army were of no use if an enemy could starve the nation into submission within six months.<sup>32</sup> This was precisely the point made about the danger of cruisers in the Dominions. Indeed, as Admiral FA Close put it, 'The Royal Navy has never had command of the sea as far as the protection of our merchant ships are concerned ...'<sup>33</sup> Yet the Admiralty was well aware of the link between naval strength, unhindered trade routes, and social stability.<sup>34</sup> The Secretary of the Working Men's Club and Institute Union stated in 190l that 'Given a state of semi-starvation consequent on a war, the people would cry out that the war should be stopped, even to the extinction of Britain as a dominant power in the world.<sup>35</sup>

The German Navy stated its intentions very clearly in a 1905 Admiralty Staff memorandum. Britain could be defeated by only two means: blockade or by a military landing. 'The absolute prerequisite for the successful use of both means is the lasting possession of naval supremacy in the waters surrounding Great Britain and Ireland.'<sup>36</sup> This was the purpose of Tirpitz's battleship fleet. The supporters of commerce warfare advocated a further element. The effect Germany would try to achieve was clear: in the condition of panic created by attacks on commerce, and with the risk of losing superiority in European waters, the British government would have to decide whether to risk sending the Regular Army to assist the French. If it did not, the issue which would 'transform the whole constitution of Europe will be decided without our having struck a blow; we shall have been forced to look on while every safeguard for our own security was being destroyed before our eyes'.<sup>37</sup>

In 1906–08, the political economist Ernst von Halle considered the connection between the supply of food and raw materials and British naval policy in the journal *Marine-Rundschau*.<sup>38</sup> The population of Britain had increased 400 per cent in the nineteenth century, while becoming the leading industrial state. In addition to food imports, her expanding industry required increasing quantities of raw materials, making it dependent upon the world market place:

The severing of imports to England ... be it by coastal blockade or by cruiser warfare, will considerably or completely block its provisioning ... So today the British economy is an extraordinarily artificial organism with numerous supports, whose continued existence is secured only by its undisturbed functioning.

This continuation depended upon constant maintenance and support by Britain's capacity to pay for imports, partly with exports and partly with income from its overseas investments, which would face considerable threat in time of war.<sup>39</sup> Uninterrupted industrial production - and the social stability which flowed from it - was almost entirely dependent upon a reliable supply of raw materials. Conversely, these imports could be paid for only if goods were produced for export. The contemporary statistics showing British dependence on its import trade make it clear how the continued functioning of British industry would be affected by an interruption of bulk imports.<sup>40</sup> In 1909–13, almost two-thirds of the annual requirements of foodstuffs were imported, and stored supplies of imports were reckoned to last for four to eight weeks. The entire raw cotton and jute supply was imported, with hemp and flax, only a small proportion less. A quarter of all leather and hides, all petroleum and rubber were imported. Iron and copper ore imports were increasing yearly by large amounts, as well as other non- and precious metals, and much of the needs of the chemical industry. Cotton, wool, rubber, jute, hemp and other foreign produced items would be severely affected. No less than 75 per cent of the annual wool requirement was imported, and was a specific German target as its interdiction would affect both the military and civilian war effort, and morale.41 The interdiction of imports would be more far-reaching than at first glance, as the civilian population would be affected too.

The crux of Halle's position on commerce warfare was that the issue touched the basis of contemporary economic life, the interference of which would undermine the foundations of even the strongest national economy. Britain was 'absolutely dependent on an unbroken and

undisturbed continuation of its maritime traffic. If this were effectively cut off, it would be forced to conclude peace at any price.'42 Murray, too, recognised this as 'the crux of the whole matter'. The population had to be kept fed and satisfied, so that they would not take to the streets 'which will force our politicians to conclude a disastrous peace ...'. The most dangerous time would be the first few months of war, before the Royal Navy gained absolute command of the sea. In this period it would not be able to spare many ships to protect food imports, and the results would be catastrophic: '... although our Admirals were defeating the enemy, the mobs at home would force the politicians to make peace'.<sup>43</sup>

The other major consideration for Britain was security of transport. Halle maintained that there was no guarantee that Germany 'can not interdict traffic on the major trade routes by means of superior cruiser power'.<sup>44</sup> Those in Germany examining the effectiveness of commerce warfare saw that previous wars in which Britain had been involved had produced a considerable rise in costs of foodstuffs and other goods, price manipulation, and speculation. There also had been a rise in shipping insurance premiums, which in turn affected the cost of transporting goods.

The cumulative effect would be much greater because Britain now possessed about half the world's merchant shipping.<sup>45</sup> Even rumours of war in the past had led to swift and considerable changes in insurance and transport costs, a particularly important factor for Britain, dependent upon supplies from the world market. Halle commented that the increase of maritime insurance premiums for British ships and their cargoes, and the use of non-British neutral ships, would burden wheat and other foodstuffs with more than proportional price rises. That a continuous and unbroken supply of a basic commodity such as wheat could not be guaranteed, clearly indicated Britain's weak position: 'Wild speculations, price manipulations and panic would doubtless be the result.'<sup>46</sup>

In 1905, a committee of the British Naval Intelligence Department acknowledged that the country faced a substantial threat from a prolonged commerce warfare attack. Foreign trade was such that it would be 'quite impossible to convoy more than a percentage ... convoy duty would remove [cruisers] from the more effective work of hunting down the enemy's commerce destroyers'. It was accepted that the Indian Ocean–Suez–Mediterranean route probably would have to be abandoned in war. Grain from Australia would be particularly vulnerable and it was expected that ships would have to be laid up or transferred to foreign flags.'48

In the *Rapid Review* in 1907, a naval officer lamented that the Admiralty had ceased building cruisers, while Germany was laying down three a year, at the very moment turbines enabled speeds of 24 knots for smaller cruisers:

The cruiser squadrons are so cut down that it is highly probable that battleships will be detached to do the work of cruisers ... We cannot use any of our protected cruisers to catch these [German] vessels ... clearly the question of commerce protection is becoming acute.<sup>49</sup>

Attacks on maritime trade were the most obvious form of warfare to provide good results in proportion to the effort expended. The Dominions were well aware of this. In 1905, a leading Australian newspaper stated that 'If the routes by which foodstuffs are brought to the United Kingdom were blocked ... even for the short space of three or four weeks, there would be at once the beginning of an acute famine.'50 As late as April 1914, the National Review pointed out that it was certain that in the first stage of a naval war, commerce protection 'will be most inadequately carried out', and the problem was exacerbated by the large number of armed German merchant vessels.<sup>51</sup>

# The Broader Implications of German Commerce Warfare Planning

Vice-Admiral Gunther von Krosigk's 1911 detailed examination of theory and practical application in the 'Memorandum on cruiser warfare in a war against England' brings to light another aspect of what Germany hoped to achieve. Trade would be attacked not just for the economic damage caused, but as a lever to affect the deployment of British naval forces. This factor was of concern to the Dominions, and one newspaper commented that while any trial of strength would be in the North Sea, 'it is obvious strategy for Germany to scatter round the world possibilities of attack, and so weaken ... the force that is kept to face her at home'. <sup>52</sup> While attacks on trade in British home waters was considered impossible because of the Royal Navy's strength, it were considered

possible to cause mass panic by cruiser warfare against British imperial trade routes. This would result in the detaching of considerable forces to distant parts and provide relief for German naval actions in the North Sea.<sup>53</sup> For Britain the question was from where and how would goods reach her, and could the trade routes be kept open without the transfer of numerous cruisers to foreign stations, reducing the effectiveness of the battlefleet? There was no lack of warning voices. It was pointed out that General Baron Colmar von der Goltz had written in Seemacht und Landkrieg that Britain was bound by an Imperial policy which scattered her naval forces over the globe, and to recall these would take time. In this moment of opportunity for Germany, 'careful preparation will permit a rapid mobilisation, and may give us a temporary superiority'. 54 In order to achieve this. attacks on trade had to concentrate on stopping the import of bulk commodities immediately on the commencement of war. The effectiveness of this secondary action was not to be underestimated, and under certain circumstances could tip the scales to Germany's benefit because Britain could not afford to ignore disruptions to her shipping in those distant regions supplying essential commodities. If the threat to trade from the South Atlantic and along the sea routes from Asia, Australasia, and India leading to Suez were effective, Krosigk believed that the insecurity created would reach a level which would create panic in shipping circles, who would demand naval protection. Ships would have to be dispatched from the European front to deal with the threat, and this would be the opportune moment for the German battleship fleet to strike. Herein lay the value of cruiser warfare. British forces lured from European waters 'certainly would create a measurable relief for our conduct of the domestic war'. 55 In particular, from Krosigk's standpoint as chief of the Cruiser Squadron based at Tsingtau in northern China,' his planned wide-ranging depredations would provide a unique opportunity to compel' the Royal Navy to reduce its strength in home waters .thus further limiting its strategic flexibility, already reduced by Dominion demands for protection. This would force an agreement on terms which would guarantee and consolidate Germany's world position. Here was a clear connection between strategy and foreign policy.

An appendix to Krosigk's memorandum provided a lengthy consideration of Britain's vulnerability. There was considerable British apprehension about the dependence on the import of raw materials, particularly wool and cotton, both of which were crucial to a war effort. The anticipated social disruption was equally important:

In view of the complicated nature of modern English economic life, it appears very probable that with a long period of interdiction of the import of raw materials, the most serious questions of existence for the English working-class population can be caused.<sup>56</sup>

Every increase in food prices would be a severe blow. One British estimate was that three million would become jobless due to the dislocation of industry, and by the fourth week of a war, some ten million would require support. The German assessment was that there were 'sure prospects of affecting the internal political situation in England and thereby the conduct of war, through effective cruiser warfare'. This idea of creating mass panic in the British population and its effect on the war effort runs through both the works of political economists and the naval memoranda they influenced. He have been supported to the conduct of war, through both the works of political economists and the naval memoranda they influenced.

In order to create a 'bread-and money-panic', it was essential that aggressive measures were taken against merchant shipping from early on. How could panic be caused most effectively? Clearly, the interdiction of foodstuffs would produce the quickest result, while that of raw materials would hamper Britain's war effort in the longer term – as well as causing mass unemployment and social unrest, as industry wound down. A careful statistical analysis was provided, and the most appropriate fields for cruiser warfare operations were assessed, based on the quantities and value of cargo on various trade routes. A special case was the import of wool and cotton. Krosigk's Memorandum noted that 'Successful cruiser warfare against the Suez trade will without doubt have greater effects on the English economy, and thus on the war, than an attack on South American trade.' The conclusion was that cruiser warfare in both the South Atlantic and on the trade routes leading into the Suez Canal would be profitable, but that the preferred field of operations was the latter because of the greater value of goods transported from Asia, Australasia and India.

This then led into a detailed examination of the Suez trade routes. The most obvious place to attack was in the Gulf of Aden where the trade routes converged. As the Indian Ocean was a large

expanse and there was little recourse to German or neutral harbours for supply, the Cruiser Squadron would attack most effectively not at the convergence, but at the source of the Suez trade or along its routes. For this operation, the areas under consideration were South and East Africa, India and Ceylon, Malaya, East Asia, and Australasia. The intricacies of regional geography made it certainly easier to patrol and block individual straits and local waters. In addition, British trade along the 2,400 miles from Shantung (NE China) to the Malacca Straits travelled set routes and had a frequency of traffic which offered rich targets. There was also the proximity of the Dutch Indies which – if the German Foreign Office did its job – could be expected to exercise a benevolent neutrality and provide access to coal, cable and radio communications. Finally, the region was already home to the Cruiser Squadron (at Tsingtau) where it could be located at the outbreak of hostilities. Working out its operational planning in detail in peacetime, it could move quickly and effectively.<sup>60</sup>

This danger was well recognised in Britain. Murray noted: 'How long do you think your social fabric would remain stable under such conditions? How long would the populace of London, or ... manufacturing districts, stand doubling of the price of food accompanied by ... diminished wages?'<sup>61</sup> Awareness of the nation's potentially exposed position came increasingly into mainstream discussion. It must not be forgotten that it was in 1913 that General Friedrich von Bernhardi's *Germany and the Next War* appeared in English. In this he bluntly stated that in the war against British commerce, 'The prizes which fall into our hands must be remorselessly destroyed ...' and the sharpest measures taken against neutral ships carrying contraband of war.<sup>62</sup> Such sentiments hardly reassured British merchant shipowners and naval planners. In March 1913, Admiral Lord Charles Beresford stated that the proper protection of the supply of food and raw materials was the first necessity of defence planning. Britain was vulnerable to a secretly and suddenly organized attack on its trade routes: 'Our real danger is starvation and not invasion.' <sup>63</sup>

Britain could not afford to ignore this potential danger, and debate in the Dominions had already been underway for some time. The effects of an interdiction of trade clearly would be felt at the extremities of Empire and affect naval operations. In August 1913, Colonial Secretary Lewis Harcourt made a key speech in the Commons concerning economic developments in the Dominions and Colonies, which was forwarded to Berlin by Ambassador Paul von Lichnowsky. He laid emphasis on the importance of cotton and petroleum imports, particularly the latter and its increasing use in the Royal Navy. Any interruption to the movement of trade and imports would cause considerable havoc. It was anticipated that war between Britain and a major power would cause the immediate dislocation of trade and disruption of finance, until the seas had been cleared of enemy warships — a situation which Germany took for granted.

# The Danger of Auxiliary Cruisers

Admiral Fisher wrote that in connection with the welfare of British seaborne trade, it had to be remembered that German armed merchant vessels acting as auxiliary cruisers could well prove very troublesome, combining as they did high speed, with a coal capacity in excess of any regular cruiser in British service. Fisher was involved in a protracted argument with the Admiralty on the inadequacy of trade protection forces. He did not share the contemporary belief that cruisers would not be effective commerce raiders, and believed they could survive at sea for lengthy periods by capturing coal from prizes. Ferman Admiralty Staff documents show that considerable effort put into organising a system for obtaining and converting merchant vessels. Although by 1914, the modernisation of its Cruiser Squadron had made considerable progress, because of the vast expanse over which operations were anticipated, auxiliaries were to play a vital part and their functions were minutely detailed in operational orders.

Implementation was characterised by Teutonic thoroughness. There had been a tremendous growth in the German economic presence east of Suez and along the American Pacific rim, and a considerable increase in the routes and vessels of German shipping companies in the whole Asian region. The Norddeutsche-Lloyd had successively bought up small competing British lines in Asia thereby accessing British trade routes and sources of coal. While this was originally a response to trading demands, German Naval staff ensured that appropriate strategic areas were traversed. As *Die Woche* innocently pointed out, if one viewed a route map of the islands between Asia and Australia, the region was fully enclosed by the German routes.<sup>68</sup>

This proposed use of the great number of merchant marine vessels for military purposes was particularly important for the German Navy, and the circumstances of conversion provided an ongoing point of contention with Britain. Germany maintained that on the outbreak of hostilities it would become 'a national duty to use the strength of the merchant navy wherever possible'. <sup>69</sup> It was a particularly useful instrument as merchant vessels did not have the operational restrictions of the cruisers. However, because of the financial demands of the naval race in the years before the war, only limited sums were available for the outfitting of auxiliary cruisers. In July 1914, Chief of Admiralty Staff Admiral Hugo von Pohl wrote to Albert Ballin, the director of the Hamburg-Amerika Line, emphasising that German success could be expected only if all possible preparations had been made. Of great importance was the co-operation of the major shipping companies, and to this end conferences were held with the Chief of Naval Intelligence, Fregattenkapitän Isendahl, to discuss measures. <sup>70</sup> Postal and fast steamers were designated for conversion to auxiliary cruisers. Details discussed included: speed, preparation of gun and searchlight mounts, munition storerooms, radio telegraphy, naval reservists as deck and engine personnel, and other measures. <sup>71</sup>

The danger to commerce was clear to British observers. In 1902 it was noted in the National Review- that the *Kronprinz Wilhelm* and *Deutschland* had averaged 23.5 knots crossing the Atlantic, two knots faster than any British ship. If the German vessels were armed and carrying coal instead of cargo, 'we have no cruiser which could catch them ... Our only plan is to subsidize fast liners ... placing them at the disposal of the Admiralty ...' Trade had to be protected at all costs. From 1912 the Admiralty made special efforts to persuade the major shipping companies to carry between one and four 4.7 inch guns, ammunition and radio on their larger vessels. The Australian Naval Attache in London commented that it was obvious that the adoption of such a system 'would be a real and definite -safeguard against the menace of German policy'. It was of paramount importance to the Empire that supplies of raw materials and foodstuffs should continue in wartime and 'arming a few merchantmen after the outbreak of hostilities won't secure it'. The state of the state o

#### Conclusions

Germany's world aims continually have to be kept in sight. Commerce warfare in distant regions was valid, given Germany's view of its role in what were regarded as important areas of geopolitical strategy in future decades. This was particularly so for East Asia. India was threatened by Russia from the north, and in Siam and Burma Britain was facing growing French interests. The fate of Korea and Manchuria was yet to be decided, and the United States' possession of the Philippines reinforced its power position in Asia. As Ernst Francke argued, perhaps it was Germany's destiny to act as a counterweight and form a system of balance in the region. Only a strong Germany could guarantee world peace, and only through naval power was it strong overseas.<sup>74</sup>

Ideally, as Admiralty Chief of Staff Admiral Wilhelm Büchsel had indicated in 1903, the prerequisite for success in achieving Germany's world aims was 'a political situation in Europe which povides the German Empire with a completely free hand overseas. Any security in Europe would preclude ... successful implementation.'<sup>75</sup> The European situation had changed to Germany's disadvantage due to the erratic machinations of its rulers. The undoing of Tirpitz's carefully calculated plans to neutralise the threat of the Royal Navy in European waters the naval race into which Germany was forced after the British began to build the *Dreadnought*-class battleship. After 1909, the dream of a fleet strong enough to defeat the Royal Navy in the North Sea began to evaporate in the face of mounting internal dissent at the cost involved. Chancellor Theobald von Bethmann Hollweg actively encouraged the Army's programme as a means of checking Tirpitz's ever-increasing demands on the national budget.<sup>76</sup>

The supporters of commerce warfare saw their hopes rise, and detailed planning shows that this strategy was intended to make an appreciable contribution to Germany's war effort. Büchsel wrote that 'It can be accepted that a Cruiser Squadron operating boldly and offensively, interdicting ... exports to England, will achieve the desired effect ...', namely that successful attacks on merchant shipping in foreign stations would cause considerable disruption to British economic life.<sup>77</sup> This was nowhere denied.

AJ Marder wrote that 'Deprived of her trade, Britain could not possibly have maintained her

industries, fed her rapidly growing population, or equipped her armies.'<sup>78</sup> Aggressive German operations against British trade were particularly important in view of the effect on the European naval situation in wartime. It was believed 'completely within the realm of possibility to create popular panic by means of commerce warfare, which will lead to the detachment of considerable forces to distant parts of the world'. This would contribute greatly to the effectiveness of German naval operations in European waters and 'in conjunction with other operations make the. English Government inclined to accept a peace suitable to us'.<sup>79</sup> Indeed, wrote one British economist later, when war broke out 'even our firm trust in the Navy did not altogether prevent a moment of panic'.<sup>80</sup>

The planned depredations against trade provided a unique opportunity to compel Britain to reduce her forces in home waters, thus limiting its strategic flexibility which was already under pressure from Dominion demands for protection of merchant shipping. Under these circumstances, Britain could not avoid coming to an agreement on terms which would consolidate, if not increase, Germany's world-power position. That this was no German flight of fancy is shown in Sir John Colomb's assessment that failure to provide adequate maintenance for Britain's position on foreign stations 'would probably affect the British position as a whole'.<sup>81</sup>

August 1914 saw the immediate commencement of economic warfare by both Germany and Britain in an attempt to cut each other off from sources of raw materials and markets. Indeed, even before war was declared in 1914, the Austro-Serbian hostilities caused a decline in prices at the Sydney wool sales, with European orders being cancelled in quantity. Dominion businessmen who had some experience of the cutting of specific supplies transported by sea during the South African, Russo-Japanese and Spanish-American Wars anticipated widespread constrictions of trade, and there was uncertainty as to the arrangement of foreign credits. It was estimated there were 11,000–15,000 men already out of work in Australia. The immediate danger was that this uncertainty might change to speculation and panic.<sup>82</sup>

While attacks on British trade routes by cruiser interdiction initially had some effect, it was not lasting. The naval superiority of the Entente and Germany's lack of suitable bases overseas prevented extensive commerce warfare with surface vessels. However, as Avner Offer states with reference to wider German naval issues, it must be taken into account what could have happened, and one needs also to consider the nature and reality of the threat and how appropriate a response Tirpitz's battleship planning was. The supporters of the 'deciding battle' concept must have been disturbed by Corbett's comment that while an enemy fleet might be defeated, that nation would be little the worse: secondary action in the form of commerce warfare was necessary in order to force a peace. At a constant of the commerce warfare was necessary in order to force a peace.

Gerd Hardach writes that prior to 1914, commerce warfare 'played but a subordinate role' in German naval planning. This is true in light of the 'main game' in the North Sea, but the crucial and specific function of commerce warfare cannot be denied. While the economic damage may have been minimal, the psychological effects were considerable in the first months of the War, particularly in the Dominions. Vice-Admiral WR Cresswell who played a seminal part in establishing the Australian Fleet Unit, emphasised that if German commerce warfare had been more successful, there would have been 'moral and other damage incapable of expression ... incalculable would have been the effect upon the spirit of Imperial unity'. What needs to be kept in mind is what was *intended* to be achieved, regardless of the early loss of Germany's colonial bases in Asia and the Pacific, which prevented full implementation of commerce warfare until the start of the submarine campaign in the Atlantic.

Supporters of submarine economic warfare were not popular in the German Navy Office, and were banned from publishing. Yet it is noteworthy that in early 1914, Vice-Admiral Graf Maximilian von Spee requested not only submarines but also aircraft to assist the Cruiser Squadron. <sup>87</sup> Already in May 1914, Kapitänleutnant Blum of the submarine section wrote a memorandum on the function of submarines in a commerce war with Britain, which was discussed with Tirpitz but referred back for further investigation. The numbers such an operation required prevented its implementation at that time. <sup>88</sup> No further action was taken by Germany until August 1915, which saw the start of the Admiralty Staff 's promotion of economic warfare by other means, as a strategy which hopefully would bring Germany victory. <sup>89</sup> Until the end of 1916, British food imports were maintained at almost 90 per cent of the prewar level. <sup>90</sup> However, the validity of the principle of commerce interdiction was accepted and underlay the later use of submarines, and the longer the war went

on the more both parties pinned their hopes on economic warfare.<sup>91</sup> Maltzahn recounted that following the Battle of the Skaggerak (Jutland), the jubilant Admiral Reinhard Scheer reported to the Kaiser that even the most successful battleship clash would not force Britain to seek peace: 'An end to the War could be achieved only by destruction of English economic life in unrestricted submarine warfare.'<sup>92</sup>

Was there a real possibility for commerce warfare, and why did it not fulfil its expectations? The German Navy had real prospects of early success in targeting trade routes from and within the British Empire, and thereby of affecting strategic deployments. CE Fayle, a respected writer on naval matters, acknowledged the effectiveness of Germany's policy of diluting British naval concentrations in European waters. Vice-Admiral Sir Thomas Jerram, commanding the China Squadron, commented that, 'the possibility of Germans being on trade routes is of first importance'.

As events developed in the first months of the war, the climate of uncertainty, even fear, which was created, the slowing of imports, the tying-up of naval forces in search and pursuit of German cruisers and auxiliaries, and the delay of Dominion troop transports were considerable hindrances to the war effort. The successes of *Emden, Karlsruhe, Möwe* and *Wolf* indicate what might have occurred on a larger scale, despite the British belief that the seas would be swept clear of all commerce raiders within a few weeks of the outbreak of war. The *Emden* in particular struck where the maximum political and commercial effects would be obtained. Archibald Hurd rightly commented that 'reviewing the depredations ... in the light of the subsequent attack on ocean-borne commerce ... and the heavy losses inflicted, the widespread irritation which she occasioned ... is notable'. Had it not been for the disarray into which Graf Spee's plans were thrown by the unexpected entry of Japan into the war, and the quick occupation of German colonies by Australasian and Japanese forces, the whole Cruiser Squadron would have attacked merchant traffic in Asian, Indian Ocean and Pacific (including western North American) waters, causing considerable losses.

Admiral Erich Raeder later commented in the official German naval history that much can be ascribed to the failure of foreign policy. When war came, this was locked tightly into a set path, dominated by Army and Continental considerations. As Berghhan has observed, the obvious fact that enemy trade could only be harmed if one possessed well-developed overseas bases failed to dampen the enthusiasm for cruiser warfare driven by imperialistic motives, and clouded naval strategic thiing. He high Seas Fleet found itself confined to port in the North Sea, all that was left was the possibility of successful action by cruisers in overseas waters. That German naval planning was divided in its purpose, concentrating on battleship construction, but still acknowledging the role of cruisers, without properly providing what was requisite for their successful operation, can be seen as the fundamental cause of the failure of commerce warfare by surface vessels. In practical terms, this meant that funds were directed to the construction of battleships. In Raeder's words, once the German Naval Admiralty Staff decided there was a role for commerce warfare, 'it was necessary to organise the ... material preparation for such a difficult task with all available means ...' It was precisely this which was not done thoroughly enough.

- 1 Wolfgang Wegener (H Henvig, tr.), *Naval Strategy of the World War*, US Naval Institute Press, Annapolis, MD, 1989, p. 79.
- 2 Avner Offer, *The First World War. An Agrarian Interpretation,* Clarendon Press, Oxford, 1989, p. 14; Paul Kennedy, *The Rise of the Anglo-German Antagonism 1860–1914*, Allen & Unwin, London/Boston, 1980, p. 464.
- 3 Gerd Hardach, The First World War 1914-1918, University of California Press, Berkeley, 1977, p. 3.
- 4 See Sir R Henry Rew, Food Supplies in Peace and War, Longmans, Green, London, 1920, p. 2f.
- 5 I have used both terms for *Kreuzerkrieg*, as the aim was primarily commerce interdiction. A good general discussion of commerce warfare is Bryan Ranft, 'The Protection of British Seaborne Trade and the Development of Systematic Planning for War, 1860–1906', in B Ranft (ed.) *Technical Change and British Naval Policy 1860–1939*, Hodder, London, 1977 pp. 1–22.
- 6 On what constituted contraband in the German view see F Perels, 'Privateigentum auf See in Kriegszeiten', *Marine-Rundschau*, Bd. 14/3, 1903, p. 275. The differentiation of absolute and relative contraband provided an ongoing international debate. See H Wehberg, 'Kolonialprodukte als Kriegskontrabande', *Koloniale Rundschau*, Heft 11/12, 1914, pp. 604–13. Specific application is defined in Ernst von Halle, 'Handelsmarine und Kriegsmarine', in *Neue Zeit-und Streitfragen*, Hrsg. Gehe-Stiftung zu Dresden, 4. Jg., Oktober 1906-Juni 1907, p. 54.
- 7 Rudolf Troeltsch, Deutschlands Flotte im Entscheidungskampf, Minier, Berlin, 1914, pp. 8-9.
- 8 See CE Fayle, Seaborne Trade Vol. I, Murray, London, 1920-04, pp. 34–45; David French, British Economic and Strategic Planning 1905–1915, Allen & Unwin, London, 1982, p. 13f.; Arthur J Marder, The Anatomy of British Sea Power: British Naval Policy 1880–1905, Putnam, London, 1940, p. 86ff.
- 9 Archibald Hurd, The Merchant Navy, Vol. I, Murray, London, 1921, pp. 218, 222.
- 10 Memorandum by Reginald McKenna on the naval situation, 24 June 1912, Cabinet Papers Cab/37/111/79, in CJ Lowe and ML Dockrill, *The Mirage of Power. British Foreign Policy 1902–1922, Vol. 3. The Documents*, RKP, London, 1972, p. 456.
- 11 Sir Julian Corbett, Some Principles of Maritime Strategy, Longmans Green, London, 1911, p. 87.
- 12 See the discussion in relation to the seminal 'Dienstschrift IX' in Ivo N Lambi, *The Navy and German Power Politics*, 1862–1914, Allen & Unwin, Boston, 1984, pp. 75–7.
- 13 Volker Berghahn, *Der Tirpitz-Plan. Genesis und Verfali einer innenpolitischen Krisenstrategie unter Wilhelm II*, Droste, Düsseldorf, 1971, p. 57.
- 14 G Schreiber, 'Zur Kontinuität des Groß-und Weltmachtstrebens der deutschen Marineführung', Militärgeschichtliche Mitteilungen 26/2 (1979) p. 159. The interest shown in Galster's views evoked Tirpitz's wrath.
- 15 Hans Hallmann, Der Weg zum deutschen Schlachtflottenbau, Kohlhammer, Stuttgart, 1933, p. ix.
- 16 Stosch-Tirpitz, 17 Feb. 1896, in Ulrich von Hassell, *Tirpitz. Sein Leben und Wirken mit Berücksichtigung seiner Beziehungen zu Albrecht von Stosch*, Belschersche Verlagsbuchhandlung, Stuttgart, 1920, p. 110.
- 17 GA Erdmann, Eine deutsche Auslands-Flotte. Zur Anregung und Kritik, Schulze, Leipzig, 1903, p. 25.
- 18 Bundesarchiv-Militärarchiv Freiburg (German Federal Military Archive), RM47/v 525, Admiralty report of 9 Nov. 1914. All following RM (Reichs-Marine) references are from this archive.
- 19 Bundesarchiv-Militärarchiv Freiburg, NI 60/3, Nachlaß Senden, Privatdienstliche Korrespondenz Senden-Bibran mit Vize-Admiral Viktor Valois, BI. 47, 'Aufzeichnung betr. Ansichten des Vize-Admirals Valois über die deutsche Flottenpolitik gegen England, 1898'.
- 20 Vizeadmiral Frhr. von Maltzahn, 'Seestrategie in ihren Beziehungen zur Landstrategie nach englischamerikanischem Urteil', *Marine-Rundschau* 7. Heft (1912) p. 876.

- 21 Quoted without reference in Erich Raeder, *Der Kreuzerkrieg in den ausländischen Gewäßern*, Bd. 1, *Das Kreuzergeschwader*, Mittler, Berlin, 1927, p. 3.
- 22 RM5/v 1124, Bl. 221, Coerper-Tirpitz, 28 June 1906.
- 23 See Jonathon Steinberg, Yesterday's Deterrent. Tirpitz and the Birth of the German Battle Fleet, Macdonald, London, 1965; Berghahn, Der Tirpitz-Plan (note 13).
- 24 On differences between the Kaiser and Tirpitz over armoured and battleship cruisers, see Berghahn, ibid. pp. 360–65
- 25 RM5/v 5972, Bl. 214, Müller-Fischel, 15 Jan. 1911.
- 26 RM5/v 5925, Bl. 2, 'Denkschrift über den Kreuzerkrieg im Kriege gegen England', April 1911. Fayle (note 8, p. 51) acknowledged the effectiveness of Germany's policy of diluting British naval concentrations in European waters.
- 27 See Eugene Staley, *Raw Materials in Peace and War,* Council on Foreign Relations, NY, 1937, p. 32; also David Williams, 'State Regulation of Merchant Shipping 1839–1914: The Bulk Carrying trades', in S Palmer and G Williams (eds), *Charted and Uncharted Waters*, University of London Press, 1981, pp. 55–80.
- 28 For a broader, socially based discussion of British vulnerability see Trevor Wilson, *The Myriad Faces of War: Britain and the Great War 1914–1918*, Blackwell, Oxford, 1986, ch. 1.
- 29 JCR Colomb, *The Protection of our Commerce and Distribution of our Naval Forces Considered*, Harrison, London, 1867, pp. iii–vii.
- 30 For an American view of the British side see Benjamin Taylor, 'The Decline of British Commerce', *North American Review*, Oct. 1900, pp. 577–93.
- 31 See Marder (note 8) Ch.6; Ranft, 'The Protection of British Seaborne Trade' (note 5); French, *British Economic and Strategic Planning* (note 8).
- 32 Capt. Stewart Murray, 'Our Food Supply in Time of War, and Imperial Defence', *Journal of the Royal United Services Institution* 45, 1901, p. 657.
- 33 Ibid. p. 699.
- 34 See Avner Offer, 'The Working Classes, British Naval Plans and the Coming of the Great War', *Past and Present*, 107, May 1985, p. 205.
- 35 BT Hall, speaking in response to Murray (note 32) p. 722. On social unrest see also SL Murray, 'The Internal Condition of Great Britain during a Great War', *Journal of the Royal United Service Institution* 57, 1913, p.1603ff.
- 36 'Denkschrift des Admiralstabes über die Kriegführung gegen England 1905', RMA, Entwicklung der Marine XVII, pp. 89–97, quoted in Walther Hubatsch, *Der Admiralstab und die obersten Marinebehörden in Deutschland, 1918–1945*, Bernard & Graife, Frankfurt/Main, 1958, p. 249.
- 37 'The True Doctrine of National Defence', National Review, April 1914, p. 229.
- 38 On the recommendation of the political economist Gustav Schmoller, from 1897 Halle also wrote for the propaganda department of the Navy Office (*Nachrichtenbüro*), one of several prominent academics recruited who published a stream of statistical and propaganda material in support of naval expansion. Halle was responsible for all economic aspects of the Department's publications.
- 39 Ernst von Halle, 'Die englische Seemachtpolitik und die Versorgung Großbritanniens in Kriegszeiten, Teil II, *Marine Rundschau*, Heft 2 (1908) pp.809, 815; similar views are expressed by the historian Ernst Francke, 'Weltpolitik und Seemacht', *Nauticus* (1903), p. 144.
- 40 Detailed statistics are in BR Mitchell, *European Historical Statistics 1750–1970*, Columbia UP, NY, 1976. Those in this paragraph are from Fayle (note 8) p. 3ff.

- 41 Full statistical tables are provided in A Barnard, *The Australian Wool Market 1840–1900*, Melbourne UP, 1958, p. 215f. The detailed plan for the attack on Australian wool exports is in RM5/v 5970, B1. 64. See the author's article 'German Commerce Warfare Planning for the Australian Station, 1900-1914', *War and Society* 14/1 (1996) pp. 17–47.
- 42 Halle, 'Handelsmarine', p. 57.
- 43 Murray (note 32) p. 725.
- 44 Halle, 'Die englische Seemachtpolitik ...', Teil I, Marine-Rundschau, Heft 8/9 (1906) pp. 911–12.
- 45 Statistics of steam and sailing vessels are in Mitchell (note 4) p. 623.
- 46 Halle (note 44) pp.916-18.
- 47 Minutes of Admiralty Meeting on the Protection of Ocean Trade in War Time, 30 April 1905, p. 32, Admiralty 116/866B, in Ranft, *Technical Change* (note 5) p. 19.
- 48 Admiralty 1/7734, NDI Memo. 'Food Supply in Time of War', 15 July 1901; Admiralty 1n594/A, 'Charts and Statistics of U.K. Food Imports'. 4 Jan. 1902, in Ranft, 'The Royal Navy' (note 5) p. 210. An earlier British view of British dependence on colonial imports and the strategic value of the Dominions which still held weight was that of George Parkin, *Imperial Federation. The Problem of National Unity*, Macmillan London, 1892, esp. pp. 104–14.
- 49 Lt Charles Bellairs, 'Is Everything well with our Navy?', Rapid Review, No.38, March 1907, p. 204.
- 50 The Age, Melbourne, 21 Feb. 1905.
- 51 'The True Doctrine' (note 37) p. 228.
- 52 Sydney Morning Herald, 4 Aug. 1911.
- 53 RM5/v 5925, Bl. 2, 'Denkschrift über den Kreuzerkrieg im Kriege gegen England', April 1911.
- 54 Quoted in 'The British Admiralty and the German Navy', National Review, Dec. 1902, p. 525.
- 55 Ibid.
- 56 RM5/v 5716, 'Anlage zur Denkschrift über den Kreuzerkrieg im Kriege gegen England', 24 April 1911. The figures used were taken from Halle's 1906 *Marine-Rundschau* article, which shows the reliance placed on the assessments of the political economists.
- 57 'The True Doctrine' (note 37) p. 228.
- 58 RM5/v 5716, 'Anlage zur Denkschrift' (note 56).
- 59 Gustav Schmoller and Lujo Brentano were among leading political economists who supported naval expansion. See the author's essay "An Instrument of Culture": The Imperial Navy, the Academics and Gennany's World Mission', in G Munro and A Bonnell (eds), *Power, Conscience, and Opposition. Essays in Honour of John A Moses*, Peter Lang, NY/Bern, 1996, pp. 3–25.
- 60 RM5/v 5716, 'Anlage zur Denkschrift' (note 56).
- 61 Murray (note 32) p. 714.
- 62 Friedrich von Bernhardi (AH Powles, tr.), Germany and the Next War, Arnold, London, 1913) p. 160.
- 63 *Parliamentary Debates*, Vol.50 p. 1915; col. 1929, 27 March 1913. William Charles de la Poer Beresford was an Admiralty Lord 1886–88, and also a Conservative MP. He had been C-in-C Mediterranean and then of the Channel Fleet 1905–09.
- 64 Parliamentary Debates, Commonwealth of Australia, Vol. 65, pp. 2690, 2693, 28 Aug. 1912; p. 7689, 20 Dec. 1912.

- 65 Even Marder barely touched on the Navy's conversion from coal to oil and its implications. See Geoffrey Jones, 'Admirals and Oilmen: The Relationship between the Royal Navy and the Oil Companies, 1900–1924', in Palmer and Williams (note 27) pp. 107–24.
- 66 Politisches Archiv im Auswärtigen Amt (German Foreign Office Archive) Bonn, R 6124, Lichnowsky-Bethmann Hollweg, 1 Aug. 1913.
- 67 Sir John Fisher (PK Kemp, ed.), *The Papers of Admiral Sir John Fisher* Vol. II, Navy Records Society, London, 1964, p. 369.
- 68 Between 1897 and 1900, the postal and freight steamer service increased from 19 ships with 74,111 BRT to 74 ships with 242,785 BRT. 'Deutsche Schiffahrt in Südasien'. *Die Woche*, 14 July 1900, pp. 1219–20. Even the smallest of these vessels had designated wartime functions.
- 69 Ernst Graf zu Reventlow, Der Einfluß der Seemacht im Großen Kriege, Mittler, Berlin, 1918, p. 13.
- 70 RMS/v 3681, BL.142, Pohl-Ballin, 4 July 1914.
- 71 The original agreement was concluded between the Navy Office and the NDL on 27 May 1898. Complete technical details are in RM5/v 5970, Bl. 193, 'Anforderungen der ReichsMarineverwaltung, betreffend Bau und Einrichtung denen neue in die Ostasiatische Reichs Postdampferlinie einzustellende Dampfschiffe genügen sollen'. Others followed with the HAL and Hamburg-South American Line.
- 72 ER Fremantle, 'Mercantile Cruisers and Commerce Protection', *National Review*, July 1902, pp.764–5. Fremantle was Commander on the China Station 1892, promoted Admiral 1906.
- 73 Australian Archives Melbourne, MP1049/1914/0289, Hawarth Booth-Secretary Naval Board, 21 March 1912. The British plan was implemented in mid-1913.
- 74 Ernst Francke, 'Weltpolitik und Seemacht', Nauticus (1903) pp. 138, 141.
- 75 Bundesarchiv-Militärarchiv, Nachlaß Büchsel. N 168, Bd. 8, 'Zurn Immediatvortrag', 21 March 1903. See Berghahn's comments on foreign policy, p. 380ff.
- 76 See Fritz Fischer, War of Illusions: German Policies from 1911 to 1914, Chatto, London, 1975, p. 116f; Berghahn (note 13) pp.271ff., 564ff., 594–6.
- 77 Büchsel, 'Zurn Immediatvortrag' (note 75). See Berghahn's discussion of the Koester-Senden-Tirpitz debate on armoured cruisers, p. 359ff.
- 78 Marder (note 8) p. 4.
- 79 RM5/v 5925, 'Denkschrift'.
- 80 Rew (note 4) p. 29.
- 81 JCR Colomb, 'Our Naval Arrangements in the Other Hemisphere', Fortnightly Review 67 (1900) p. 263.
- 82 See Ernest Scott, Australia During the War. Official History of Australia in the War of 1914–8 Vol.XI, Angus & Robertson, Sydney, 1936, p. 514ff.
- 83 Offer, The First World War (note 2) p. 325.
- 84 Corbett (note 11) p. 94.
- 85 Hardach (note 3) p. 35.
- 86 Quoted without reference in GL Macandie, *The Genesis of the Royal Australian Navy,* Pettifer, Sydney, 1949, p. 289.
- 87 RM5/v 6784, 'Kriegsspiel 1914', 28 April 1914, p. 44.

- 88 Raeder (note 21) pp. 153-6.
- 89 Hardach (note 3) pp.11, 36, 38-9; Offer (note 2) p. 357ff.
- 90 Hardach, p. 123.
- 91 Although the Admiralty Staff did not develop a doctrine of submarine economic warfare. it kept pace with technology enough to make effective tactical use of submarines. See Offer (note 2) p. 329. On Tirpitz's defence of financial constraints, see Berghahn (note 13) p. 366.
- 92 Vizeadmiral Frhr. von Maltzahn, 'Das Fehlen einer obersten deutschen Seekriegsleistung im Weltkriege', *Marine Rundschau*, April/May 1921, p. 189.
- 93 Fayle (note 8) p. 51.
- 94 Cited without reference in AW Jose, *The Royal Australian Navy 1914*–1918, 2nd ed., Vol.IX, *The Official History of Australia in the War of 1914*–1918, Angus & Robertson, Sydney, 1934, p. 19; also Fayle's assessment (note 8) p. 53.
- 95 See the detailed chapters in CE Fayle, The War and the Shipping Industry, OUP, 1927.
- 96 Hurd (note 9) p. 187.
- 97 See Raeder's biting comments (note 21) on the failure of German policy regarding Japan, p. 19.
- 98 Berghahn (note 13) p. 55.
- 99 See Kapitänleutnant Kupfer, 'Der Kreuzerkrieg auf den Weltmeeren und sein Einfluß auf den Hauptkriegsschauplatz', *Marine-Rundschau*, Bd. 41/2 (1936) p. 53. On Tirpitz's defence of financial constraints, see Berghahn (note 13) p. 366.
- 100 Raeder (note 21) p. 8. See also Maltzahn's ringing postwar condemnation, 'Das Fehlen' (note 92) p. 190.