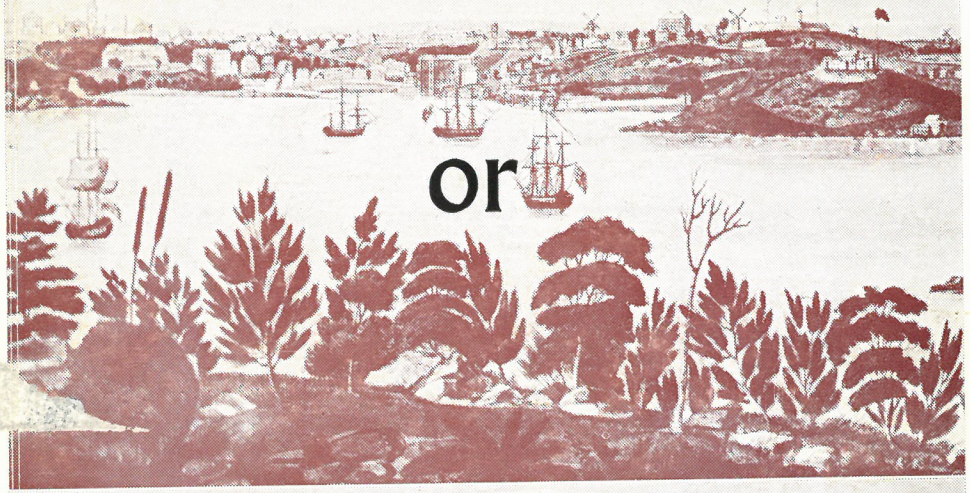
SYDNEY COVE 1812.

TRADING POSTS



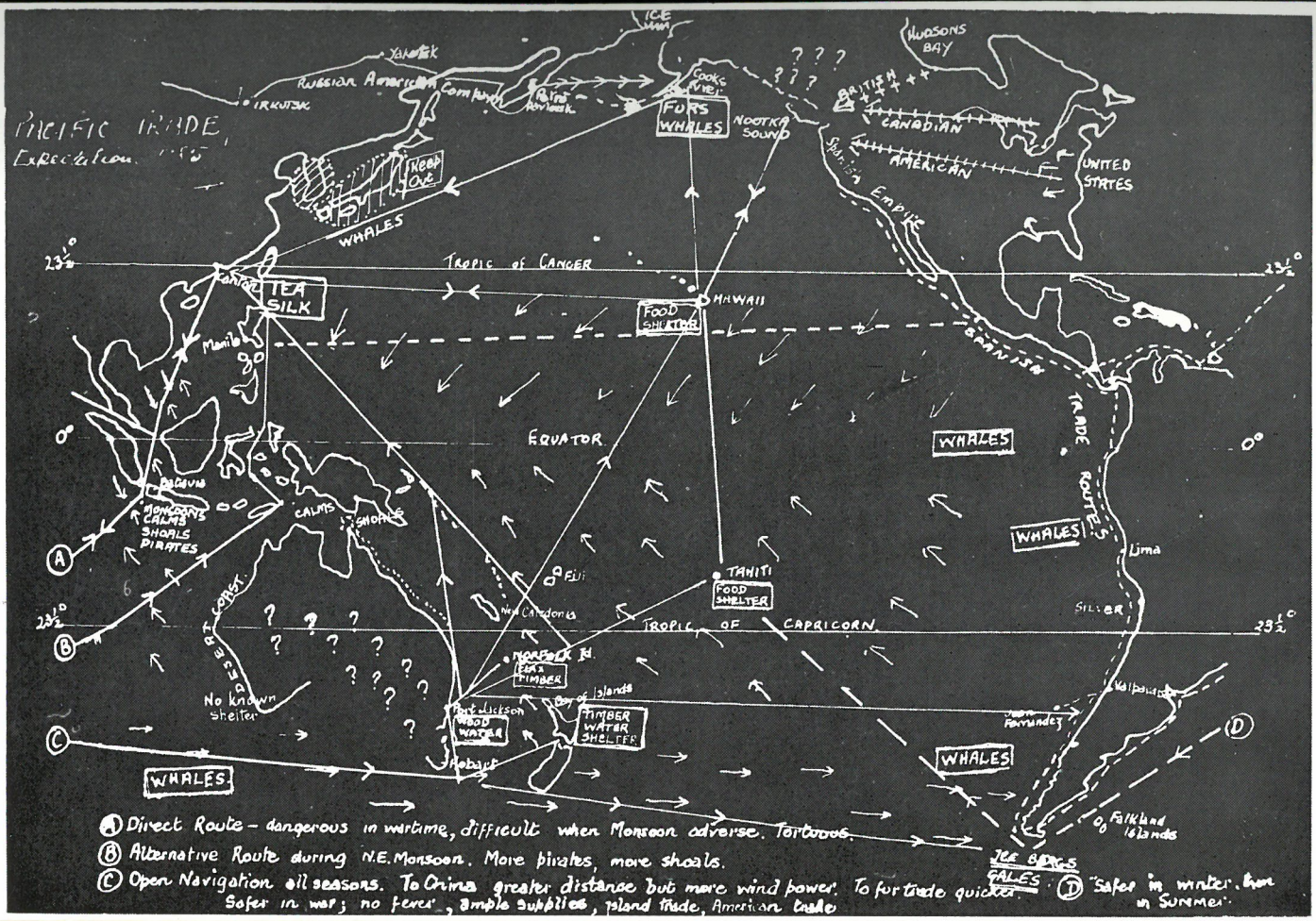
or

NEWCASTLE 1812. CONVICT VILLAGE AND COAL MINE.

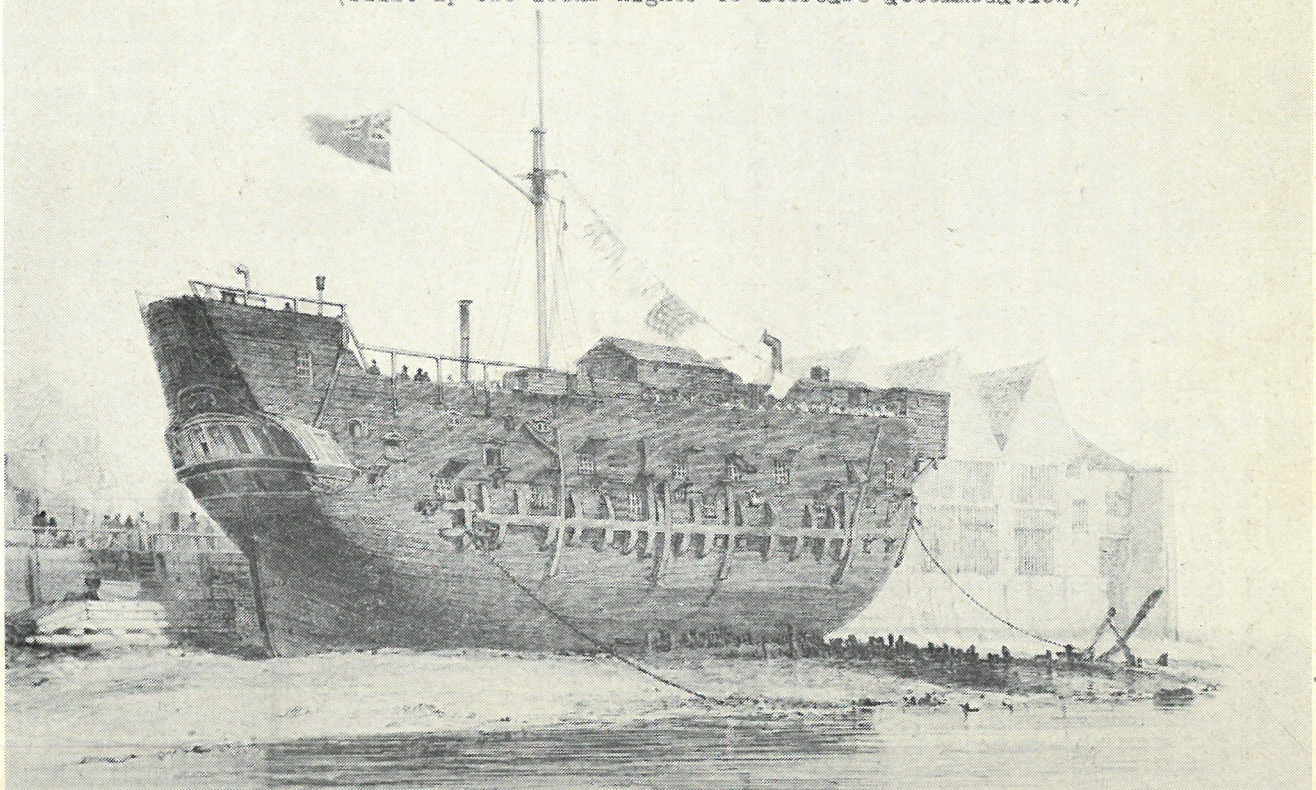
PENAL COLONIES

COOK'S ROUTE TO PACIFIC TRADE

K. M. DALLAS



VANCOUVER'S "DISCOVERY" - as convict hulk DEPTFORD 1829.
Hull plan same as Endeavour, Resolution, Adventure & Discovery I.
(built up two decks higher to increase accommodation)



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Front cover (top)—

The port of Sydney as seen in 1812 from the North Shore. Sydney Cove was a natural wet dock where ships could heave down for repairs in perfect safety.

Front cover (bottom)—

The Newcastle penal settlement — convict huts, railway to coal jetties, with cutters loading for shipment to Sydney.

Map—

This shows the focal points of Pacific Trade in their relation to Port Jackson.

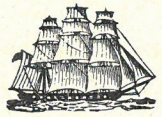
Opposite Map—

Hulk " Discovery " at Deptford (1829) moored alongside dock wall as hostel for convict work force, at low tide. This shows the hull form of the cat-built colliers chosen as most efficient for exploration of the Pacific Ocean. Two extra decks have been built to increase accommodation.

TRADING POSTS OR PENAL COLONIES

K. M. DALLAS

TRADING POSTS or PENAL COLONIES



THE COMMERCIAL SIGNIFICANCE
OF COOK'S NEW HOLLAND ROUTE
TO THE PACIFIC

C. L. RICHMOND & SONS PTY. LTD.
DEVONPORT, TASMANIA

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In memory of

A. L. MESTON

Scholar, Teacher, Humanist.

Registered at G.P.O., Hobart, for transmission through the post as a book.

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CONTENTS

Introduction

IN May 1952 the Tasmanian Historical Research Association published a condensed version of the events that led to the founding of the first colonies in Australia. A year earlier a general essay on the theme had been rejected by Historical Studies, Melbourne. The title was: "Australia — a Mercantilist Plantation". A detailed examination of the evidence for this theme led to the submission to M.U.P., Oxford Press, and other publishers of a MS. of some 200,000 words. At that time, 1955-56, study of documents in the Public Records Office, London, made it necessary to include other evidence of the influence of the whalers on British policy. A most important part of this was the letters written by Samuel Enderby to Pitt, the Prime Minister, urging freedom of all seas to whalers and later urging that Port Jackson be used as a base for capturing Spanish settlements in South America, using convicts as part of the taskforce.

The re-writing has been delayed by the demands of teaching and by other historical research but for fifteen years the substance of this book has formed the basis for teaching economic history. Indeed, until about 1950, the approach was that until wool export became considerable Australia had no economic history worthy of study.

In 1950 this view was challenged by a C.R.T.S. student, Tom Errey, asserting that all significant events have economic forces somewhere behind them. The answer to that was: "Well, if so, whaling would have had something to do with it." Study of the records of the Enderbys in the Mitchell Library showed that this was abundantly true but that there was much more to it. This led to the tentative essays referred to above.

Perhaps the most significant discovery was that the events of Cook's Third Voyage, ignored because he by-passed Australia, had uncovered such promising commercial possibilities that the history of European trade with Asia and the Pacific Ocean really begins from there.

A sketch of the earlier stages by which this economic interpretation was formed may be of use. Schooled in the "sceptred myth" that Australia began as a purely penal colony, one accepted the conventional view that its commercial importance began, grew and would continue to grow on the production of fine wool. The myth seemed plausible enough — this intention to reduce crime in England by exporting convicts—plausible but fallacious.

The importance of Cook's discoveries was that he had found a suitable site for such a colony, after having been sent to Tahiti for a purely scientific purpose. His search for a southern continent arose from the silly notions of philosophers; there was no suggestion that it might have been made because of the wishful thinking of merchants.

The colony's troubles were ascribed to moral defects in the people sent out. "Convicts of the worst type" appeared in thousands of examination papers. The implication that there was a best type was not explored. The notion of "IF only" was supreme — if only they had not been lazy; if only the government had sent (why "sent"?) free settlers skilled in farming; if only the thirst for rum had been less. Generations of scholars dilated on these evils.

In spite of these "birthstains" we had become a credit to the Empire through the genius of Macarthur, Marsden, Macquarie, Wentworth and their heirs and successors, helped of course by the heroic explorers and gold prospectors. The convicts had been prevented from seeking gold because Gipps or someone else said: "Put it away Mr. Clarke, or we shall all have our throats cut." That did it! No question was asked on what convicts knew of gold or how to find it. You just picked it up.

All very simple. Of whaling not a word — no, one word: Bass used a whale boat. What were whale boats doing in a penal colony? So we were left to discover what whaling later became from reading Frank Bullen's marvellous "Cruise of the Cachalot". Earlier memories of "Kingston and Ballantyne the brave" and Stevenson himself, all mixed up with the Romance of the South Seas. All that and other extra-curricula legends of forebears making sealing voyages to Kerguelen or being "done in" when blackbirding in the New Hebrides.

In 1920, Melville's "Moby Dick" reappeared, after lying for seventy years dormant. This was the real stuff which took one back to the early days of Nantucket when Obed Macy had called the oceans "a green pasture to which their children's grandchildren would go for bread". In it also appeared the startling claim that this other America had been given to the world by the whaleship. The circumstantial detail seemed more than literary hyperbole. We met there, too, Samuel Enderby but he was not specifically linked with Australia. There were outlandish names like Timothy Folger and Ebor Bunker — but we knew of Bunker's Hill. Was there any connection?

In 1938 Dakin's "Whalemen Adventurers" linked these names with the early days of the colony and showed that Samuel Enderby was up to something even then. Also at this time

Keynes' "General Theory of Employment, Interest and Money" was forcing all economists to rethink their positions. Moreover, he boldly linked his theory with that of the Mercantilists and showed that those chaps knew what the score was. It was asking too much to expect historians, to whom all economic explanations were anathema, to link this with Australia.

Keynes' relation of government spending to national income led to an examination of the effects of the convict expenditure on the prosperity of our early colonies. (After all, it was inescapable that Sydney was prosperous before wool exports became considerable for in 1817 its business men, in spite of objections by the home government, had formed the Bank of New South Wales.) Investigation of this expenditure and its amount led to the discovery that the bases of the national income then were the exports of oil and whalebone and seal skins, the expenditure of the home government and the private capital brought by our early capitalists. Though done before the war, these aspects were unpublished until 1947, when a paper was written for Historical Studies called "Transportation and Colonial Income". By then Keynes' principles were the basis of government finance the world over — but the historians were still looking askance at his views of mercantilism.

Keynes' recognition of the validity of mercantilism made one realise that in 1780, and for another fifty years, governments were acting on these principles. The presumption was, therefore, that all new settlements were made to augment foreign trade which was the quickest, surest way of augmenting the wealth of the realm. New South Wales then was founded for the benefit of the London merchants whose Members of Parliament voted the money for it.

When one considered that until 1830 the income of the two colonies came more from "the fishery" than from wool, but that government expenditure was greater than either, one had to ask why the home government had supported them on such a scale that by 1840 over £8,000.000 had been spent. (The whaling income was probably much larger than official figures showed for much oil was sold, at un-settled harbours, to visiting whaleships.) By this time it was abundantly clear that assigned convicts were the work force for wool growers — a supply of slave labour sent out at government expense that the woollen industry of Britain might flourish. Of course the old guard reversed the medal, holding that it was the need to find work for convicts that fostered wool growing. "Need" and "necessity" are terms which no economist uses: the issue is always how much people are prepared to pay for an expected return, even if it is other peoples' money they are spending.

All this made one look back to the first settlements, and even beyond that, for the use of convicts in other imperialist ventures. The war intervened: years of learning the uses and limits of celestial navigation, of seeing at first hand the vast convoy system and its demand for secure bases for assembly and dispersal (slow convoys at six knots took one back almost to Nelson's day), the acute scarcity of hemp and manilla (and that maze of hemp and timber which was the engine of Nelson's "*Victory*"), the importance of tides, weather, currents and dead reckoning, compass errors and azimuths but most of all the importance of harbours with their offlying hazards marked by beacons only (the war had put out the lights and we were reduced to groping for a landfall as was done before the "coastwise lights of England" led the ships of England home).

So one saw Freetown, the only commodious natural harbour in Africa; Capetown, unsafe in winter even now; Durban, bastion of seapower but wholly manmade, with Bantu convicts scraping barnacles from ships in dry dock; Calcutta, "power on silt" as Kipling said, sited a hundred miles inland because of its tidal streams; New Orleans also at the head of sailing ship navigation and once the world's third port for size; London River with its vast complex of wet docks and invaluable tides; Portsmouth with its convict-built forts still guarding its approaches and where the "*Victory*" in dry dock still flew the Admiral's pendant, her mammoth hemp cable still flaked out on the orlop deck; the Clyde estuary, where the "*Queens*" even could come and go by night; Gibraltar, Bermuda, Kingston—still bases of sea power and much more.

All this helped to make clear the lessons taught by Cook and Bligh. The secret orders to find the Great South Land — for science, yes, but that also meant for trade, exclusive trade; the search for a North West passage which discovered instead the fur trade and Hawaii, the invaluable base for this; the proven open navigation into the Pacific by way of New Holland—groping blind even at noon through Channel fogs helps one to see how our forerunners rejoiced in the knowledge of open oceans, clear skies and bold coastal features.

Cook's reports of finding sources of mast timber and hemp were as exciting to the Lords of Admiralty of those times as were assured supplies of oil fuel between 1900 and 1914 to Jackie Fisher and Churchill and to their successors.

The commercial possibilities were matched in importance by the new methods of celestial navigation. The common opinion has been that the invention of the chronometer solved the problem of determining Longitude. The detailed evidence of Cook's

narratives shows that this was not so: the method of Lunar Distances was the decisive invention; the chronometer was merely a useful accessory. Professional astronomers were employed by Cook, his officers, midshipmen and even petty officers acquired proficiency in the new methods; moreover, at every main harbour the observatory was set up and its position fixed with a precision previously unthinkable. From these exact departures they were able to chart precisely their courses to the next Landfall and any hazards of shoals that lay between. The resultant charts gave to any competent seamen the means to "make" those harbours with precision, even if they used nothing more complex than dead reckoning. Each main position also gave a check on the rating of their chronometers, so that these retained their usefulness on the shorter traverses. It was this monumental devotion to the Lunar methods that revealed the true function of the chronometer.

The effects of this precision of discovery on all future trade, in the saving of time, the reduced wastage of ship's gear and the lessened incidence of scurvy, add up to a commercial revolution of the first magnitude. Yet all this is missing from our history books because writers have not navigated and navigators have confined their writings to straight technicalities.

This democratising of the "Haven Finding Art" was a fact twenty years before Napoleon claimed that every soldier carried a marshal's baton in his knapsack.

These inventions and discoveries gave the basis for enlarged trading at greater profit but the causes for this lie even farther back in the industrial growth of Europe and America and the resultant insatiable demands for oil and fibres, furs, silks and tea. Jefferson's Memoirs show his dismay at the British policy of excluding American oil from their home market and also buying over the American industry, lock, stock and barrel. These masters of their craft followed the big money, loyalists to themselves and their calling.

So Botany Bay, founded to augment the wealth of London merchants, bred a clique of colonial racketeers who deposed Bligh when he tried to stop them. This was the very thing that spokesmen for the East India Company had foreshadowed. Yankee free traders also made profit from it and by 1800 had also collared the prize of the fur trade. These developments merely show how the aims of the founders were frustrated by the play of economic forces.

The contemporary founding of a trading settlement at Freetown is to be compared with that of Botany Bay. In 1941 there was a Creole minority, living in genteel poverty and pathetically

loyal to the England of Queen Victoria, bearing names like Macaulay, their villages still named Regent, Wilberforce and Granville. Founded in 1787 to abate a nuisance by providing for the Black Poor of London, by setting them to grow cotton and sugar to assure ten per cent to the philanthropists, here was a colony of free settlers, served by government ships and supplies. In fact it was an export of vagrants and prostitutes intended to augment the wealth of the realm *and* to secure the only good harbour on the African coast. The same people, at the same time, for the same purpose. It proved to be of no value to the East India trade because the prevailing winds and currents hindered homeward bounders from making the Guinea coast. After Capetown was taken it had no value as a harbour of refuge.

Some of us, all too few, owe a long-standing debt to Professor J. B. Brigden who, forty-five years ago, stressed the fact that every colony must have at least one basic industry around which the subsidiary ones may grow. The same idea pervades Nussbaum's history of European economic institutions—that any town is a consumption group : a settled group of people which can command its sustenance from regions, albeit remote, outside its walls. A trading base, by virtue of its situation and its services, can thus command its sustenance. Australian settlement began with an urbanisation of one hundred per cent. Its sustenance for the first two years was carried in barrels of flour, beef and biscuit supplied from naval stores. It also had a capital stock of rope and sailcloth, iron and clothing. The home government continued to furnish—was committed to furnish—that sustenance indefinitely, just as it was committed to supplying a ship of the navy, under a naval officer. Its function was that of a naval vessel—to afford protection to ships of His Majesty's loyal subjects, from perils of the sea and King's enemies. We must conclude that the Lords of Admiralty thought the return would be worth the outlay. It was.

Gibraltar was such a town and continues to be such after 265 years : a base for legal and illicit trade. *H.M.S. "Iron Duke"*, though moored in Scapa Flow throughout the last war until she was "aground on her own milk tins", was another. The island of Ascension was not a colony—it was a naval establishment, a veritable "stone-walled frigate".

For its first hundred years the colony that grew from Botany Bay did not produce from its own territories sufficient breadstuffs for its needs. For its first fifty years these were paid for, in part, from moneys voted by the House of Commons. We must not describe it as a mendicant state on that account.

That men like Pitt, Dundas, Hawkesbury and Sydney saw the new colony merely as a "dumping ground", a "receptacle for

social refuse", is absurd. They were intelligent and practical men, faced with urgent tasks of applying limited national resources to diverse ends. They knew that any community, once established, is an organic thing with an inherent capacity to grow or decline, to become something quite different from what its founders intended. It might even rebel and defect to enemies as colonies of other states had done.

Therefore there was, from the first sketched plan onward, a hierarchy with a judicial body, a church and means for organised defence. There was a certainty that traders, British or foreign, would visit it. This is shown by Phillip's designation of Neutral Bay. It is shown in the coat-of-arms—a bale of goods, a ship, distaff, plough and a church "in the distance"—not, let us note, in the foreground. The motto "Sic fortis Etruria crevit" shows expectation of growth and prosperity, hardly consonant with a purely penal colony.

The upper class was at first also military. There was provision for civil courts but a naval establishment is under naval discipline and the first four governors were naval officers, jealous of their authority, which they soon found threatened by traders, not to say racketeers.

The salient difference between this colony and that of, say, Georgia, planted sixty years earlier with debtor prisoners and Austrian emigrants, was that there was no chartered company. This was legally impossible and politically undesirable because of the sacred rights of the East India Company. The Crown could assert its superior power, even over this monstrosity, an empire within an empire. We must remember that the Crown had taken from it the control of its foreign affairs ; also we must remember that its charter was shortly to be renewed—or abolished. Powerful factions of private merchants were demanding free trade to East Asia. Manchester and Glasgow were centres of this aspiration and Dundas was a protagonist for his brother Scots.

Historians should eschew metaphors, especially those deriving from pressmen, parsons and politicians, and concede that Pitt and his colleagues were rational and responsible. They should seek to rationalise their intentions.

In simple terms, there was a slave work force—male and female, so "with power to add"—to be supplemented by women procured (sic) from the Friendly Islands. We need not ask whether these were to be slave or free. There was a master class subject to naval discipline. The Governor's Commission was drafted with the dominant consideration in mind—the safeguarding of the commercial interests of the Realm, which meant

the City of London and, more particularly, those of its citizens incorporated in an effete but sacred company.

The decision to fix on Botany Bay was the sequel to an abortive search for a site on the south-west coast of Africa. The urgency of the operation derived from the knowledge that the French, in the next war, would again seek to take over the Dutch settlements, both at the Cape and in eastern seas. The sailing of La Perouse, in 1785, showed the shape of things to come.

The decision was taken by the same people who had sought a west African site—"for navigation and commerce"; had approved the Sierra Leone colony; had sent secret orders to Cornwallis in Calcutta to seize Trincomalee as soon as he had news of French hostilities. They approved the forming of new bases at Penang and Malacca, by the East India Company. All such moves implied a tied (or slave) work force, whether Chinese coolies, the Black Poor of "Marrybone" or the convicts in the hulks, already under naval discipline and who had been valuable as slave labour in the dockyards during the preceding war. Between wars they were surplus to requirements and legally subject to transportation.

The following chapters set out some of the evidence that the Australian settlements were the outcome of a commercial revolution based on sea power. The revolution, like all others, was marked by the rise of a new social class, the free traders. They sought freedom of trading, or whaling, in all seas. It was painfully obvious that the Americans had fought for this and won it.

Of course there is no final proof that this was the basic cause but it is vain to talk of proof to schools of historians who purport merely to give facts, without theory or philosophy, and who therefore give pages to Torres and de Quiros, whose influence on Australian history was nil, and omit all mention of La Perouse visiting Botany Bay, thereby avoiding any need to explain it. Likewise, if religious beliefs are to be stressed, a sermon to convicts, with no proof that it was heard or heeded, is insignificant beside the religion of traders, which was to make profit, whether "cloaked by a surplice" or not. To these men formal religion was a device to keep servants, slaves and convicts sober, honest and diligent.

Chapter 1

The Choosing of Botany Bay

PHILLIP'S orders left him a wide discretion in choosing the site of the settlement. Botany Bay was the appointed rendezvous, though on all counts except mildness of climate Adventure Bay was as good and choosing it would have shortened the passage from Capetown by at least a week. Both were charted precisely and had shelter, wood and water. Adventure Bay had been visited twice; it also had more forest and better ship timber. That Phillip had grave doubts about Botany Bay is clear from his attempt to outstrip the main fleet to examine it, taking King and Dawes, his surveyor, with him. His examination of Port Jackson resolved all doubts—the harbour itself was a most valuable acquisition, whatever the condition of soil and climate. For shelter, safety of its approaches, defence from seaborne attack, its natural wet dock coves where ships could be hove down with safety and despatch—for these it was a seafarer's dream harbour. The preference of the Admiralty for Botany Bay over the only other known anchorage, Adventure Bay, makes sense only from its geographical situation.

Though it was farther from the Cape (Hunter, in the "*Sirius*", had Adventure Bay in mind in case his hay was running short), Botany Bay was nearer to Norfolk Island. Hence its choice as a rendezvous. Once arrived, Phillip was free to choose a better harbour and, if one were not found, remove to the Bay of Islands or the Thames River in New Zealand, both recommended by Cook as sites for a colony[1]. These were nearer to Norfolk Island than was Botany Bay and not much farther from Capetown. They had excellent timber (at the Thames Cook had found mast timber as fine as any in Europe growing on its banks) but

1—Cook's Voyages, Tallis Edition, Vol. I, Page 186

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the numerous and warlike people were a too-powerful threat to the safety of any first permanent settlement.

Lest carping critics may object that eleven ships armed by 200 marines could look after themselves we need to allow for these ships straggling in singly with damaged rigging and enfeebled crews and note the experience of Furneaux in 1773 with the Maoris. Botany Bay was inhabited but its scanty population had no canoes capable of attacking ships at anchor by night or day. Norfolk Island had the unique advantage of being a no-man's-land.

Those who still believe that, merely in order to relieve overcrowded gaols and "for the better disposal of convicts" the British government decided to establish a penal colony at Botany Bay have to explain why, if this were all, it was decided to settle Norfolk Island at all. Within three weeks of landing at Sydney Cove Phillip sent off King with a picked party (including two men said to be experienced in flax working). Phillip's instructions were to make a settlement there but did not say it was urgent. Those who take their stand on the Documents and disparage inferences from what men did are in this case forced to allow that Lord Sydney and others cited flax cultivation as one reason for sending the expedition.

To belittle this matter, as foolish or premature, is merely to be wise after the event. Consider the current facts: after a seven months passage and in the turmoil of landing and settling a thousand people, some thirty of them, in one of the two permanent ships were sent on this mission, with a ten days passage, to an island known to have no harbour, at which La Perouse had failed to find a landing (which they then knew). If the main object was a penal colony, a gaol, why make two? Those who invoke Phillip's vision, in other matters, should in this case find evidence of a "fatal flaw in character". That an efficient naval officer should thus divide his forces and double his commitments when in a situation where he had only two ships at his disposal, and with two foreign ships at anchor in an outport, should convince anyone that he knew the government had set some store on taking this island in spite of its lack of basic qualities for any settlement at all.

The explanation lies in naval and commercial aspects. It was strongly held in London that the flax and mast timber might afford an alternative source of supply to the dockyards of the eastern seas. At this time all equipment of this kind for Indian dockyards was supplied from stocks in England, drawn mainly from Baltic ports and exposed in every war to delay, capture or cessation. Even in peace the supply stopped in winter. Cook's

opinions, in all three journals, of the quality of the flax and timbers, were convincing and reliable. The Norfolk Island flax plant was more luxuriant than that growing in New Zealand and the pine trees were as large.

With La Perouse refitting in Botany Bay there was no time to lose. En route for Botany Bay, under orders, he had touched at Norfolk Island and failed to make a landing. So sending King off in the "*Supply*" gave the British the first chance. Phillip thus "forestalled the French" and would have been recalled, at least, had he not done so. It is also certain that the sailing of La Perouse in 1785 had hurried on the preparations of the First Fleet. This is one of those matters which are too obvious to need mention. It was not forgotten, in naval circles at least, that it was the same La Perouse who had in 1789 raided Hudson's Bay and captured the British ships and factories there.

That these "sanguine expectations", as Tench called them, proved illusory is irrelevant beside the fact that they were held, and were plausible and influenced the fortunes of the new colony. The first reports sent back to Sydney were that Cook's flax plant could not be found. Of course, it did not look like any other flax plant. The pines were unmistakeable, large and abundant. Clearing and sowing crops were more urgent matters and the success of these helped to alleviate later shortages in Sydney, which, it is too often overlooked, were largely caused by the loss of the "*Guardian's*" stores when she was brought back into Capetown in a sinking condition after striking an iceberg. Timber was cut and turpentine distilled from the pines. This also proved to be of little value for naval purposes. The sloop "*Norfolk*" was built there of the local timber and gave good service to the settlements. Spars were cut and shipped to English dockyards for trial.

On her second voyage there with people and stores the "*Sirius*" was lost—depriving Sydney of its main insurance against food shortages, while the big pines were found to be rotten inside and useless for large masts.

In 1790 King was given leave and sent to England to report in person on the needs and prospects of the settlements—and to advance his own. The events of his return with the Third Fleet are told in Chapter 5.

Back in Sydney he helped the whaler captains to get favours from Governor Phillip and sailed for Norfolk Island with his bride. How he provided for his discarded convict de facto wife and his sons is somewhat obscure, but he did[2]. While in England he had urged on Nepean the importance of procuring some

2—See Bassett: The Governor's Lady.

Maoris to instruct the convicts in their method of preparing fibre so in March, 1793, the *"Daedalus"* (tender to Vancouver), arrived in Sydney with two kidnapped Maoris. These were sent on by the next ship for Norfolk Island—still not knowing what they were wanted for and expecting, as in Maori quarrels, to be eaten by their captors. (Meantime King had asked a whaler captain to catch some Maori instructors but nothing came of this.) They were very amused when King told them what he wanted of them as they explained that this was women's work and one was a chief's son, the other a tohunga or priest. It was like asking an Australian bishop to show Chinese peasants how to shear sheep. They did what they could to instruct the pakeha.

By this time Phillip, after five anxious years, had gone home and Grose was making hay for the Rum Corps by furthering the manifest destiny of Sydney as a base for Pacific trade. The officers chartered the *"Britannia"*, a London-owned whaler, for a voyage to Bengal. En route she called at Norfolk Island with stores and King borrowed her for a ten-day cruise to return the Maori dignitaries in state and style, loading them with presents of pigs and poultry at government expense as tokens of goodwill. He followed this up with a suggestion to the Home Government, sent through Grose as his political superior, that if a settlement were to be made in New Zealand he would be willing to take charge of it. This clearly shows that he had lost faith in the flax industry of Norfolk Island but not in the flax industry as such.

Grose had similar aspirations and sent the schooner *"Francis"* on a trading venture to New Zealand. His denunciations of King, for poaching on Sydney's preserves, and King's yard-arm squaring replies, are very entertaining as official excuses of an ambitious member of the Senior Service when outranked by a red-coated racketeer. They also show that colonial profit-seekers were well aware of the Pacific trade[3].

Though the flax aspirations proved unfruitful, both to the eastern dockyards and to Commander King, it is beyond question that they had caused the British investment in the settlements to be larger than it would otherwise have been and so stimulated the growth of Sydney and the other merchants who used it, whether whaling or trading and British or foreign. The flax industry did not die but fibre bought from Maoris was used for some production of cordage and sailcloth. In 1830 the import of fibre to England was over 700 tons. It is indicative of the approach of historians that Tench's error, rushing into print before the existence of flax was proved, crops up in A. G. L. Shaw's

3—See Chapter 6 for further details.

"Story of Australia" which tells us that "flax" did not grow on Norfolk Island. He might have asked himself why an edition appeared even in Paris (Chez Letellier 1789) with an appended Recit Historique which surveyed the manifold commercial advantages which British could expect to derive from the settlements: the fur trade, the island trade and that of South America — plus the "dazzling hopes of the New Zealand hemp". The moral of this is plain: the training and status of the Royal Marines makes them to this day a byword in shipping circles for ignorance on maritime matters.

By contrast in Prof. C. M. H. Clark's "History of Australia" there is a bald mention of the settlement of the island and a belated mention of flax, as incidental to the coming of Hamilton Hume, Snr., to New South Wales.

The point is that there were hopes and aspirations of persons ignorant of the nature and processes even of European flax; the New Zealand plant was quite different and its fibre was called sometimes Hemp, sometimes Flax, because it was suitable for both cloth and cordage, but to prepare it European skills were useless and Maori ones unattainable. Official opinion oscillated between growing it in the settlements or in England, or planting European flax (or hemp) in colonies.

The position in 1780 was broadly this: Ever since "the stick married the basket"[4] sails were of flax and cordage hempen. As larger ships became more economical the rigging demanded was larger and stronger. There was a steady increase in size, as well as in numbers, of ships as long distance trade increased. From 1700 at least the increasing coal trade to London demanded bigger colliers and the cat-built barks and brigs, from 300 to 400 tons, were built in scores at Whitby and Shields. In these James Cook was schooled. So the evolution of these ships and men provided the means for the sustained voyaging required in the trading possibilities of the vast Pacific. The precise charting of its wealth was the logical outcome of the growth of London with its fuel problems and the consequent production of staunch and capacious colliers, framed of English oak, planked in part with Baltic timbers and rigged with Baltic hemp and spars. The East Coast was a famous school of seamen and shipwrights for another century at least[5].

West Country traders and shipwrights had sought enlarged opportunities in New England and built ships for sale as well as use. By 1770 it was commonly estimated that one-third of British shipping was colonial built. On their delivery voyage these were freighted with plank and spars for British yards.

4—See Kipling: The First Sailor.
5—See Conrad: Notes on Life and Letters, Page 155.

The best and largest masts came from Baltic, Norwegian and New England sources, in that order. In 1807 17,000 masts and spars various were bought from Russian and Prussian ports. After the Treaty of Tilsit this fell to 4,600. The Quebec totals for these years were 2,750 and 23,000 respectively[6].

It is no wonder then that, between 1658 and 1814, on nearly twenty occasions British fleets were sent to the Sound to keep this vital trade open (ibid, p.165). In 1791 Phillip sent home specimens of ship timber: in 1795 cargoes of spars were cut in New Zealand and in 1802 the Admiralty urged on the colonial office that ship timber (compass timber) should be shipped to England by the returning transports. To suggest that this was to provide back-loading is to reverse horse and cart. Many of them were under charter for tea from Canton anyhow. Such timber as the Navy specified, stringy bark, box and cedar, ship timber, block timber and guncarriage, could be loaded on the floors or as deck cargo. In 1803 *H.M.S. "Glatton"* took iron bark and box 162 pieces, lignum vitae (for block sheaves) 55 pieces[7].

The scarcity of timbers and hemp that became acute after 1780 had been long foreshadowed and showed itself unmistakeably in higher prices. In Pepys' diary there are two mentions of anxiety about the safe arrival of masts from America and from the Baltic. In 1720 Defoe stated that there was still much large timber in Sussex and Hampshire but doubted whether it was worth the cost of haulage by land. Nelson's *"Victory"* gives us a gauge of the growing cost. Built at Chatham 1759-65 on a keel of teak, 150 feet long and 20 inches square, scarphed and bolted, she used 300,000 cubic feet of timber cut from oaks that had been growing since good King Charles' golden days. In 1780 she was copper sheathed; twice repaired, the second in 1800 left very little of her original hull and the cost exceeded her first cost. At this time the New Forest was being cut out; big ships were built cheapest where big timber grew near deep water. Three of Nelson's ships — *"Euryalus"*, *"Agammemnon"* and *"Bellerophon"* were built at Buckler's Hard on the Solent and towed to Portsmouth for rigging with Baltic spars and hemp[8].

The twenty-five years war levelled ancestral oaks as well as royal forests. Between 1806-9 the 6th Baronet of Nunwell, I.O.W., sold his oak woods for £100,000, at 7/6 a cube "which was three times the controlled price of 1944"[9]. Cobbett cites two surveys of the New Forest: that of 1608 found 315,477 loads of navy timber, another of 1783 found only 20,800 loads or enough for

6—Albion: Forests and Sea Power (1923), Page 356.
7—HRA, Vol. III, 1803.
8—Callender: Story of H.M.S. Victory.
9—Oglander: Nunwell Symphony, Pages 175-6.

three first-rates. This alone was enough to arouse interest in the timbers Cook reported. Wars and inflation are great consumers of iron rations[10]. In 1786 an English Company built sawmills at Speymouth to cut timber for the Royal Dockyards; planks and masts up to 60 feet long were shipped south. The New Statistical Account of 1835 reports that ships up to 750 tons were built there; that during the wars timber cut was worth £40,000 a year and that by 1815 Glenmore forest was cut out[11]. To show that the Admiralty had ship timber in mind from the beginning we might quote a petition of June 9, 1792, of James Davies to Admiralty humbly showing that he was for 15 years a sawyer in Deptford Dockyard, was chosen by Governor Phillips (sic) to go to Botany Bay from whence he had lately returned after instructing and leaving "30 pair of good men in that branch". He humbly solicited a position in Deptford. A postscript states that a carpenter and boatswain from Botany Bay were already appointed to a ship[12].

By 1780 shipwrights were substituting wrought iron for wood in such special uses as bolts, instead of treenails, and knees (brackets fixing cross beams to timbers). Here too the cost of Swedish iron was high but worth paying. Cort's puddling process was subsidised by the Navy in the hope that iron of shipwrights' quality might be made more cheaply from pitcoal and also reduce dependence on foreign sources. In 1820 Cobbett was advocating with success the planting of American locust trees as a source of more durable "pins" for shipwrights. Treenails were used in thousands and of large sizes for big ships. The largest were 3 feet long and 3 inches thick. The *"Victory's"* sides had a two-foot thickness of solid oak, counting plank, timbers and lining, which were bored and pegged with treenails. For large wooden ships, where strength was required, knees, bolts, chain plates and anchors, Swedish charcoal iron was best and was used until 1850, even at its premium price[13].

The Navy was also responsible for another great innovation — mass production by machine tools. In 1806 Marc Brunel was paid £20,000 for his patent machinery for block-making. The output was 140,000 blocks (assorted) a year, supplying both Navy and Ordnance. Such a consumption of blocks argues an equal consumption of ropes.

The rigging of a ship was an integrated structure of wood and hemp which spread the sails and transformed wind power into sea power. The ports and states which enjoyed the lowest costs in building and rigging had an advantage in sea-borne trade.

10—Cobbett: Rural Rides, Vol. II, Page 179.
11—NSA: Vol. XIII, Elginshire, Page 52.
12—Admiralty Orders, 1792 (Greenwich Museum).
13—McCulloch: Comm. Dict., 1854.

The freedom of the seas was a reality only for the strongest. In 1780 British sea power was dominant but the American advantage of cheap timbers, which had become the basis of a large shipbuilding industry in colonial days, meant that once independent the United States were free to compete for the world's trade and from 1820 to 1850 predominated in building merchant ships. Their rivalry in Asian trade and whaling was feared ; after the war of coercion the attempt to give them the full rigour of the Navigation Acts failed and by 1825 a reciprocity agreement was reached.

In this struggle to maintain supremacy the building of bigger and faster ships was important. The scale of use of hemp increased more rapidly than size and number of ships because they carried more and heavier spars and more sail. Each ship needed several cables and spare anchors. The strength of cables required arose from the wind resistance of rigging rather than from the size of the hull. The wind is the enemy, the force that must be tamed at sea and resisted when at anchor. Hence the common practice of striking topmasts when riding out a gale. Cables had a limited useful life ; they were expendable stores, not permanent fittings.

The cable of a first-rate weighed six tons ; cables and hawsers alone probably used from sixty to eighty tons of hemp. The shrouds and stays and running rigging probably used an equal amount. The only hemp then known was the grey cannabis stuff. Manilla hemp was then unknown in the west but in Melville's time in whalers it was much used for whaling lines. Hemp was "a dusky fellow, a sort of Indian, but manilla was a golden-haired circassian"[14]. He found it stronger though less durable but in 1780-1800 it was not used. Between 1808-14 when Riga hemp reached famine prices there was some import from India of Sunn hemp but it was inferior stuff. In 1809 the Navy made its first trials of welded chain as cable[15]. Somewhat earlier hemp cables had been "boomed" with light chain to prevent chafing on rocky bottoms but only for exploring ships like the *"Lady Nelson"*. The use of chain cables, when capstans and windlasses were man-powered, would have meant some revision of seamanship manuals and much profanity from boatswains and mariners. Though hemp rotted, chain rusted, needing frequent scraping, chipping and anointing with slush and tar. It did not displace hemp for another fifty years. The use of wire rope for shrouds and standing rigging became common by 1840 and general soon after. This was vital to the far more powerful windships which held their own in all bulk trades of long distance until about

14—Moby Dick, Chapter LX.
15—McCulloch, Comm. Dictionary.

1880 when the marine steam engine became economical. Wire rope was invented in Clausthal, in the Harz Mountains, in 1834, for use in haulage from deep mines. Ship riggers took to it readily. So that it is not until 1850 that iron replaced hemp in all heavy ships' gear and also that Manilla displaced true hemp for braces, halliards, sheets and all running rigging.

We can now turn to the evidence for this period from the minutes of the Committee for Trade and Plantations. The burden of it all is that both for hemp and flax there was no hope of any large supply from any other source than the Baltic lands.

In 1783 the bounty paid on hemp and flax grown in England was only £1,835[16]. Russian iron was imported, as ballast for hemp cargoes[17]. Swedish and Russian iron were superior to English and, though dearer, were preferred by shipwrights[18]. In 1786 when the CTP discussed a proposed trade treaty with Russia, Swedish iron was used for steel making, in anchor forging and other ship uses. Some Russian iron was better than Oregrund (the best Swedish). The import was about 60,000 tons. Iron smelted with coal was improving and might lessen the need for imports. "The national advantages are too obvious to need our comments thereon." On hemp there was merely this brief mention : "Very little comes from any other country."[19] They note also that many British subjects had emigrated to Russia to build ships there. At this time a Scots admiral in Russian service induced three leading men of the huge Carron Iron Works, as well as several skilled workmen, to take service and Russian citizenship to manage iron works and make firearms and steam engines[20].

In November, 1786, there is mention of tests made on China hemp and of recommendations to governors in Canada to encourage the growth of hemp there. In April, 1787, the Committee made "certain alterations" to the draft instructions for Arthur Phillip, Governor of New South Wales. In November, 1787, it considered the expediency of encouraging the growth of hemp in Ireland[21]. In January 1788, a London merchant reported adversely on the prospect of growing hemp in Canada. He thought the cost of labour was against it and that the peasantry were ignorant and illiterate and any new form of cultivation would need large bounties[22].

16—B/T, 5/2, Page 24.
17—Ibid, Page 180.
18—B/T, 5/3, Page 446.
19—B/T, 5/4, Pages 25-6.
20—NSA, Vol. IX.
21—B/T, 5/4, Page 393.
22—B/T, 5/5, Pages 41-5.

This is very similar to the conditions at Norfolk Island — even skilled and diligent workers had no means of learning a completely new technique, even when the source of fibre grew without cultivation. In October, 1789, a request was sent to Governor Phillip for specimens of New Zealand hemp seed, for trial in England.

Then in 1790 there appears a report which shows how futile all their previous deliberations on hemp and flax had been. A report from the Comptroller of the Navy stated that the Navy bought only the best Riga and Petersburg; mainly Petersburg. In the Seven Years War (1756-62) Riga cost £30 and Petersburg £26; in the wars from 1775-1782 prices were £37 and £33 respectively. None was bought by government in 1782-5. In 1786-90 prices were £33 and £28. These were c.i.f. prices; the import duty was £3/13/4 a ton. In war time the Navy bought an average of 10,000 tons a year; in peace from 2,500 to 3,000 tons. He thought that if hemp were grown in Canada it would cost them, with bounty added, £40 a ton and it was likely that only a small part of this produce would be fit for naval purposes. He pointed out that the safety of ships must depend on the goodness of cables and cordage[23].

Still the Committee recommended that government should encourage any reasonable attempt to obtain supplies from some part of H.M. dominions and not depend solely on any one foreign country. They advised the sending of 2,000 bushels of hemp seed to Canada, with samples of the four grades of Russian fibre; that premiums be offered and that it was desirable to send one or two intelligent persons from Russia or Poland or Livonia to teach Canadians the methods of preparing fibre.

The parallel to conditions of Norfolk Island is strong. In Baltic lands the peasants gathered the stalks in autumn and in the long winter nights worked it up into hanks and bundles of stuff ready for twisting into long strands and laying these into ropes at the hundreds of rope walks at dockyards of European ports. As with the Maori women the art of preparing fibre was learned from childhood. It was just as ridiculous to expect any significant result from "one or two intelligent persons" (if they could be procured) as to expect a Maori, any one at all, to impart to convict women skills which to all his people were common household matters. Only a mass emigration of Russian peasants to Canada could establish such an industry; thus it was cheaper to buy hemp and flax from Russians and to buy the prepared fibre of phormium tenax from the Maoris.

23—B/T, 5/6, Pages 300-310.

The Committee also stressed the risk that offering a fixed price in Canada for ten years ahead would merely fill H.M. Stores with bales of low-grade fibre[24].

It is of interest that the freight on Russian hemp was from 30/- to 40/- a ton while that on iron was 5/-[25].

Ten years later, when the consequences of depending on Russian sources were being acutely felt, with 300 ships tied up in Russian ports and their crews removed inland, the Committee considered what prospects there were of encouraging production in Britain or elsewhere. In England land was wanted for wheat and other crops; labour was too dear for hemp production to pay; in North America also the labour cost was too high; their sailcloth and cordage were imported from Britain. Indian sunn hemp was being tested at Woolwich. The Navy Board stated that prices had risen from £24 and £28 in 1790 for Petersburg and Riga hemp to £61 for each. In France the cost of cordage for a ship of 100 guns was 196,000 livres but all their hemp and flax was home grown[26].

The whole of the hemp trade of Russia depended on advances from British merchants; for the previous 19 years two-thirds of the produce had been bought by British traders; at Petersburg in 1798 there were 619 British ships and 434 ships of all other nations.

In Riga in 1796 there had been 397 British and 590 foreign ships. One-third of the exports were to Britain; the number of spars shipped was 3971 and of masts 1790[27].

In 1801 the average import of hemp over the past 15 years had been 26,134 tons — the highest year was 30,000 tons of which 12,000 tons were bought by the Navy[28].

The cables used by ships in the Indian country trade were of Quoir with some manila hemp for light ropes. The East India Company ships still used European hemp ropes, made in Britain[29].

Amasa Delano, an American trader, made three voyages in the eastern trade between 1800 and 1815. His first cargo to the east was of masts and spars, blocks and timber pumps for ships, beside 500 barrels of salt beef. He states that kayar cables (quoir, coir) were used by the large ships built of teak in Bombay for the trade in cotton to China and that English Indiamen commonly procured kayar cables. Such a cable for a ship of 1,000

24—Ibid, Pages 320-6.
25—B/T, 5/7, Page 29.
26—B/T, 5/12, Page 208.
27—Ibid, Page 252.
28—Ibid, Page 258.
29—Ibid, Page 226.

tons was 22½ inches round. These were far more elastic than hemp cables[30]. (The coir rope still used in the Navy is not as strong as hemp but has some advantages; it floats, will not rot and will stretch farther before parting. Its lower breaking strain means it must be more bulky for given uses and this would have made it a clumsy thing to handle in mooring large ships.)

The plan to make settlements at (or near) Botany Bay and at Norfolk Island was intended to forestall the French (and Americans) in opening up the trade possibilities of the Pacific Ocean and to secure a source of supply for naval stores for East Indian dockyards, thereby relieving the need to supply these from European sources. The attempt to manufacture cordage and sailcloth from the Phormium tenax was contemporary with that of encouraging the growth of Hemp in Canada and Ireland but foredoomed, like them, because of ignorance of the basic condition necessary: the wide diffusion of the art of preparing a fibre of high and uniform quality, fit for the exacting demands of the rigging of large ships. The government had a work force at its disposal but which was also in demand in Britain for the unskilled drudgery of the naval dockyards. In the new settlements the basic work of clearing land and building houses and stores had the first call on the work force but from the beginnings some part of this force was intended for, and applied to, the preparing of "flax" and the cutting of timber for the needs of shipping. Also, as we shall see later, the Pacific base was called on to supply materials and men for other settlements, like that at Nootka Sound. It maintained a work force for the diverse purposes of sea power. That it was composed of low grade elements is true but such elements then were used to man the navy and provide recruits for the land forces of such outposts as the slave trade forts in Africa and the territories of the East India Company.

We need not waste time on distinguishing strategic aspects from the commercial and economic ones. Such attempts are mere sophistries resorted to by scholars who understand no more of these than they do of the basic facts of ships and seafaring of those times. The distinction, for what it is worth, is that strategy is a term applicable to immediate operations whose ultimate object is commercial aggrandisement. The Navy occupies and establishes the bases for the commercial people to use. That naval personnel also dabbled in trade was then no more remarkable than that merchantmen, with Letters of Marque, sought profits from capturing ships and cargoes of the King's enemies.

30—Delano: Narrative of Voyages and Travels, Boston, 1817.

Appendix to Chapter 1

Applied Science in Commercial Navigation

THE new commercial possibilities revealed by the explorers were made more certain, that is, more profitable, by the precision and cheapness of the new navigation devices. Some biographers of Cook do not mention these at all; others dilate on the value of the chronometer as if it was a computer instead of a very expensive supplement to the new tables of Lunar Distances. In Professor Beaglehole's edition of Cook's voyages he wrote, in Volume I, that the Lunar Distances method of determining Longitude was made obsolete by the use of the chronometer. In the introduction to the second volume we find that Cook's evidence made him amend that and state that the lunar method persisted for another hundred years. Cook's opinion of the "watch" is quite clear and still holds true: "that uncertainty in the rate (i.e., the gaining or losing error) and still worse, the varying of the rate, will always render the longitude deduced from it a little uncertain, especially in long runs"[1]. Later he wrote: "The most expensive article is a good watch but for common use, and where the utmost accuracy is not required, one may do without it."[2]

Therefore, until chronometers became cheap and until their rate and its variations could be checked in port, the use of lunar methods prevailed. Cheapness came only after the precision watch-making industry expanded to meet the vast demands of the railway age; time checks were provided by observatories in large ports. Routine time signals by gun or flag enabled mariners to check its rate without risking damage to it by taking it to a shore observatory. Until time signals were provided, mariners could check the rate only by calculations of time from lunar distances, as Cook and his "professed observators" had done by means of their portable observatory.

The Nautical Almanac and Astronomical Ephemeris was first published in 1767 by order of the Board of Longitude. In the preface to the second edition the Astronomer Royal, Nevil Maskelyne, stated that the tables had been developed from those

1—Vol. II, Page 139, Beaglehole Edition.
2—Vol. II, Page 525.

published in 1755 by " the late Professor Mayer of Gottingen ". He had compiled them for land surveys and by this means " geography had been so much reformed and the positions of distant places determined with an equal accuracy to those of the nearest ". The needs of navigators were met by adapting these methods of land survey. The finding of the longitude of a ship's position was done by computing its local time and Greenwich meridian time. Maskelyne's tables were designed to make this computation simple and quick, and of sufficient accuracy. They were the composite result of the work of Mayer, of Halley of England, Wargentin of France, Maskelyne and others. Wargentin had made tables of the eclipses of Jupiter's satellites, a very valuable supplement.

It is essential to realise that the fixing of permanent positions as for ports, demands high accuracy and may take much time ; in navigation by sea, land or air an approximate accuracy suffices, its degree varying with the speed with which the observer's position is changing.

The tables were cheap and available to all ; improved sextants of metal were becoming general — Delano mentions the defects of wooden ones in tropical climates[3] — and there was nothing to go wrong. The chronometer was delicate and unreliable — as it still is — and its use also required the Almanac and the sextant, as well as a clear horizon. The advantages of the chronometer method lay in the greater regularity of observations, a greater simplicity and speed but *not in greater accuracy*. The lunar methods continued as the only cheap means by which mariners could check the rate of their chronometer (if they bothered with one at all). Thomson's Lunar and Horary Tables 1845 (Thirtieth edition) expound this. The writer's copy shows by the former owner's thumb marks and figuring that it was in use after 1865 at least and mainly for lunar observations. Thomson implies that many ships carried two or even three chronometers and used the average of their times. Yet by 1865 all large ports had time signals. In 1915 when Shackleton was ice-bound in the Weddell Sea Worsley corrected the rate of the chronometers by lunar methods[4].

Cook (and associates) proved the efficacy of the new Ephemeris and the supplementary benefits of the expensive and delicate chronometer but the Arnold chronometers were a failure and even Mr. Kendall's " watch " (which cost £450) broke down on the third voyage. The precision of navigation was not affected by this, even when in 1780 their Ephemeris had expired and they had to interpolate from the tables for 1779[5].

3—Voyages, 1817, Page 36.
4—Bragg : Old Trades and New Knowledge, Pages 26-7.
5—King's Journal, Tallis Edition, Vol. II, Page 476.

The rapid spread of these methods is attested by Sir Joseph Banks who, in 1791, wrote, adverting to the propensity of explorers to indulge in guesswork : " As merchants, because of distances and dangers, find it necessary to employ men acquainted with all the modern improvements of navigation, no error that is made will remain long undetected."[6]

In assessing the specific commercial expectations that arose from the discoveries we must be quite clear about the new quality of precision which these voyages gave to all trade, by inland routes as well as oceanic ones. Precise positions for lands, harbours and hazards were made, once for all, but the methods proven were such as could be practised by any literate navigator. This was as important in combating scurvy as the use of lime-juice but it also increased sea-worthiness (and lowered costs) by reducing wear and tear on ships and crews, thereby raising the profit expectations of ship owners. The defining of wind systems and ocean currents was a further consequence.

The striving for precision is an essential characteristic of all capitalistic development. Cook's voyages were the direct outcome of the scientific revolution. The new methods were taken up quickly ; fur traders like Alexander McKenzie used them in opening the overland route to the Pacific coasts ; Mungo Park used them in his second search for the sources of the Niger. For inland explorers the tables for Jupiter's satellites were invaluable ; chronometers were of little use to them. To show the thoroughness with which Cook's itinerant observatory worked we might ponder the routine report of Lieutenant King on fixing the position of the Hawaiian harbour where Cook was killed. " The longitude of the observatory was deduced from 253 sets of lunar observations, each set consisting of six observed distances of the sun from the moon and stars ; fourteen of the above sets were taken at the observatory, 105 sets being taken whilst cruising off Owhyee and 134 sets when at Atooi and Oneeheow ; all these being reduced to the observatory by means of the time-keeper."[7] Such monumental diligence and the compensation of errors meant that traders needed no more than ordinary diligence to find this harbour without delay.

In assessing the relative merits of longitude by chronometer and by Lunar Distances it is essential to remember that chronometer calculations also depend on observing altitudes of sun, moon or stars and this depends on clear horizons as well as celestial visibility. Therefore they could not be made at night. Lunars depended on intermittent conjunctions of Moon and stars or Moon and Sun ; therefore night observations of Moon

6—Banks-Grenville, H.R.N.S.W., Vol. I, Part II, Page 457.
7—Voyages, Tallis Edition, Vol. II, Page 415.

and stars (or of Jupiter's satellites without any other celestial body) were the reliable means of finding longitudes on land as on sea.

Thus the bearing of Cook's voyages on the future of all seaborne trade lies in these things: the position of all salient geographical features was fixed with a previously unthinkable precision; the charts based on these gave all seafarers precise departures and landfalls; the calculations for position on passage were accurate and cheap and demanded no more knowledge of mathematics than the simple rules and the use of logarithms. The practical outcome of all this was to shorten passages, reduce the incidence of disease and other causes of unseaworthiness and so greatly extend all commercial possibilities.

Those who are satisfied with a "spirit of enterprise (or adventure)" as the cause of commercial expansion should consider how far the range of that spirit was extended by the democratising of the hitherto abstruse arts of navigation.

All this was as purposive as the development of space travel in our own times. It began with scientists even before the setting up of the Board of Longitude in 1714; it ignored national groupings. Just as Johannes Mayer built upon the mathematics of Euler, so La Perouse, as well as Vancouver, Flinders and Franklin, used the same methods, tables and timekeepers as did Cook. The pressure to do all this came from the merchants of the mercantilist states.

Those who are content to fall back on Genius as the explanation for Cook's achievements might be reminded that genius has been defined as an infinite capacity for taking pains. We might compare this with the acceptance by professed historians of the view that the tragedy at Hawaii was due to a "fatal flaw in character". A little knowledge of seamanship and the responsibilities of supreme command can show that Cook's death came because he led the "forlorn hope" in person, as any commander must, and thereby saved the expedition from extinction. In this event, he thereby preserved the fruits of his "genius" to become a basis for the "leaderless legion" which followed him into the trade of the Pacific Ocean.

Chapter 2

The Discoveries of James Cook, 1769-81, & his pupils

THE three voyages mark a complete break with past ventures largely because of the new methods available and the deliberate policy of applying them. The predicted transit of Venus could have been observed from the Marquesas. The Nautical Almanac for 1768 included Maskelyne's instructions relative to the observations of the transit. Tahiti was chosen because its position had been fixed by lunar methods by Wallis' expedition and it could be found with certainty. It also offered ample food supplies. The transit could provide data important for the improvement of the new astronomical navigation. However, the most important object of the voyage, as Cook's secret orders stated, was "the business of the Southern Continent". The Admiralty meant to settle the business, in spite of the jealousy of the Spanish government, and Venus was used to hoodwink them. The result has been to hoodwink those historians who believe there ever was such a thing as a purely scientific expedition. We cannot ignore the widespread belief, among philosophers, in the existence in a Great South Land of something as astonishing, and commercially valuable, as what Columbus had found. The unknown world was still large enough for that.

The deliberate choice of the North-Country ship of moderate draught, "yet of sufficient burden and capacity to carry a proper quantity of provisions ... of a construction that will bear to take the ground and of a size which may be safely and conveniently laid on shore to repair damage ... properties (which) enabled sustained voyaging in high latitudes and detailed examination of coasts", shows the purpose. Every phrase of Cook's assessment spells this out to seamen unmistakeably. Williamson says it was the prevailing winds that forced previous Pacific voyagers northwards and that the fear of a lee shore made them avoid the unknown east coast of Australia. Both these are landsmen's

prejudices. For those times and ships, every night of sailing involved the possibility of approaching a lee-shore with a fair wind; even to-day "Channel fever" is a common condition of homeward-bound European master mariners. An explorer by definition is one who must seek such lee shores with precautions matched to the risks. After the months of sustained voyaging around New Zealand, Cook's ship and supplies had reached the condition that the naval vessels of Wallis, Byron and Cartaret would have reached months earlier. He had to think of his next source of supplies and refit.

Whether Cook had any say in the choice of ship has not been established but it must remain a probability — it was so relevant to the choice of the man. The indignant rejection, by Lord Hawke, of Dalrymple's claim to the command, followed by the appointment of Cook, shows that the Admiralty knew what was wanted. A commoner, a mere warrant officer, was preferred to a scientific gentleman, because detailed surveys were wanted and Cook had abundantly proved his fitness for this in his years of service in the St. Lawrence River and Newfoundland. His fitness to command covered both detailed surveys and sustained voyaging but also the maintenance of the health of crews, which is the basic condition of seaworthiness. Cook's success in the matter of health (in which Furneaux failed on the second voyage) was due less to the specific measures used than to his understanding of the ways of seamen. He had come from the lower deck, he spoke the common language and knew how to counter the prejudices. His measures to enforce consumption of antiscorbutics are frequently reported. This was not due to any sentimental humanitarian attitude but to the practical knowledge that at sea a man's health is not merely his own business. He knew how to enforce the rules he made; this was as important as the belief that scurvy was not merely an Act of God. His success in command and in exploration has been ascribed to some "innate ability" called genius — a term for which there is no useful definition. His work, and his appointment, were the products of a new age of applied science in which "la carriere ouverte aux talents" was proved to be the basis of efficiency. His aversion to gentlemen passengers, parsons at sea and "gentlemen whom the King's service would be better without" springs from the same concern for fitness for sustained voyaging.

In New Zealand he saw commercial possibilities in the timbers accessible to water transport, flax, harbours and navigable rivers. In Hawkesworth's narrative of the first voyage he makes Cook to say "their string, lines and cordage are so much stronger than anything we can make with hemp that they will not bear a

comparison"[1]. Cook revised this in his journal of the Third Voyage to: "One plant deserves particular notice — it produces a fine, silky flax superior in appearance to anything we have and probably at least as strong."[2] He thought the Thames River or the Bay of Islands the best sites for a colony.

It is no wonder then that he recommended no site in Australia where he found only poor harbours, a dry and sandy coast and no useful timber. He noted possible harbours at Port Jackson, Broken Bay and Port Stephens but he stuck to the purpose of establishing the coastline, either standing off shore or heaving to each night to ensure that no significant feature should escape notice. From a negative commercial aspect we should note that for the last 1,200 miles of coast he encountered navigation of diabolical difficulty involving over three months of continuous strain and anxiety. Even with a leadsman always in the chains there was danger of striking coral reefs without warning. Boats were continually required to sound ahead. They frequently passed nights at anchor within hearing of the surge breaking on the reefs, "sometimes driving towards them even with our anchors out"[3]. Though he took formal possession, as orders required, he would not have included a land which he quitted "with immense relief" as something to be occupied "to forestall the French" or as "territorial compensation for the loss of America". He summed up that coast as "on the whole rather barren than fertile, soil frequently sandy, savannahs rocky and barren"[4].

The commercial possibilities of the east coast were nil but the strategic importance was to be made clear by later discoveries.

In the account of Batavia, Hawkesworth followed Banks' account. It was rich but fever-stricken. The mountain rice might be introduced to the West Indies to feed slaves more cheaply. Convicts were employed in ropemaking and in government works. All free Europeans came out from Holland in the Company's service but immediately got leave to engage in trade, with Chinese artisans and Malay slaves. (This arrangement was later recommended for Botany Bay by Banks and Matra and was adopted when the New South Wales Corps was formed, with slaves of British origin.)

The Journal of the Second Voyage added details of likely mast timber at New Caledonia and Norfolk Island; the latter uninhabited and with the New Zealand flax growing luxuriantly. The harbours of New Zealand and Tahiti were also used, while Furneaux found wood, water and timber at Adventure Bay in

1—Tallis Edition, Vol. 1, Page 186.
2—Ibid, Vol. II, Page 59.
3—Ibid, Vol. I, Page 250.
4—Ibid, Page 258.

Van Diemens Land. In Patagonia and South Georgia harbours were proved and colonies of seals found. Whales were reported frequently in southern oceans. The voyage also proved that the route via New Holland gave the freest access and at all seasons to the Pacific Ocean. Cook rated as the biggest achievement the maintenance of health of crews even in sustained voyaging in sub-arctic weather — a "discovery .... which will make this voyage remarkable when the disputes about a southern continent will have ceased to engage the attention and divide the judgment of philosophers"[5]. He formed the opinion that there was a continent, because only this could account for the enormous icebergs, but that it would be uninhabitable.

The object of the Third Voyage was to find a North-West or a North-East passage. The hoped-for route would have assured British command of the trade to China as well as the fur trade, both then being jeopardised by the revolt of the American colonies. In conjunction with Cook's orders, another ship was sent to Hudson's Bay to protect British whalers, capture Americans, and help in the discovery of the passage. Cook was supplied with copies of Russian maps which showed in the far north of the Pacific a dubious mass of islands.

Again the Cape - New Holland route was used; Kerguelen Island was examined with reports of its anchorages and seals so tame as to be slaughtered at will. Adventure Bay in Van Diemens Land afforded safe anchorage, wood and water. In New Zealand and Tahiti various animals were released which, if they multiplied, would make the Society Islands "equal, if not exceed, any place in the known world for provisions". These anchorages were to become the stageing place for ships trading to the North Pacific.

From and after the discovery of the Sandwich Islands the details of commercial importance dominate the narrative. The Hawaiians were impressed by articles of European manufacture and also "deeply impressed with a consciousness of their own inferiority; a behaviour which equally exempts their national character from the preposterous pride of the more polished Japanese and of the ruder Greenlander"[6]. These were the attitudes most esteemed in colonial subjects. In pointing out the value these islands would have had to the Spaniards in their trans-Pacific voyages, he clearly implies their value if a north-west passage were to be found.

The next port was Nootka Sound on Vancouver Island, a good harbour with ample wood and water but also a numerous people who were avid for iron, brass and all metals in exchange for furs,

5—Ibid, Page 596.
6—Ibid, Vol. II, Page 247.

including the valuable sea-otter. "Therefore," wrote Cook, "the discovery of this part of the continent where so valuable an article of commerce may be met with, cannot be a matter of indifference."[7]

Moreover, the natives were accustomed to trade, were already acquainted with iron and had "strict notions of an exclusive property of everything their country produces"[8], even asking payment for wood and water taken. They had some articles of Spanish origin but it was not possible to discover what direct contact they had had with other traders. They were skilful fishermen and whalers — the journal makes frequent mention of whales, porpoises and seals.

Here was a numerous, skilful people who "immediately discovered a knowledge of traffic"[9] and enquired if the English meant to settle among them. They stole, but rationally, from considerations of utility, not from caprice as Tahitians had done. They were not warlike or hostile. Their arts and crafts were of a high order. Some of their handiwork "might be put in competition with the most delicate manufacture found in any part of the known world"[10]. It is easy to understand the appeal of such news to business men whose manifest destiny was then being formulated by Adam Smith and Alexander Hamilton. This was what they had hoped to find in a Southern Continent.

As Cook worked northward, charting an unknown coast, the wealth of furs changed but did not diminish. He found all peoples using some iron and copper. They had beads of European origin which he thought had reached them via Hudson's Bay, holding it unlikely that Russian traders had reached so far. He reiterated the opinion that a very beneficial trade might be carried on but doubted whether it was not "too remote for Great Britain to receive any emolument from it unless a northern passage is found". As the coast trended ever more westerly he saw that such a passage would be a longer one than had been hoped for. He held the opinion that the produce of furs would increase if traders increased the wants of the peoples by introducing new luxuries[11].

There is ample detail of the facilities for trading. The precise fixing of the coast and islands is recorded with details of harbours, food supplies (halibut up to 250 lbs. caught in hundreds), berries and other antiscorbutics, whales in plenty and the natives adept at hunting them but moreover anxious to trade and showing a degree of politeness uncommon in savage tribes. There was

7—Ibid, Vol. II, Page 273.
8—Ibid, Page 268.
9—Ibid, Page 288.
10—Ibid, Page 303.
11—Ibid, Page 314.

no killing, as had invariably happened in Polynesian islands. Amicable relations were easily maintained.

Then came the meeting with the Russian traders, already well established in the Aleutian Islands, and the friendly comparison of charts. Despite the ignorance of languages much valuable information was exchanged. The Russians knew very little about the American mainland as their maps were "singularly erroneous" but the trade was clearly " of utility to the Russian nation "[12].

Though Cook himself was a fair sample of the Economic Man then becoming increasingly common, he shows that his crew was not. When the last of their tobacco was issued (iron and other trade goods had already been expended and they faced a " dollar crisis ") they wasted their resources recklessly. He wrote : " So improvident is the English sailor that they were as profuse in making their bargains as if we had now arrived at a port in Virginia : by which means in less than 48 hours the value of the article in barter was lowered 1000 per cent."[13] Though many kinds of furs were bought, the great object was the sea-otter, as they had learned from the Russians what price it brought in Kamchatka and China.

After traversing Behring Strait, making contact with the wild Tchutski of Siberia, and making persistent attempts to penetrate the heavy pack-ice beyond 70 degrees latitude, they turned back to winter at the Sandwich Islands and there discovered Maui and Hawaii which they had missed on the northward passage.

Cook's last remarks must be read in the light of his new knowledge of the wealth of furs and fisheries and of his conviction that a North-West Passage, if it existed at all, would be impracticable for traders. He had just discovered the largest of the Sandwich Islands, fruitful and in a mild climate, with a good anchorage. He found the people numerous (" a thousand canoes at once are around the ship ") , free from reserves and suspicion, never cheating or stealing, selling provisions in plenty but keeping to their price. His last entry in his Journal reads : " To the disappointment of not finding a northern passage we owed our revisit to the Sandwich Islands and enrich our voyage with a discovery which seemed in many respects the most important that had hitherto been made by Europeans throughout the extent of the Pacific Ocean."[14]

With Cook's death most accounts of this voyage reach an untimely end. The expedition continued as he had intended, under Captain Clerke, for Awatska Bay, Kamchatka, to which it returned after the second attempt to return to England by an

12—Ibid, Page 349.
13—Ibid, Page 348.
14—Ibid, Pages 365-6.

Arctic Passage. There Clerke died, Lieutenant Gore took command, and Lieutenant King was transferred to the " *Discovery* " in command, taking with him his midshipmen who " were more than ever necessary because we had no Ephemeris for the current year ". This passing remark shows the high standard of navigation methods (the chronometer also had failed them) , and explains why the men of this school made their mark in later work. Vancouver, Bligh, Colnett, Portlock, Dixon, Roberts, Billings at least are known. Professor Manning Clark asserts that his death was due to a " fatal flaw " in his character. On the contrary, he died because he led in person, as any commander must do in moments of crisis. He had done his work so well that his colleagues carried it on to the planned conclusion and later played a major part in reaping its fruits. It can also be argued that the manner of his death saved the expedition from disaster. If it had, through the vacillation of the commander, suffered the fate of that of La Perouse, how long would it have been before their work would have been done all over again ?

In Kamchatka much was learned of the Russian trade with China and, indirectly, with Japan. King saw that if it was profitable to carry furs by land a thousand miles then it must be very profitable to open a sea trade — Japan could be reached in three weeks from Alaska. The Russians too paid high prices in silver roubles and silver had been one of the few commodities exchangeable in China for silk and tea. The climax came when they reached Macao and Canton, homeward bound, to buy rope and sailcloth which had been very scarce at Kamchatka. Here they sold the remainder of their furs, ship soiled as they were, for £2,000 and " the rage with which the seamen were possessed to return to Cook's River (Alaska) and, by another cargo of skins, make their fortunes at one time was not far short of mutiny ".[15]

Such a statement proves the commercial pull of an el Dorado. That crews homeward bound after four years, crews with a good record throughout, who had faced a second time the rigours of the Arctic, should occasion such language is the strongest evidence of profit expectations exceeding that of a gold discovery. Already two had attempted to desert at Kamchatka and were retaken ; at Canton two deserted with a ship's cutter. Neither men nor boat were retaken.

Officers and men alike were making plans to return. King's official journal suggests that the East India Company should send crews to Canton, buy vessels and stores there and pursue the trade and further discovery. The cost of shipping was the

15—Ibid, Vol. II, Page 507.

only cost. The cost of articles for barter was scarcely worth mentioning. With some wrought iron and a forge on board a smith could make the nails and knives needed. He added the hope that the plan " would not be entirely foreign to the nature of the work ".[16]

Thus to King it was already clear that Cook's doubts of the trade proving too remote were unwarranted. " Too remote " means unprofitable and the new facts of market value left no room for doubt. When the ships reached London and the news spread rapidly, any aspirations of private traders would have been stifled by the war with France, Spain and America which was still at its height, though at least one plan was made before the ships returned.

Before we turn to the trading adventures we must be clear about the nature of the discoveries. King thought the third voyage " distinguished above all the rest by the extent and importance of the discoveries — the Sandwich Islands bid fairer for becoming an object of consequence in the system of European navigation than any other discovery in the South Seas ".[17] The destiny of Pearl Harbour was foreshadowed by the navigator's judgment. He foresaw its commercial future in its resources and its central position with regard to all East Asia, the West of America and Polynesia. The relation to New Holland was also apparent for its relation to the Pacific was the same as that of South Africa to the Indian Ocean. Whoever held its harbours also held command of the most economical route to all European trade with Pacific shores.

This was made clear by the ending of the dream of a North-West Passage. The new situation established about sea routes rested on two basic facts : the first that it is not distance but time which determined profit in trade ; the second, that the sailing ship of those days could not pay if she had to force a passage against contrary winds. With the dubious exception of some clipper ships, after iron was being used in hulls and rigging, no square rigged ship could lie nearer than six points to the wind and in heavy seas and strong winds could barely hold the position previously made good. Moreover, to attempt to force a passage, beating into a gale and sea, for any considerable time took a heavy toll of hemp rigging and sails and strained the wooden hulls dangerously. We might note how Bligh, in a well-found ship, tried for eight weeks to round Cape Horn, then gave it up and sailed east about for Tahiti. Again, when Hunter took the " *Sirius* " from Port Jackson to Capetown for cattle, he made the Cape via Cape Horn in ninety days.

16—Ibid, Page 532.
17—Ibid, Page 389.

In the China trade, it was impossible to sail northward via Sunda Strait except during the South-west Monsoon, so ships had to time their sailing from Europe accordingly. Though the Strait is short there is a south setting current at all times and also an eastward set along the south coast of Java.

During wars the activities of French privateers were added. It is obvious that the adverse conditions were worst for ships bound to the Pacific ; for ships homeward bound they were much less risky, except for the danger from privateers who knew by the North-east Monsoon when to expect prizes. Also, for ships needing repairs, Batavia was a dear port and fever-ridden.

Cook had shown that the southern oceans afforded open navigation where ships need not shorten sail at night, continuous favourable winds and well defined coasts where refreshments of water and wood could be had cheaply and where fever did not exist. There was no base from which privateers could operate. Moreover, it was equally favourable at all seasons. As for distance (and time) if we refer to a globe we see that the route to North West America by New Holland is the same distance as the East Indies routes but far quicker while the supply points of Tahiti and Hawaii lie close to it. Even going to China the increased distance is not so great as to offset the favourable winds. From the First Fleet onward ships under charter for tea from Canton made their outward passage with convicts and supplies to Port Jackson or Hobart and their homeward one by Sunda Straits. In 1806 an outward convoy of ten East Indiamen was ordered to use the Bass Strait route to China.

That all this was clear to merchant seamen from Cook's discoveries may be seen from the details of trading plans and operations which quickly followed them.

The best contemporary evidence on the matter of trade routes is to be found in the East India Directory, first published 1811. The compiler was James Horsburgh, F.R.S., hydrographer to the Company from 1806 to 1836. The Fourth Edition, 1836, was still in use in 1869. Such handbooks for navigators, amplifying the detail on charts, embody the cumulative experience of all past generations of seamen. Horsburgh had sailed first to India in 1784 ; the Horsburgh Channel through the Maldive Islands commemorates him. His navigational data for the era of large wooden ships, hemp rigged and with hemp cables, supports the thesis that Port Jackson was the key port for the new Pacific trades, whether south or north. In his times the shipping interests of the Company had found it more profitable to build large ships for the direct China trade from London but even these 1,200 ton vessels could not be driven to windward. In plying

against strong head winds they could hope to make good very little ground and at inordinate cost in damage to hulls and rigging.

He records one Company ship making the direct China passage round Van Diemens Land as early as 1794 but does not mention those which, from the First Fleet onward, made Canton via Port Jackson. He says: "Instead of passing through any of the straits east of Java, as is usual when late in the season, they proceeded round New Holland, which, though circuitous and ought not to be adopted under usual circumstances, yet some ships have made tolerable passages to China by this route."[18]

The usual passage was via Sunda Strait but late in the season, i.e., from September to March, it was usual to proceed by the Moluccas (or Pitt) Channel, farther east, because of local easterly winds and an easterly set along the southern coast of Java. Horsburgh notes one ship which, after sighting Java, took six weeks to enter Sunda Strait. He warns ships using the eastern passage to have guns cleared for action — as late as 1834 Malay pirates took a ship near Bali. Both passages had navigation risks which were augmented by risks of capture during wars.

Thus in the period when the direct China trade was being developed there was no doubt about the hazards of the East Indies routes, which included fever and high costs if forced to use Dutch ports, while the New Holland route was favourable to big ships, open at all seasons and most favourable during the long days of southern summer, a material advantage when all coasts were unmarked by lights and charts were incomplete. Moreover, for all other Pacific lands, this was the shortest route as well as the quickest passage.

Remembering the recurring need for refit and refreshment on long voyages we find Horsburgh, following Hunter, citing Port Jackson as "one of the best and safest harbours in the world and a stranger may go into it with ease — abounds with inlets and coves where ships may moor and careen — ships running for Port Jackson in thick weather and uncertain of their latitude may take shelter in Botany Bay or Broken Bay — these are of utmost consequence for ships which may happen to be in bad condition and unable to keep off shore". For merchant adventurers as for weary mariners such facts had strong appeal. By contrast the descriptions of Rio de Janeiro (for all its scenic spectacle) are unflattering while Capetown was a dangerous anchorage in winter gales. The "Flying Dutchman", like all legends, has a solid factual basis. Phillip knew both these famous harbours and wrote of Port Jackson: "This will prove to be the most valuable acquisition Great Britain has ever made. No

18—Horsburgh, Vol. I, Page 111

country offers less assistance to the first settlers than this does nor do I think any country could be more disadvantageously placed with respect to support from the mother country."[19]

On the strength of this statement and a few others, such as "I would not wish convicts to be the foundation of an Empire", Phillip has been dubbed a visionary by historians who take refuge in mysticism when faced with facts they cannot explain. They impute to "empire" meanings that emerged in the time of Disraeli and Rhodes. Phillip had seen service in both East and West Indies and in the Portuguese navy and knew the trade empires based on Rio de Janeiro and Batavia. His previous doubts about the value of Botany Bay are shown by his attempt to outsail the First Fleet, transferring himself, King, Dawes and some skilled men to the "*Supply*" after leaving Capetown (so that the Dutch would not know of this). His assertion of the fitness of Port Jackson as the centre of a trade empire makes sense, as he also knew by then of the ports adjacent and of the favourable prospect at Norfolk Island. The basic conditions for empire were found and could be defended cheaply. A trade empire founded by convicts was an unpleasant prospect to an orthodox naval captain; what he feared is best shown by the troubles King had later with the ex-convict merchant Simeon Lord. His Majesty's Plantations (the style used even much later in a naval officer's commission) were founded for gentlemen adventurers, not for ex-convicts.

The need to hold all good harbours is made clearer by what happened when Port Phillip and the Derwent River became known and the adjacent sealing grounds were being exploited. It was the East India Company which in 1794 sent Hayes from India to the Derwent. Though remote from India, its condition was clearly of interest for the China trade. The discovery of Bass Strait shortened the passage from England to Port Jackson by a week but raised the question of harbours. Even before Port Phillip was known in detail an expedition was sent from England with all haste without any allegation of overcrowding in gaols. Good harbours on the strait were an added insurance to ships arriving in distress as well as alternative bases for traders, if they were occupied, and an invitation to enemies and trade rivals if not.

Collins left Port Phillip for the same reasons that Phillip left Botany Bay. It was of no use for trade — it "would never be resorted to by speculative men" as he wrote to King. King concurred. Surveys had shown that its entrance channel was long, circuitous, narrow, too deep for safe anchoring and subject to strong tidal streams so that "ships could not enter or leave

19—H.R.A., Vol. I, Page 51.

except at the top of the tide with a leading wind, conditions which are not to be met with every day "[20]. Nor were there any alternative anchorages for ships in distress which could not keep the sea, i.e., could not beat off shore against the frequent south-west gales if they found the tide against them in the entrance. So the great opportunity which Collins missed, as generations of historians have averred, was nothing of the kind. The bay was at best uncertain in its accessibility, at worst a death trap.

Horsburgh's Directory, dealing with " places of shelter on the south coast of Australia," prefers Western Port to Port Phillip, " being much wider in the entrance " and with fresh water more accessible. His accounts of the Derwent River and Hobart Town stress the wide, deep channel, safe anchorage and the several safe alternative anchorages if head winds should prevent immediate entry. Even to-day Port Phillip entrance is not attempted by steamers during heavy gales and strandings are frequent.

We must assess the importance of these navigational factors in the context of the objects of the users and the means available. Batman's schooners were handier ships and could put back if conditions were adverse, though one of Swanston's took refuge in Western Port and its cargo of 1,200 sheep died. A big ship of Collins' day was in no condition, after a long voyage, to beat off shore if entrance to the Bay proved impossible. Similarly Botany Bay was safe enough for the *" Endeavour "* but the larger ships of the First Fleet had to seek anchorage in deeper water exposed to easterly gales.

Seapower (and wealth) were to the nation which could hold the harbours on which the safety of shipping depended and deny them to its enemies. The examples of the distress of Peron's ships when forced to seek relief at Port Jackson, of Flinders' necessities which sent him to captivity in Mauritius and of the loss of whalers through being compelled to enter Spanish ports in South America, should suffice. Once Cook had unfolded the geographical facts the logical outcome was a settlement in New South Wales. Phillip's orders permitted him to seek another port if Botany Bay proved unsuitable. The logical outcome of the conditions of navigation was made politically imperative by the outcome of the American war ; not for territory but for command of the China and Pacific trade, which the Americans were now free to enter.

Hence we find Governor King writing in 1806, pleading for the retention of some settlement at Norfolk Island, " if the East India Company should continue to send their China-men by the eastern passage, as was the case with the *' Athenienne's '* convoy and *recommended by me in 1794,* the benefit it would give to the

20—H.R.N.S.W., Vol. IV, Pages 908-9, Vol. V, Page 158.

seamen navigating that valuable concern of the British Empire would be of the utmost consequence "[21].

That it would also be of value to his friends the whalers is certain, but no disparagement of the possible personal bias in this statement can alter the basic geographical facts nor obscure the point of King's assertion that he had held this view from the early days of the settlements, if not earlier still.

21—H.R.N.S.W., Vol. III, Page 676.