castrati were the stars of the opera stage and much in demand in church choirs. barbers in Naples hung out signs saving 'boys castrated here'? It's possible of course;

almost anything, as I fondly remember, is possible in Naples. Who knows? Perhaps San Gennaro's relics will duly avert that next cruption of Vesuvius, which geolo-

gists, Ingrid Rowland and the Italian state all deem inevitable.

To order this book for £21.95, see the Literary Review Bookshop on page 29

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m erdinand~Magellan,~the~man~who}$ is famous for being the first to circumnavigate the Earth, actually never achieved the feat. His ships and some of his crew did, but Magellan himself was killed in the Philippines in 1521. Many of those early intrepid circumnavigators never returned. If, in the 16th or 17th century, you boarded a vessel that was going to sail around the world, the chances of returning alive were pretty slim.

Joyce Chaplin, a Harvard professor who is the author of an insightful book about Benjamin Franklin, has now tackled a much broader subject. Round About the Earth is a survey of 500 years of circumnavigation up until the space race. She divides her story into three parts: 'Fear', 'Confidence' and 'Doubt'. The first covers those swashbuckling and audacious (as well as land and wealth grabbing) adventurers such as Magellan and Francis Drake. It's a world of danger, conquest and death, a world of ships sailing into the great unknown but also of emerging empires that ruthlessly subjugated other people. It's an era of fear, because so many men died. According to Chaplin this ends when scurvy, the main killer, is defeated - not by James Cook, as is most commonly assumed, but by John Byron, the 'first tender-hearted leader' who, in the 1760s, made sure that his men changed into dry clothes, wore cork life jackets and ate well.

By the time Charles Darwin boarded the Beagle in late 1831, he could be much more confident of surviving the voyage. This is where Chaplin's second part, 'Confidence', begins. She describes an era that continues until the 1920s, when tourists rounded the world in luxury ocean liners and when the first plane circled the Earth. In 1869, exactly one century after Captain Cook's first voyage with the Endeavour, travel agent Thomas Cook realised that there was money to be made by offering a luxury world tour. A few years later, in 1876, Sir Thomas and Lady Brassey sailed across the world in their own steam yacht Sunbeam, accompanied by their four children. Their boat didn't carry any guns - 'the ultimate

ANDREA WULF

Putting a Girdle Round the Earth

Round About the Earth: Circumnavigation from Magellan to Orbit By Joyce E Chaplin

(Simon & Schuster 535pp £12.99)

proof', Chaplin writes, of their 'confidence'.

The aim of circumnavigation had changed from imperial exploitation to leisure voyages and more personal challenges. There were those who tried to cycle or walk the belly of the planet - what Chaplin calls 'stunt circumnavigation'. By 1895 the Los Angeles Times complained that 'scarcely a week passes in which some person does not turn up who is bumming his way around the world on some asserted big wager'. At the same time elegant ocean liners took thousands of wealthy customers on comfortable voyages - floating hotels with orchestras and the best chefs that served the finest food.

By the time the story reaches the last section, 'Doubt', the reader has whizzed around the Earth so often that, at least in my case, something like a circumnavigator's fatigue kicked in. This is not Chaplin's fault - she is a great storyteller - but the sheer number of people who go around and around made my head go slightly dizzy. As she gets to those circling the world in aeroplanes or in space capsules, some of the thrill is over (for the reader, at least).

It's always a challenge to make such a sweeping survey work without getting lost in the detail. Luckily, Chaplin has a great eye for stories. The book is peppered with lovely details such as the empty barrel on the Galápagos Islands that served as an international postbox during Darwin's time. There are the sailors on Captain Wallis's well-provisioned and tightly packed Dolphin in the 1760s who had 'to Eate their way [through] before they could sit to Mess below', and the aristocratic traveller in the early 20th century who worried about his laundry: 'after all, what is most important to the circumnavigator is washing'.

Chaplin is great at conjuring up the tense

moments of preparation. Some of the most enjoyable sections of this book are about the practicalities circumnavigators had to deal with, from taking 'portable soup' - the 18thcentury mother of today's bouillon cubes to the problem of rusting tins in the late 20th century. Her analysis of Jules Verne's Around the World in Eighty Days is wonderful as she clegantly weaves together the story of Phileas Fogg's fictional journey with historical facts. When Verne's character goes around the world he reads travel guides and takes railways, steamers and so on - all of which give Chaplin a wealth of material to explore in greater depth. The result is an entertaining section of literary criticism mixed in with timetables, the Suez Canal, the Trans-Continental Railroad in the United States and the laying of the first telegraph cables.

Some of Chaplin's stories are familiar, but others are less known and could have been explored further. Dr Francisco Xavier Balmis's extraordinary medical enterprise deserves more than half a page. In 1803 he left Spain on a vessel with the mission to vaccinate the world against smallpox, Twenty-two orphans on board acted as his 'incubators' to keep the vaccine alive and active. The adventures of Jeanne Baret, the first woman to sail across the world - dressed as a man, she served as the botanist's assistant on Louis-Antoine de Bougainville's voyage in the 1760s - could also have been discussed in greater detail. There are hundreds of characters that pop up in this well-researched book and, though sometimes their numbers are overwhelming, Chaplin writes entertaining pen portraits that bring alive those who have circled our planet for the past five centuries. To order this book for £10.39, see the Literary Review Bookshop on page 29