

two thirds of the city's population, and then on through Germany again. After that, the skeleton disappeared from view 1840–1842 until it arrived in Riga in July 1842. In Saint Petersburg, lighting was installed so that it could be viewed also in the evening. Then, surprisingly for such a celebrated specimen, the skeleton was unrecorded from 1844–53, though it may have been in the Crimea in 1852–1853. Later it was definitely in Kazan in 1856 where it was sold for 500 roubles and then sent to the Academy of Sciences, Saint Petersburg, which lacked the space for displaying it so the bones were put in store. The skeleton was erected in the local zoo in 1867 where it languished in increasing neglect before going back in store in 1889. However, having been seen by many thousands over a period of more than sixty years, including many of the crowned heads of Europe, it was soon to regain its prestige. Articulated once again, it was hung in a new museum where Tsar Nicholas II, the court, ministers and members of the Academy took part in the opening ceremony in 1901, and its massive presence still dominates the hall.

The author of the book has previously published a series of volumes recording whalebones from around the world and his researches demonstrate the amazing hold that the remains

of the great whales have on the imagination of the human population. Sometimes in the past considered the relicts of dragons or giants, cetacean bones made an impression on people everywhere from humble peasants to great princes. Even now when a whalebone arch or other cetacean structure is threatened with decay or clearance, there is generally a major effort by the local community to preserve it. To apply an overused word, whale remains are truly iconic and not only impress with their size and longevity but are embedded in our ancient history and the dim recesses of our folk memory.

The Ostend whale is an exemplar of such remains and despite the author's extensive travels and deep research it has still not revealed all its secrets, and we learn from a postscript that it went from London to Dublin before returning to the continent. There are suggestions it was sent to the USA during its 'mystery period' but no corroboration has yet been found. This volume is a fascinating guide to its travels, comprehensively referenced and of interest to cetologists, museologists, historians of popular entertainments, and anthropologists, and to anyone who has been excited by the sight of one of the great whales whether alive or dead (Arthur G. Credland, 10 The Greenway, Anlaby Park, Hull HU4 6XH, UK (bracer@bracer.karoo.co.uk)).

La pugna Antártica: el conflicto por el sexto continente 1939–1959 [The Antarctic struggle: the conflict for the sixth continent 1939–1959]. Fontana Fontana. 2014. Buenos Aires: Guazuvira Ediciones. 323p, illustrated, softcover. ISBN 978-987-33-5970-5. ARS\$ 195. doi:[10.1017/S0032247415000650](https://doi.org/10.1017/S0032247415000650)

This book covers a substantially longer period than indicated in its title for it begins with accounts of early activities in the Antarctic, many of which are associated with the development of territorial claims which eventually went into abeyance when the Antarctic Treaty came into force in 1961 and ends in recent times. However, the introduction indicates that the two decades, from 1939 to 1959, will be principal subjects of the book.

The author is specifically concerned with *Antártida Argentina* and, in consequence, claims by Britain and, to a lesser extent, Chile are involved, as these overlap on the Antarctic Peninsula and South Shetland Islands. The cover illustrates much of the theme by showing portraits of President Juan Domingo Perón of Argentina in the centre with President Franklin Roosevelt and President Augusto Pinochet to his left and Prime Minister Winston Churchill and Chancellor Adolf Hitler to his right. One wonders why the president of Chile from 1973 to 1990 is included among the others who were in office during the events described in the book; Gabriel González Videla, President from 1946 to 1952, who has an Antarctic station named after him, would have been more relevant. Concepts of the Antarctic have a degree of variation and this book takes a broad view: the portion south of Argentina, South Georgia and the South Sandwich Islands are included in the early chapters, although the majority of the book refers to the region south of 60° under the aegis of the Antarctic Treaty, particularly the region where Argentine, British, and Chilean claims overlap. Events involving the Falkland Islands occur sporadically throughout the book.

The first chapter, *Argentina y la Belle Époque Austral* [Argentina and the good time south], begins with a terse summary of Antarctic history with involvement of the precursors of the Argentine Republic which also concern Tierra del Fuego and the Falkland Islands. Emphasis is placed on José María Sobral, an Argentine who wintered with Otto Nordenskjöld's Swedish expedition and the rescue by the Argentine naval vessel *Uruguay*. The transfer of the South Orkney Islands meteorological observatory, founded in 1903, to Argentina in 1904, which continues to function and now has the longest data set from the Antarctic, is noted. The beginning of Southern Ocean whaling, from South Georgia, by a company registered in Buenos Aires is described, although none of the several other whaling companies are mentioned. Consequences of the 'heroic era' then the First World War follow with later events particularly on Laurie Island using José Manuel Moneta's fascinating account of four winters there.

Preludio a la Contentienda [Beginning of the dispute], chapter two, makes much of the whaling industry and the German expedition aboard *Schwabenland* during which territorial claims were made on behalf of Hitler's government. Eighteen pages describe this expedition although it was in Antarctic waters for about three weeks; it returned to Germany in 1939 the date in the book's sub-title. *Reacción en Cadena* [Chain reaction], is chapter three, which notes Norwegian and United States reactions to the German expedition. Both these countries had been previously been active in continental exploration. The chapter concludes with a *Triangulo de Fuego* [Triangle of fire] where the three claims to overlapping territory and the Second World War all became involved. Chapter four, *Un Conflicto Global* [A global conflict] describes effects of the war spreading to many Southern Ocean regions, notably to remote islands, and the capture of the Norwegian whaling fleet by German commerce raiders. In this time Argentine Antarctic activities beyond the South Orkney Islands began to increase and are recounted in detail with several illustrations. The British reaction with 'Operation Tabarin' concludes the chapter.

The *Contraofensiva* [Counter-offensive] forms chapter five where President Juan Perón becomes a major Argentine proponent. A *Comisión Nacional del Antártico* was reorganised in 1946 and a list of its nine objects is given. The western boundary of *Antártida Argentina* was extended and more bases established. In Argentina this resulted in a patriotic effusion of anthems, poems, new toponyms, and similar public events. Chile was contemporaneously involved with Antarctic claims, made in 1940, and establishing stations. Relations between the South American states were formal, although a mutual territorial delimitation was not achieved. The three countries consolidated a form of *Treuga Polar* [Polar truce] by 1949. The chapter concludes with the Argentine expedition organised by Hernán Pujarto to establish a far southern base in Marguerite Bay at the site of the British Graham Land Expedition's 1936 station (although this is not mentioned). Chapter six, *La Guerra Silenciosa* [The silent war], reports the 'Hope Bay Incident' (one of the few outbreaks of the use of weapons in the region later under the Antarctic Treaty), disputes on Deception Island, establishing of a South Sandwich Island station, and related confrontations. World developments involving potential for atomic weapons and related occurrences also become implicated. Locally most of this is confined to exchanges of 'notes of protest'. The chapter ends with an account of an Argentine expedition reaching the South Pole overland and a further British initiative to place the disputes before the International Court of Justice in 1955.

The final chapter, *El Armisticio* [The armistice], not only recounts British and Argentine disputes but also refers to that between Argentina and Chile. The precedence of names of what is now generally known as the Theron Mountains, where Argentine toponymy was not published and became overtaken by English names is lamented but Pujarto's exploration of the interior of the continent is described. The Commonwealth Trans-Antarctic Expedition receives a brief mention questioning its scientific, versus political, significance. The Antarctic aspects of the International Geophysical Year 1957–1958 are discussed as *El Año de la Ciencia ... y la Política* [The year of science ... and politics]. This provided an opportunity for two politically opposed but powerful countries, Soviet Union and United States, to establish permanent stations in Antarctica and to investigate its potential resources. British politics and many multi-national scientific developments of the period are described. Possibility of sites for launching nuclear missiles and submarine bases are mentioned with the intensification of the 'cold war'.

The negotiation of the Antarctic Treaty is described succinctly and a note suggesting why Britain was the first and both Argentina and Chile the last to ratify it. Reference is made to the Anglo-Argentine conflict of 1982 which are asserted not to have involved areas in the Antarctic Treaty region, regardless of the

course and involvement of *Bahía Paraíso*. An epilogue briefly recapitulates the development of the Treaty and summarises subsequent Argentine activity with references to the Falkland Islands. This continues with contrasts of present numbers of stations of Britain and Argentina in *Antártida Argentina* observing the former are fewer.

The book has an unfortunate accumulation of errors, misconceptions, and omission of relevant material. Examples of them include the assertion of a British claim to parts of South America in defining the Falkland Islands Dependencies is indulged in a description of the claim made in 1908; the claim that the first radio transmissions from Antarctica were made in 1927 from the Argentine station on Laurie Island (the earliest were from Commonwealth Bay by Mawson's expedition in 1913); and territorial claims which resulted in defined territories by New Zealand, France, Australia and Norway are treated perfunctorily, as are those of the United States which did not reach this stage. It is also unexpected to see the winter base of the British Graham-Land Expedition (1934–1937) base described as an old house of the Australian explorer John Rymill (page 140).

There is a much simplified monochrome map of Antarctic regions at the beginning and many others of a similar style of particular locations throughout the book. The last shows the political claims on the continent. The illustrations, also monochrome, are numerous and well selected from a variety of sources to illustrate the themes. Unfortunately no list of maps nor of illustrations is provided. An appendix provides a useful, up to date, list of Argentine constructions in the Antarctic region with their positions, dates of establishment and some other information. Although a substantial proportion of these are no longer extant owing to extremes of polar weather, their number demonstrates the policy announced by President Perón of saturating *Antártida Argentina* with constructions, 16 bases and 65 refuges. None of the many other bases and refuges in the region are mentioned, but in the same period as the Argentine ones were built also many others had been deployed by Brazil, Britain, Chile, China (Beijing), Czechia, France, Germany, Korea (South), Poland, Soviet Union, Sweden, Ukraine, United States, and Uruguay. This might be interpreted as demonstrating a national, rather than an international, theme of the book.

There are also comprehensive footnotes throughout the chapters which are summarised in a concluding bibliography of about 100 entries. This usefully includes, with other references, most of the major Argentine works on the subject and many monographs. Unfortunately there is no index. Overall, the book provides a useful addition to Antarctic literature, although from the Argentine aspect. (Robert Headland, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER, UK (rk10@cam.ac.uk)).

THE CHANGING ARCTIC ENVIRONMENT. THE ARCTIC MESSENGER. David P. Stone. 2015. New York: Cambridge University Press. 360p, hardcover. ISBN 978-1-107-09441-3. US\$49.99. doi:[10.1017/S0032247415000662](https://doi.org/10.1017/S0032247415000662)

Not often do books on polar science (or science in general) begin with a citation from Lewis Carroll's *Alice's adventures in wonderland* nor bring into play the metaphor of an imaginary

being as a guide through their content. Perhaps even less often does one find a book whose author takes on the challenge of explaining the present state of knowledge about the Arctic environment – primarily its physical and chemical components – to a non-specialist audience, ranging from undergraduate students and researchers to policy makers, industry professionals and anyone concerned about the Arctic's fate.

David P. Stone certainly has the credentials to take up a challenge of this sort, with a PhD in oceanography and