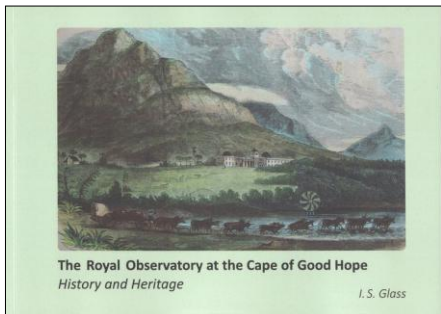


BOOK REVIEW

***The Royal Observatory at the Cape of Good Hope. History and Heritage*, by I.S. Glass. (Cape Town, Mons Mensa, 2015), pp. [iii] + 80. ISBN 978-0-9814126-2-7 (paper back), 290 × 207 mm, ~US\$18.00 (see comments at the end of this review).**

When I first saw this book I immediately thought, “What a pretty cover, but is yet another book about the famous



Royal Observatory at the Cape of Good Hope (henceforth ‘Cape Observatory’, for short) *really* warranted?” After all, I already had copies of Brian Warner’s various tomes (1979; 1983; 1995) in my library.

However, Ian Glass’ latest book is quite different from Brian’s earlier productions: it covers the history of the Cape Observatory through to the present day, and is designed not just for astronomers (both amateur and professional) but also for those with a lay interest in South African history. As the ‘blurb’ on the back cover says,

This book draws attention to a unique institution that has been part of Cape Town’s heritage for nearly two centuries. The former Royal Observatory ... has been the scene of several important advances in astronomy and deserves to be treasured not only for this reason but also because it is a unique architectural complex ...

[In this book] Emphasis has been placed on the remarkable work done there and on the extraordinary astronomers who carried it out.

And who better to write such a book than Dr Ian Glass. For much of his working life, Ian was employed by the Cape Observatory where he specialised in infrared astronomy. Fortunately for us, though, he also had a passion for astronomical history and was able to devote more and more time to this following his retirement. By my count, this is the fourth such book of his that I have had the pleasure of reviewing.

Ian relays the history of the Cape Observatory through its “... large collection of instruments and historic images ...” (back cover) via an introductory chapter and six chronologically-ordered chapters. The Introduction gently reminds us that astronomical history is not just

about what happened in Galileo’s day or during the nineteenth century—with its giant telescopes and the emergence of astrophysics. It is also about much more recent developments, and in the case of South Africa this was the remorphing of the Cape Observatory into the South African Astronomical Observatory and the appearance of the Southern African Large Telescope (SALT), one of the world’s elite 11-m class telescopes.

In just two pages, the first of the chronological chapters ‘sets the astronomical scene’ at the Cape prior to Britain’s founding of the Royal Observatory there, mentioning in particular the French Jesuit, Guy Tachard (he was *en route* to present-day Thailand and is the subject of some of my own research), and the remarkable Nicholas-Louis de la Caille, the topic of Ian’s previous book (Glass, 2013).

Chapter Three, “The Story of the Royal Observatory”, introduces us to some very familiar names, including Thomas Henderson, Sir Thomas Maclear, Sir David Gill, Harold Spencer Jones and Richard Stoy. Their research and that of other staff members, including J.K.E. Halm, the Observatory’s “... first real astrophysicist ...” (page 18), is summarised. Also mentioned is John Herschel’s sojourn at the Cape from 1834 to 1838.

The next chapter focuses on “The Buildings of the Royal Observatory”, and in 28 pages Glass takes us on a tour of the various buildings that comprise the Observatory complex, with emphasis on the telescopes. Given the plethora of illustrations, this is a special treat for those of us interested in historical instruments.

“The Work of the Royal Observatory” is a 16-page chapter that not only briefly discusses the positional, photographic and photometric astronomical research conducted by staff, but also the Observatory’s role as the nation’s official ‘time-keeper’. Personally, I enjoyed the photographs on page 48 of two of the Observatory’s different time-ball towers.

The very brief penultimate chapter talks about the reorientation of the Observatory in the 1960s as an astronomical research institution, its rebirth as the South African Astronomical Observatory (SAAO) in 1972, the development of the Sutherland observing site and the acquisition of its most famous occupant, SALT. How fondly I recall the opening ceremony on 10 November 2005.

The final chapter, titled “Conservation and Heritage”, not only discusses the Astronomical Museum and heritage status of the Observatory

buildings and some of the instruments, but also the natural history of the Observatory site. For example, I did not realise that

The site is to some extent isolated from its urban surroundings by the two rivers, the Liesbeek and the Black. To the north and east are wetlands that form a sanctuary for bird life. Near its northern boundary is a bird hide that overlooks the vlei area. In winter, flamingos, geese, ducks and many other birds can be seen.

Meanwhile, the Observatory grounds still include areas of original vegetation, which boast an endangered plant and the equally-endangered Western Leopard Toad.

The Royal Observatory at the Cape of Good Hope. History and Heritage was a pleasure to read, and brought back nostalgic memories of my one and only visit there. Ian Glass writes well, and his book is a pictorial *tour de force*, with its many historical and recent photographs, cartoons, sketches, architectural plans and Observatory site maps. It is an excellent 'guide book' for those visiting the Observatory, but also deserves to grace the bookshelves of anyone with an interest in South African astronomical history. Note that the final price of copies will be determined by the cost of airmail postage to the purchaser. For enquiries and/or orders email the author (ian.glass@gmail.com) or Ms Thembela Matungwa (tm@sao.ac.za).

Reference

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***Perspectives on Early Astronomy in Indian Context*, by M.N. Vahia, Nisha Yadav and Srikumar Menon. (Kolkata, National Council of Science Museums, 2015), pp. [iv] + 112. Paper back, 140 × 218 mm.**

For some time I have been following the research, mainly in ethnoastronomy and archaeoastronomy, of Professor Mayank Vahia from the Tata Institute of Fundamental Research in Mumbai, so it is a great pleasure to be able to review this little book, which he wrote

with two of his colleagues.

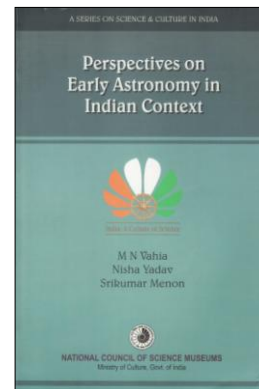
In the "Author's Note" Professor Vahia, Nisha Yadav and Srikumar Menon explain that in this book they try

... to summarise our perspective on how human interest in skies might have evolved.

This book aims to provide a phenomenological overview of the growth of our understanding of astronomy. It does not provide technical details of how to measure locations of stars and planets or details of astronomical records in Sanskrit literature, something that has been done much better by other more competent authors. (page 3).

Following this are six chapters.

The first is titled "Evolution of Human Understanding of Astronomy". After briefly reviewing human evolution, prehistoric cultural phases and environmental change during the Pleistocene and Holocene, the authors try to answer the following question: "So how did humans gather and evolve their ideas of astronomy from the first stages of their evolution and understanding?" (page 8). In so doing, the authors look at the Sun, Earth, Moon and stars, and the seasons. While much of this is basic fare for astronomers, novices will find it useful.



The next chapter, "Astronomy in the Context of Human Intellectual Growth", largely provides a background

context for the more detailed analysis of Indian astronomical history, which will follow. The authors point out that "Attempts made by humans in trying to understand the heavens are of profound interest and importance." (page 24), and they proceed to discuss the following topics: myths, the splendour of the night sky, early monumental architecture, religious ideas, and expression through art. In the process, they briefly introduce some Indian examples.

However, it is only Chapter 3, "Indian Megaliths and Astronomy", that fully immerses us in Indian astronomy. The authors stress that

Most of the megaliths in India are found in the southern part or [*sic*] peninsula India, though there are other pockets of megalithic sites found at Vidarbha, Kumaon, Rajathan, Jharkand etc. (pages 35–36).

Specific megalithic sites we are introduced to are at Aaraga Gate, Byse, Hanamsagar, Hergal, Mumbaru, Nilaskal and Vibhutihalli, all in southern India, plus the stone circles near Nagpur in central India. Most of these meg-