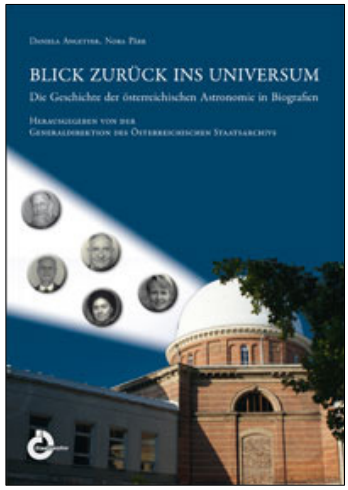
BOOK REVIEWS

***Blick zurück ins Universum. Die Geschichte der österreichischen Astronomie in Biografien,* by Daniela Angetter and Nora Pärr (edited by the Generaldirektion des Österreichischen Staatsarchivs, Vienna 2009), pp. 321. ISBN 978-3-902575-27-2 (paperback), €22.00, 240 x 170 mm.**



Looking Back into the Universe is the somewhat unusual title of this publication of the General Administration of the Austrian State Archive which contains biographies of about 125 astronomers associated with Austria who lived between the fourteenth century and the present day. While Nora Pärr covered almost 30 astronomers who lived in the fourteenth to eighteenth centuries, Daniela Angetter wrote biographies of the more recent ones—about 100 astronomers of the nineteenth and twentieth centuries. Of the 24 living astronomers included in the book, 13 provided their own biographies.

The term 'Austrian' is taken in a broad sense; thus the book includes astronomers like Johannes Regiomontanus, who was born in Germany and died in Italy, but spent some of his years at Vienna University; Johannes Kepler, who spent many years as a teacher and mathematician in Graz and Linz; and Rugjer Josip Bošković, who was born in 1711 near Dubrovnik (which only in the nineteenth century was part of the Austrian-Hungarian Empire). Among twentieth century scientists, both Austrians working abroad (like the well-known emigrant, Thomas Gold) and immigrants (like the Vienna Observatory Director in Nazi times, Bruno Thüring) can be found. On the other hand, Joseph Johann von Littrow (1781–1840), the most famous Director of the Vienna Observatory, and author of the famous popular book *Wunder des Himmels*, is inexplicably absent from the book—only his son, Karl Lugwig, is included.

Besides dates and places of birth and death, and (in most cases) a portrait of intermediate quality, a curriculum vitae of from one to five pages is given, which is supplemented by a selection of references and biographical information.

The entries have about the same length and quality as those in Hockey et al.'s *Biographical Encyclopedia of Astronomers*, but a cursory comparison shows that only about 25% of the deceased astronomers in the Austrian book are included in Hockey's two volumes, indicating that Angetter and Pärr were able to include quite a number of 'stars of fainter magnitude'.

This book can be recommended to anyone interested in the history of European astronomy, and is available from the Austrian State Archive (see http://www.austria.gv.at/site/5075/default.aspx).

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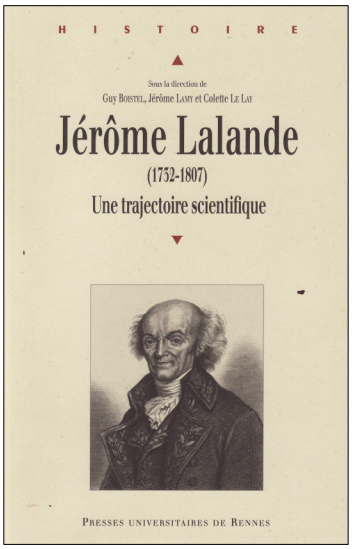
***Jérôme Lalande (1732-1807). Une Trajectoire Scientifique*, edited by Guy Boistel, Jérôme Lamy and Colette Le Lay, (Rennes, Presses Universitaires de Rennes, 2010), pp. 234, ISBN 978-2-7535-0991-7 (paperback), €18.00, 240 x 155 mm.**



Jérôme Lalande (1732–1807) is one of the most interesting figures of eighteenth century astronomy. He is mainly known for his *Histoire Céleste* which contains the positions of 50,000 stars, but his other activities were considerable and very varied. While centring on astronomy, his work extended to several other scientific domains and even to tourism. He was also a very good popular writer. An excellent biography was recently published by Simone Dumont (*Un Astronome des Lumières, Jérôme Lalande,* 2007, Paris, Vuibert and Paris Observatory), and should be read before this new book, which gives many details on Lalande's activities but assumes some previous knowledge of his multi-faceted personality.

The present book was written by twelve historians with complementary competences on the variety of topics addressed by Lalande. The two first chapters show how Lalande—who had no official position in an observatory and in particular at the Paris Observatory, which was the exclusive domain of the Cassinis—still managed to assemble a network of pupils and friends in order to gather large quantities of astronomical data and to reduce observations. The next chapter describes how his talents for organization reached their climax with the founding of the *Bureau des Longitudes* in 1795, during the French Revolution (Lalande was active in the Revolution and was consequently powerful amongst the scientists of the time). This gave him the opportunity to make official and develop even further his network of collaborators, and the Bureau essentially took control of all French astronomy.

Lalande had many connections with the Navy, as described in the following chapter. He was for many years the editor of the official ephemerides of the Academie des Sciences, the *Connaissance des Temps,* and managed to transform it into a nautical almanac, with lunar tables for the determination of longitudes borrowed from Maskelyne's tables in the English *Nautical Almanac*. In 1793 Lalande also published an *Abrégé de Navigation* which contained examples of astronomical calculations useful for sailors.

The second part of the book is devoted to the many close relations that Lalande maintained with foreign scientists. The first chapter recalls that he was sent to Berlin in 1751, aged only 19, to make observations complementary to those of La Caille at the Cape of Good Hope in order to obtain parallaxes of Mars, Venus and the Moon. He was so successful that he was elected to the Academy of Berlin in 1753, together with Le Gentil. In Berlin, Lalande met Euler, with whom he later had an active exchange of correspondence and some minor disputes. The next chapter tells us that Lalande visited England twice, in 1763 and 1788, when he met and became a friend of Nevil Maskelyne. Many letters between the two men are preserved (and two letters from Lalande are reproduced in facsimile). Their relations were not interrupted by the wars between France and England. Another chapter is devoted to the tumultuous relations between Lalande and the Austrian Jesuit, Maximilian Hell. The last chapter of this part of the book is concerned with the numerous exchanges of letters between an aged Lalande and the amateur astronomer, Honoré Flauguergues, and also with the famous Baron Franz Xaver von Zach (during the blockade of France by England the letters between Lalande and Zach transited through Switzerland). Some letters are also reproduced in these two chapters.

The last section of the book describes some non-astronomical activities of Lalande. He was a remarkable successor of the Encyclopaedists (he actually wrote many articles for the encyclopaedia of Panckoucke). In 1778 he published a large book with splendid illustrations devoted to ship canals, in particular the famous *Canal du Midi* which connects the Atlantic Ocean with the Mediterranean Sea (first chapter of this section). Lalande also wrote an *Art du Papier* (The Art of Paper-making) and an *Art du Tanneur* (The Art of the Tanner), but these are only mentioned in the conclusion without further details. The next chapter tells us that Lalande travelled through Italy in 1765 and, once back in Paris, produced an extensive guide that became 'the bible' for many travellers—including Chateaubriand and Stendhal—well into the nineteenth century. Of course, this guide includes scientific matters, and for this reason is a precious resource for historians of science. The final chapter recalls that, as with several other prominent scientists and artists of his time, Lalande was an atheist and a very active freemason.

Overall, this book is a mine of information, not only on Lalande but also on the astronomical life of his time, during which a 'Republic of Sciences' developed in parallel with the better-known 'Republic of Letters'. It was during this period that science, and in particular astronomy, became truly international with considerable collaborative enterprises like the expeditions to observe the transits of Venus. The editors are to be commended for producing a relatively homogeneous book in spite of the large number of authors. However, a good knowledge of the French language is required to take full advantage of it. Actually, most of the literature concerning Lalande is in French, as can be seen in the bibliography at the end of the book. This book, and the earlier one by Simone Dumont, certainly deserve to be translated into English.

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CORRIGENDUM

Re Thompson, A.R., 2010. The Harvard Radio Astronomy Station at Fort Davis, Texas. *Journal of Astronomical History and Heritage*, 13(1), 17-27.

The name Tom Wilson that occurs in Section 11 and as T. Wilson in the caption of Figure 11 (on page 25) should in fact be Tom Clarke.

I thank D. Downs and J.M. Moran for pointing out this correction.

A. Richard Thompson