

Review by Christiaan Sterken in *Observatory* (April 2017)

45 Years of Heck in Professional Astronomy, by Joe Hube (Venngest, Duttlenheim, France), 2016. Pp. 637, 20.9 × 14.7 cm. Price €98.00 (about £89) (paperback; ISBN 978 2 9542677 3 9).

This book is devoted to the itinerary and professional activities of André Heck, a peripatetic astronomer and prolific scientific author of Belgian origin. The first eight chapters of the book (about 300 pages) focus on Heck's life (from studentship to retirement) as a scientist, and on the astronomical research that he carried out during his 45-year-long career. That first part reads like a comprehensive interview summary; the second part of the book is an exhaustive collection of documents, citations, and letters of reference, complemented with lists of meetings, lectures, publications, and summaries of papers.

The first chapter narrates Heck's coming to astronomy, and also sketches a most personal image of his early years: born in 1946 into a modest family, he always had to keep spending to a strict minimum during his youth and adolescence. That was also the case throughout his student years at the University of Liège, where he lived on a tight budget in coal-stove-heated student rooms with rudimentary furniture and facilities beyond imagination of today's typical student. At Liège University he had the privilege of being tutored by Paul Ledoux, an excellent and fair teacher. His professors were, among others, André Monfils, Léo Houziaux, and Pol Swings.

The next chapter describes life at the Liège Institute of Astrophysics (then located in the suburb of Cointe), where Heck joined Pol Swings' Group at the observatory. In particular he reports on several early trips abroad: to Hoher List Observatory in Germany, to Paris and Strasbourg Observatory, to Haute Provence Observatory, as well as on his first contact with the observatories in Chile (*viz.*, the Cerro Tololo Inter-American Observatory, and the Las Campanas and ESO La Silla observatories). The highlights of this chapter are the description of his discovery of Comet 1973a at Haute Provence Observatory, and an account of his first observing runs at ESO La Silla. The chapter concludes at the moment that is specified as "A Career in Full Momentum" and describes the devastating consequences of the Belgian government's decision to allot financial support to universities on the sole basis of their number of students. That policy — an indirect consequence of the social and political situation after the 'May 1968' student revolts in Belgium — heavily cut into budgets at research-intensive institutes like the place where Heck was on a tenure-track position.

The turning point of Heck's career is the topic of the third chapter: his appointment in 1978 as Resident Astronomer (and later on as Acting Observatory Controller) at the *International Ultraviolet Explorer (IUE)* ground observatory at Villafranca in Spain. This chapter describes in detail how the *IUE* Science Operations functioned, and refers to the numerous visiting astronomers that he met and supported during many observing shifts. In 1983 he decided to leave Spain and to take up a position at Strasbourg Observatory. His life and work in Strasbourg is described in the two following chapters: how he finally obtained tenure, and how he acquired two additional academic degrees — one at Strasbourg University, and one in Liège.

Then follows a bitter account under the title "Anni Horribiles", the disastrous years that followed after Heck was diagnosed in 1987 with an incurable life-threatening ailment. Thus in 1989 he resigned, for health reasons, from the Directorship of Strasbourg Observatory.

The next three chapters deal with his multifarious work in publishing as scientific author, as freelance writer, and editor of the well-known *Star*s Family* publications and the seven *Organizations and Strategies in Astronomy* books, for which he was awarded a prize by the Royal Belgian Academy.

The first part of the book closes with a last chapter on diverse activities and on the transition to definitive retirement after having worked 45 years in professional astronomy.

The intended readership of this book spans scientists, PhD students in the natural sciences, and young postdoctoral researchers. Readers studying the history of astronomy may also find the book of interest. It has a particular appeal to two specific generations of astronomers and scientists, *i.e.*, those (like myself) of retirement age who have witnessed those times and who have lived through some stories and anecdotes so well described in this biographical account,

and those of the very young generation — evidently for an entirely different reason: this publication clearly demonstrates the crucial importance of a good scientific education at a home institute. But upright scientific education and mentoring is only a *necessary* condition, but certainly not a *sufficient* condition: Heck's itinerary clearly illustrates that losing a good home institute is like losing a home forever.

The prime historical value of this book is the well-documented description of facts and situations that span more than half a century from someone's primary school to university and beyond. The touching story told is one of the shaping of a personality — in this case a scientist coming from an underprivileged family background — through economic hardships, the rigours of the university system of the time, unprecedented calamitous political decisions, grave health adversities, and severe job insecurities.

This book is extremely well documented with hundreds of references to books, papers, and web sites, and comprises nearly 250 photos and illustrations. Several indices — one hundred pages altogether — render any search very practical and effortless. — CHRISTIAAN STERKEN.