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In 1961, when I first met Prof. Otto Neugebauer at Brown University, I had intended to work on Arabic mathematics. After learning a bit about my background, Neugebauer suggested that it would be better for me to work on medieval Arabic and Hebrew astronomical texts. I agreed to do so (despite my ignorance of astronomy at the time) and have had no regrets. He proposed for my thesis that I prepare editions, with translations and commentaries, of two Hebrew versions of a commentary on the astronomical tables of al-Khwārizmī (9th century) that, in turn, were based on a lost Arabic text by Ibn al-Muthannā (10th century). The results of this research were subsequently published by Yale University Press in 1967. Professor Neugebauer was an excellent teacher and he patiently and gently corrected the missteps of a novice in the field. As is well known, his publications serve as a model for the way to study the exact sciences from antiquity to early modern times, and my intellectual debt to him is enormous. While I was at Brown I also met David Pingree, then a post-doc, and we spent many hours together discussing topics in ancient and medieval astronomy and astrology. My knowledge of astrology is almost entirely due to the efforts of Pingree who encouraged me to take such matters seriously as historically important even though they are devoid of scientific value from a modern perspective. Writing papers with Pingree was indeed an educational experience.

For a long time I maintained a primary interest in the sort of medieval texts that Neugebauer had in mind for me. So, I edited and translated *The Astronomy* of al-Bīṭrījī (ca. 1200), based on manuscripts of the Arabic original and the medieval Hebrew translation (published by Yale University Press in 1971), and then I edited the astronomical tables of Levi ben Gerson (14th century) which, in contrast to most other medieval sets of tables, were based on new models and new computations (published by the Connecticut Academy of Arts and Sciences in 1974). However, Neugebauer made it clear to me that the basis for a full understanding of medieval astronomy required a deep knowledge of the works of Ptolemy (2nd century), the leading astronomer in antiquity. In fact, in his introductory classes on ancient astronomy, Neugebauer used Ptolemy's *Almagest* as the basic text, and this practice has served me well throughout my academic career. Shortly after completing my work at Brown, Derek J. Price at Yale suggested that I read a paper by Willy Hartner that had just appeared on the subject of Ptolemy's cosmic distances. I soon realized that the Greek text of Ptolemy's *Planetary Hypotheses* was incomplete, and that the Arabic version (then only available in a difficult and incomplete German translation) contained a hitherto unknown section on cosmic distances that underlay the medieval tradition of sizes and distances of the planets. This led to a facsimile edition of the Arabic version of Ptolemy's *Planetary Hypotheses* with a translation of the new section on planetary sizes and distances (published by the American Philosophical Society in 1967). In this way I proved that the Ptolemaic system of sizes and distances did indeed go back to a text by Ptolemy. The medieval tradition of planetary distances and sizes was then the focus of the thesis by Noel

M. Swerdlow at Yale under my supervision, completed in 1968, and a joint publication on an anonymous Arabic text concerning planetary distances and sizes (published in *Centaurus*, 1970–1971); the author was subsequently identified as al-ʿUrḍī (13th century) by George Saliba (published in an article in *Isis* in 1979).

Although not represented in the essays mounted on this web site, I have collaborated with many scholars from whom I have learned a great deal. In a series of papers with Alan C. Bowen we explored many facets of Greco-Roman astronomy, and his linguistic and philosophical sensitivity was essential to the success of these projects. In a series of papers on early modern science with Peter Barker we explored various philosophical and theological issues that arose in the astronomy of the Renaissance. More recently, I have been working with Giora Hon on topics relating to symmetry from antiquity to the twentieth century, and this has led me to consider a whole range of issues I had not anticipated in such domains as the history of architecture and modern physics. Finally, in matters concerning the development of astronomy in Spain in the late Middle Ages I have greatly benefited from my collaboration with José Chabás. These joint efforts have taken advantage of the possibilities for rapid communication using e-mail, often with several messages going back and forth in the course of a day.

In addition to collaborators (not all of whom have been mentioned here) I have had the good fortune to meet a number of distinguished colleagues who helped guide my work in various ways. A complete list would be too long and so I will mention only those whose impact on my research was greatest. At Yale my senior colleagues, Asger Aaboe and Derek J. Price, were most generous in offering advice and criticism. Edward S. Kennedy, who was visiting Brown when I was a graduate student, is a special case because he almost single-handedly made the study of Arabic astronomy into a proper intellectual discipline. In the course of frequent trips to Europe I met, among others, John D. North, Gad Freudenthal, Paul Kunitzsch, José Luis Mancha, and Julio Samsó. My many discussions with them—in person, by e-mail, and by the exchange of letters—gave a sense of community to our scholarly endeavors.

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