***Astronomy and Astrology in the 13th-century Hebrew Encyclopedias***

In the first half of the 13th-century, there was an increasing demand for acquiring scientific and philosophical knowledge among Hebrew-reading Jews who lived in Latin Europe. This demand, which could not be fulfilled\satisfied by the scientific Hebrew treatises available at the time, shortly led to the emergence\appearance of Hebrew compendiums that, for the first time, provided access to the full range of medieval sciences. These compendiums, known as the “Hebrew encyclopedias of science”, received (some) scholarly attention, mostly during the last two decades. However, their astronomical and astrological sections have never been studied systematically. My dissertation, supervised by Prof. Shlomo Sela at Bar-Ilan University, is the first comprehensive study of the astronomical and astrological sections of the Hebrew encyclopedias. Based on the available manuscripts, the study summarizes their content; identifies their scientific sources; examines their authors’ use of sources and scientific terminology; places the encyclopedias in the context of other medieval scientific texts; and reveals their cultural role in medieval Jewish society\communities.

The research focuses on the following five encyclopedias: (a) Judah ben Solomon ha-Kohen’s *Midrash ha-ḥokhmah*; (b) Shem-Tov ibn Falaquera’s *De*ʿ*ot ha-filosofim*; (c) Levi ben Abraham’s *Livyat ḥen*; (d) Gershom ben Solomon’s *Sha*ʿ*ar ha-shamayim*; and (e) *Sefer ha-Kolel*, an anonymous encyclopedia devoted exclusively to astronomical and astrological materials, which only partially survived.

The dissertation provides new insights into the overall profile of the encyclopedias and into the\their authors’ *modus operandi* in composing their works. Its first chapter is devoted to the historical and social circumstances that led to the emergence\appearance of the encyclopedias. Then, the dissertation analyzes each encyclopedia separately, providing information on its unique character, and addressing new discoveries on its content and sources. For instance, the research reveals the existence of hitherto four unknown chapters of the astronomical section of *Sha*ʿ*ar ha-shamayim*; chapters found hidden in a single manuscript. Another intriguing finding is that two (of the?) encyclopedists acquired scientific knowledge through oral communication, apparently with Christian scholars. A special attention is paid\given to the authors’ critical remarks against consensual scientific notions and scientific authorities, to their usage of canonical Jewish texts in astronomical and astrological contexts, and to their treatment of specific issues, such as lunar spots, the theory of trepidation, star catalogues, mathematical algorithms, and astrological doctrines. Laying the foundations for the production of critical editions in the future, the dissertation offers a full account of the codicological and paleographical aspects\characters of the encyclopedias’ extant manuscripts.

The encyclopedists’ scientific terminology is thoroughly examined. The research shows that some encyclopedists adopted the scientific vocabulary coined by Abraham Bar Ḥiyya, Abraham ibn Ezra, and Jacob Anatoli; while others also created a unique scientific terminology. The research, then, explains the authors’ strategies in coining new Hebrew scientific terms, and – regarding those who relied on Arabic sources – addresses the authors’ methodologies in translating scientific terms from Arabic into Hebrew. Glossaries of technical terms used by all five encyclopedists are included.

The dissertation is the first comprehensive study on\of the astronomical and astrological sections of the so-called Hebrew encyclopedias of science. It helps us understand how Jewish intellectuals interpreted, used, and disseminated scientific knowledge in the 13th-century, and reveals the encyclopedias’ significant role in satisfying the intellectual needs of the medieval Hebrew reader.