Brief Communications
Abraham Zacut’s Signature:
A Mystery Solved

Abraham ben Samuel ben Abraham Zacut of Salamanca (1452–1515) is perhaps best known today for his historical work, *The Book of Genealogies* (ספריוחסין), but he was also the leading astronomer in the Iberian peninsula at the end of the fifteenth century. His main astronomical work, *The Great Composition* (החבור הגדול), composed in Hebrew in 1478, consists of canons (a set of instructions) and astronomical tables. A Castilian version of the canons by Juan de Salaya was completed in 1481 with the aid of Zacut. Shortly after the expulsion of Jews from Spain, Zacut arrived in Portugal and was apparently given the title of “royal astronomer” during the reigns of João II (1482–1495) and Manuel I (1495–1521). After Judaism was declared illegal in Portugal in 1497, Zacut went on to North Africa, and subsequently to Jerusalem. His fame among European astronomers (outside the Iberian peninsula) depended on a set of astronomical tables published in Leiria, Portugal, in 1496, with canons in Latin in some copies and Castilian in others, entitled *Almanach perpetuum*. This was one of the earliest publications of a set of astronomical tables. Although Zacut is mentioned as the author, this does not seem to be true for the canons, which differ in many ways from the Hebrew canons of his *Great Composition*. According to the colophon, Joseph Vizinus translated
Zacut’s text from Hebrew to Latin and then from Latin to Castilian, but this probably does not reflect Vizinus’s precise role in the publication. In any event, it is not clear that Zacut was aware of this edition. All, or some of the tables, in the Almanach perpetuum were later reprinted in Venice in 1498, 1502, 1525, and 1528, and this is an indication of the status of Zacut’s work in the astronomical community at the time. There were also translations (and adaptations) of the printed edition into Arabic.¹

Zacut’s role in Portugal is not easy to reconstruct, and there are many legends of dubious historical value. One fixed point seems to be his signature, “Abraham Zacut, royal astronomer,” on a Portuguese document, dated 9 June 1493.² But this document has long been puzzling, and there is no other signature by Zacut with which to compare it. In 1896 Kayserling published a “facsimile” of the signature which he had received from a Portuguese colleague, Joaquim Mendes dos Remedios.³ In this facsimile two Hebrew letters are crossed out, which seems strange in a signature (see Fig. 1). It turns out that Kayserling (or possibly his Portuguese colleague) was just correcting the Hebrew without indicating that the image had been altered. Indeed, in the facsimile published in 1909 by Lemos no letters are crossed out (see Fig. 2).⁴ But is it likely that Abraham Zacut, a major author of Hebrew texts, would write התוכן מהמלך instead of תוכן המלך (the king’s astronomer)? In any event, the Hebrew expression is a literal translation of a title as it would appear in a Romance language: in modern Portuguese it would be o astrónomo do rei (corresponding to l’astronome du roi in modern French), where Hebrew ר (or מ) corresponds to the preposition de.⁵ Perhaps the most problematic aspect of this signature is that it was not customary to add the honorific ר (rabbì) before one’s name in a signature. Moreover, in addition to the given name in a signature, the father’s name and the grandfather’s name were usually included.⁶ Another difficulty concerns the letters at the end of the signature (to be discussed below).


² For a previous discussion of this signature accompanied by a low quality image, see Chabás and Goldstein, Zacut, pp. 11–13.


⁴ Maximiano Lemos, Zacuto Lusitano: a sua vida e a sua obra (Porto: Eduardo Tavares Martins, 1929), p. 20. The main subject of this book is Zacuto Lusitano (d. 1642), but it also contains some remarks about Abraham Zacut of Salamanca (d. 1515).

⁵ For the Latin form of Zacut’s title, see the colophon at the end of the Almanach perpetuum (Leiria: Samuel d’Ortas, 1496), f. 172r: Madrid, Biblioteca Nacional de España, shelfmark I-1077. Cf. Chabás and Goldstein, Zacut, p. 10.

⁶ For examples of Hebrew signatures in medieval documents from Spain, see José Luis Lacave, Medieval Ketubot from Sefard (Jerusalem: Magnes Press, 2002). Generally, Hebrew signatures are far more cursive (and hence more difficult to decipher) than the signature here.

Figure 1. Kayserling’s “facsimile” of the signature (1896).
It seems to me that the simplest solution is to assume that someone acting as Zacut's agent signed the document for him. In that case, the honorific and the lack of patronymics are plausible, and the awkwardness in the grammar need not be attributed to Zacut himself. The letters at the end of the signature were interpreted by Kayserling as י''א, but in 1897 Kaufmann explained that this was impossible. Generally, it has been understood that these letters represent the name of the Portuguese king at the time, João II, but there are difficulties with this claim. In Judeo-Portuguese one would expect either ג'ואו, ג'ואאו, or ג'ואן. And in Hebrew texts which preserve a legend about an encounter between Zacut and King João, the king’s name is given as יואן. In all cases there is a וakhir at the end of the signature, but none is to be seen on this Portuguese document of 1493. However, if one accepts the hypothesis that an agent is responsible for Zacut’s signature, then a blessing (for a living person) would be appropriate after the name. This means taking יא as an abbreviation: in a private communication Tzvi Langermann suggested that it could be an abbreviation for יאир or יאיר, which corresponds to the common יאир דוד (may his light shine brightly), despite the negative connotation of the expression, יאירה, in Ezekiel 32:7. Although Langermann found only one example of this expression as a blessing after a name (Jerusalem, NUL, MS Heb. 8° 480, late seventeenth-century Kurdistan), he added: “but that does not mean that this is the only time it was ever used; it only means (as I know all too well) that this was the only time a cataloguer took the trouble to cite it.” Some have taken the stroke at the end of the signature to be a final nun, but it does not resemble the final nun in התוכן and may just be a flourish which, together with the stroke before התוכן מהמלך, forms a kind of parenthesis. The flourish at the beginning of the signature and the underlining are also unusual.

It is difficult to be certain, but the likelihood is that this signature is due to an agent, acting on behalf of Abraham Zacut, who wrote: יא אבראהים זכות התוכן מהמלך.

7 David Kaufmann, “La prétendue signature d’Abraham Zacouto,” Revue des études juives 34 (1897): 120–121. Kaufmann pointed out that יא stands for יאוש ונינו עליון, which is appropriate for a city, not a person. Although Kaufmann does not remark on it, there is no י in this text (despite Kayserling’s transcription). Kaufmann took the letters at the end of the signature to be, in all probability, יא, which is the form for the king’s name that appears in a legend about Zacut and King João of Portugal (see n. 9 below).

8 On Judeo-Portuguese, see Devon L. Strolovitch, “Old Portuguese in Hebrew Script: Convention, Contact, and Convivência” (Ph.D. dissertation, Cornell University, 2005; online at http://www.jmrg.org/strolovitch/disspage/). The most extensive text in Judeo-Portuguese is a translation of a work on astrology by Juan Gil of Burgos, where the name of the author in Hebrew characters is ג'ואן ג'ילדיבורגו (ibid., p. 79; Oxford, Bodleian Library, MS Laud. Or. 282); cf. Guy Beaujouan, L’astronomie dans la péninsule ibérique à la fin du moyen âge (Coimbra: Junta de Investigações do Ultramar, 1969), p. 11.

9 This legend is preserved in three versions, and in two of them the name of King João II appears as יואן: Menasseh ben Israel (d. 1657), Sefer Nishmat hayyim (Amsterdam, 1651; repr, Lemberg: Schrenzel, 1858), book 3, chap. 21 (not paginated); and Joseph Sambari (1672), in Adolf Neubauer, Mediaeval Jewish Chronicles and Chronological Notes, 2 vols. (Oxford: Clarendon Press, 1887–1895; repr. Amsterdam: Philo Press, 1970), vol. 1, p. 139. In an earlier version Zacut encounters a king who is just identified as “one of the Iberian kings” (מלך אחד ממלכי ספרד): see Abraham ibn Migas (sixteenth century), Sefer Kedod ‘elohim (Constantinople, 1585; repr, with an introduction by Haim Hillel Ben-Sasson, Jerusalem: Jewish National & University Library Press, 1976), f. 49a.
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Appendix

The Portuguese text of the document was transcribed by Viterbo,\(^{10}\) but here I present a somewhat revised version, based on the readings of Cristina Costa Gomes, a paleographer in Lisbon at the Centro Científico e Cultural de Macau. For assistance with the English translation I am grateful to Luís Saraiva of the University of Lisbon and José Chabás of the University Pompeu Fabra (Barcelona). According to this document, Zacut received 10 golden coins (*espady*es) for some unspecified service (see Figs. 3 and 4).

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After the signature in Hebrew, on the last line:

For Ruy Gill who is [ordered] to give to Raby Abraham x espadis, for the notebook.

Some words in the Portuguese text are abbreviated in the sense that certain letters are omitted; in this transcription these letters have been added in italics. The five dots after “Rey” in the form of a cross correspond to the royal signature. The year 1493 is given in Roman numerals, where the symbol for “90” (IR) is unusual; however, I am informed by Cristina Costa Gomes that, at the time when this document was written, R was used in Portugal for “40” in Roman numerals. Hence “IR” means “90” and the date is 1493. Moreover, this document occurs in a series of archival documents where all the surrounding items are dated 1493, and so the date is quite secure.11