ABOLGHASSEM GHORBANI (1912–2001)

IN MEMORIAM

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Professor Abolghassem Ghorbani, a knowledgeable, hard-working, and internationally known Iranian historian of mathematics, a fertile author of high school mathematical textbooks, and a devoted mathematics teacher, passed away on November 21, 2001, in Tehran. He was a unique and pioneering figure in the history of mathematics in Iran during the Islamic period.

Abolghassem Ghorbani (Abu'l-Qāsim Qurbānī) was born on January 12, 1912, in Tehran. He graduated from Saint Louis French High School (Tehran) in 1933 and received his B.S. degree, also in Tehran, four years later. After compulsory military service, he began teaching mathematics in high schools and colleges, including Saint Louis French and Franco-Persian High Schools. From 1962 to 1966, he was the Iranian cultural counselor and the superintendent of Iranian students in Geneva (Switzerland). From 1966 to 1979, he was engaged in teaching and research activities in the Iranian Girls College.

During his fruitful, simple, and dignified life, he published 68 books and numerous articles in Iranian scientific and literary journals. Among the books, 10 treat the history of mathematics in Iran and other areas in Islamic civilization (see the bibliography below); 47 titles are elementary and high school mathematical textbooks, co-authored with Dr. Hasan Saffari (who now lives in Paris). The rest are his writings and translations in the field of mathematics.

The items [3, 5, 9], and [10] have received Iranian Year-Book Awards. Item [8] is a unique bibliographical work in the history of Islamic mathematics. An English translation by Dr. Javad Hamadani Zadeh of an abridged preliminary version of it was published by Sharif (formerly Arya-Mehr) University of Technology (Tehran) in 1973. The translation, *A Short History of Mathematics in Iran (from the Ninth to the Seventeenth Century)*, contained chapters on the life and works of 40 Iranian mathematicians.

Professor Ghorbani's deep knowledge of mathematics, his command of several European languages, and his familiarity with both oriental and occidental sources made him an eminent scholar in the field. Apart from his distinctive scientific qualifications, he was a model of sincerity, high-mindedness, humbleness, and kindness toward his numerous disciples, whom he was always ready to assist. His patience, however, ultimately resulted in some of his work being plagiarized by others in papers published outside Iran, without any reference or acknowledgment.

Professor Ghorbani had a strong poetic sense and composed mystic and satirical Persian poems. He was an admirer of Hafez, the famous 14th-century Iranian poet. In his last years, Professor Ghorbani had lost his eyesight and devoted himself to reciting mystic poems and talking to close friends and disciples. A short time before his painful death, there was a plan to organize a gathering in his honor and to offer him an honorary Ph.D. on the occasion of his 90th anniversary. Instead, memorial gatherings were held in Tehran and Isfahan. His

memory will live long in the hearts of those who knew him and who learned from his example.

As a disciple of the late Professor Ghorbani, I learned much from his books and from working with him directly. I also benefited greatly from his guidance and support in scientific work. He insisted that research be done as thoroughly as possible and that it should never be hurried into print. His years of devotion to these ideals were not rewarded appropriately in his own country; for a real appreciation of his work, we will have to wait.

BOOKS BY ABOLGHASSEM GHORBANI ON THE HISTORY
OF MATHEMATICS IN ISLAMIC CIVILIZATION

All dates are given according to the Iranian (hijrī shamsī) and Christian chronology. All books are in Persian.

1. *Do riyāzīdān-e Īrānī va shamme-ī dar bāre-ye 'adadhā-ye motaḥabb* [Two Iranian mathematicians (Kamāl al-Dīn Fārisī and Muḥammad Bāqir Yazdī) and a short account of amicable numbers]. Tehran: Iranian Girls College, 1347/1968, 64 pp.

2. *Riyāzīdānān-e Īrānī az Khwārazmī tā Ebn-e Sīnā* [Iranian mathematicians from al-Khwārizmī to Avicenna]. Tehran: Iranian Girls College, 1350/1971, 367 pp. [On the life and works of 26 mathematicians. The book includes a facsimile edition of the Arabic text of Kūshyār ibn Labbān, *'Uyūn al-uṣūl fi'l-ḥisāb* (principles of Hindu reckoning), manuscript Tehran University, Central Library 2092/4.]

3. *Kāshānī nāmeh* [A monograph on Ghiyāth al-Dīn Jamshīd al-Kāshī]. Tehran: Tehran University Press, 1350/1971, revised edition 1368/1989, 220 pp.

4. *Nasavī nāmeh* [A monograph on Abu'l-Ḥasan 'Alī al-Nasawī]. Tehran: Iranian Culture Foundation, 1351/1972; repr. ed., Tehran: Iranian Cultural Studies and Research Institute, 1370/1991, 210 pp. [Includes facsimile edition of the Arabic text of al-Nasāwī's treatise on Hindu reckoning *al-Muqni'*, manuscript Leiden, University Library, Or. 556.]

5. *Bīrūnī nāmeh* [A monograph on Abū Rayḥān al-Bīrūnī]. Tehran: Iranian National Heritage Society Press, 1353/1974, 619 pp. [Includes facsimile edition of the Arabic text of al-Bīrūnī's *Maqālīd 'ilm al-hay'a* (Keys of astronomy), manuscript Tehran, Shahīd Moṭahharī (ex-Sepahsālār), 597/23.]

6. *Taḥrīr Estekhrāj al-awtār ta'līf-e Ostād Abū Rayḥān Bīrūnī* [Edition of the *Extraction of Chords* composed by the Master Abū Rayḥān Bīrūnī]. Tehran: Iranian National Heritage Society Press, 1355/1976, 280 pp. [Includes facsimile edition of the Arabic text of al-Bīrūnī's *Extraction of Chords*, manuscript Leiden, University Library, Or. 1012.]

7. *Fārisī nāmeh* [A monograph on Kamāl al-Dīn al-Fārisī]. Tehran: Homa Publication, 1362/1984. 155 pp. [Includes facsimile edition of the Arabic text of Kamāl al-Dīn al-Fārisī's *Tadhkirat al-aḥbāb fī bayān al-taḥābb* (Reminder for Friends on Amicable Numbers), manuscript Istanbul, Köprülü 941/2.]

8. *Zendegīnāme-ye riyāzīdānān-e dowre-ye Islāmī* [Biography of the mathematicians of the Islamic period from the third to the eleventh century of the Hijra]. Tehran: Iran University Press, 1365/1986; repr. ed., 1374/1995, 563 pp. [On the life and works of 167 mathematicians.]

9. *Būzjānī nāmeh* [Monograph on Abu'l-Wafā' al-Būzjānī, co-authored with Mr. M.-A. Sheykhan]. Tehran: Enqelāb-e Eslāmī Publishing and Educational Organization, 1371/1992, 221 pp. [Includes facsimile edition of the Arabic text of al-Būzjānī's *Geometrical Constructions*, manuscript Istanbul, Ayasofya 2753.]

10. *Taḥqīqī dar āthār-e riyāzī-ye Abū Rayḥān Bīrūnī* [An investigation of the mathematical works of Abū Rayḥān al-Bīrūnī]. Tehran: Iran University Press, 1374/1995, 468 pp. [Revised version of [5].]

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