



MOSAHEB, GHOLAM-HOSAYN

MOSAHEB, GHOLAM-HOSAYN (Ġolām-Ĥosayn Moṣāḥeb, b. Tehran, 2 Ābān 1289 Š./25 October 1910; d. Tehran, 21 Mehr 1358 Š./13 October 1979; [Figure 1](#)), scholar, mathematician, logician, and founder and general editor of the *Dāyerat al-maʿāref-e fārsi*.

LIFE

Mosaheb was the son of Moḥammad ʿAli (d. 27 November 1945) and Fāṭemeh (d. 11 August 1964). His grandfather, Mirza ʿAli Ḳoṣnevis, was a gifted calligrapher and fluent in Arabic. He composed a poem in one thousand couplets, entitled *Alfiyeh*, describing the didactic rules of Arabic grammar, rendering these easy to memorize by Arabic students (M. Moṣāḥeb, p. 1). His father was a physician, and his mother wrote poetry (T. Moṣāḥeb, p. 1; see also Afšār, 2004, pp. 402-08).

Gholam-Hosayn Mosaheb completed his secondary education in 1927 at the then Dār-al-moʿallemin-e markazi (see [EDUCATION xviii. Teachers' Training Schools](#)), which was founded in Tehran in 1918. A studious and hard-working student, he was awarded a First Grade Science Medal by the Minister of Education (*Gozāreš*, p. 31) and was appointed to a teaching position at the same school for one year. In 1928, Mosaheb went to France and took the twelve-month course of specialized mathematics at Lycée le Grand on a government fellowship (personal interview with T. Moṣāḥeb). He received his Bachelor's degree in mathematics in 1931 from Dār-al-moʿallemin-e ʿali (see [EDUCATION xix: Teachers' Training Colleges](#)) and was employed by the



Ministry of Education, wherein, despite a sporadic record of a service, he achieved high administrative posts, notably General Director of Higher Education (1949), Executive Director (1951), and Deputy Minister (1952). Not being an ambitious careerist, however, Mosaheb was for the most part committed to research and study in fields of his interests (Afšār, p. 404). In 1934 he joined the faculty of the Teachers' Training College, where he taught until shortly before his death (see below).

On a fellowship from the Ministry of Education he traveled to England in 1945 and received his Ph.D. in mathematics from Cambridge University in 1947. His two celebrated articles, "On the Problem of the Set of Distances," and "On Differentiation and Denjoy Behaviour of Functions of Two Real Variables," were published in the *Journal of the London Mathematical Society* (vol. 22, 1947, pp. 252-56) and the *Mathematical Proceedings of the Cambridge Philosophical Society* (no. 46, 1950, pp. 28-45), respectively. He joined the London Mathematical Society in 1950 (Gozāreš, p. 32).

With the objective of educating mathematics teachers and establishing a center for mathematical research (Medqālci, p. 80), Mosaheb founded the Institute of Mathematical Research (Mo'asseseh-ye taḥqiqāt-e riāzi) in 1966 at Teachers' Training College. In it, a carefully selected group of students were trained to teach advanced mathematics in the universities both in the capital and in the provinces. In 1979 there were 68 graduates teaching in universities, some of them holding a mathematics Ph.D. In commemoration of Mosaheb's lifetime achievements, the Tehran University Council changed the name of the Mathematics Institute to Dr. Gholam-Hosayn Mosaheb Mathematics Institute in 1979. The Institute was renamed again in 1997 and called Dr. Gholam-Hosayn Mosaheb Mathematics Research Institute (Mo'asseseh-ye taḥqiqāt-e riāzi-e Doktor Gōlām-Ḥosayn Moṣāḥeb). A tenured professor in 1959, he was granted the honorary doctorate in science by the Tehran University in 1976.

In 1937 Mosaheb married Āmeneh Maṇṣuri Mo'ayyed (1917-1995). They had five children: Rastā (1938), Tarāneh (1943), Šahryār (1945-1994), Šāhkār (1951), and Nāmdār (1952).

WORKS

Mosaheb's first book, *ʿOlum-e tafriḥi* (Leisure sciences, Figure 2), which dealt with the recreational aspects of science, was published in Tehran in 1928. In 1929 he founded the bi-weekly journal *Riyāziyāt-e ʿāli va moqaddamāti*



(Advanced and elementary mathematics), of which eleven issues were published until March 1931 (Şadr-e Hāšemi, pp. 338-39). Mosaheb resumed the publication of the journal, this time on a monthly basis, in November 1935, of which only two issues appeared (Qāsemi, 2010, p. 74; T. Mosaheb, personal interview, 2010). In 1934 Mosaheb reentered the field of journalism and published a newspaper, entitled *Barq* (electricity/lightning), to encourage people, “to try their very best to safeguard Iran’s unity and progress” (*Barq*, no. 1, p. 1). The progressive overtone of the newspaper, however, led to its being banned periodically, and in due course permanently (Qāsemi, 2004, pp. 179-81; for a selection of Mosaheb’s editorials in both journals he founded see Qāsemi, 2009, pp. 462-74).

Between 1930 and 1951 he published several volumes of high school textbooks in collaboration with the leading university professors and teachers of the time. In addition to mathematics, books on physics and mechanics were also included in the project.

In 1938 Mosaheb edited Omar Khayyam’s *al-Jabr wa ‘l-moqābela Resāla fi al-barāhin ‘ali masā’el al-jabr wa al-moqābela* and published it as *Jabr o moqābela-ye Kāyyām* with a brief Persian translation and extensive footnotes and elaborate appendixes and addenda. Khayyam’s monumental work was first introduced to the field by the German orientalist and mathematician Franz Woepcke (1826-1864) as *L’algèbre d’Omar Alkhayyami, publiée, traduite et accompagnée d’extraits des manuscrits inédits*, in 1851 (Kerāmati, pp. 80-81). A relatively unknown book in Iran, its publication documented the pioneering role of Khayyam in solving cubic equations and even some higher orders (Mosaheb, “Jabr-e Khayyām,” *Dāyerat al-ma’āref-e fārsi*, p. 728). An expanded version of the book was published in 1961, as *Hakim ‘Omar Kāyyām be ‘onvān-e ‘ālem-e jabr* (Figure 3). His extensive introduction to the book exemplifies his studious attention to the variations of different manuscripts, his informed adaptation of transliteration guidelines, and his awareness of manifold premises, assumptions, and complexities of rendering such a text into a language comprehensible to the students of the field (Afšār, p. 405).

In 1951 Mosaheb published *Madkal-e manṭeq-e šurat* (Figure 4), in 700 pages, which was the first Persian book on mathematical logic, introducing a large number of terms of logic into Persian (Gozāreš, pp. 25-26). He earned the praise of the internationally known Iranian scholar L. A. Zadeh as a thoughtful and well researched scholarly work (Zadeh, pp. 354-55).



Dāyerat al-ma'āref-e fārsi, the first general encyclopedia in Persian compiled along internationally recognized norms and standards (Āšuri, 1996, p. 168), was launched in 1956 when the New York based [Franklin Book Program](#) decided to publish an encyclopedia, to be based on *The Columbia Viking Desk Encyclopedia* (New York, 1953), in Iran, Egypt, Afghanistan, and Pakistan. [Homayun San'atizadeh](#), the founding manager of the Tehran branch of the program (Mo'asseseh-ye entešārāt-e Ferānklin), reached agreement with Mosaheb to oversee the implementation of the project. Noticing the limited number of entries on Iran and Iranian figures, he asked the cooperation of noted Iranian scholars and invited them to contribute related entries. "The work," under Mosaheb's editorship, "received extensive adaptation and sophisticated editing, and it finally appeared as a basically Persian work." (Smith, p. 190) The first volume of the Persian-language encyclopedia (letters *alef-sin*, [Figure 5](#)) was published in 1966 in 1,425 pages, and it has been cherished as a unique contribution to the Persian culture (Ayman, p. 698). In his lengthy introduction to the volume, Mosaheb meticulously described the methods and systems devised and employed in word spacing, the use of numerals and scientific symbols, and system of abbreviations.

With its remarkable scholarly precision and reliability, the '*Dāyerat al-ma'āref-e Mošāheb*,' as the work is known in Iran, contained about 30,000 translated entries and 10,000 authored ones, and brought about a far-reaching development in productive research, writing, and translation in various fields (Āšuri, 2009, p. 62).

Deterred by the unfavorable policies and practices imposed by the newly appointed director of the Mo'asseseh-ye entešārāt-e Ferānklin, Mosaheb resigned from his position in 1972 (Homayounpour, p. 60). After his resignation, Reżā Aqşā was appointed as the editor of the *Dāyerat al-ma'āref* (Aqşā, p. 6). Although all principal articles and a substantial number of other entries of the second volume were already completed by Mosaheb and his colleagues, his resignation caused a major delay in the publication of the volume, which was ultimately published in two parts in 1976 and 1977 (*Zendegi-nāme*, p. 131).

While planning the successive stages of compiling the encyclopedia, Mosaheb invited a number of competent scholars, including Aḥmad Ārām, [Hosayn Gol-Golāb](#), Şafi Aşfiā, and Moştāfā Moqarrebī, in order to devise neologisms and introduce Persian equivalents for scientific terms (Aqşā, p. 2) The product of the geography group, *Farhang-e eştelāḥāt-e joḡrāfiā'i* ([Figure 6](#)), was published



in 1960, with some 700 terms. It was intended make similar collective efforts in other fields, but these did not materialize (Mosaheb, “Farhang-e eṣṭelāḥāt-e joḡrāfiā’i,” *Dāyerat al-ma’āref-e fārsi*, pp. 59-60).

Mosaheb’s *Ānālyz-e riāzi* was published in Tehran in 1967 (Figure 7), and was followed by the first volume of *Teori-e moqaddamāti-e a’dād* (Figure 8) in 1970. The books were the recipients of Iran’s ‘The Book of the Year Award’ in 1967 and 1979, respectively. The second volume of *Teori-e moqaddamāti-e a’dād* was posthumously published in late 1979 and received the same award in 1983, four years after the author’s death.

Mosaheb is one of the few scholars honored and prized in Iran both before and after the Islamic Revolution in recognition of scholarly achievement. He has been commemorated in several cultural ceremonies and gatherings: Farhang-sarā-ye andiṣeh (1996); Kongreh-ye bozorgdāšt-e Doktor Ġolām-Ḥosayn Moṣāḥeb va nohomin seminar-e ānālyz-e riāzi va kārbord-e ān (Tehran, 1998; see *Gozāreš*); Kongreh-ye bozorgdāšt-e Doktor Ġolām-Ḥosayn Moṣāḥeb (Tehran, 2009; for the proceedings, also containing several of his articles on logics and mathematics, see *Zendegi-nāmeḥ*). *Negah-e-Nou/Negāh-e now*, a quarterly journal edited in Tehran by ‘Ali Mirzā’i, dedicated an issue to Gholam-Hosayn Mosaheb (no. 82, Tābestān 1388 Š./Summer 2009; Figure 9).

Mosaheb’s statue has been placed at Bustān-e Dānešvarān in Kish Island and at the new campus of the Teacher’s Training College in Karaj (T. Moṣāḥeb, interview).

Although very serious and even ill-tempered at work, Mosaheb was quite pleasant and witty in private gatherings. He has earned the praise of scholars and colleagues for the wide range of his knowledge and his scholarly tenacity (Zaryāb, p. 3; Dowlatābādi, p. 475), his mastery of several languages, including Arabic, English, and French, and his tireless pursuit of academic objectives (M. Moṣāḥeb, p. 20).

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