The History of early promulgation of eyeglasses in Persia

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Abstract

Background & Aims: From ancient time the human being was familiar with refraction of light through the crystals. One of the earliest finished natural crystals as a lens belongs to 3000 years ago named as Nimrud lens. The purpose of this research was to find when the use of eyeglass was promulgated in Persia

Methods: To answer the question, we looked for the first use of the “eyeglass” or its synonyms in the Farsi literature and Persian ancient artistic paintings.

Results: Jami was the first the Persian poet that used a synonym of eyeglass in his poems. The frequency of its use in Farsi poems has been increased from 16 century onward. We also found two Persian paintings demonstrating the use of eyeglasses in the Safavid period.

Conclusion: Eyeglass was introduced from Europe to Persia. The use of the eyeglasses in Persia was promulgated in the 15th century and early Safavid period onward.

Key words: Eyeglass, Farsi literature, Spectacle, Jami

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Materials and Methods: To answer, we reviewed and looked for the first use of the word "eyeglass" and its synonyms in the Farsi literature and historical notes. We also present two ancient Persian paintings demonstrating the use of eyeglasses in the 17th century.

Results
To the best of our knowledge, the word “eyeglass” or its synonyms were not presented in the Persian word dictionaries until the 15th century; however, the meaning of “eyeglass” has been presented from the 15th century onwards in the Persian word dictionaries (1). Jami (Nur ad-Din Abd ar-Rahmân Jāmī, 1414-1492 A.D.) was the first Persian poet who used eyeglass for presbyopia (1, 4). Jami in the late of Timurid period (1370-1507 A.D.), was the first Persian poet that mentioned a synonym of eyeglass in his poems. He used the term “foreign glass” instead of the eyeglass because in that time eyeglasses were imported from Europe to Persia (1).

Jami in different part of his Divan told:

Instrument Symposiun, Istanbul University 26-30 September 2016, an exchange receipt issued by Domici family in Italy was alluded for buying eyeglasses for Persia during the Safavid period (Personal communication).

Spectacles with colored glasses and decorative eyeglass promulgated during the Qajar dynasty (1875-1925 A.D.). Naser-ad-Din Shah (1831-1896 A.D.) in his dairy to Mazandaran indicated that he had to use spectacle with green glasses because of his eye pain (4).

The earliest pictorial evidence in Persian painting is drawn by Muin Musavvar (1617, Isfahan-1797). He was a pupil of Reza Abassi (Kashan, 1565-Tabriz, 1635 A.D.). In 1673, he posthumously portrayed his mentor (Reza Abassi) with eyeglasses (Figure 1).

Figure 2 demonstrates an old man holding a draft. It is drawn by Mir Seed Ali (circa 1565) during Safavid period. According to the evidences it may concluded that the use of the eyeglasses in Persia was promulgated in the 15th century and early Safavid period.
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Discussion

The first eyeglass invented in Italy about 1286; however, the inventor is unknown. (2, 8) In the 13th century, Roger Bacon (1214-1294 A.D.) described the magnifiers and explained for the first time how to magnify visual objects using pieces of glass spheres.

Figure 1. Posthumous portrait of Reza Abbasi (Kashan, 1565-Tabriz, 1635) with eye glasses, drawn in 1673 by his pupil Muin Musavvar (1617, Isfahan-1797)


Figure 2. Old man with a draft drawn (circa 1565) by Mir Seyid Ali Mussavar (1510-1572). Available at: https://commons.wikimedia.org/wiki/File:Mir_Seyid_Ali_Mussavir.jpg. Accessed on September 19, 2018. (Public domain)
Bacon wrote: "for this reason, this tool is useful for elderly people and people who have weakness in their vision as it allows them to be able to see any letter however small it was, if it was magnified enough." (3) In a sermon addressed by Dominican friar Giordano da Pisa (circa: 1255–1311 A.D.) on February 23, 1306, he wrote: "It is not yet twenty years since there was found the art of making eyeglasses, which make for good vision." In 1604 the first correct description as to why convex and concave lenses could correct myopia and presbyopia was published by Johannes Kepler (3, 7). In the beginning of the 14th century, the eyeglasses were first mentioned in the medical books in Europe (3).

In the European art there are many paintings that demonstrate people with the early use of eyeglasses. The earliest pictorial evidence for the use of eyeglasses is the portrait of the cardinal Hugh de Provence reading in a scriptorium drew by Tommaso da Modena's in 1352 on a wall fresco in the city of Treviso, Italy. Since drawing of people was discouraged in the early Islamic art, the pictorial evidences of the use of eyeglass in the Persian paintings is limited (3).

Conclusion
Eyeglass was introduced from Europe to Persia. (3, 6) The use of the eyeglasses in Persia was promulgated in the 15th century and late Timurid and early Safavid period onward.

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