

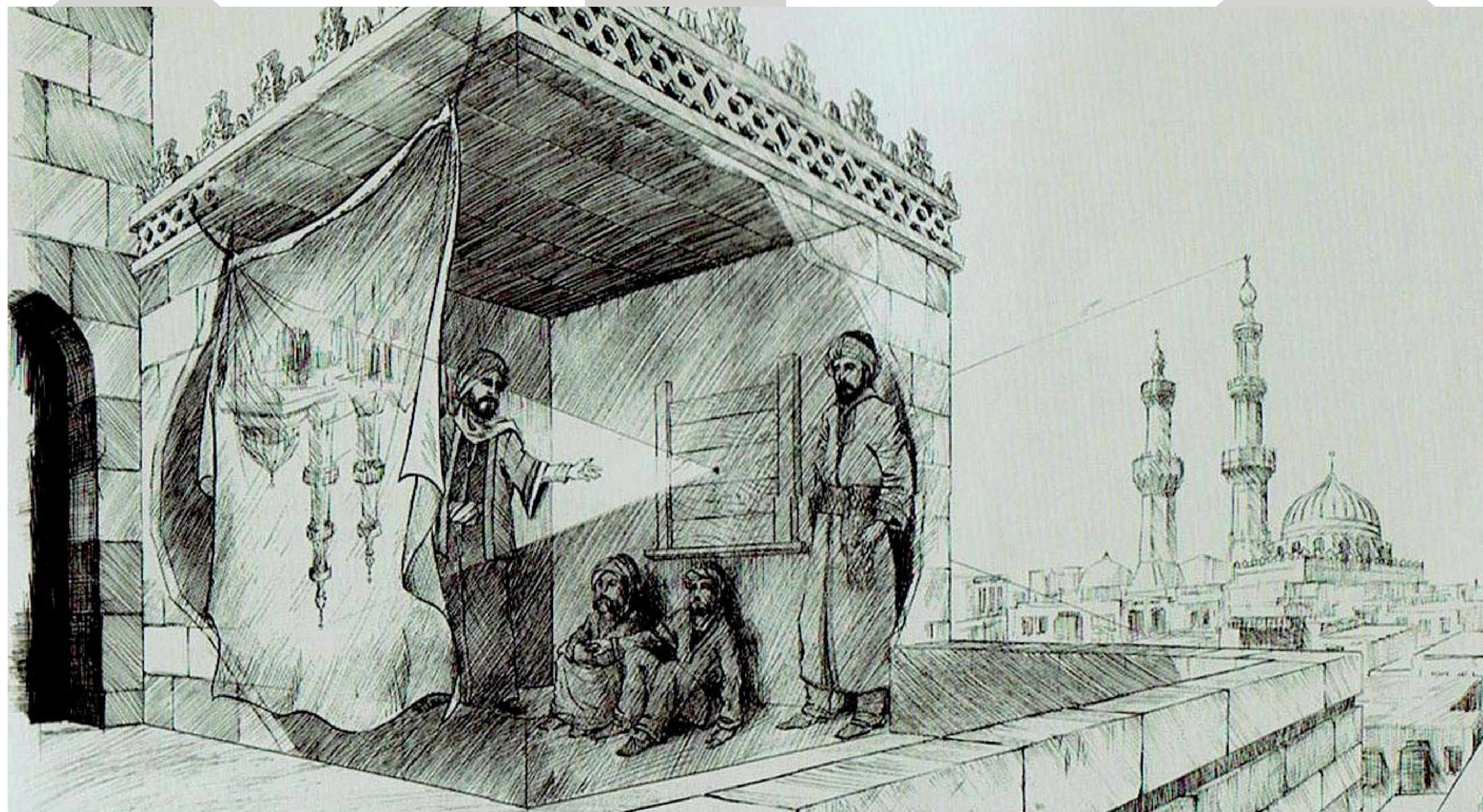
Coffee

Coffee is the most consumed beverage in the world. The stimulating effect of coffee was discovered by a shepherd from Ethiopia, when he noticed that his goats were becoming energized every time they ate "bunn" beans. By drying the beans and then boiling it in water, al-qahwa was created. A bitter beverage with a stimulating effect. In the 15th century CE coffee spread out quickly from Ethiopia and Yemen through the Islamic Caliphate and elsewhere through trade networks of Muslim merchants. In the Arabic language the bitter beverage was called "qahwa", because it oppressed the feeling of hunger. This was later called coffee in Europe.



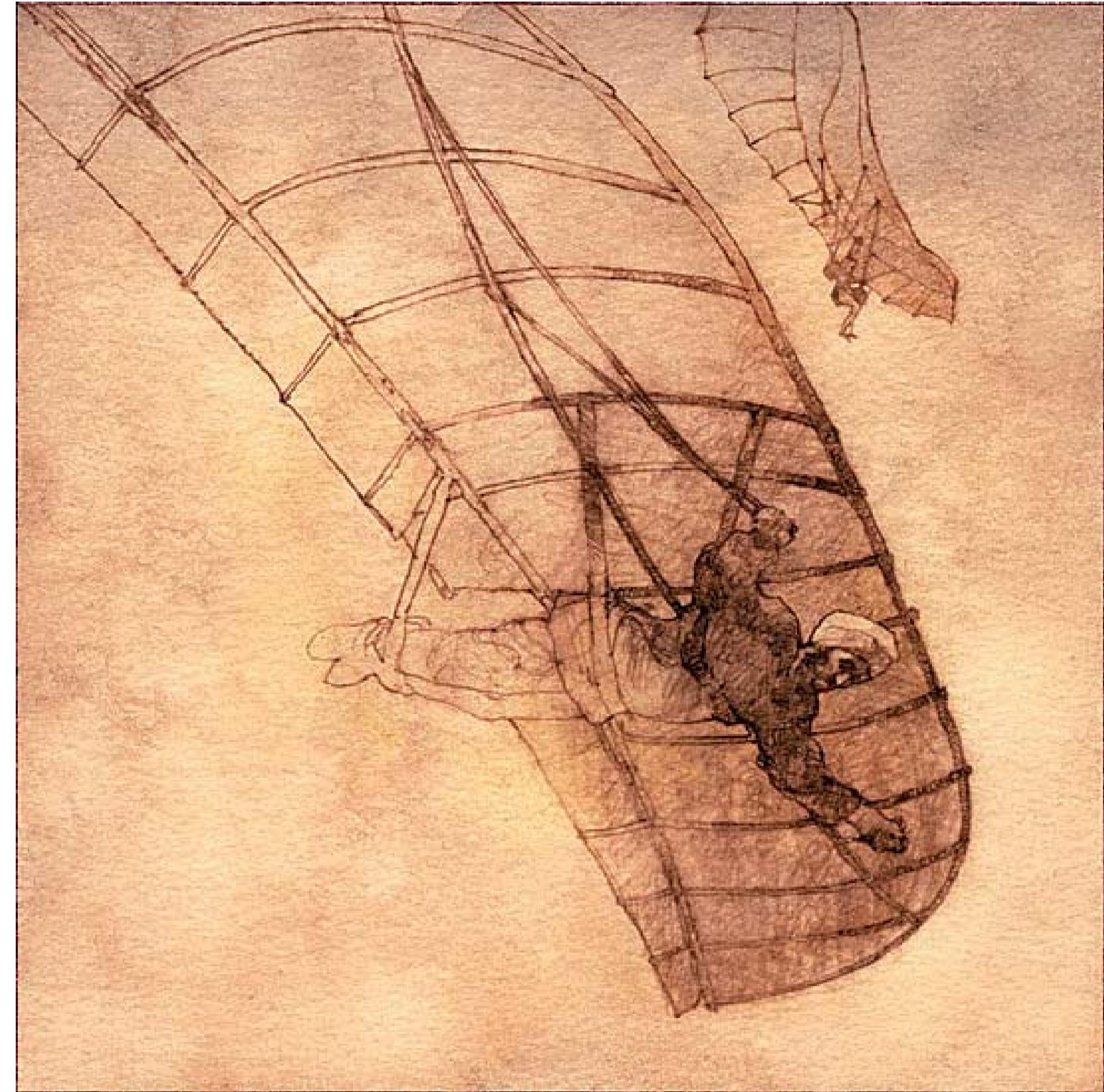
Optics and Camera

All photographic devices work with the old Camera Obscura (dark room) principle. Light enters a dark room (space), after which the image is illuminated on a light-sensitive plate, or cloth. In the 11th century CE, this optical effect was discovered by al-Haytham (965-1040 CE). He called this effect "al-Bayt al-Muthlim" which means dark room. This invention was used for centuries as entertainment for scholars and elites. Ultimately, it was used to make the first photocamera.



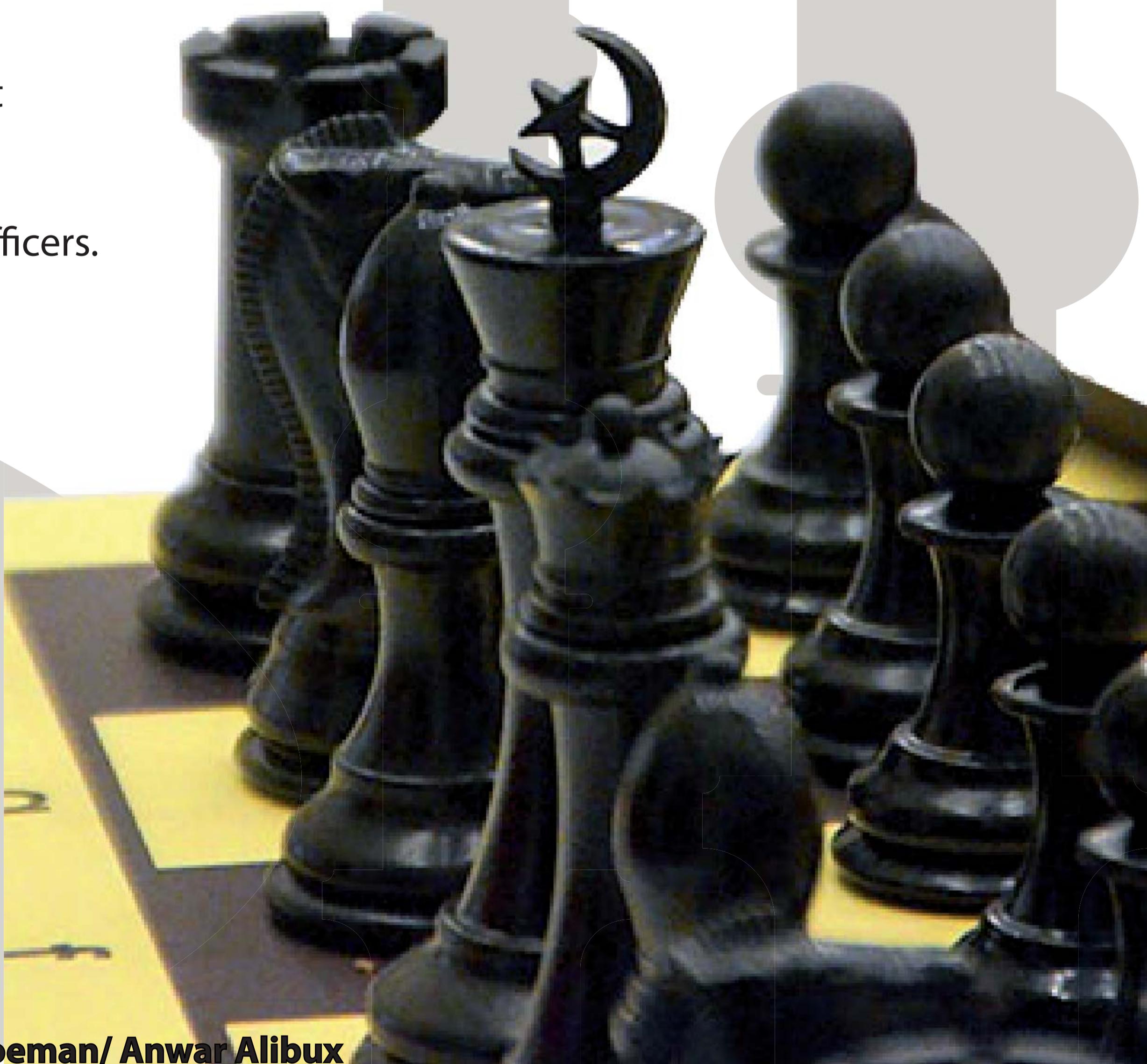
Flight: Parachute and Wings

In the 9th century, Islamic scholar Abbas ibn Firnas took the first parachute jump from a minaret in Cordoba, Spain. He survived the fall of approximately 40 meters. A year later, he built a glide plane designed in the shape of a wing. He concentrated on the form (curvature) of the wings. Everyone thought he would fall to his death. Instead, he landed a few hundred meters away and glided a few minutes in the air, this time resulting in a serious injury to his back. He blamed the hard landing to the fact that his design lacked a tail. "All the birds land with their feet just below its tail." Every aircraft nowadays lands on its rear wheels. The first flight in human history was performed by a 70 year old Muslim scholar.



Chess

A complex board game that originated from India. In India, this game was played in different variations and was even used as part of military training for thousands of years. Chess develops your tactical and strategic thinking. The current variant of chess that's played worldwide finds its origin from the time during the Caliphate of the 10th century CE. The game was standardized and used in competitions between military officers. Chess was often played in mosques and was a favorite game among Islamic scholars.



Al-Khemia©: Iref Joeman/ Anwar Alibux