

PRESS RELEASE

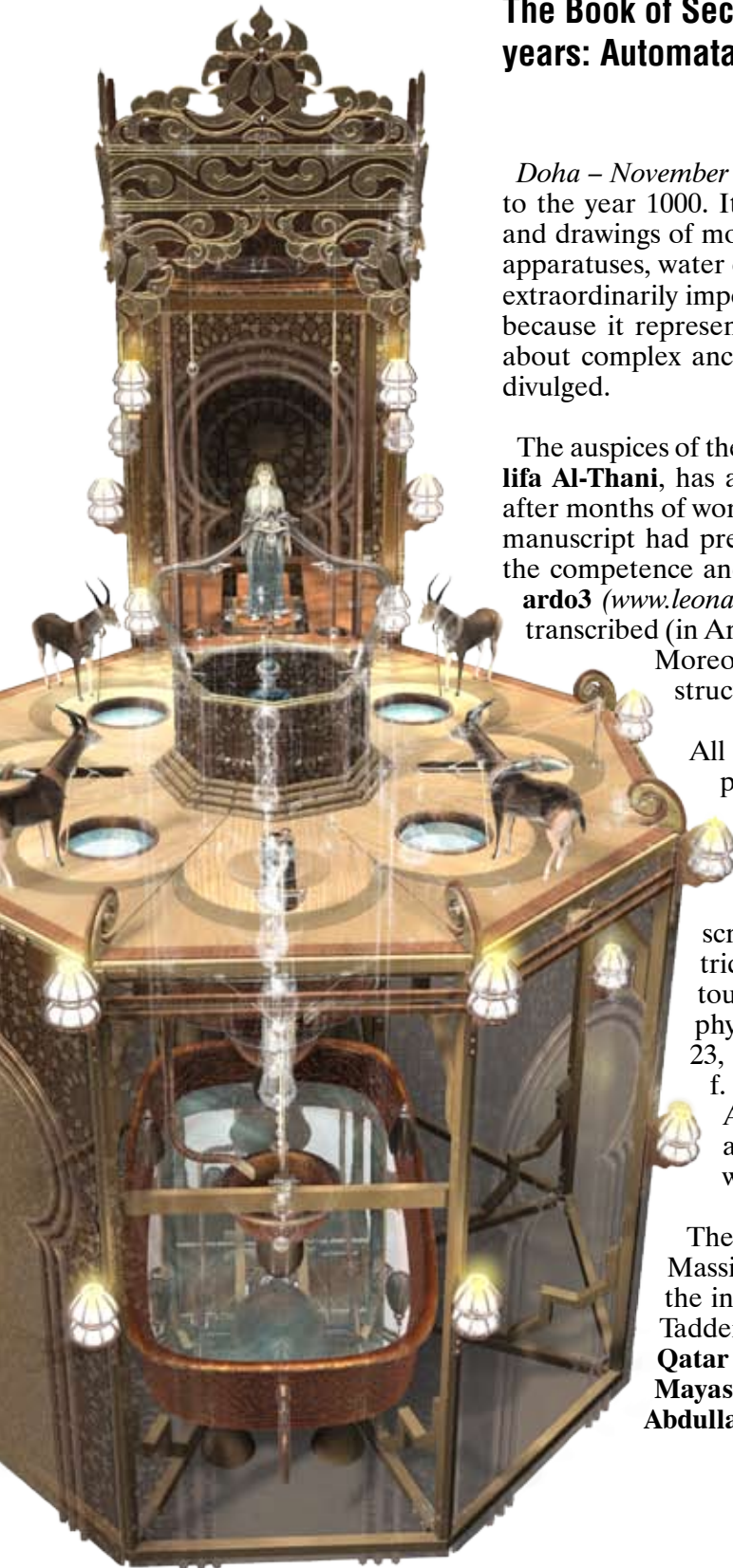
The Book of Secrets is coming to the world after a thousand years: Automata existed already in the eleventh century!

Doha – November 2008 – The Book of Secrets is a manuscript dating back to the year 1000. It is a priceless manuscript, as it includes descriptions and drawings of more than thirty ingenious devices including mechanical apparatuses, water clocks, automatic calendars and war machines. It is an extraordinarily important manuscript in the field of the history of science, because it represents one of the earliest written and drawn testimonies about complex ancient machines and has never before been studied or divulged.

The auspices of the Emir of Qatar, **his Highness Sheikh Hamad bin Khalifa Al-Thani**, has allowed the funding of an entire research group that, after months of work, has given exceptional results. The complexity of the manuscript had prevented many experts from interpreting it. Thanks to the competence and the technology of the Italian research center **Leonardo3** (www.leonardo3.net), the manuscript has, for the first time, been transcribed (in Arabic) and translated (into Italian, English and French). Moreover, all its machines have been interpreted and reconstructed.

All the work that has been done will be presented in a permanent exhibition at the **Museum of Islamic Art in Doha** (www.qma.com.qa), which will represent one of its main attractions on the occasion of its inauguration on November 22. The exhibition will present a digital and interactive reconstruction of the manuscript, explaining all its machines to the public, thanks to tridimensional models animated through a holographic touch screen. Two machines of the *Book of Secrets* were physically reconstructed: *The Fortress Demolisher* (Figure 23, f. 35v) and the *Clock with three characters* (Figure 11, f. 21r). An edition including a case with the book (in Arabic, English, French and Italian), a facsimile and a DVD-ROM will help reveal this unique work to the whole world.

The curators of this work are the founders of Leonardo3, Massimiliano Lisa, Mario Taddei and Edoardo Zanon. All the interpretations of the machines are owed to Zanon and Taddei. The project and the exhibition were funded by the **Qatar Museums Authority** chaired by **Her Excellence Sheika Mayassa bint Hamad Bin Khalifa Al Thani** and directed by **Abdulla Al Najjar**.



Machine 1 - A love fairytale and the evil snakes

«The project was launched by Leonardo3's discovery of the presence of this important Arab manuscript: *The Book of Secrets in the Results of Ideas*, copied in 1266 (in Toledo) from an original dating back to the eleventh century by the Andalusian engineer Ibn Khalaf al-Muradi. The only copy of this manuscript is conserved in the Biblioteca Medicea Laurenziana in Florence. It has never been studied in all its complexity and has never been disclosed», states Massimiliano Lisa of Leonardo3. «It is a unique source for the study of ancient Arab technology to which reference has to be made when studying the inventions of the Renaissance, like those by Leonardo da Vinci», Lisa added. Edoardo Zanon clarifies that «it is a great honor for us to present the results of this fascinating work in the new Museum of Islamic Art in Doha. Tackling the work of an ancient Arab scientist has presented us with problems different from those we usually face when we study the work of Leonardo da Vinci or of the Italian Renaissance in general. While interpreting the machines, we had to overcome many difficulties. The projects of the *Book of Secrets* are considerably complex and their study has important implications». Mario Taddei concludes that «among the various machines, I wish to mention number 13, which presents a complicated and ingenious system which, at the top of each hour, puts into motion a series of mechanical automata, including mechanical snakes, women and men which function through a system based on water, mercury and pulleys. The enormous and difficult work of interpretation has allowed for the understanding reconstruction of all the mechanisms and of all the machines which are all, surprisingly, functioning, not without some mysteries...»



It is a process that overcomes all the limits and witnesses how the force of culture unites peoples. The manuscript is of an Arab origin. It migrated from Spain to Italy and today returns to the Islamic world thanks to a permanent exhibition in Doha which presents an interactive digital version of the manuscript, proving as well the importance of technology in reaping the fruits of cultural goods. Thanks to the publication of the manuscript, the whole world is benefiting from this work. The public will thus discover that the technology has a history that is longer than what could generally be thought. A thousand years ago, inventors and engineers were able to create incredible functioning automata, which established the basis for modern mechanics and which, in many cases, were also real pieces of art.

Designed by **Ieoh Ming Pei**, the **Museum of Islamic Art in Doha** extends over 45,000 square meters and hosts treasures coming from all over the Islamic world from the 7th to the 19th century. The celebrations of its inauguration will last for an entire week and will attract celebrities, officials and the media from all over the world.

Leonardo3 is an innovative media company and research center whose mission is centered on the study and the popularization of cultural goods through innovative methods and technologies internally developed. (For further information on the project: www.leonardo3.net/secrets).

Machine 11 - A clock with three characters