Science Institutionalization in Early Islam:
“Bayt al-Hikma of Baghdad as a Model of an Academy of Sciences”

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ABSTRACT
This study aims to introduce academy-type institutions of the pre-Islamic era. To illustrate the ascendance of the Islamic tradition of science institutionalisation, founding and patronage of academies, the example of Baghdad’s Bayt al-Hikma (House of Wisdom) which flourished in the ninth century AD is examined closely in the light of primary Arabic sources on the subject as well as recent contemporary international literature. The study will then go beyond the existing narrative on Bayt al-Hikma to argue that it was an ‘academy of sciences’ that preceded by centuries the Academia dei Lincei of Rome, considered by many scholars as the world’s first academy of sciences established in 1603.

Keywords: History of Science, Islamic Science, Islamic Civilisation, Bayt al-Hikma, Academies of Sciences.

Introduction
Science institutions have evolved historically, eventually emerging in many forms. Nowadays, they include schools and universities, research centres, learned societies and academies of sciences.

However, even with the existence today of over 120 formally recognised academies of sciences around the world (IAP, 2015), the understanding of the term ‘academy of sciences’ is, at present, lacking. Many people are ignorant of the fact that an academy of sciences’ primary role is to act as the science advisory or sovereign (supreme authority) (Ravetz, 1980) which actively promotes science in the catchment area where it operates, and a forum where scientific issues are debated, studied and communicated.

A quotation from Drenth, which appears in his book Walks in the Garden of Science provides a definition of an academy of sciences (Drenth, 2006). It reads:

An Academy is basically a learned society, with (a restricted number of) members who are solely selected on the basis of their scientific or scholarly qualification and reputation... An Academy’s main responsibility is the promotion of science and scholarship through independent research, reflection and discussion as well as evaluative and advisory activities, and the public disclosure of its opinions and judgements.

Although the above definition essentially explains what the term ‘academy’ means in the context of the 20th century, many of the elements embedded in it are applicable to academies of sciences and academy-type institutions of the past including Bayt al-Hikma of Baghdad in the first half of the ninth century.

This paper aims to provide a short history of ancient academy-type institutions. Moreover, to illustrate the rise of the Islamic tradition of science institutionalisation and patronage, the example of Bayt al-Hikma of Baghdad will be re-examined and the perception that Bayt al-Hikma of Baghdad was an ‘academy of sciences’ of its day involved in translation, research and information dissemination, will be investigated leading to the conclusion that Bayt al-Hikma preceded the Accademia dei Lincei, viewed by many scholars as the world’s first academy of sciences established in Rome in 1603.

This, to draw lessons that can help to raise the profile of science and further institutionalise the scientific enterprise in developing countries, today.