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Ṣāʿid al-Andalusī: Abū al-Qāsim Ṣāʿid ibn abī al-Walīd Aḥmad ibn ʿAbd al-Raḥmān ibn Muḥammad ibn Ṣāʿid al-Taghlibī al-Qurṭubī

Lutz Richter-Bernburg

Born **Almería, (Spain), 1029**

Died **Toledo, (Spain), July or August 1070**

Ṣāʿid al-Andalusī was a Muslim historian, historian of science and thought, and mathematical scientist with an especial interest in astronomy. Given the near-total loss of his astronomical writings, his claim to recognition in science largely rests on his encouragement and possibly patronage – in his capacity as a well-placed functionary at the Toledan court – of a group of young, precision instrument makers and scientists, the most renowned of whom was Azarquiel (*i. e.*, **Zarqālī**). The precise extent of his involvement in the compilation of the *Toledan Tables* – widely disseminated in Latin Europe during subsequent centuries – remains uncertain, owing to the *Tables*' deficient manuscript tradition and to the fragmentariness of biobibliographic data.

Following in the footsteps of his paternal family, Ṣāʿid pursued the career of a legal official, having received a solid education in the Islamic religious disciplines; in 1068, the Dhannūnid Berber amīr of Toledo, al-Maʾmūn Yaḥyā (reigned: 1043–1075), appointed Ṣāʿid chief religious judge (*qāḍī*) of Toledo, an office his father had held earlier and that he himself was to fill until his death. His civil life thus did not stand out from among many of his contemporaries of similar background. What set him apart was his interest in history, history of science, and science itself, especially astronomy; here it may be recalled that in the present context "science" refers to what in premodern Islam often was termed "the ancient disciplines," *viz.* the syllabus of Aristotelian philosophy, logic, medicine, the mathematical sciences (including astronomy), and the occult disciplines, *i. e.*, alchemy, astrology, and magic.

The only work of Ṣāʿid's to survive intact is what has often been called his "history of science": *Al-taʿrīf bi-ṭabaqāt al-umam* (Exposition of the generations of nations) of 1068. The "nations" here intended are those said to have had a disposition toward the cultivation of learning, such as, Indians, Persians, Chaldeans, Egyptians, Greeks, al-Rūm ("Byzantines" and other Christians), Arabs, and Jews (in contrast to the others not so disposed, *i. e.*, Chinese, Turks, and Berbers). Of his other three nonextant works, he cites two there: *Jawāmiʿ akhbār al-umam min al-ʿArab wa-ʾl-ʿAjam* (Compendious history of nations – Arab and non-Arab) and *Maqālāt ahl al-milal wa-ʾl-niḥal* (Doctrines of the adherents of sects and schools). These appear to have treated historical subjects, whereas the third one, *Iṣlāḥ ḥarakāt al-kawākib wa-ʾl-taʿrīf bi-khaṭaʾ al-rāṣidīn* (Rectification of planetary motions

and exposition of observers' errors) adumbrated the astronomical activity of the remaining 2 years of his life, after completion of *Generations*. In *Generations*, Ṣāʿid's view of history and of the progress of scholarship and science from their earliest appearance among (or revelation to?) humankind up to his own country of al-Andalus (Muslim Iberia) and generation has drawn considerable scholarly attention during the last decade-and-a-half, without the issue of his actual beliefs having been convincingly settled. In particular, Ṣāʿid's seeming "pessimism" concerning the cultivation of learning and science among his fellow countrymen has called for comment, given the fact that by that time he and Azarquiel must have been engaged in observations for a number of years and the apparent quickening of astronomical activities in his very hometown of Toledo immediately after the completion of *Generations*, for which the name Azarquiel has taken on nearly emblematic status.

As indicated earlier, extant sources provide but disappointingly fragmentary testimony on astronomical activity in Toledo between 1068, the date of Ṣāʿid's *Generations*, and Azarquiel's less than voluntary move to Cordova *circa* 1080 because of unsettled conditions under al-Maʾmūn's dissolute grandson Yaḥyā al-Qādir. Thus Ṣāʿid's personal contribution to the observations and research as represented by sections of the *Toledan Tables* cannot be determined exactly except in the cases of planetary motions (including the length of the solar year) and the theory of trepidation; one may not stray far from reality in assuming that the title of his treatise *Rectification of Planetary Motions and Exposition of Observers' Errors* suggests the focus of his astronomical interests and of his contribution to the *Toledan Tables*. Relative ignorance of current relevant scholarship in the Islamic East was a shared Andalusī feature in Ṣāʿid's lifetime, as evidenced not merely in *Generations* but as demonstrated far more graphically by the *Toledan Tables* themselves.

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