

III. THE LATIN WEST AND ISLAM

I. SPANISH CONTACTS

The Greeks, following in the tradition of the Damascene,¹ showed informed interest in Islam for centuries. Zigadenos (d. c. A.D. 1118) reveals some close knowledge of the Qur'ān, as we find in the *Dogmatic Panoply*,² in which he makes reference to some twenty or more suras out of a total which he gives as 113, and provides a critical commentary upon them. But it was not through Byzantium that the West was to come to its better understanding of Islam. Its old and new contacts lay closer geographically with the Muslims of Spain, because there Christians and Muslims had lived side by side for many centuries, and were with the passage of time less linguistically divided than in the rest of Western Christendom. Neither were their relations always hostile. Natural curiosity and an interest in the arts and sciences of the Arabians might account for the first tentative approaches. Lorraine seems to have been peculiarly susceptible to such influences at the earliest period, namely, the tenth century.³ It is even possible that the Lotharingians, together with the Normans and as a partial result of the Norman Conquest, may have been instrumental in bringing some more knowledge about the Saracens and their lore to England. England tended to draw her teachers from France and Lorraine: Abbo of Fleury (late tenth century), Robert of Lorraine, who was Bishop of Hereford (eleventh century), Leofric of Exeter, Hugh of Reading, Walcher of Malvern (eleventh to twelfth centuries), and it is perhaps to Robert of Lorraine, to Hereford and Malvern that one should look for the beginnings of the new learning in England.⁴ In this connexion Petrus Alfonsi (A.D. 1062 to 1110), a converted Jew, should not be overlooked. He is the "Alfonse" of Caxton, collector of folktales, translator from Arabic and apologist for his new faith.

Norman England is linked with Norman Sicily in all probability in the person of Adelard of Bath (early twelfth century), but his travels from his native land were probably even wider than that.

¹ *Islam and Christian Theology*, Part I, Vol. I, p. 65.

² Migne : *Pat. Græc.*, 130, col. 1341.

³ *Vide* articles by J. W. Thompson, M. C. Welborn and J. C. Russell in *Isis*, Vol. XII, pp. 184-193. Vol. XVI, pp. 188-99 ; Vol. XVII, pp. 260-3, and Vol. XVIII, pp. 14-18.

⁴ *Cf.* William of Malmesbury : *De Gestis Pontificum Anglorum*, Lib. IV, p. 300 (Rolls Series).

Did he know Arabic? He claims to know Arabic science in his book entitled *Perdifficiles Quæstiones Naturales*. Berthelot considers that his science is not directly derived from the Arabians but that Boethius is the source for some. Thus the subject of the indestructibility of matter (related to the theory of the indivisible atom) is common to him and to Hugh of St. Victor.¹ But he shows acquaintance with Khwārizmī's tables, with Thābit b. Qurra's book on astrology and with Qusta b. Luqa's *De differentia spiritus et animæ*. It is always possible that he had these in translation. We hear that John of Spain translated the last named into Latin at the request of the Archbishop Raymund (mid-twelfth century), but this seems too late for Adelard's profit, and it is possible that his Euclid was translated from Greek and not from Arabic. Matters which show some affinity with Muslim thought and science are the theory of vision,² the theories of the four elements and the four qualities, and the denial of a vacuum in the interests of a theory of a universal continuum. One point of interest is his attributing to the Arabians' instruction a preference for reason to authority.³

These illustrations are sufficient to show that the primary interest was in science. It is often said that the one to start the work of translation was Constantine the African (d. 1087). He translated *Kitāb ul Maliki* by 'Alī b. Al 'Abbās and thus to Salerno would belong the initiation of the work. The medical part of this book was translated by John the Saracen⁴ (1040–1103) also of Salerno. This, however, is far too late to look for the beginnings. And there is reason to suppose that many translations in the school of Salerno were not direct from Arabic but from Hebrew, but this might well have been the case elsewhere. If it is true that Sylvester II used texts in Latin translated from Arabic, then the work of translation must be earlier than Constantine, for Sylvester died in 1003, and since the scene of Sylvester's studies was Spain, it seems all the more probable that the beginnings of Latin translation from Arabic were in Toledo, Cordova and Seville.

In the early period there was special interest in the medicine of the "Arabians." Ibn Sīnā's *Al Qānūn fi't T'ibb*, 'Alī b. 'Isā's notes for oculists, *Tadhkirātu'l Kahhālīn*, were highly esteemed and translated. *At Tasrīf li man 'ajiza 'an it ta'ālīf*, by Abu'l Qāsim Khalaf b. al 'Abbās az Zahrāwī (d. A. D. 1013), was in its Latin

¹ Cf. Adelard's *Per. Quæst. Nat.*, Cap. 4, with *Eruditio Didascalica*, I, 7.

² *Quæst. Natur.*, Cap. 23.

³ Vide Haskins: *Studies in the History of Mediæval Science*, Chapter II, and specially pp. 38 ff.

⁴ Also known as Johannes Afflacijs.

translation the favourite manual of surgery at Salerno, Montpellier and the other medical schools of Christendom. Astronomy or Astrology had a great fascination. It is worth while looking at the history of a book like Ptolemy's *Almagest*. There was an Arabic translation of this made by Al Ḥajjāj b. Maṭar and one by Ḥunayn b. Ishāq, the latter being revised by Thābit b. Qurra in the ninth century. This bore great fruit in the Muslim schools, not least in the work of Khwārizmī. His astronomical tables were revised by the Spanish Muslim Maslama al Majrīṭī (d. c. 1007) and Adelard puts them into Latin (A.D. 1126). Al Fārghānī is another astronomer of the ninth century whose work was put into Latin in the twelfth century. Galippus, probably a Christian of Toledo, assisted Daniel of Morley (c. 1175–87) in the interpretation of the *Almagest*. There are four works of Abū Ma'shar, the astrologer (Albumassar), translated by John of Spain and Adelard. For music, Al Fārābī's *Iḥṣā'u'l 'Ulūm* is translated. Some writings of the Muslims are not now extant in the Arabic, but they have been preserved through being translated, e.g., many of Al Kindī's works, and Al Khwārizmī's work on Algebra, *Hisābu'l Jabr wa'l Muqābala*, which was translated into Latin by Gerard of Cremona. With the exception of Az Zarqālī's¹ book of Ptolemaic geography, also translated by Gerard, geography seems to be less represented in translation.

2. KNOWLEDGE OF ARABIC AMONG THE LATINS

The eyes of the Latin scholars who wished to become acquainted with the new learning were turned towards Spain. But were they equipped for their task? Their knowledge of Arabic was almost non-existent and at least most inadequate for such learned studies as they wished to undertake.

Most would hope to find some of their co-religionists who knew both Latin and Arabic. But as early as the reign of Hisham I (788–96) the edict had gone forth that no other language but Arabic should be used in Muslim Spain. Thus it must be assumed that the knowledge of Latin would tend to decline in a way similar to the decline of Coptic and Syriac before Arabic in the East. Nevertheless it was quite possible that the Romance language would continue, since it is easier to control a language used in literature than a colloquial language. There are a few indications that translations were made from Arabic into Spanish or Castilian. John of Spain (alias Johannes Hispalensis, Ibn David, Avendeth, etc.) made

¹ Full name Abū Ishāq Ibrāhīm b. Yahyā' az Zarqālī.

translations of Ibn Sinā, Al Fārābī and Al Ghazzālī into the colloquial speech and Gundisalínus then put these into Latin. There is also reason to believe that Al Battānī's Astronomical Tables were translated into Spanish direct from the Arabic.

If there was a decline in the knowledge of Latin which the clergy of Spain had, the visiting scholars might find many difficulties in the way of their acquisition of the "Arabian" sciences, such as a different form of colloquial speech, a difference in the pronunciation of Latin, the rendering of unfamiliar scientific terms in Latin by people with linguistic but no scientific (or philosophical) knowledge, the abandonment of any attempt at real translation and the escape to bewildering transcriptions which sometimes deteriorated so badly as to result in complete unintelligibility. This last was bad enough when Latin or Greek words were transliterated,¹ as *poicherii* for *enchiridii*. E. G. Browne says "The Latin *Qānūn* of Avicenna swarms with barbarous words which are not merely transcriptions, but in many cases almost unrecognizable mistranscriptions of Arabic originals: *nawājīdh* (wisdom teeth) becomes *nequegidi*, and *phrenitis* (in Arabic, *farrānūtis*) becomes at last *Karabito*."²

Such matters show the difficulties which these early pioneers in translation had to face. It would be foolish to laud them as proficient in Arabic. They brought various gifts to a common pool and obtained the assistance of people of various races, notably of Jews, and, while we are well aware of the crudities of much of the work, it is still most remarkable how much was achieved by industry and perseverance, worthy of our highest commendation. Possibly there were more than Roger Bacon who were aware of the deficiencies of translations. Herman the German confessed to Bacon that he was unable to translate books on Logic from the Arabic because he knew no logic. Bacon says that neither did he know Arabic well, being rather an assistant to translators than a translator.³ He

¹ Vide Cousin: *Fragments Philosophiques: Philosophie Scholastique* (Paris, 1840), Cap. I, where he discusses the fragments of Abelard's *Dialectica* in MS of St. Victor, 844.

² E. G. Browne, *Arabian Medicine*, pp. 34 and 113.

³ See *Comp. Stud. Phil.* viii, p. 472: "*Nec Arabicum bene scivit, ut confessus est, qui magis adiutor fuit translationum quam translator: quia Sarascenos tenuit secum in Hispania, qui fuerunt in suis translationibus principales. Similiter Michael Scotus ascripsit sibi translationes multas. Sed certum est quod Andreas quidam Judæus plus laboravit his. Unde Michaelus sicut Heremannus retulit, nec scivit scientias neque linguas.*" Cf. also *Op. Majus* I, iii, 67 ff. and iv, 22 (Bridges), *Op. Minus*, pp. 325, 330-49 (particularly what he says about the Vulgate), *Opus Tertium* X, 33, XXIII, 75-8 (faulty translation of Aristotle) and his praise of Grosseteste and Boethius for their translations, *ibid.*, XXV, pp. 89-95, and *Comp. Stud. Phil.*, VIII, pp. 465 ff.

asserts that there were not four Latins who knew the Hebrew, Greek and Arabic grammars.¹ He does not restrict his criticism to Herman but extends it to Michael Scot and others. Bacon is writing in the middle of the thirteenth century and though we have always to make allowances for some harshness in his criticisms, even if the state of affairs was not quite so bad as he stated, it was still bad and at the beginning of the process in the late eleventh century it must have been much worse, although an Arabic-Latin glossary was compiled as early as the eleventh century.²

The method by which these translations were produced can be gathered from prefatory remarks to be found in some of them. Gundisalvus works in collaboration with the converted Jew, Ben David (Avendeath). Plato of Tivoli is assisted by the Jew Abraham ben Hiyya, alias Savasorda, Gerard has the help of a Mozarabian called Galippus (possibly Ghālib). It seems as if these "helpers" were really the initial translators. They would sometimes translate the work from the Arabic into the vulgar tongue, leaving the Christian Latinist to give a rendering from that version into Latin. The Jews made a number of translations into Hebrew and their culture seems to have been of a high order, especially in Toledo. When Alfonso the Wise (el Sabio) set up the study of Arabic at Seville in the thirteenth century, he sought the co-operation of translators of various races and religions.³ Renan gives us his opinion on this matter thus: "Up to the twelfth and thirteenth centuries the translations were always made directly from the Arabic, but a little later on the translation came to be made from Hebrew translations. The character of these translations is that to be found in all the mediæval translations. The Latin word covers the Arabic word in the same way that chessmen are set out on the squares. The order of the words is Arabic rather than Latin. Many technical terms which the translator did not understand are merely transliterated in a very crude manner. (The Arabic is without diacritical points, and so, wrongly pointed, it becomes in the process of transliteration almost completely unrecognizable. Thus Thales becomes Belus and Hipparchus, Abraxis)." ⁴ This is correct in so far as it applies to the style of the translations, but Renan overlooks the colloquial intermediary when he says "direct from Arabic." Present-day texts in Arabic are not exempt from the

¹ *Op. Tertium* X, pp. 33 f. (Brewer).

² See the edition of C. F. Seybold, Tübingen, 1900.

³ Steinschneider: *Hebräischen Übersetzungen des Mittelalters*, pp. 616-626 and 975-90.

⁴ Renan: *Averroes and Averroism*, Part II, Cap ii, pp. 203 f.

same mispointing. Renan also fails to observe that scribes were often illiterate; and this was preferred and is so still in modern times. The fault therefore was not always that of the translator but of the scribe who had written the Arabic text which he used.

3. JEWISH ASSISTANCE IN TRANSLATION

Of the part played by the Jews he says, "The Jews played an essential part in these relations and this has not been sufficiently acknowledged in history. Their commercial activity made it easy for them to acquire the languages and to act as natural intermediaries between Christians and Muslim. If we would see the importance in which Jews were held from Barcelona to Nice we should read the *Itinerary* of Benjamin of Toledo. Princes and lords, in need of their silver and their knowledge of medicine, held them in favour and it was only the common people who felt any antipathy towards them. Men who desired to be instructed in philosophy had no scruples in sitting at the feet of men of other religions. Science had something of neutrality and was common to all."¹

A mixed population was of great value in this work of transmitting learning. In Sicily and in Southern Italy a certain knowledge of Arabic persisted for a long time, not only in the courts of the Hohenstaufens and Manfred but also in that of his bitter opponent Charles of Anjou, and among the common people. The patronage of Frederick II had a powerful influence in this direction. The Jews became greatly proficient in Arabic and also in translation work. Some of them wrote freely in Arabic as well as in Hebrew from very early times. Ishaq Isrā'ili's *Book of Definitions* was perhaps written originally in Hebrew, but from the tenth century, when he wrote, he is influential and was to play a modest part for many centuries even as far as the *Summa Theologica* of St. Thomas and beyond. But his work was mainly in medical science. It is David b. Marwān al Qūmiṣī or Mukammats² at the end of the ninth and beginning of the tenth centuries who is the precursor of many of his race in the field of philosophy, or rather of "Arabian" Peripateticism. He is reputed to have influenced Sa'adiya Gaon, who was to make his great contribution to the philosophy of religion with his Arabic work *Kitābu'l Amānat wa'l I'tiqādāt*. He was followed more imme-

¹ Cf. also Haskins, *op. cit.*, p. 17, note 57, for bibliographical references showing the great part which was played by the Jews in the extension of culture and learning.

² Steinschneider: *Hebräischen Übersetzungen*, Vol. I, p. 378. Vide *Jewish Encyclopædia*, Vol. IV, p. 466, which contains a synopsis of his introduction to philosophy *Isharūn Maqālāt*.

diately by Hibat Ullāh Abu'l Barakat of Baghdad, for whom he traces the main lines of enquiry, as a comparison of David's *'Isharūn Maqālāt* (Twenty Questions), with Abu'l Barakat's works makes abundantly plain.

Even in Judaism the effect of the Arabic language is apparent. The *Midrash* of the second period shows Arabian influence in thought and language. Even the ritual was invaded by the use of Arabic. Yehūda b. Tibbon advised his son to read the *Perikope* in that language every Sabbath. Benjamin of Tudela tells us that in his time the heralds who preceded the Prince of the Exile proclaimed his dignity in the Arabic tongue.¹ Sa'adiya² in addition to being familiar with the Qur'ān made a famous explanatory translation of the Torah into Arabic. Steinschneider records how Shem Tob b. Isaac boasted that he had transcribed Arabic books into the Hebrew script for twenty years, which shows that many more Jews knew Arabic as a spoken language than were able to read the Arabic script.³ Among the Jews who wrote original works in Arabic beside those already mentioned were Yahūda b. Balaam of Toledo and Moses b. Gikatilla, both Spanish Jews of the eleventh century and both eminent exegetes and philologists, of whom the latter sought to establish a rationalistic exegesis probably stimulated by the same debates on Scripture which resulted, on the Islamic side, in the critical attack on the *Torah* and the *Injil* made by the Spanish Muslim Ibn Hazm.

Ibn Gabirol⁴ (Avicebron) wrote *Fons Vitæ* in Arabic, from which a partial translation was made into Hebrew, but the work is only known in its entirety to-day in the Latin translation used so much in the Middle Ages and the spring from which much Neoplatonism flowed into Latin literature, particularly that of the Franciscan schools. Duns Scotus seems to have taken his theory of *materia primo-prima* from it.

It is not then surprising that when the Latin world desired initiation into the mysteries of Arabian science and literature they should seek the aid of these natural intermediaries, the cosmopolitans of the time with contacts within both Christendom and the Muslim world.

¹ See Asher's edition of his *Itinerary*, Vol. I, p. 62, and cf. *Jewish Encyclopædia*, art. *Biblical Exegesis*, Vol. III, p. 168.

² Vide Graetz : *Geschichte der Juden*, V, 268 sqq.

³ Steinschneider, *op. cit.*, Vol. II, p. 742.

⁴ A Jew of Malaga, full name Sulaymān b. Yahyā b. Jabirul (fl. 1021-58). John of Spain translated his work in 1150. Vide Steinschneider : *Europäischen Übersetzungen aus dem Arabischen*, Ia, 44 f.