

Chapter 58: Music (continued)

C. The Music Theorists

“There is one and the same principle which, if prevailing in the at tempered particles of the elements, is equipoise of temperament, *if produced in tones in pure and delightfully interval*, if apparent in gesture is grace, if observable in languages in rhetoric and eloquence, if created in the limbs is beauty, if the mental faculties is equity.”

Jalal al-Din Dawwani: *Akhlaq-i Jalali*.

In addition to those who conceived music to be “like a fan” on a sultry day were those to whom it was “like medicine,” as we have heard in the opening fanfare to this chapter. That was precisely how the Pythagoreans viewed music, and it was from them that the notions of the “theory of numbers,” the “harmony of the spheres,” and the “doctrines of the ethos (*tathir*)” were handed down to Muslim peoples as methodical systems, although the history of the Semitic and Aryan races in pre-Islamic days teems with those beliefs. In fact, the Greeks derived their theses on those matters from the ancient Semites of Babylonia-Assyria, as shown elsewhere.¹

Iamblichus affirms that Pythagoras learned those secrets from the *Chaldaei* of Babylon,² and books on music and arithmetic by Pythagoras were known in Arabic,³ as were the works of his disciples Iamblichus, Porphyry, Proclus and Nicomachus.⁴ Perhaps the first impact came through the pseudo-Aristotelian production known as the “Book of Government” (*Kitab al-Siyasah*), said to have been translated into Arabic, *via* Syriac, by Yuhanna ibn Batriq (d. c. 200/815),⁵ and this is what we read therein on the influence of music and the harmony of the spheres. Mental diseases are amenable to cure by means of musical instruments which convey to the soul the harmonious sounds which are (ultimately) due to the motions of the spheres in their natural movements.

When those harmonious sounds are interpreted through human agencies, they produce music which is enjoyed by the human soul, because the harmony of the spheres is mirrored in the harmony of man’s nature, which is fundamental to life. That work was translated from Arabic into Latin as the *Secretum*

Secretorum about the year 530/1135, and won considerable popularity during the European Middle Ages.⁶

Following Pythagoras, the cosmic order of things was explained under the proposition that “everything is number,” and since mundane music was among the ectypes of numerical proportion, the harmonious order of things covered both melody and rhythm, the various *genres* of which could banish depression, assuage grief, halt passion and cure sickness. The theory of numbers fascinated Muslim peoples because, unlike geometry, which depended on visual appreciation, it was purely mental sciences. The Pythagorean scale in music, which was based on the “theory of numbers,” was known quite early to the Persians and the Arabs, and the Khurasanians even improved on it.

Islam, having no racial boundaries, the special musical characteristics of the Persian, Arab, Syrian, and Turkoman found open acceptance in the capitals and cities of the Caliphate. Because of these national peculiarities it soon became evident that some sort of fixation of method and system was urgent, and this expediency was brought to fruition by an Arab named ibn Misjah (d. c. 97/715) who, having travelled in Syria and Persia and taken lessons from practitioners and theorists, conceived a system of music theory and a method of practice which were adaptable to existing conditions in Arabic-speaking lands. These, we are told, were adopted generally.⁷

Thus were the eight Arabian melodic modes (*asabi'*) classified in two groups of four each: the first in the course (*majra*) of the *binsir*, i.e. using the major third (408 cents), and the second in the course of *wusta*, i.e. using the minor third (294 cents).⁸ At the same time eight rhythmic modes (*iqa'at*) were formulated, also in two groups of four each, those numbers being in accordance with cosmic theories. All the song books of the period, from Yunus al-Katib (d. c. 148/765) to al-Isfahani (d. 356/967), specify the melodic and rhythmic modes of each song.⁹ Meanwhile, a neutral third (355 cents), i.e. an interval half-way between the major and minor third. It was introduced by a certain lutanist named Zalzal (d. 175/791),¹⁰ although a somewhat similar three-quarter tone had existed in the pre-Islamic measured pandore (*tanbur mizani*).¹¹

Another wayward interval was the Persian minor third (303 cents) which was sharper than the Pythagorean interval (298 cents),¹² and it was these alien intervals which both al-Isfahani and ibn 'Abdi Rabbihi blames for the decadence of the pure Arabian music in the third/ninth century. There are many earlier theorists of music, notably Yunus al-Kativ (d. c. 148/765) who wrote a “Book of Melody” (*Kitab al-Naghm*). That was also the title of the book by al-Khalil (d. 175/791), who also compiled a “Book on Rhythm” (*Kitab al-Iqa'*). He was the “father of prosody”¹³ A more important treatise appears to have been the “Book of Melody and Rhythm” by Ishaq al-Mausili (d. 236/850), and that was accomplished, says al-Isfahani, without the author's knowing an iota of the work of Eucklid.¹⁴ None of these works has come down to us, but we know precisely what al-Mausili's theoretical principles were from the *Risalah* of his disciple ibn al-Munajjim (d. 300/912).

In the mid-third/ninth century a new world dawned for those interested in that group of the sciences

known as the quadrivium, i.e. the *'ulum riyadiyyah*, which included the theory of music. At “House of Learning” (*Bait al-Kikmar*) in Baghdad were scholars who had translated the great Greek writers on Music into Arabic, including Aristotle, Aristoxenus, Nicomachus, Euclid, Ptolmy, and probably Aristides Quintillanus.¹⁵ The first to avail himself of the new learning was al-Kindi (d. c. 260/873), and three or four – out of a dozen – of his works on the subject have been preserved. The entire gamut of the science of music is covered by him in his several extant works, two of which have been translated or extracted.¹⁶ He not only appreciated music as a science for mathematicians and joy to auditors, but as a prescription for physicians to administer to the afflicted mind and body.

As de Boer says, al-Kindi applied mathematics to medicine in his theory of compound remedies, like the effect of music on geometrical proportions.¹⁷ Everything within the entire macrocosm was linked together. Each note on a lute was connected with melodic mode (*tariqah*), rhythm, and sentiment. These, in turn, were conjoined with the planets, seasons, elements, humours, colours, and perfumes. In his minute description of the lute – the earliest which we possess – “the four gold things” dominated all else. There are four strings, tunes in fourths, and four frets. The strings from the lowest to the highest were four-ply, three-ply, two-ply and one-ply.¹⁸

His disciples, the Ikhwan al-Safa (fourth/tenth century), followed him in most things, but made the strings compounded of 64, 48, 36, and 27 strands respectively.¹⁹ They assigned to every melodic and rhythmic mode a specific influence (*tathir*), a doctrine which held sway in Islamic lands up to the 14th/20th century. His most illustrious student was al-Sarakhsi (d. 288/899), but his five books on music have not survived.²⁰ Thabit ibn Qurrah (d. 288/901) is credited with eight treatises on music, yet not a page has come down to us.²¹ Other theorists were Mansur ibn Talhah (d. c. 299/910), a follower of al-Kindi, ibn Tahir al-Khuza'i (d. 300/913), one of the most learned in the philosophy of music,²² ibn al-Munajjim (d. 300/912) whose “Treatise on Music” (*Risalah fi al-Musiqi*) still exists,²³ Qusta ibn Luqa (d. c. 300/912),²⁴ and Abu Bakr al-Razi (d. 313/925) who penned a “Book of Summings-up of Music” (*Kitab fi Jumal al-Musiqi*).²⁵ The fame of all these was swept aside on the emergence of the “Second Master” (i.e. second only to Aristotle) whose name became known in Europe as Alfarabius.

Al-Farabi (Alfarabius) was a Turkoman, although educated in Iraq. Celebrated chiefly as a philosopher, he also takes front rank as a music theorist, being known especially for his “Major Book on Music” (*Kitab al-Musiqi al-Kabir*) which was the greatest contribution to the subject up to his time. He tells us that almost all the Greek works on music had been translated into Arabic. Most of these he studied, although he mentions no one by name, save Themistius. Unlike the latter, who was not a practitioner in music, al-Farabi was an instrumental performer,²⁶ and whilst most of his theoretical discussion was based on Greek authors, on the practical side he supplied original material not to be found elsewhere, especially in his description of the existing instruments of music among the Arabs.

Being a good mathematician and physicist, he was fully equipped to deal with speculative theory (*'ilm al-nazari*). Although he indebted to the Greeks, he avoided their errors in that he did not agree that sound

is heard in water in less degree than in air, nor that wool when struck produces no sound, as Aristotle tells us.²⁷ Neither did al-Farabi repeat the blunder of Nicomachus that Pythagoras discovered the consonances by comparing the weight of the hammers in the blacksmith's shop,²⁸ a legend repeated by Gaudentius of Boethius.²⁹ His treatment of the influence (*tathir*) of music leaves the Greeks and al-Kindi far behind, as one would readily expect from a naturalistic philosopher.

Further east was Muhammad ibn Ahmad al-Khwarizmi (d. c. 370/980) who was in the service of the vizier of the Samanid Prince, Nuh II. He compiled an encyclopedic "Keys to the Sciences" (*Mafatih al-'ulum*), one key of which unlocked the door of music.³⁰ Another scientist, Abu al-Wafa' (d. 388/998), penned a "Compendium on the Science of Rhythm" (*Mukhhtasar fi Fann al-Iqa'*),³¹ while in distant Muslim Spain a "Treatise on the Composition of Melodies" (*Risalah fi tallif al-Alhan*) was produced by 'Ali ibn Sa'id al-Andalusi (fourth/tenth century).³² The contemporary Ikhwan al-Safa has been signaled already, especially in their spiritual approach to music. Yet they were well versed in the science of acoustics. One recalls how the famous German physicist Helmholtz argued that musical tones are distinguished by their force, pitch, and quality, and that the force of a musical tone increases and diminishes with the amplitude of the oscillations of the particles of the sounding body.³³

Preece and Stroh questioned the definition saying that loudness does not result from amplitude of vibration only, but that it also depends upon the quantity of air in vibration.³⁴ The Ikhwan al-Safa had proclaimed that view over 800 years earlier when they said, "Hollow bodies, like vessels...will resound for a long time after they are struck, because the air within them reverberates time after time until it becomes still. Consequently, the wider the vessels are, the greater the sound, because more air is put into vibration.

Those encyclopedic philosophers are also recognized the spherical propagation of sound,³⁵ whilst the Aristotelian *De Audibilibus* (802a) had stated that "the direction of sound follows a straight line."³⁶ Meanwhile, the tractates of the Ikhwan al-Safa were being introduced into Muslim Spain by Maslamah al-Majriti (d. 398/1007), and so widespread was their circulation that the name of al-Majriti was attached to them in that land.³⁷

From Turkestan there came the world-renowned ibn Sina (d. 428/1037), better known in Europe as Avicenna, and it was in his widely read book entitled "The Cure (*al-Shifa'*) that a chapter (*fann*) was devoted to music. Like al-Farabi, he passed over the Pythagorean dreams of the "harmony of the spheres," being content to deal with the art *per se* which, as he knew from personal experience, was often a cure from mortal woes. His treatment of the theory of music is different from that of al-Farabi because what was practiced in Bukhara, Hamadan, and Isfahan was alien to that in Syrian. The fretting of the lute was certainly dissimilar, the first semi-tonal fret (*mujannab*) being the diatonic interval (112 cents), whereas elsewhere the semi-tone was the *limma* (90 cents), whilst the Zalzalian neutral third was slightly flatter (343 cents).³⁸

He gives the notation of a few of the melodic modes, and from that one sees the Persians were retaining

their fanciful names of them, such as *Salmaki*, *Nawa*, etc. These Persian terms crept into Arabian music in the third/ninth century, at first their scales agreed with those of the old Arab “Finger modes” (*asabi*’), but later indiscriminately. All the old Arabian instruments are mentioned together with a few strangers, viz. the ‘*anqa*’, evidently a long-necked instrument, the *salbaq*, probably the Greek *symbyke* (the Aramaic *sabbeka*), and the *sanj jinni* or *sini*, seemingly the Chinese metalophone.³⁹ Ibn Sina also introduced a chapter on music in a shorter work entitled “The Deliver” (*al-Najat*) which was translated into Persian – as the *Danish Nameh-i ‘Ala’i* – by his student Abu ‘Ubaid al-Juzajani.⁴⁰

Another of his disciples was Abu Mansur ibn Zailah (d. 440/1048), whose “Book of Sufficiency of Music” (*Kitab al-Kafi fi al-Musiqi*) is even more valuable than the above treatises of Ibn Sina. Although Baron d’Erlanger thought otherwise, it contains much material not to be found elsewhere, especially on the practical art of music, and also passages from a treatise by al-Kindi which has not been known hitherto.⁴¹

Strange to say, al-Kindi had written a work entitled “The Book on the Division of Canon” (*Risalah fi Qismat al-Qanun*), which might have been a commentary on Euclid’s *Sectio Canonis* since we know that he was acquainted with the book.⁴² Yet it was not until the emergence of a scientist of the eminence of Ibn al-Haitham (d. 430/1039) that we do find a “Commentary on the Canon of Euclid” (*Sharh Qanun Uqlaidis*), together with “Discourse on the Commentary on the Harmonics” (*Maqalah fi Sharh al-[A]rmuniqi*), the latter being probably the *Introctio Harmonica* of Cleonides.⁴³ A far more remarkable book was Ibn al-Haitham’s “Treatise on the Influence of Melodies on the Souls of Animals” (*Risalah fi Tathirat al-Lahun al-Musiqiyyah fi al-Nafus al-Hayawaniyyah*).⁴⁴

Unfortunately, we do not know its scope of inquiry because the ruthless hand of time seems to have erased it. Yet it dealt with a set of phenomena which had long enticed the minds of Muslim peoples – the phenomena that the camel’s pace could be hastened or retarded by music’s power, that horses could be persuaded to drink by its urge, which reptiles could be charmed and stilled, and that birds could be lured by its potency.⁴⁵ Nor should we forget the Andalusian lexicographer Ibn Sidah (d. 458/1066) whose *Kitab al-Mukhassas* contains several sections on music and musical instruments.⁴⁶ There are other famous men of Muslim Spain who “hit the mark” – as the Arabs say – in the science of music, although some of them, owing to the intolerance of the Berber legists, sought other lands where their gifts were appreciated.

One of these was Abu al-Salt Umayyah al-Andalusi (d. 529/1134) who went to Egypt. He not only excelled as a music theorist but as a practical musician as well.⁴⁷ His “Treatise on Music” (*Risalah fi al-Musiqi*)⁴⁸ must have been an important work since it was translated into Hebrew,⁴⁹ and quoted by Profist Duran.⁵⁰ An outline of its contents has been given in English.⁵¹ His compositions appear to have had some influence in North Africa.⁵² The learned philosopher Ibn Bajjah (d. 533/1138) compiled a “Book of Music” (*Kitab al-Musiqi*)⁵³ which, says Ibn Sa‘id al-Maghribi, was famed in Western Islamic lands as was al-Farabi’s book on Eastern Islamic lands.⁵⁴ He also contributed a “Book of the Soul”

(*Kitab al-Nafs*), doubtless a commentary on Aristotle's *De Anima*, which deals with the sense of hearing (*al-sam'*) and the physical bases of sound (*sout*).[55](#)

Another Andalusian savant was ibn al-Haddad (d. 562/1165). He wrote a work, entitled by Casiri as *Musices Discipline*, without giving the Arabic equivalent.[56](#) Better known was ibn Rashd (d. 593/1198) famed in European books as a philosopher and commentator. In his "Commentary on Aristotle's *De Anima*" (*Sharh fi al-Nafs li Aristatalis*)[57](#) he naturally treats of the spherical propagation of sound, which was not touched upon by the European writers until Michael Scot translated into Latin which version was printed in 1472/1473.

In the Near and Middle East, the names of theorists of music crop up in the pages of cultural history. Abu al-Hakam al-Bahili (d. 550/1155) was highly esteemed as a mathematician and scientist at Baghdad and Damascus. His work on music was "well known."[58](#) More renowned was ibn al-Naqqash al-Baghdadi (d. 574/1178).[59](#) In *'ilm al-musiqi* he was the tutor of Yahya al-Bayasi who was in the service of the Ayyubid Sultan Salah al-Din (d. 591/1193).[60](#) Muhammad ibn Abi al-Hakam (d. 576/1180), a son of Bahili, too "had knowledge of the science of music," in addition to being a good practitioner in it.[61](#) At the Nizamiyyah College at Baghdad was Kamal al-Din ibn Man'ah (d. 551/1156); he was "without a rival" in astronomy, conics, music, and mensuration.[62](#)

Then there was 'Alam al-Din Qaisar (d. 649/1251), the "great master of the age in all the mathematical sciences," a student of Kamal al-Din. Hassan ibn 'Umar says that 'Alam al-Din was particularly distinguished for his profound knowledge of music.[63](#) Further East there arose Fakhr al-Din Razi (d. 606/1209), whose "Assembling of the Sciences" (*Jami'al-Ulum*), an extremely useful encyclopedia, contains chapters in nine sections on the theory of Music. In some respects, he was quite an original thinker.[64](#) There is also a small tract on music by Nasir al-Din al-Tusi (d. 672/1274) preserved at Paris, which, however, contains only the elements of the theory of music.[65](#)

A really important work is one by al-Hassan ibn Ahmad ibn 'Ali al-Katib (fl. 626/1228) entitled "The Perfection of Knowledge of Music" (*Kamal al-Adab al-Ghina'*), the solitary manuscript copy of which is to be found in Constantinople. It contains 40 sections (*abwab*) and covers the entire field of music.[66](#) Finally, came the famous Safi al-Din 'Abd al-Mu'mun al-Urmawa al-Baghdadi (d. 693/1294). He was the author of "The Book of Musical Modes" (*Kitab al-Adwar*) and "The Sharafian Treatise on Musical Proportion" (*Risalah al-Sharafiyah fi al-Nasab al-Talifiyyah*), which revolutionized the science of music in the Near and Middle East.[67](#) He took the scale of the old Khurasanian pandore (*tanbur Khurasani*) and used its intervallic progression of *limman*, *limman*, *comma*, i.e., 90, 90, 180 cents, as the basis for what came to be called the "Systematist" theory.

The German savant Kiesewetter called him the "Zarlino of the Orient,"[68](#) whilst the English musicologist Sir Hubert Parry considered the new scale to be "the most perfect ever devised."[69](#) Riemann, the music historian,[70](#) shows that it gives consonances purer than those of the European tempered scale, whilst Helmholtz, the physicist, considered that the theories were "noteworthy in the history of the development

of music.”⁷¹ It spread far and wide, and was accepted by Qutb al-Din al-Shirazi (d. 710/1310), the author of the Persian encyclopedia known as “The Jewel of the Crown” (*Durrat al-Taj*),⁷² and Mahmud al-Amuli of the same century, who compiled “The Precious Things of the Sciences” (*Nafa’is al-Funun*), also in Persian.⁷³

The theories of Safi al-Din ‘Abd al-Mu’min are to be seen the “Treasure-House of Rarities” (*Kanz al-Tuhaf*) written in the mid-eighth/14th century, although we read in the section on musical instruments in that book that some performers were using older system, i.e., the earlier Person-Arabian Pythagorean scale of al-Farabi’s days.⁷⁴ The books just mentioned were all in Persian, since the Persian renaissance had spread far beyond its frontiers.

Still, Arabic literature held its own in Spain, Egypt, and Iraq, and in the domain of music theory we have many exponents: ibn al-‘Ala’i al-Baghdadi (eighth/14th century) in his “Reading of Time in the Art of Melodies” (*Qir’at al-Zaman fi’Ilm al-Alhan*),⁷⁵ al-Khatib al-Irbili (fl. 731/1329) in “The Jewels of Arrangement in the Knowledge of the Notes: (*Jawahir al-Nizam fi Ma’rifat al-Angham*),⁷⁶ Muhammad ibn ‘Isa ibn Kara (d. 759/1358) in “The Goal of Inquiry in the Science of Melodies and Rhythm” (*Ghayat al-Matlun fi Fann al-Angham w-al-Durub*),⁷⁷ ‘Amr ibn Khidr al-Kurdi (d. 800/1397) in “The Treasury of the Desideratum in the Melodies and Rhythms” (*Kanz al-Matlub fe ‘Ilm al-Dawa’ir w-al-Durub*);⁷⁸ but more important still was ibn al-Tahhan (eighth/14th century), whose “Collector of the Sciences” (*Hawa al-Funun*) is of extreme value, especially on the construction of instruments of music.⁷⁹

The Persian renaissance had greatly influenced Turkey. This evocation was due chiefly to ‘Abd al-Qadir ibn Ghaibi (d. 840/1435), a tremendous personality who had been the chief minstrel at many Courts from Baghdad to Samarqand, and was better known as the author of the “Collector of Melodies” (*Jami’ al-Alhan*) and other works which, with those of Safi al-Din ‘Abd al-Mu’min, became the accepted textbooks. The former were somewhat critical of a few axioms of the latter.⁸⁰ Indeed other authors, writing in Arabic, were just as contentious, including the author – probably al-Jurjani (d. 816/1413)⁸¹ – of the “Maulana Mubarak Shah Commentary” and the “Muhammad ibn Murad Treatise” in the British Museum.⁸²

All this reflects the keen critical attitude of these Muslim theorists on music. Although the Persian renaissance had greatly influenced Turkey, which was by this time beginning its political domination of the Near East, Arabic culture still held literary sway in Syria, Egypt, and Iraq. A Turkish writer, Khidr ibn ‘Abd Allah, had written a treatise on the “Musical Modes” (*Adwar-i Musiqi*) for Sultan Murad II, in which he mentions al-Farabi, ‘Abd al-Mu’min, Ptolemy, Nicomachus and a certain ‘Abd al-‘Aziz al-Kirmani as his authorities,⁸³ while another Turkish author, Ahmad Oghlu Shakhr Allah compiled a book based on the Persian “Treasure House of Rarities” (*Kanz al-tuhaf*) written in the previous century.⁸⁴

Al-Ladhiqi (d. 900/1494) dedicated his Arabic “Treatise of the Conquest of Music” (*Risalat al-Fatihyyah fi al-Musiqi*) to the Turkish Sultan Rayazid II.⁸⁵ Meanwhile, ibn Khaldun (d. 808/1406) had written in the famous “Introduction” (*Muqaddimah*) to his universal history the “Book of Examples” (*Kitab al-Ibar*)⁸⁶

with its chapter on music. More important, to the theory and practice of music, was a treatise by al-Maridini (d. 809/1406) called the “Introduction to the Theory and Canons of Melodies” (*Muqaddiman fi ‘Ilm Qawanin al-Agham*). The same writer published a “Commentary in *Rajaz* verse on the Melodic Modes” (*Urjuzah fi Sharah al-Naghamat*).⁸⁷

In fact, verse had become a popular, although not a perspicuous – medium for that subject. More satisfying was an anonymous treatise entitled “The Advantage in the Arrangement of the Melodies upon the Times and the Zodiac” (*Fi’ideah fi Tartib al-Angham ‘ala al-Ayyam w-al-Buruj*), which reveals that the old conceit in the influence (*tathir*) of the heavenly spheres was still as strong as ever.⁸⁸ This is also most apparent from the “Treatise Concerning the Knowledge of Melodies” (*Risalah fi ‘Ilm al-Angham*) by Shihab al-Din al-‘Anjami (ninth/15th century).⁸⁹ On the purely instrumental side is a “Survey of the Concerns and Anxieties in the Explanation of the Instruments of Music” (*Kashf al-Humum w-al-Kurub fi Sharh Alat al-Tarab*), a most important treatise on music and instruments in the ninth/15th century Egypt, quoting many unknown authorities – Taqi al-Din Muhammad ibn Hassan al-Farabi (or Faryabi), Ahmad ibn Muhammad ibn Ayyub al-Khwarizmi, and others.

The only MS available of this book is in Constantinople.⁹⁰ The names quoted reveal men of Turkoman origin. Two others of that stirps who were music theorists were Sa‘d al-Din Kammari (ninth/15th century) who wrote a book on the harp (*chang*) in the form of a dialogue between master and student, and a Fakhr al-Din al-Khujandi (tenth/16th century) who penned a clever criticism (*hashiyah*) of Safi al-Din ‘Abd al-Mu‘min.

With the dawn of the tenth/16th century came the domination of the Ottoman Turks from Kurdistan to Algeria, and within those boundaries the theory and science of music fell into desuetude. The compendiums of the sciences, which almost always include music, were current – the older *Irshad al-Qasid* of al-Akfani (d. 749/1348), the *Maqalid al-‘Ulum* of Jurjani (d. 816/1413), the *Unmuzaj al-‘Ulum* of al-Fanari (d. 839/1435), and the later *Miftah al-Sa‘adah* of Tashkoprizade (d. 968/1560) dealt with the subject, but in his last work most of it was borrowed from older compendiums.⁹¹

A certain Shams al-Din al-Saidawi al-Dimashqi wrote a treatise called “The Book Concerning the Acquisition of the Melodies” (*Kitab fi ma‘rifat al-Angham*). Like several other such treatises of the period, it was in verse, but it revealed a neoteric device for notation by means of a stave of eight or so lines.⁹² Another tract in *rajaz* verse was by Nasir al-Din al-‘Ajami.⁹³ Two others in rhymed prose have come down to us.⁹⁴ A really solid work of that century was “The Treatise of the Discoverer in the Science of the Melodies” (*Risalt al-Kashif fi ‘Ilm al-Angham*) by Muzaffar ibn al-Hussain ibn al-Muzaffar al-Haskafi,⁹⁵ while in Morocco, ibn al-Wansharisi (d. 956/1549) contributed a valuable work on “The Natures, Elements and Modes” (*Taba’i’, Tubu’, wa Usul*).⁹⁶

In the 11th/17th century there lived a certain bu ‘Isami (d. c. 1103/1690) who was the teacher of another music theorist Muhammad ibn Tayyib al-‘Alami (d. 1136/1722), the author of “The Companion of the Performer” (*al-Anis al Mutrib*), also of Moroccan origin.⁹⁷ Then there was a “Book of the Combinations

in the Science of Music and the (*Kitab al-Jumu' fi 'Ilm al-Musiqi w-al-Tubu'*) by 'Abd al-Rahman al-Fasi (d. 1098/1685).⁹⁸ It must be remembered that Morocco, like Muslim Spain, ignored the scale of the Systematists,” and followed the old Arabian musical system based on the Pythagorean scale with the occasional intrusion of Zalzalian neutral third (355 cents).

In Persian the scale of the “Systematists” was used in the 11th/7th century, the chief authority being Abu al-Wafa' ibn Sa'id.⁹⁹ Here, treatises on music abounded, although some of them were trivial in comparison with those of the glorious past. One is named “The Teaching of the Modes” (*Ta'lim al-Naghamat*), another is the Treatise on the Science of Music” (*Risalah 'Uklum Musiqi*),¹⁰⁰ and lastly “The Exquisite Pearl in the Art of Music” (*Durr al-naqi fi Fann al-Musiqi*). The last was by Ahmad al-Muslim al-Mausili (fl. 1150/1737), but it was in Arabic, having been derived from the Persian work of 'Abd al-Mu'min al-Balkhi.¹⁰¹

In Muslim India where Persian, Khurasanian, and Turkomanian musicians were favoured side by side with those of India, it is obvious that the former musicians, trained in an art that was in many respects different from that of the Aryan peoples of India, took direction from such books on the theory of music as were known in Persian, just as the Indian musicians turned to Sanskrit sources of information. We know of two Persian books on music theory that were dedicated to the Emperor Akbar (d. 1014/1605). They were the “Excellent of the Modes” (*Tahfat al-Adwar*) by 'Inayat Allah ibn Mir Hajj al-Harawi, and the “Treatise on the Science of Music” (*Risalah dar 'Ilm al-Musiqi*) by Qasim ibn Dost 'Ali al-Bakhari.¹⁰²

An Amir of the Court of Aurangzib named Shah Qubad ibn 'Abd al-Jalil al-Harithi, called Diyanat Khan, caused a collection to be made of Arabic and Persian treatises on music of such authors as al-Kindi, ibn al-Munajjim, al-Farabi, ibn Sina, ibn Zailah, Safi al-Din 'Abd al-Mu'min, and also of many later writers,¹⁰³ whose works he himself had collated. Two Persians writers appear to have made translations of or adaptations from Sanskrit treatises. One was entitled *Rag Darpan* issued by a certain Faqir Allah in about the year 1073/1662. Another was *Kitab Parjat Sangit* written by Mirza Rauzan Zamir (d. c. 1080/1669), praised by Shir Khan Lodhi. A third book was “The Excellent Thing of Hindustan” (*Tuhfat al-Hind*) by Mirza Khan Muhammad ibn Fakhr al-Din and was dated 1086/1675. 'Iwad Muhammad Kamil wrote about playing the *bin* in his *Risalah dar 'Amal Bin wa Thath-i Ragha'i*, while Abu al-Hassan Qaisar contributed a book called “The Knowledge of the Melodies” (*Ma'rifat al-Nagham*).¹⁰⁴

D. Influence

“Thy neighbour is thy teacher.”

An Arabic Proverb

As mentioned elsewhere,¹⁰⁵ the ancient Near and Middle East had been influencing Greece and Rome from time immemorial. With the dawn of Islam, this stimulation from the Orient increased by leaps and bounds, as the Muslims were on European soil from the second/eighth century in the Iberian Peninsula, and from the ninth/15th century in the Balkans. Culturally, the former impact was a widespread blessing,

not only to Spain and Portugal but also to the rest of Europe. The Arabs and Moors comprised some one-tenth of the population of the Iberian Peninsula, and its leisured classes were *facile princeps* in all the concerned art, literature, and science.

It is not all surprising that this newly imposed civilization from the East should have captivated all eyes, ears, and minds. What we owe to Arabic authors in literature, science, and philosophy, and to Islamic artisans in architecture and the minor arts have been detailed at some length elsewhere in the present work. [106](#) Europe's indebtedness in music in Muslim Spain and Portugal has been the favourite theme of the present writer for many years. [107](#) Of its more general diffusion, a further endeavour should be made to indicate the *primum mobile* which induced other lands to take this exotic art to their hearts.

To the peoples of Islam, music was not merely a diversion of the privileged classes, but the heritage of all, and was, therefore, part and parcel of the social life of the whole community, as the Ikhwan al-Safa had thought. [108](#) That was what the peoples of the Iberian Peninsula found to be the case with the Moors. Of the music of this land before the Muslim invasion in 91 – 93/710 – 712 we know very little. It is true that we read of Isidore of Seville (d. 15/636) whose influence on medieval culture has been lauded to the skies, [109](#) but what Isidore tells us about music in his *Originum sive Etymologiarum* does not enlighten us on the contemporary music, since almost everything that he has collected under the heading is derived from alien and earlier sources, as Migne has shown. [110](#)

In the “Codex Toletanus” (second/eighth century) of Isidore's *Etymologiae*, we have marginalia in Arabic. One may ask why? The answer is that the educated classes in Christian Spain found that the acquisition of that language opened up a new world to them in the arts, sciences, and literature, and the year 188/804, Arabic was in official use in charters and canonical decrees. [111](#) The Bishop Alvarus of Cordova (third/ninth century) was lamenting the spread of Arabic culture and learning to the detriment of the Christian Scriptures, shows which way the wind was blowing. [112](#) It is in iconography, perhaps, that the earliest Moorish influence in music may be espied as, for example, in the S. Medard *Evangeliarum* (second/eighth century), the *Psalterium Aureum* (third/ninth century), [113](#) and in the miniatures (fourth/tenth century) reproduced by M. Serrano Fatigati, [114](#) all of which show long-necked pandores and other instruments, including large and small rebecks. [115](#)

Some of these necked instruments, such as the lute and pandore, had frets (*dasatin*) on the finger board, which fixed the Arabo-Pythagorean scale with absolute precision. Prior to that, European musicians had to depend on their ears alone while tuning strings and “stopping” notes. Here is a list of Spanish instruments with their Moorish originals named in parentheses: atambor (*al-tanbur*), laud (*al-ud*), rabe (*rabab*), canon (*qanun*), axabeba (*al-shababah*), albogon (*al-buq*), annafil (*al-nafir*), sonajas de azofar (*sunuj al-sufr*), and atambal (*al-tabl*). All of these instruments may be seen in the miniatures of the *Cantigas de Santa Maria* of Alfonso el Sabio (d. 683/1284), [116](#) whilst the *Libro de Buen Amor* of Juan Ruiz (d. c. 751/1350) makes distinction between Spanish and Moorish instruments such as in the *guitarra morisca* and the *guitarra latina*. [117](#) One is, therefore, not surprised to find Rafael Mitjana, the

historian of Spanish music, lauding “this Oriental civilization, so rich and so exuberant...imprinting an indelible mark on so many examples of Spanish art, and more especially upon music.”¹¹⁸

The Spanish population, seeing how universal and attractive Moorish music and song were among its people, soon became as ardent auditors and practitioners as the Muslims themselves, and gathered to the “leila” (Ar: *lailah*) and “zambra” (Ar. *zumrah*) of the latter to hear their “cana” *ghaniiyyah*), “huda” (Ar. *huda*), and “anaxir” (Ar. *nashid*), since Moorish “aravia” fascinated their ears, and the “mourisca” tempted their feet. So ravished by enthusiasm were the Spaniards with such displays that they were led in excitement to cry “algzara” or “alarido” in admiration. These words are the Arabic *al-ghazara* (copious) and *al-‘arid* (amplitude).

One may still hear cries of “Ole, Ole” (Allah, Allah), punctuating the performance of a “cante hondo” in modern Spain, when the audience is carried away by the clever ornamentation (Ar. *tahsin*) or the melody by a singer or a player.¹¹⁹ As Professor J. B. Trend says, “this tendency to profuse ornamentation is seen in every form of art, whether cultivated or popular, and it...undoubtedly goes back to the time of the Moors.”¹²⁰ Among the dances the “mourisca” was much fancied by the Spaniards and the Portuguese, and in the sports and pastimes of the latter the Moorish influence is quite patent.¹²¹ Joy as well as thanksgiving was at its height during the Great Muslim festivals, and that the dance was given recognition on such occasions seems very probable because the Portuguese had a dance called the “muchachim,” which may be the Arabic *muwasim*, the name of the six Muslim festivals, as we know from the ibn Battutah¹²² and al-Maqqari.¹²³

On the other hand, Pedro de Alcala (911/1505)¹²⁴ gives word *muwajjah* the plural of which is *muwajjahin* (mascarado con caratula), which Dozy and Engelmann link up with “los matachines,” a troop of four, six, or eight persons who performed a clownish dance.¹²⁵ This word is claimed to be derived from the Arabic *mutawajjahin* (masked people). That leads us to the Spanish words “mascara” (actor) and “zaharron” (merry andrew), which are the Arabic *maskharah* (cause of laughter) and *sakharah* (scoffer). Another figure of entertainment was the Spanish “moharrahe,” who was no other than the Moorish *muharraj* (buffoon).¹²⁶ It was the arts of these people which captivated the Moors and the Iberians alike,¹²⁷ and their influence spread abroad at the hands of the wondering minstrels.

It was these minstrels who were the real disseminators of music during the Middle Ages, for, as Naumann, says they were carrying new themes from one people to another, as well as many “an original and singular rhythm.”¹²⁸ This latter would have far-reaching effect, as we shall see presently. Even the Arcipreste de Hita (eighth/14th century) realized that it was not the bowed instruments which typified the exotic Moorish rhythms, but the plectrum-struck lute and pandore.¹²⁹ The other feature of that Oriental art was the mellisma or embroidery of the melody by Muslim singers and players which Professor Trend has well compared with the arabesque in Mudejar art.¹³⁰ The Spanish Courts were well supplied with Muslim players, singers, as the official records, even their names have been registered.¹³¹

That the wandering minstrel class contained a fair sprinkling of Moors, there is some evidence. It is

probable that the long hair, painted faces, and gaudy raiment were prompted by Oriental minstrels,¹³² and the Spanish “mourisca,” already mentioned, with *grelots* on the dancers’ legs, and the “hobby horse,” both borrowed from the Moors, inveigled the ears and eyes of audiences. The *kurraj* or hobby horse of the Moors and its impedimenta of bells (*jalajil*) are mentioned as far back as Jarir (d. c. 110/728) and have also been described by ibn Khaldun. Let us turn to the diffusion of these arts.

Some of the external features of the music of the Basques reveal a Moorish tinge. Their “mutchikoa,” which was danced by young men armed with batons, immediately suggests that the original was the Arabic *muskwikah* (bristling with arms). In Catalonia, there was a dance which specialized the water flagon called “almaratxa,” which was the Moorish *al-mirashshah*. That feature was dropped about 1215/1800. The Basque “zortzico,” also common in Spain, has a time measure of “five-eight” which immediately reminds one of the Moorish *makhuri* rhythm.¹³³ P. Donostia assures us that the “zortzico” “does not represent the musical basis of the Basque people.”¹³⁴

In other words, it is an exotic plant, reared among the Moors. Among the most popular of the Basque folk instruments are the “alboka” and “atabula,” the originals of which are to be sought in *al-buqi* and *al-tabl* of the Moors. Clearer still is the Moorish influence in the Basque “zamalzain” to which the people still skip about, little suspecting that it is the Arabic *zamil al-zain* (gala limping horse), the English “hobby horse.”¹³⁵

All of these neoteric devices soon spread over the Spanish and Portuguese borders, as the French, Italian, and English languages and customs reveal, some of them are to be found even today in Pyrenean provinces in something akin to their pristine character. One recalls that the tambourine made its entry into Western Europe as the “tambour de Basque” and “tambour de Biscaye.” Jean Poueigh, in his entrancing book on the *Chansons populaires des Pyrenees francaises*, shows how the popular song of some regions in France has been influenced by the Oriental art, and in his own particular sphere of research he hears and sees quite definitely the Moorish pattern.¹³⁶

Among his numerous examples in the “mouchicou” of Bearn, which is the warlike Basque dance “mutchikoa.” One of the Pyrenean song dances is a kind of “branle” called the amelet,” which had its origin in Toulouse in the sixth/12th century. There it fell into desuetude, although it may still be heard in the mountains of Foix. Could these binary measured song dances owe their name to the Moorish *ramal*? Yet the inherent wandering propensity of folk music is notorious, and one example of this is the Bulgarian rhythmic “aksak” which is to be found in Basque instrumental tune.¹³⁷ Its paternity is traceable to the Turkish *aqsaq*, a 9/8 movement.

In France, iconography supplies the clearest evidence of the Moorish and Saracenic influence in musical instruments,¹³⁸ whilst its literature clinches that certainty.¹³⁹ The Moorish ‘*ud*, *rababah*, *qanun* and *tanbur*, appear in the seventh/13th century as the “leus” (luth), “rubebe,” “micanon” and “mandore” – the Spanish “guitarra morisca” of Juan Ruiz (eighth/14th century), the “morache” of Guillaume de Mechain (c. 743/1342) in France. With these came the Saracenic *naqqarah*, *tabl*, and *tabl-zan* – the last meaning

really “a drummer” – which were Gallicized into “naguarre” (nacaire), “tabor” and “tabolzan.” Later, the French adopted the Persian *tinbal* as the “tinballe” in 876/1471. [140](#)

French minstrels were welcomed at the Spanish Courts, [141](#) and these as well as the peregrinating type were the means by which these Moorish instruments and music were spread abroad. The Spanish “mourisca” was danced in France as the “Moresque,” whilst “los matachines” were “les matassins” of that land, all of whom were “masques,” as did the Moorish *maskharahs*. As late as Thoinot Arbeau (997/1589), the French “Morris dancers,” i.e. Moorish Dancers,” were putting dye on their faces. [142](#) He calls the “matassins” by the name “les bouffons” (Ar. *muharrajat*).

The troubadour problem, in relation to the Moorish influence, has been the arena of fierce conflict since the days of Heut’s *Origine Fabularum Romanensium* (1105/1693), as the present writer has shown elsewhere. [143](#) The discovery by Levi-Provencal in 1374/1954 that the fifth song in Jeanroy’s *Les Chansons de Guillaume IX* was not only inaccurately transcribed but that its final lines were actually purely Arabic, [144](#) was a veritable bombshell to the sceptics. Whether the troubadours actually borrowed their form and material from the Moorish *mutrib* (minstrel) or not, they certainly had the opportunity to do so. [145](#)

Indeed, it is not improbable that the Provençal word “trobador” was coined from the Arabic *tarrab* (*taraba* = “to rejoice”, *tarraba* = “to sing”). [146](#) The orthodox explanation of the word is that it issued from the Provençal verb “trobar” (French “trouvere”) meaning “to find.” If that be so, it was a very lucky “find,” seeing that it gave birth to the verse of the troubadours. Joseph Anglade says [147](#) that the “trovador” who lived at the princely Courts was known as a “sergrier,” a name which was no more than the Moorish *sakharah*. [148](#) On the other hand, Menendez Pidal believes that the “segrier” belonged to a class between the “trovador” and the “juglar.” [149](#)

In Pedro de Alcala (915/1509), the “trobador” equates with the Moorish *sha’ir* (poet), *nadim* (boon companion), and *adib* (scholar). [150](#) There can be little doubt that the Moorish *muwashshahah* and *zajal*, which were popular verse forms as old as the fourth/tenth century, were the mould from which much of the poetry of the troubadour sprang, as Ribera has claimed. [151](#) Even the scenes and *dramatis personae* of that poetry reek with the Orient. If they could borrow those features, why could not the melodies which enhanced that verse also be copied? In truth, they were almost inseparable. Even if the troubadours could not grasp the significance of the Arabic language they could at least seize the prosodical structure, the melody of which would be transfixed in their ears with certainty.

In any case, they had their “juglar” who attended them ostensibly for that purpose. Some of the later works of that early troubadour, Guillaume IX (d. sixth/12th century), “can be explained only by *muwashshahah* and *zajal*,” as Nykl insists, and he says of the later Marcabru that his two *estornel* (Ar. *zurzur*) were, “in all likelihood, made upon an Andalusianbilo” and “stanza” equate precisely with the Moorish *markaz* and *bait*. What is stranger still is the literal identity between the Latin musical term “conductus” and the Arabic *majra*, although we may not at present be able to pin the likeness down to

precise identity of usage. [152](#) What we do know for certainty is that the Spanish “estribillo” and “stanza” equate precisely with the Moorish *markaz* and *bait*. What is stranger still is the literal identity between the Latin musical term “conductus” and the Arabic *majra*, although we may not at present be able to pin the likeness down to precise identity of usage. [153](#)

Concerning the famous *Cantigas de Santa Maria* of Alphonso X (d. 683/1284), the miniatures of which present us with the delineations of many Moorish instruments, Julian Ribera has made wide claims for the Moorish influence in both the melodic and in the rhythmic structure of that work. [154](#) As his interpretation of the latter does not agree with the Arabian rhythms of the third/ninth to the fifth/11th centuries examples known to us, [155](#) that part of his elucidation is suspect, whilst his transcription of the melodies has been disputed by many. [156](#)

On the other hand, the literary material which he amassed is extremely valuable to all who are interested in the problem. Yet the failure of Ribera, in the circumstances mentioned, does not validate the sweeping statement of Higini Angles that there is not the slightest trace of an Arabian (Moorish) influence in the melodies of the *Cantigas*. [157](#) Others of the anti-Moorish influence party are more guarded in their utterances, since they admit that because there is not contemporary Moorish music available there can be no absolute proof either “for” or “against” that thesis. They evidently know the reason why there was no written contemporary Moorish music, seeing that the pious Cardinal Ximenes, according to his biographer Robles, committed a million Arabic manuscripts to the flames, [158](#) believing, as the late Reynold A. Nicholson has said, that he could “annihilate the record of seven centuries of Muhammadan culture in a single day.” [159](#)

Spanish composers of the standing of Pedrell and Falla are outstanding opponents of the claims for a Moorish influence. The former asserts that Spanish music “owes nothing essential” to the Moors, [160](#) but takes care not to define what he means by “essential.” He prefers to acknowledge a Byzantine influence, but does not quote documentary evidence which he and others demand the pro-Moorish advocates should exhibit. In fact, there are no Byzantine documents of the pre-Moorish days that authenticate his contention.

Fella makes a different approach. He acknowledges the Oriental strain in Spanish music, but he attributes that feature of the “gipsies.” [161](#) In other words, a handful of uncouth gypsies, who entered Spain not earlier than 846/1442, are to be credited with having exerted a more pre-dominant influence on Spanish music than a million Arabs and Moors whose ancestors entered the Iberian peninsula so far back as 94 – 95/712 – 713, without including the countless Mozarabes, Mudejares, and Moriscos, who had adopted the Arabian and Moorish mode of life.

The fact is that Spain is compelled to face the question of the Oriental strain in her national music as exhibited in the “cante hondo” and “flamenco,” but dare not acknowledge the influence of Islamic peoples. Jean Sermet says of the “cante hondo” that it “is certainly of Oriental origin,” [162](#) while Raoul Leparra states that the “very special *mentalite* of the ‘flamenco’ goes back, according to the hypothesis

most justified, to the domination of the Moors.” [163](#) Fortunately, there have been and are men of the stature of Menendez Pelayo, [164](#) Mitjana Gordon, [165](#) Menendez Pidal, [166](#) Ribera, [167](#) and Nykl [168](#) who recognize clearly the Moorish influence as they would the sun at noonday.

The Moorish influence spread quite naturally to Italy, where such instruments as the “liuto,” “rebecca,” “canone,” “tambura,” “taballo,” and “nacchera,” as well as such terms as “maschera” and “mattaccino” reveal their ancestry. [169](#) Of course, the definitely Oriental Courts of Frederick II (d. 648/1250) and Manfred (d. 665/1266) at Palermo and Naples had their quota of “Saracen” minstrels and dancing girls. [170](#) A glance at medieval documents enables one to note the frequent appearance of Italian minstrels at Spanish Courts and *vice versa*, [171](#) all of which conduced towards the inter-change of alien ideas in music, including that of the Moors, which the poles asunder from that of Europe proper.

The Sicilian instruments of the period are displayed on woodwork screens of the sixth/12th century of Palermo, while those delineated by Fra Angelica, Bellini, and Montagna (ninth/15th century) are quite revealing of the Oriental influence in their ornamentation as well as in their shape. [172](#) It was here that the mounted men-at-arms of the English condottiere, Sir John Hawkwood (d. 796/1394), were using a nacarino which was, of course, the Arabic naqqarah. Meanwhile, the crusaders had returned from Palestine with fresh ideas of martial music. Previously they only used trumpets (*tubae, litui*) and horns (*corni, bucinae*), whereas the Saracens were equipped not only with trumpets (*anfar, karnat*) and horns (*buqat*), but also with large (*kusat*), medium (*naqqarat*), and small (*qas‘at*) kettledrums, together with reed-pipes (*zumar*), shawms (*surnayat*), cymbals (*sunuj*), and bells (*ajras*), which were used not merely for signalling but to create fear and dismay among the Christian array. [173](#)

It is generally believed that the cylindrical bore “trump” of Richard Coeur de Lion, first heard in 587/1191, was borrowed from the Saracens. [174](#) With the latter the military band was a distinct unit known as the *tabl khanah* or “Drum House” which was drawn up with the standards away from the actual conflict, where it played unceasingly during the battle for tactical purposes. In times of peace it was the function of the *tabl khanah* to perform the five-fold *naubah* for the Caliph and the three-fold *naubah* for princes or governors. Generals, according to their rank, were allotted a specific number of players, although only the highest of the Amirs were allowed kettledrums. [175](#) Europe adopted all those customs, and up to the 13th/19th century the various ranks of European generals could be determined by observing the musical honours bestowed on them. [176](#)

In Britain we observe the Oriental current flowing, presumably *via* France, as one sees in the word “mattachin,” the dance in which a duel was fought with wooden swords typifying the struggle between the Christians and the Moors. Here it was dubbed the “Morris dance,” but, as Brand points out, “the genuine *morisco* was very different from the European Morris.” [177](#) Each of the performers being a “masker” (Ar. *maskharah*), they painted their faces and wore masks. A folk-song and dance authority of today, Maud Karpeles, dismisses the Moorish origin of the British “Morris Dance” by saying it “is now discredited” – by whom, we are not told. [178](#)

Such English authorities as Thomas Blount, Joseph Strutt, and John Brand had no doubts about its Oriental origin, and anyone who has seen the “hobby horse” and knows its history will scarcely be convinced by the latest heresy. “Moor’s garments” are specified in English documents as early as 914/1508 just as “Turk’s garments” for kettle drummers were mentioned a century later, the reason being obvious in both cases. With the general infiltration of Moorish instruments came the “lute,” “rebeck” of “ribible,”¹⁷⁹ “tabor” and “naker,” and they did not necessarily intrude through France, since both English and Scottish minstrels were welcomed at the Spanish Courts, where not only Moorish instruments were in common use, but Moorish minstrels were playing.¹⁸⁰

In the east there came the Turkish eruption into Europe during the ninth/15th century, when the whole of the Balkan Peninsula was conquered. That the music of the latter was influenced by that of the Turks can scarcely be denied, however much collectors of folk and national music may strive to minimize that persuasion. The Oriental strain exists to the present day, more especially in Bulgaria, Albania, and Yugoslavia. According to Raina Katzarova, the Turkish rule only left “infinitesimal traces in Bulgarian folk music.”¹⁸¹ Yet among those immeasurably small vestiges are many irregular Oriental rhythms from 5/16 through odd numbers up to 13/16. Further, did not those instruments of a definite Oriental prompting contribute something – if but the merest fraction – to those “infinitesimal traces?”

Those instruments include the “tamboura,” “kemence,” “kaval,” “daara,” and “tarabouka” – all adopted from the Turks.¹⁸² In Yugoslavia the Oriental impress is deeper, since many of their melodies are acknowledged to be of Turkish or Arabian origin.¹⁸³ The “tanburica” is common to the Yugoslavs together with its cousins the “saz” and “shargy.” The Arabo-Turkish lute (*‘ud*) is known in Macedonia as the “oot.” Among Balkan wind instruments, the “duduk,” “zurne,” “dzamare,” and “bore,” as well as the percussion group – “daule,” “deff,” “daulbas,” “daire,” “dalbujane,” and “chapara” – all tell the story of their parentage. Albania used a host of Turkish instruments, including pandores of the “yonghar” ad “paraduzen” class.¹⁸⁴

Even Rumania and Russia were influenced by the Turkish *kopuz* in their “kobsa” and “cobsa,” whilst the latter adopted the Arabian *al-tabl*, *naugah*, and *tab-li baz* in the tenth/16th century “litavri,” “nabat,” and “tulumbaz” respectively for their military bands.¹⁸⁵

Perhaps the greatest of all the “borrowings” from the Turks was made by European military bands. It began about 1138/1725 when the Turkish Sultan presented the ruler of Poland with a complete military band instrumented after the Turkish fashion. The craze soon spread to Russia, Austria, Prussia, France and Britain. The pre-dominant feature of this Turkish music was the use of the bass drum, cymbals, triangle, tambourine, and “Janissary bells.” These not only helped precision in marching for the army, but the new tonal colour attracted the attention of the orchestra, and very soon Mozart (1196/1781) and Haydn (1290/1794) were scoring for such instruments in their immortal works, the former using them in his opera *Il Serablio*.¹⁸⁶

Indeed, the Orient became the scene for countless *libretti*: Beethoven’s *Ruin of Athens*, Rossini’s *Turks*

in Italy, Webber's *Abu Hassan*, Boieldieu's *Caliph of Baghdad*, David's *Lalla Roukh*, Bizet's *Djamileh*, Massenet's *King of Lahore*, Bantock's *Pearl of Iran*, and so on. What would the annual pantomimic productions in Britain be without *Aladdin*, *Sindbad*, and *The Forty Thieves*, all from the *Arabian Nights*, although some of us may be amused at the pseudo-Oriental music which accompanies them.

The musical influence of Islamic peoples is not confined to the West. South of the Maghrib and Egypt we find the *tabl*, *ghaitah*, *bandair*, and *shaqshaq* in the Sudanese languages as the "tabala," "tamba'or" "tumbul," "algaitaru," "bendere," "bendo" or "bentere," "segesege" or "asakasaka."¹⁸⁷ The "azamari" or troubadours of Abyssinia may have derived their name from the Arabic *al-zumar*, meaning people who gather together to make music. Their *agarit* is clearly the Arabic *naqqarat*. The neighbouring Somalis use the Egyptian *zummarah* as the "zomari," just as they do in Zanzibar, although it becomes the "anjomari" of Madagascar.

The lute-like *qabbus* of the Arabs and Turks became the "kabus'u" of Somaliland and the "qalbus" in Zanzibar. Turning to the west coast of Africa one recognizes the Arabic *al-tabl* and *alghaitah*, as well as the Turkish *boru* in the "tabulaie" of Senegal and the "a-tabule" of the Gold Coast, the "algaita" of the hausa, and the "buro" of the Gold Coast.¹⁸⁸ Returning to the east coast, it should be noted that, in spite of Sanskrit influence on the Malagasy language and the cultural pressure of Indianized Sumatrans, we do not find a solitary musical instrument of Indian or Indonesian origin. That statement takes us to India itself, where the Islamic cultural influences are as patent as the noonday sun.

A recent writer on Indian music avers that "the stories that tell how the various styles of North Indian music were invented by musicians of the Muhammadan period have probably *no basis in reality*."¹⁸⁹ So far as the "form," the method of performance, the actual instruments, and the technical nomenclature of that music is concerned, the above statement is a distortion. That some "styles" came via the "musicians of Muhammadan period" must surely be allowed, and among them are the *qal*, *ghazal*, *tarana*, and *firu dasht*. One recalls that Amir Khusrau (d. 725/1325) has been actually censured by the purists of the old Indian school of music for *Islmaic innovations*, and one presumes that the above were among them.

The *naqsh*, an ornamental piece of music, was another feature in Amir Khusrau's time, and that and the preceding items would seem to be those specifically Islamic features which Alain Danielou believes that "no one can seriously speak of their having any influence" on the development of Northern Indian music. One asks, would that include the *khiyal*? Surely that deserves some claim to pristine utterance. It certainly lives up to its name, which means "fancy" or "imagination," since the embellishment of its melodic outline becomes perfectly scintillating at the hands of a Muslim *ustad* (*virtuoso*). Fox Strangways said that the *khiyal* received "its highest development" at the hands of the Muslims, having originated with a certain Mahmud Sharqi of Jaunpur (d. 844/1440).¹⁹⁰

The names of such modes as *'ushshaq* and *nigar*, together with such technical terms as *basit* and *sarpardah*, are quite alien to Sanskrit. One is prompted to inquire why Sanskrit or Hindi words are not used instead of the Arabic *midrib* for the "plectrum," and *khali* for a "rest" in a rhythmic pattern. Why call

the drum “brace” the *diwal* instead of its Sanskrit equivalent? Seemingly there is some “basis in reality” for the Muslim claims.

When we examine the musical instruments of modern India, we find overwhelming evidence of the influence of Islamic peoples, which is a sufficient rebuttal to Alain Danielou’s claim that “outside influences” were only “temporary fashions.” Nobody can scan the names and features of those instruments without concluding that Pakistan and parts of Muslim India have been wearing those supposedly “temporary fashions for many centuries. Search as one may in the old Sanskrit treatises, even *Sangita Ratnakara* (seventh/13th century), one will not discover in their pages the *sitar*, *rabab*, or *tanburi*.

Indeed, the *chargah-sitar* and *tarabdar sitar* bear an unmistakable Persian likeness. Even the *sarod* or *sharod* can be no other than the old Turkoman *shahrud* of the fourth /tenth century. All of these instruments as well as the *dutarah* and *chartarah* bear names which determine their origin. Grosset claims that the *qanun* or psaltery was derived from the old Indian *katyayanavina* or *svara-mandala*:¹⁹¹ but since the latter is not mentioned in the Sanskrit treatises earlier than the *Sangita Ratnakara*, which is of later date than the Arabic authorities, the claim for Indian priority is far from convincing. Among the bowed types the *kamanchah* is the most obvious of the borrowed Islamic instruments. The insistence of Grosset that the Sanskrit term *kona* stands for both “plectrum” and “bow” cannot be justified, although he claims the *Amara kosha* (first/seventh century) as his authority for the use of the “bow.”

Yet Ananda K. Coomaraswamy declares that “no Indian *vina*, whether ancient or modern, was ever played with a bow.”¹⁹² The antiquity of the *ravanahasta* as claimed by Fetis, who was foolishly influenced by the mythical *ravanstron* of the Sonnerat, was sheer imagination,¹⁹³ as was his indication of a manuscript at Vienna, dating from the days of the first Caliph (first/seventh century, *sic*), supposed to delineate a bow.¹⁹⁴ The Fetis design of a *ravana* and his so-called *ravanastron* and *omerti* are actually of Chinese provenance, as was his Indian *tambourah*.¹⁹⁵ The fact is that the earliest account of the function of the bow is given by al-Farabi.¹⁹⁶ Passing to wind instruments – the *surna*, *alghuzah*, *moshuk*, *nafir*, and *karna* – their very names confirm their origin, as do those of the percussion group – the *tabla*, *tablik*, *naghara*, *duffda*, and *da’irah*, however much some of these names may have been altered.¹⁹⁷

The music of the peoples of the Malay Archipelago was also influenced by India, especially Muslim India, on the instrumental side. The bowed *rabab*, or spike-footed viol, which spread with the adoption of Islam is known in the various islands as the “regab,” “repob,” “erbabi,” and “arababu.” The lute-like Arab *qabus* or *qanbus* and the Turkish *qopuz* appear as the “gambus,” “babbus,” and “kabosi,” whilst the *surna* or *sunray* becomes the “serunai,” “sarune,” “sruni,” and “sralai.”¹⁹⁸ Further north, when the Mughuls became masters of China (641 – 770/1213 – 1368), the instruments of Islamic peoples began to influence that land. Kuglai Khan introduced an organ called the *hsing-lung-sheng* into China; it is being expressly mentioned as coming from the “Muslim kingdoms” of the “lands of the West.”¹⁹⁹

The armies of the Yuan rulers comprised large contingents from Turkestan, and a number of their Court officials were Persians. Was it any wonder that bands and orchestras of Muslim musicians should find favour at Chinese Courts? Here were to be heard such instruments as the “tan-pu-la” (Turki *tanbur*), “sai-t’o-erh (*sitar*), “huo-pu-ssu” (*qopuz*), “la-pa-pu” (*rabab*), “ha-er-cha-k’o” (*ghijjak*), “k’o-erh-nai” (*qanun*), ta-pu-la” (*tabl*), an “ta-pu” (*daf*).²⁰⁰ Thus, we discern how the Islamic arts in music traversed land and sea, covering continents and oceans, bringing to distant shores the indigenous music of several Near and Middle east peoples, which was not only fresh and novel, but had a comeliness and grace, a form and symmetry dissimilar from their own, some of which, wherever possible, were eventually absorbed.

Finally, there is the question of the influence of the music theorists of Islamic peoples – especially that of the Arabic theorists – in the practical and theoretical spheres of music. All historians of art and science have openly acknowledged the debt that we owe to Islamic peoples during the Middle Ages,²⁰¹ and one can include the science of music in Europe’s indebtedness, however small it may be, in our modern concept of obligation. Greece had always been a borrower from the East in the distant past. Even in the days of Byzantium she was absorbing from the Orient.²⁰² Yet with all the trumpeted fame of the Hellenic world, not a single treatise on the theory of music was produced – or at least has survived – from Anonymus II (fourth/tenth century) at the same time of Psellos (fl. 442/1050).

It was only the Arabic treatises on that subject which had currency from Seville to Samarqand, viz. those of al-Kindi and al-Farabi up to those of ibn Sina and ibn Zailah (d. 440/1048).²⁰³ One cannot help noticing the complete absence of genuine music theorists in Christian Europe from the pre-sixth century A.D. to the mid-third/ninth century.²⁰⁴ The reason for the decay has been described by the Muslim historian al-Mas’udi (d. 345/956). He says, “In the days of the ancient Greeks...and Byzantium, science was developed and scholars were honoured. Natural science was particularly studied...as well as the *quadrivium*, i.e. arithmetic, geometry, astronomy, and music...Then came the Christian religion, which...destroyed and blotted out the teachings of science. All that the ancient Greeks had placed before the world vanished, or was distorted. Among the noble sciences which were thrown aside...was the science of music.”²⁰⁵

This is not a biased picture by a Muslim. The facts can be proved up to the hilt by Christian historians who had the *ipissima verba* of the Fathers of the Church before their very eyes. Tertullian (d. c. 240 A.D.) decried Pagan literature,²⁰⁶ i.e. the literature of Greek and Latin philosophers, which was in strict accord with the authoritative *Apostolic Constitutions* which laid down, “Hold aloof from pagan books entirely.”²⁰⁷ Saint Jerome (d. 440 A.D.) was warned not to dabble in heathen literature,²⁰⁸ although he actually lamented that so few knew of Plato and Aristotle.²⁰⁹ Even Saint Augustine (d. 430 A.D.) pandered to his readers saying, “Heaven is for the ignorant.”²¹⁰ Cassian (d. 480 A.D.) reveals that the decrees against Pagan literature were still being observed.²¹¹ Even 60 years later Saint Benedict (d. c. 544 A.D.) recommends only the Bible and expositions thereon to be read by the Catholic Fathers.²¹² It has been admitted that “at no time have the general mass of Benedictines has learned.”²¹³

Under such conditions one can readily appreciate the total neglect of the works of the great Greek theorists of music. Europe knew of them only through fragments – often mistranslated as Roger Bacon affirmed – offered by Martinus Capella, Boethius, Cassiodorus and Isidore of Seville,²¹⁴ whereas the scholars at the House of Learning” (*Bait al-Hikmah*) at Baghdad had made Arabic translations of the works on music by Aristotle, Aristoxenus, Nicomachus, Euclid, Cleonids, and probably Ptolemy and Aristides Quintillianus by the third/ninth century.²¹⁵ We have seen how both Euclid’s *Canon* and Aristotle’s *De Anima* had been the subject of Arabic commentaries (*shuruh*), and all were part of collegiate studies in Islamic lands, since music (*‘lim al-musiqi*) was part of the course of mathematics (*riyadiyah*), i.e. the *quadrivium* of the medieval European studies.²¹⁶

To appreciate the meaning of the impingement of Arabic learning – in the sciences especially – on Western Europe, one has to consider the prevailing cultural conditions there. In Spain, the hub of Islamic culture in Europe, we have Bishop Alvarus (third/ninth century) complaining that whilst his congregations could not pen a letter in their own tongue, they could accomplish mono-rhyme in Arabic,²¹⁷ while the ignorance of his clergy was deplorable.²¹⁸ At the centre of Europe’s intellectual culture – the Carolingian Empire – learning had so declined that studies had almost ceased, whilst at Cluny the subjects of the *quadrivium* were but little studied.²¹⁹ The Monk of Angouleme admits that “there existed in Gaul scarcely a trace of the liberal arts” before the days of Charlemagne, and it was no better in Rome, the very centre of Christianity.²²⁰

In Muslim Spain the cultural atmosphere was far different. Sa’id ibn Ahmad al-Qartabi (d. 462/1070) writes of that land thus, “The learned of al-Andalus exerted themselves in the cultivation of science, and laboured in it with assiduity.”²²¹ Ibn al-Hijari (d. 590/1194) testifies that under the Umayyad regime in al-Andalus (second – fifth/eighth – 11th centuries) “students from all parts of the world flocked...to learn the sciences of which Cordova was the noblest repository, to derive knowledge from the mouths of the doctors and ‘*ulama*’ who swarmed in it.”²²² What was taught specifically of the theory of music we do not know. The treatises of al-Farabi, the Ikhwan al-Safa, Ibn Sina, and the later Abu al-Salt Umayyah, Ibn Bajjah, and Ibn Rushd were available to all, most of these authors being known by their Europeanized names as Alfarabius, Avicenna, Avempace, and Averroes. (See H. Albert, *Musikanschauung des Mittelalters*, Halle, 1905, pp. 143, 169).

In spite of the destruction of Arabic manuscripts by Cardinal Zimenes in 898/1492 *et seq.*, a few manuscripts on music theory have survived, notably that of al-Farabi, the “Major Book on Music” (*Kitab al-Musiqi al-Kabir*), now preserved at Madrid, being a sixth/12th century copy made for a student of Ibn Bajjah (Avempace).²²³ Al-Farabi’s treatment of the physical bases of sound, also dealt with by the Ikhwan al-Safa, was a notable advance in that particular sphere.²²⁴ His description of the musical instruments of his day stands unique in the history of music. European theorists seem not to have considered the subject worthwhile. His minute account of the *accordatura* of the necked stringed instruments, the scales of harp-like instruments, and the compass and digit holes of the wood-wind family were subjects unheard of before his time,²²⁵ although al-Kindi had dealt with the lute in that

fashion a century earlier.[226](#)

In a Persian treatise, the “Treasure House of Rarities” (*Kanz al-Tuhaf*), dating from the eighth/14th century, we have another example of the thoroughness of Islamic music theorists. In this we have not merely the musical gamut of an instrument described, but recommendations as to the style of facture, the best types of wood for use, an elaborate account of the manufacture of silk and gut strings, devices for amplifying the tone by means of sympathetic strings – the first account of its kind as well as the sprinkling of powdered glass on a glue covered interior of an instrument so as to improve the tone. The earliest mention of that device in Britain is a patent (No. 7454) taken out in 1253/1837. Ibn Sa‘id al-Maghribi (d. c. 680/1280) says that books on “the various instruments and the art of making them are common among us,” while in the days of Ibn Rushd and al-Shaqundi (d. 629/1231) Seville was the centre of the manufacture of musical instruments, and had an export trade.

How much of the Arabic material recorded above was translated into Latin we have no record. Yet seeing that Arabic was not only spoken by the Arabs and Moors, but also by the Mudejars and Mozarabes, who were, respectively, the Muslims who remained in the reconquered Christian Spain, and the Spaniards and Portuguese who lived under Muslim rule, much would have been passed on orally. One outstanding man in the former group was Muhammad ibn Ahmad al-Riquti, who, when the Christian armies took Murcia in 640/1242, was retained by the Christian king to teach in his schools, he himself being famed as a music theorist and mathematician.[227](#) That some of it was passed on via the Latin tongue or script we know from Anthony a Wood who says that when Roger Bacon lectured at Oxford, using faulty Latin translations, he was ridiculed by Spanish students, who have known the Arabic originals.

According to Bacon, there were few mathematicians among the Latins, and both he and Adelard of Bath strongly advised students abandon European schools and seek the fountain-head in Muslim Spain.[228](#) Two Arabic tractates on the sciences which contained a section on music were translated into Latin, viz. al-Farabi’s “Register of the Sciences” (*Ihsa’ al-‘Ulum*) and an anonymous “On the rise of the Sciences” (*De ortu scientiarum*), both of which became formal textbooks in European schools. Neither was of much value *per se*, since each merely outlined the bases of the study.[229](#) Yet they were quoted by Gundisalvus, Magister Lambert (Pseudo-Aristotle), Vincent de Beauvais, Roger Bacon, Jerome of Moravia, Walter of Odington, and others.[230](#)

The Islamic impact on musical instruments has already been shown, especially in the stringed variety with their frets. These latter were fixed according to the old Arabian system of ibn Misjah (d. c. 97/715), which was based on Pythagorean tuning, a circumstance which completely dispels the erroneous assumption of the Director of the “Museo-Laboratorio de Musica Marroqui” at Tetuan, D. P. Patrocinio Garcia Barriuso, that the music of Morocco, Algeria, and Tunis is not “Arabian music.”[231](#) As H. G. Farmer has been demonstrating for many decades, the “musica hispano-musulmana,” which he believes originated in Spain, was actually the old Arabian system of ibn Misjah, Ishaq al-Mausili, Ziryab, ibn al-

Munajjim, al-Kindi, and al-Farabi, a “sisteme model distonico y cromatico,” as he terms the present Moroccan music.

According to him – and his book has received the “Imprimatur” of the Roman Church – those “eminent musicologists” who have studied Moorish music have approached the subject with “prejudice, lack of knowledge, and impropriety of nomenclature,” when they have dubbed “Spanish-Muslim music” as “Arabian music.” So as to demonstrate the “superficial affirmation” of those erring musicologists mentioned above, he would enlighten the octave, of which Europe was an *au fait* so early as Sir John Chardin (1123/1711) and about the quasi-Arabian quarter-tone system, really Turkish, which succeeded in the 11th/17th century, the latter being illustrated by Dr. Barriuso, who copies a diagram from a music treatise of Kamil al-Khalu‘i (1322/1904), so as to prove that his “Spanish-Muslim” music of a thousand years earlier was not “Arabian music.” *O sancta simplicitas!*

So far back as the third/ninth century, when Christian Spain was in its intellectual childhood, the Baghdad scholars had translated from Greek into Arabic the Muristus treatises on the organ and hydraulic. Such works enabled the Arabs to construct similar instruments which led to some interesting results. An organ or hydraulic was being used in the Caliph’s palace at Baghdad in the time of Princess ‘Ulayyah (d. 210/825),²³² and there is evidence that organ constructors were known in Syria during the sixth/12th century.²³³ There is no reference to the hydraulis in the Orient since the time of Isaac of Antioch (fl. 459 A.D.), and in the Occident since the days of Apollinaris Sidonius (c. 483 A.D.),²³⁴ because the Greeks had adopted a weighted blast bag instead of hydraulic pressure.

Could the resurgence of the hydraulic in the third/ninth century have been due to the Arabic translations of Muristus?²³⁵ Amedee Gastoue says that “the makers of the first large organs in the Occident in the third/ninth century were, without doubt, either Greeks or Syrians,” and since he shows that the hydraulic had died by that time among the Greeks, the greater probability rests with the Syrians at the revivers.²³⁶

Returning to the question of the frets on the necks of stringed instruments, the Arab theorists used an alphabetic notation to designate the notes produced as those frets as we see in the “Treatise of Music” (*Risalah fi al-Musiqu*) of ibn al-Munajjim (d. 300/912),²³⁷ which the author specifically stated was based on the system of Ishaq al-Mausili (d. 235/850) who was the teacher of Ziryab (d. c. 238/852), the famous musician of Moorish Spain. Europe, however, possessed no definite and practical notation of that sort. In its church music, neumes were used as a means of registering the melodic outline, but they did not convey any precise intervallic steps. By the time of Hucbald (fourth/tenth century), we find an alphabetic notation on very much the same lines as that of the Arab system, giving a major diatonic scale.²³⁸

No wonder that the latter has been attributed even to the Arabs,²³⁹ or to the Semitic Orient.²⁴⁰ It may also be pointed out that the instrumentalists of the minstrel class possessed a practical knowledge of music theory (*ad delectandos audientes artis ratione temperare*), whereas the church singers did not. This was stated by pseudo-Huebald.²⁴¹ Later, the Arabic influence on the alphabetic tablature for stringed instruments is openly admitted in a Latin manuscript entitled *Ars de pulsation lambuti*²⁴² et

aliorum similibus instrumentorum (902 – 903/1496 – 1497) in which the tablature is said to have been “invented” by a “Moor of the Kingdom of Granada.”²⁴³

Conde de Morphy said that Spanish lute tablature was “probably of Oriental origin,” whilst his helper, Gevaert, more positively asserted that the Castilians and Aragonese “elaborated their tablature in imitation of that of the Muslims.”²⁴⁴ Some other strange coincidences crop up in history. In his section on the “Eight Tones,” Odo of Cluny (d. 330/942) attached names to the *chordae* which have more than casual interest because three of them are Arabic, viz., “schembs” (*shams*), “caemar” (*qamar*), and “nar” (*nar*).²⁴⁵ This terminology belongs to the doctrine of the ethos (*tathir*) as related to music, firmly believed in by Islamic peoples up to the present day.²⁴⁶ The General influence of Islamic culture on Gerbert of Aurillac (d. 394/1003) and Constantine the African (d. 480/1087) is not unworthy of notice. The former studied the mathematical sciences (*matheses*) at Barcelona, and that included music,²⁴⁷ which had been neglected in France.²⁴⁸ Indeed, he had been dubbed “Gerbert the Musician.”²⁴⁹

Constantine was born at Tunis (Carthage), and then held by the Muslim Zairids. He spent 39 years in the East among the Chaldaens, Arabs, Persians, and Egyptians, and studied their sciences, including music. Because of his settling in Sicily and at Monet Cassino in Italy, his writings had considerable influence on European culture.²⁵⁰ One theorist who used him was Aegidius Zamorensis (seventh/13th century), a *protégé* of the Arabophile Alphonso X el-Sabio,²⁵¹ but a recent writer, Gerhard Pietsch, does not perceive any “Arabian influence” in his writings. Aegidius could scarcely have avoided the “Arabian influence” since we read in the *incipit* to his *Ars musica* that he learned “chiefly from Iraquian (Chaldaen) and Egyptian books.”²⁵²

The music practiced by the Arabs and Moors also influenced Western Europe in other directions, notably in the melodic arabesque, organum, and the hocket. The arabesque or free embellishment of the melody (*tahsin*) was the art in which the Moorish *virtuoso* excelled. His “excesses” (*zawa'id*) – as those *melismata* were called – were usually vocalized on such words as *ai* or *laili*, which were introduced even into Spanish songs. (See E. L. Chavarri, *Musica Popular Espanola*, Barcelona, 1927, p. 36.) All sorts of tricks prevailed – the *mabturah* (staccato), *istirahah* (repose), *shadhharah* (short, soft note), and the *nabrah* (a glottal catch like the *coup de glotte*).²⁵³ This last may possibly be the device hinted at by Magister Lambert, which Merchettus of Padua calls a “feigned voice.”²⁵⁴

On the other hand, it may have been the “embellishment” known to the Arabs and Moors as the *shahajah* (a whining sound), which was accomplished by the singers making a swift *glissando* from a low note to its fourth, fifth, or octave.²⁵⁵ This latter was in partial accord with the instrumental device known as the *tarkib* illustrated by al-Kindi under the name of *jass*, which meant plucking two lute strings with the thumb and forefinger.²⁵⁶ Ibn Sina gave the name *tarkib* only to the simultaneously struck fourth or fifth, whilst striking with the octave was called the *tad'if*.²⁵⁷

In other words, he recognized the distinction between “organizing” and “magadizing.” It was that Arabian and Moorish *tarkib*, which, most likely, prompted the European “organum,” although with the Muslims

the *tarkib* was, at that time, simply an “embellishment.” Today, the music of the Turkoman peoples is an “organum simplex” with the “diapente.”

The most significant influence by the Moors on the music of Western Europe was in mensural music. Neither the Greeks nor Romans were particularly interested in other than prose rhythms. With the Arabs, rhythmic modes (*iqāʿat*) in music, six in number, had existed since the first/seventh century, two or more were added later.²⁵⁸ Up to the third/ninth century the singer and instrumental accompanist observed the same rhythm, but Ibrahim ibn al-Mahdi (d. 224/839) and his Romantic school introduced schemes whereby a singer and the accompanist used different rhythms.²⁵⁹

When to that contrariety there was added a further diversity in the prosody (*ʿarud*) of the verse, a performance became more than intriguing, and H. G. Farmer has given an illustration of that in an article on *iqāʿat* in the *Urdu Encyclopaedia of Islam* and in *Grove's Dictionary of Music* (1374/1954).²⁶⁰ No wonder the Muslims referred to their rhythm as the “heartbeats of Allah,” for its content was infinite and boundless. Islamic music is fundamentally homophonic, and therefore quite different – in that respect – from that of Europe which is harmonic or polyphonic. Yet the Muslim seeks his harmony (*muwafiqah*) in the variegated rhythmical and prosodical structure of song and in the tonal differences of the rhythmic beats (*durub*). At first, such disparate things must have appeared to Christian Europe as a *lucus a non lucendo*.

Yet the time came when the Spanish singer and instrumentalist found themselves imitating the Moorish *mughanni* and *mutrib* in their rhythms. In the very nature of things the beats of the plectrum (*midrib*) on the lute or pandore strings, or the taps on the tambourine or drum, often left intermediate silences (*sukun*), which were the very anti-theses of the sustained notes of the melody. It was because of that circumstance that Europe – after it had adopted mensural music – called the Moorish *iqāʿ* by the name of *cantus abscisus*: hence Simon of Tunstede's chapter called *De truncationibus sive hocketis*.²⁶¹

The latter word, “hocket,” “hoquet,” or “ochetto,” is simply a phonetic reproduction of the Arabic *iqāʿat*, a fact which European scholars only very tardily acknowledge,²⁶² although H. G. Farmer had claimed that derivation as far back as 1344/1925.²⁶³ Most of them still adhere to the non-sensical – when it is not actually laughable – derivation from the English “hiccough” or “hiccup.”²⁶⁴ We see the same intrusion of the “h” in “hocket” as in Latin translation of Avicenna's “Canon” (*Qanun*) where *ʿishq* becomes “hash.” Of course, not all of the Moorish rhythms were borrowed by Europe.

Such an outlandish design as the *makhuri* of al-Kindi or the *khafif al-ramal*, both quintuple, were rejected, although Johannes de Grocheo (c. 700/1300) admitted that the music of the peoples was “not precisely measured,” and that included the Basque “zortzico,” which was also a quintuple rhythm. Curiously enough, the examples which only used two note values of the “longa” and “brevis” in “hockets” were dubbed *musica resecata*, whereas those which used many more note values were classed as *hoquetus vulgaris*, and this may imply that it was more used by the people at large.

The mention of note values and the popular “hocket” raises two vital points which deserve consideration. We are told by one of our leading musicologists, R. Thurston Dart, that in Europe “the first steps towards a convention establishing the duration of a note were made in the late sixth/12th century,”²⁶⁵ and there were only two or three duration values to notes in those days. Yet the Arabs recognized five different mensural types of sound at least, although they had no definite “notion” for the latter, save a cumbersome tablature and onomatopoeia,²⁶⁶ up until the seventh/13th century, when an alphabetic (*abjadi*) and numeric (*‘adadi*) notation or tablature was introduced.²⁶⁷

Concerning the *hoquetus vulgaris*, it is worth recalling what Jerome of Moravia (seventh/13th century) quotes on the authority of Franco of Cologne (fifth – sixth/11th – 12th centuries) who was the earliest of the mensural theorists. He affirms that the “hocket” was applied to songs which had *already been composed*, whether in Latin or in the Vulgar tongue, which means that the “hocket,” that is to say the Moorish *iqā‘at*, was a new device which was being applied to older material, notably the music of the people. Lastly we should remember that the approach of the Arabs and Moors in their *iqā‘at* and that of Christian Europe in their borrowed “hocket” were different; the former, because they viewed music horizontally, using rhythmic contrariety between the vocal line (prosodic) and the accompaniment (rhythmic), the latter, because they visualized music vertically and introduced those mensural features into three or four melodic parts.

European notation may also have received novel outlook from Arabian or Mozarabian sources, as H. G. Farmer pointed out in 1344/1925.²⁶⁸ One of the Latin mensural theorists, known as “Anonymous IV” of Coussemaker, mentions in the work entitled *De mensuris et discantu* (c. 674/1276) two technical terms, “elmuarifa” and “elmuahym,” as the names of notation symbols.²⁶⁹ The words are Arabic, although the first of them appears in the fifth/11th century *Glossarium Latin–Arabicum*, under the term *al–ma‘rufah* which equates with “nots.”²⁷⁰ It may be identified with the form *al–ma‘rifah* (cognition).²⁷¹ It is explained in “Anonymous IV” as having “a stroke on the left side in descending, just as the English depict it.”²⁷²

As for “elmuahym,” that word looks suspiciously like *al–mubhim* (shutting) or rather *al–mubham* (locked, closed).²⁷³ In the Latin translation of the Arabic of Euclid’s *Elements* the word “elmuahym” stood for the “rhomb.” We are told that some music scribes penned that note with a square head, whilst others made it rectangular. In one form it was a “plica” with an ascending and/or descending stroke (*tractus*). When it was written as an obliquely protracted line it was one of the “currentes” (running notes), in which character it could be a “double, triple, or a quadruple ‘elmuahym’” – and could even be extended to sevenfold.²⁷⁴

The problem raised by this Arabic technical nomenclature is not easy to solve. One naturally asks, “Why were Arabic words used in a Latin work if there were technical equivalents in that language?” The author of “Anonymous IV” was certainly well acquainted with Pamplona and other Spanish works on the subject, and that Arabic terminology may have come through a Mozarabic scribe who would, in southern Spain, be acquainted with that language. Could we not assume that “elmuarifa” and “elmuahym”

represented some new mensural devices in notation? Incidentally, “Anonymous IV” features both Leonin of Paris (sixth/12th century) and Perotin, his successor (seventh/13th century).

Gustave Freese sees in the “Currentes” of Leonin a synonymy with the “elmauhym” and “elmuarifa,”²⁷⁵ i.e. that it “may owe something to Arabian sources, by way of the troubadour influence,”²⁷⁶ whilst in Perotin, “the quick-moving upper parts would seem to suggest some troubadour and folk influence.”²⁷⁷ One of the last tributes to the music of Islamic peoples by A. H. Fox Strangways, the author of *The Music of Hindustan*, was to say this, “The Arabs, who taught to Europe their mathematics and medicine, have influenced our music in ways that we are only now finding out.”²⁷⁸

Yet whatever the “pros” and “cons” in the subject may be, both East and West agree fully in their praise of music, and Walter do Odington (eighth/14th century) quotes Avicenna (ibn Sina) side by side with St. Gregory, St. Bernard, and the Psalmist, saying, “Inter omnia exercitia sanitatis cantare melius est.”²⁷⁹

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- [273.](#) In grammar it stood for "a noun of indication," i.e. a demonstrative pronoun.
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