Turkish & Arab Makams
Music Theory
For

OUD
ΘΕΩΡΙΑ & ΔΑΚΤΥΛΟΘΕΣΙΑ

ΓΙΑ

ΟΥΤΙ

[Συλλογή και επεξεργασία του υλικού των κειμένων: Βαγγέλης Κατσούλας / Πηγή: www.udeclipse.com]
History of the Oud

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3. Description
4. Models of the ‘ud
5. Performance and Aesthetics
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1. The Term ‘ud

Literally, ‘ud means ‘twig’, ‘flexible rod’ or ‘aromatic stick’, and by inference ‘piece of wood’. In Ibn Khaldun (14th century), ‘ud denoted the plectrum of the lute called barbat. The etymology of the word has occasioned numerous commentaries, among them Farmer’s alluring thesis that the Arabs adopted the term to differentiate the instrument, with its wooden sound-table, from the similar Persian barbat, whose belly is covered with skin. But this can no longer be defended. The choice of the term ‘ud depends on a discursive form of Arab thought which required some other word to define the barbat before the ‘ud (the same applies to all the instruments of the emergent Islamic world): in this system of ideas, one term refers beck to another or is glossed by yet another, leading to a multiplicity of terms. As the sanj is described as a wanj, the buq as a qarn, the duff as a tar, the ‘ud becomes a synonym of the barbat. The skin-wood difference was not taken into account. This play of reference is clear as stated by the 10th-century Andalusian writer, Ibn ‘Abd Rabbihi: ‘the ‘ud is the barbat’. Other writers, such as Ibn Sina and Ibn Khaldun, included the ‘ud under the heading of ‘barbat’ when speaking of its characteristics. In the 10th century, commentaries on pre-Islamic poetry by al-Anbari (d 916) give the ‘ud two semantic meanings: barbat and mizhar; mizhar was to become a poetic substitute for the ‘ud. Earlier, it could equally denote the lyre, suggesting a process of transference from lyre to lute, the lute gradually acquiring the attributes of previous string instruments and becoming a sublimation of them. This transference is noticeable in the earliest Arabic versions of the Bible, where kinnor (lyre) is translated as ‘ud (lute).

2. Early History

The transfer of terms for lyre and lute appears more subtly in the myth of the invention of the ‘ud which has been handed down in two variants from the 9th and 10th centuries, the first being Iraqi and the second Iranian. These say that the ‘ud was invented by Lamak, a direct descendant of Cain; on the death of Lamak’s son, he hung his remains in a tree, and the desiccated skeleton suggested the form of the ‘ud (a contradiction between archaeological research and mythological tradition; the former assumes a process of evolution from lyre to lute, confirmed by organology). The myth attributes the invention of the mi’zaf (lyre) to Lamak’s daughter. There is a Chinese legend that the pipa lute was created through the division or modification of earlier instruments of the zither type, zheng and zhu; such a relationship, of lyre to lute or zither to lute, did exist in the Far East. The comparison suggests a common origin for the ‘ud and the pipa.

Just as the ‘ud becomes the quintessence of earlier chordophones, it also constitutes their functional synthesis. In the 9th century, Miwardi, the jurist of Baghdad, extolled its use in treating illness, a principle allowed and defended in Arab Spain by the 11th-century theologian Ibn Hazm. The symbolism lived on until the 19th century: ‘the ‘ud invigorates the body. It places the temperament in equilibrium. It is a remedy... It calms and revives hearts’ (Muhammad Shihab al-Din). There is also evidence that it was played on the battlefield. In any case it was predominantly in secular usage that the ‘ud made its mark, as the only kind of accompaniment to a form of responsorial song known as sawt, according to written tradition (the Kitab al-Aghani of al-Isfahani) and oral tradition (Tunisia and the Arabian Gulf).
The emergence of the 'ud on the stage of history is an equally complex matter. Two authors of the end of the 14th century (Abu al-Fida, or Abulfedae, and Abu al-Walid ibn Shihnah) place it in the reign of the Sassanid King Shapur I (241-72). Ibn Shihnah added that the development of the 'ud was linked to the spread of Manicheism, and its invention to Manes himself, a plausible theory because the disciples of Manes encouraged musical accompaniments to their religious offices. Reaching China, their apostolate left traces of relations between West and East, seen in a short-necked lute similar to the 'ud. But the movement's centre was in southern Iraq, whence the 'ud was to spread towards the Arabian peninsula in the 7th century. However, the texts mentioning the introduction to Mecca of the short-necked lute as the 'ud were all written in the 9th and 10th centuries. The 'ud spread to the West by way of Andalusia.

3. Description

The 'ud consists of a large soundbox connected to a short neck, features that give it its letters patent of nobility and distinguish it from the long-necked lute family (tanbur, saz, baglama, setar etc). The body has evolved considerably from the original pear shape (which is perpetuated in our own time by the qanbus, taking on a swelling, rounded form). A spherical shape may even have been envisaged: al-Kindi (9th century) described the body of the lute as a ball divided in two, but a century later the Ikhwan al-Safa’ encyclopedia suggested harmonious proportions: 'The length must be one and a half times the width; the depth, half the width; the neck, one quarter of the length'. If the neck measured only 20 cm (its approximate length today), the total length would be 80 cm, with or without the pegbox - an instrument much the same size as very large contemporary models. Another tradition required the length of the vibrating string from nut to bridge, now about 60 cm, to be equal to the body length, which would leave only 15 cm for the length of the neck.

The body is made from lightweight wood. It consists of a series of 16 to 21 ribs, mentioned as early as the 10th century by the name of alwah ('boards') and now called dulu ('sides'). In the 19th century, the body was called qas'a ('receptacle', 'bowl'), and by the classical authors jism ('body'). It consists of a strongly rounded back (zahr) and a flat front surface (batn: 'belly'; sadr: 'chest', or wajh: 'face') made of lightweight wood, which must 'reverberate if it is struck' (Ikhwan al-Safa’). This, the soundboard, is pierced by one quite large soundhole, or (earlier) two small ones; sometimes there are three round or oval soundholes (a design inspired by the lotus flower in Morocco). The holes may be plain or richly ornamented. They are called shamsiyya ('little sun'), qamarat ('moons') or 'uyun ('eyes'). The bridge, on the lower part of the belly, is known in classical writings as musht ('comb') and as faras ('horse') or marbat ('fastening place') today. It bears the strings and stands about 10cm from the lower edge, which is called ka'b ('heel'). (In a recent innovation by Munir Bashir, of Iraq, the 11th, low string is not on the traditional bridge but on the lower edge of the soundbox. The raqma ('membrane'), a piece of fishoskin or leather, or occasionally of shell, between the bridge and the soundhole, protects the belly from the strokes of the plectrum. This section may take all kinds of extravagant shapes; a Tunisian example is in the form of a parallelogram. The raqma tends to be absent from the modern Iraqi 'ud.

The neck, joined to the body, is described as 'unq ('neck') in classical writings and the raqba ('neck') or zand ('wrist') today. It extends the upper part of the instrument by some 20 cm and is inserted into the soundbox up to the soundhole. This length, which has been much discussed, is important in the instrument's construction, determining the number and location of the intervals and thus affecting the modes. In early 19th-century Egypt, Villoteau gave the measurement as 22.4 cm; a century later, also in Egypt, Kamil al-Khula'i gave it as 19.5 cm. In contemporary Egypt, the length of the neck may vary between 18 and 20.5 cm. It is standardized as 20 cm in Syria, but a length of 24.5 cm may be found on Moroccan models, he 'ud 'arbi (Arab 'ud). If the 'ud 'arbi is the descendant of an archaic model of Andalusian provenance, the upper part of the instrument may have become shorter. The neck rarely has
frets (*dasatin*), but some are found on the Tunisian lute of Khumayyis Tarnan (1894-1964). Both sides of the neck are inlaid with marquetry to facilitate the learning of the instrument, so providing visual references for the placing of the hand. There is a nut of ivory or bone, called *anf* ('nose') or *ataba* ('threshold'), at the upper end of the neck before it bends sharply back to become the pegbox. The tuning-peg(s) are screwed to the pegbox; they are called *mafatih* ('keys') or more commonly *malawi* ('folds', 'whorls'). The vibrating length of the strings ranges from 60 to 67 cm, according to the model, but lengths as small as 52 cm have been noted.

The quality of material used in the making of the *'ud* is extremely varied; the more the diversity, the better it sounds. This explains the elaborate attention paid to decorative inlay work and the assembling of an impressive number of pieces of wood. The Baghdad lute maker Hanna Hajji al-'Awwad (1862-1942) used 18,325 pieces to make a single *'ud*.

Classical lexicographers regarded the wood of the *wa's*, which cannot be identified, as best for the material of the *'ud*. All kinds of wood have been used, some chosen for their aromatic quality (like sandalwood). Some texts recommend the use of a single type (Ibn Tahhan, 14th century); woods mentioned include walnut, larch, beech, maple, cypress, pistachio, oak, mahogany, cedar and pine for the belly, and ebony for the fingerboard. There is a growing tendency to add inlay work to the *'ud*, whose weight may exceed 800 grams in Arabian lutes but is less in Turkish ones (which are 6 to 8 cm smaller than their Arabian counterparts, and more like the Maghribi *'ud* of the *'arbi* type).

4. Models of the *'ud*

(i) *Two-string 'ud:* The thesis of its existence has been upheld by musicologists from Europe and Iran; it envisages the archaic *'ud* as a counterpart of the *tanbur*, having two strings like that instrument. The argument rests on the names of the strings, two of which are Iranian terms (bamm and zir) and two others of Arab origin (mathna and mathlath). There is no circumstantial documentary evidence to support this hypothesis.

(ii) *Four-course 'ud:* The Arabian *'ud qadim* (ancient lute), in particular, invited cosmological speculation, linking the strings with the humours, the temperature, the elements, the seasons, the cardinal points, the zodiac and the stars. The strings may be tuned bass to treble or treble to bass. Bass to treble tuning is represented by al-Kindi (9th century), who advocated tuning the lowest course (bamm or first string) to the lowest singable pitch. Placing the ring finger on a mathematically determined length of this string, one moves on to deduce the pitch of the third open course (mathna), then that of the second (mathlath) and finally the fourth (zir). (This system is also applied to the five-course *'ud* and is still used as a tuning method, following the sequence 1-4-2-3-5 or 1-4-2-5-3.) Adherents of the opposite school (*ikhwan al-Safa*) tune from treble to bass. The intention, inherited in part by the Turkish *'ud*, entails pulling hard on the zir (high) string, so that as it approaches breaking-point it gives a clearer sound. One then moves on to determine the pitch of the second course (mathna), the third (mathlath) and finally the fourth (bamm). These two schools did not remain entirely separate. But whichever procedure is used, both end up with tuning by successive 4ths, each course being tuned a 4th above the lower course preceding it. Musicologists, Eastern as well as Western, who try to interpret the pitch of these notes in European terms end up with different results.

Although the four-course *'ud* survives in Morocco, as the *'ud* *'arbi*, the tuning does not conform to the pitches inferred from classical treatises: a conflict between oral and written traditions. The Moroccan method seems to be the product of a previous system, the *'ud*
Another characteristic of the four-course 'ud is that it is bichordal, having double courses. 13th-century iconography shows that it was already usual to pair the strings at that time, probably to increase sonority but also to allow the development of a more virtuoso type of performance.

(iii) Five-course 'ud: The addition in Andalusia of a fifth course has been attributed to Ziryab (8th-9th century), although in theoretical writings it appeared in Iraq with al-Kindi. (The addition of this extra course has a parallel in China.) With Ziryab the fifth course, known as awsat (‘intermediary’), a term perpetuated in the ‘ud of San’a’ called qanbus, is placed between the second (mathna) and third (mathlath) courses. With al-Kindi and his successors, it was to reach the end of the instrument and become the string called hadd (‘high’) or the second zir. (According to oral tradition, to obtain an octave on the long-necked lute baglama, a low string should be placed in the middle. This is done when the neck has few frets.) As the ancient 'ud did not have a two-octave compass, the appearance of the fifth string corresponded to the demands of a new system. The four-course 'ud had no need to run right through the octave. Its repertory was performed on a tetrachord or pentachord, transposable an octave higher. With the five-course model, the heptatonic system imposed complete series of octaves. The new lute was called 'ud kamil (‘perfect 'ud’).

The five-course 'ud is the most common and most popular model among performers. It has also been called the 'ud misri (Egyptian) because of the finely constructed instruments produced by the lute makers of Egypt, who export them as far as Zanzibar. The people of North Africa have added the dialectal name of m'sharqi or mashriqi (‘of the east’). The method of tuning it, extremely flexible in the 19th century, is now becoming stabilized. These modifications are due partly to the break-up of the Ottoman Empire, which has caused a rupture between Turkish and Arab cultures, and partly to the proliferation of teaching methods endeavouring to impose a single type of tuning, running from low to high: yaka = G; 'ushayran = A; duka = d; nawa = g; kardan = c'. However, there are variants reintroducing tuning by 4ths. Thus what is described as 'Aleppo tuning' consists of: qarar busalik = E; 'ushayran A; duka =d; nawa = g; kardan = c'. This latter structure is used in Turkey and Iraq. To answer the practical requirements of present-day notation, a treble clef followed by the figure 8 is used. This procedure has been much criticized by those in favour of using the bass clef. The tuning of the Turkish lute faithfully reflects the Arab type but in reverse, reading in descending order: gerdaniye = g; neva = d; dugah = a; asiran = e; kaba dugah = d (this last, more mobile pitch may equally settle upon G. This outdated tuning represents the 'old school' (eski akort), and has now been replaced by an ascending tuning - the 'new school' (yeni akort): A-B-e-a-d'-g'. Though it is now considered incorrect in the Syro-Egyptian area, and representative of the old Ottoman school, a tuning method in ascending order survives in Iraq. It consists of: yaka = d; 'ushayran = e; duka = a; nawa = d; kardan = g'. The compass of the bichordal five-course 'ud is just over two octaves; in Turkey, it is three octaves with the addition of a low course. Arabian instruments can achieve this by the addition of a sixth course.

(iv) Six-course 'ud: Two kinds of six-course 'ud exist: one has six pairs of strings, the other five pairs with an additional low string. The first was found by Jules Rouanet in North Africa towards the end of the last century; tuned inclusively it has since disappeared except in Libya,
where it is still made but with different tuning. A similar instrument, found in Syria, is tuned C-E-A-d-g-c’. The instrument with five double strings and a single low one, however, is becoming increasingly usual from Istanbul to Baghdad. It has become common to place the additional string after the highest (or chanterelle). Its pitch is at the choice of the player; no rule is laid down. The presence of the extra string endows the instrument with a wider range and increased ease of playing, allowing the performer to run effortlessly through three octaves. The sixth course is also coming to be used as an intermittent drone, a new phenomenon.

(v) Seven-course ‘ud: Seven-course models, based on a complex system of tuning, were found in Egypt and Lebanon in the 19th century but have not been seen since 1900. There is one exception: the Tunisian, Fawzl Sayib, is a living master of the seven-course instrument in the six pairs and one low arrangement. A feature of this ‘ud was that it reversed the arrangement of strings, placing first the high and then the low strings on the neck from left to right. According to Mikha’il Mushaqa (1800-88), only four of the seven courses were played, the lowest course (jaharka) and the two highest (busalik and nihuft) being unused in performance.

5. Performance and Aesthetics

The strings of the contemporary ‘ud are twisted, or spirally reinforced. They are plucked with a plectrum (riși, ‘quill’) made of an eagle’s feather and held between thumb and index finger; a shell or plastic plectrum may be used instead. The technique calls for suppleness of the wrist as the plectrum strikes the strings in a simple fall, or combines risings and fallings. Certain teachers, such as Tawfiq al-Sabbagh, claim that a technique similar to the mandolin tremolo was once used. This may have disappeared, but another technique spread rapidly: the basm (‘imprint’), which was invented by the Egyptian Ahmad al-Laythi (1816-1913). It consists of substituting for the plectrum touches of the fingers of the left hand, plucking the strings, and introduces light and shade into the execution. Munir Bashir (Iraq) extended the technique by using the right hand too; he has made it one of the canons of present-day aesthetics of the ‘ud.

There are two schools or conceptions of performance. The first, or ‘Ottoman’, takes as its principle the ornamentation of the sound, produced by delicate glissandos of the fingers and slight vibratos. The touch of the plectrum on the string sets off a vibration which, in turn, gives rise to an effect of resonance, volume and controlled intensity. The plectrum does not interfere with the resulting sound. This produces an intimate style of playing, making the interiorized ‘ud a path to meditation. This approach was first promoted in Istanbul by Ali Rifat Cagatay (1867-1935) and Nevres Bey (1873-1937), then by Refik Tal'at Alpman (1894-1947) and Cinucen Tanrikorur (b 1938). It spread to Aleppo (Nash’at Bey, d c1930, and ‘Abd al-Rahman Jabaqji, b 1931), then was developed in Baghdad by Salman Shukur (b 1921), Jamil Bashir (1925-77) and Munir Bashir (b 1930). The last-named is the best-known contemporary ‘ud player; he has provided it with an instrumental repertory, the basis for recitals, eliminating its ancient association with song.

The second aesthetic approach is Egyptian. The volume is amplified by firm strokes of the plectrum, which makes the strings resonate; the result is a curiously dulled sound, akin to the nasal effect of Egyptian song. This calls for virtuosity in performance, which is conceived of as an exteriorizing factor. The finest proponents of this school have been Safar ‘Ali (1884-1962), Muhammad al-Qassabji (1898-1966) and Farid al-Atrash (1907-75), who, despite his melodramatic style, breathed a new vitality into the instrument. A synthesis of these two styles is taking place in Somalia, where the manner of performance combines extensive glissandos with the sonorous impact of the plectrum; the outstanding proponents of this style are Abdullahi Qarshe and ‘Umar Dhule.
6. Study of the 'ud

With the appearance of new problems of theory, such as the 19th-century division of the octave into 24 quarter-tones, the 'ud has entered a new phase. In the past it was not an ideal instrument for theoretical research, unlike the tanbur: 'The 'ud allows of theoretical demonstrations, but in an imperfect manner' (Farabi). However, as the tanbur fell into disuse among Arabs during the 19th century, the 'ud was substituted for theoretical reference. The present-day tendency towards a standardized teaching method based on a Western approach tries first to resolve the problems created by the use of microintervals not provided for in Western treatises, and second to produce teaching manuals adapted to the instrument's evolution. The earliest such course to be published, in 1903, was by the Egyptian Muhammad Dhakir Bey (1836-1906): *Tuhfat al-maw'ud bi ta'lim al-'ud* ('The promise of the treasure, or the teaching of the 'ud'). Since then, various manuals have tried to 'democratize' the instrument, placing it within everyone's reach and putting forward teaching rules that claim to be universal. They offer instruction in solfeggio and Western theory and give exercises on occidental or oriental modes. They all use Western notation, with modifications of key signature, and place before the student a large repertory, mostly of the 19th and 20th centuries. Notable among proponents of this method of teaching was Muhiddin Targan (1892-1967). This trend has been opposed, in the name of the elementary aesthetic rules of traditional Arab music (i.e. creative liberty and the development of the modal sense). But certain masters of the 'ud owe something to these newer manuals. Two are outstanding for their instructional value, those by Fu'ad Mahfuz of Damascus (1960), which effects a synthesis between theoretical and practical, and 'Abd al-Rahman al-Jabaqi of Aleppo (1982), the first accompanied by audio- and video-cassettes. In any event, it is still too early to analyse the consequences of written, standardized tuition in an instrument whose technique has been passed down individually and orally from master to pupil for over a thousand years.

Getting Started on the Oud

This part of the website is aimed at the newcomer to the oud, who may have just bought an instrument and needs to restring it, get it in tune and start playing. I have divided the material into the following sections, and clicking on each will take you to the corresponding page:

- Parts of the Oud
- Stringing the Oud
- Tuning the Oud
- Holding the Oud
- Plucking the Strings

Parts of the Oud

The oud consists of a large pear-shaped body (or soundbox) attached to a short neck. The front (or face) of the oud's body is flat and contains one or more soundholes, whereas the back is bowl-shaped and constructed from around twenty thin strips of wood known as 'ribs'. Strings are attached to a bridge on the face of the oud and pass over a nut at the other end of the instrument. Tuning is achieved by turning a series of pegs contained in a pegbox, which is set almost at a right angle to the neck of the oud. Notes are produced by stopping the strings at some point on the front of the neck - this area is also known as the fingerboard. The main parts of the oud are shown in the diagram below:

[The above diagram was adapted from Mutlu Torun's book "Ud Metodu (Gelenekle Geleceke)"]

Stringing the Oud
One end of each string is attached to the bridge of the oud by one of the three methods shown in the diagram below. Passing the string underneath itself in this manner is enough to ensure that it does not slip when it is under tension.

The other end of each string is then attached to the corresponding tuning peg on the head of the oud. The tuning peg is then turned to tighten the string. The order in which the strings are attached to the bridge and the tuning pegs is shown in the diagram below:

[The diagrams on this page were adapted from Mutlu Torun's book "Ud Metodu (Gelenekle Geleceke)"]
Tuning the Oud

Once the oud has been strung, you need to decide on which tuning to use. This will depend on the type of music you want to play, and may be influenced by a famous oud player or the recommendations of your oud teacher. I shall outline some common tunings used in the Arab and Turkish schools of oud playing, and then discuss the tunings selected by some great oud players.

I have used the following pitch notation below. Each pitch is labelled with a name (C, D, E, etc.) and an octave number as a subscript (1, 2, 3, etc.). Higher numbers indicate higher octaves, and in this notation it is conventional to write middle C as C_4.

Arab tuning

The most common Arab tuning is (low to high):

\[ D_2 \ G_2 \ A_2 \ D_3 \ G_3 \ C_4 \]

The use of F_2 instead of G_2 is also very popular, and the 6th string is often tuned to C_2 for *maqamat* based on C. Alternatively, many players from the Iraqi school prefer to place the 6th string next to the 1st string, e.g. Munir Bashir and Jamil Ghanim both used the tuning C_3D_3G_3C_4E_3F_2 and Jamil Bashir used the tuning D_3E_3A_3D_4G_4G_2.

When reading Arab or Western sheet music you should bear in mind that the oud (like the guitar) sounds an octave lower than it is written. This means, for example, that if the highest string is tuned to C_4 (middle C) it will be notated as follows:

![Arab tuning notation](image)

Turkish tuning

One of the most common Turkish tunings, also known as the 'Bolahenk' tuning, is (low to high):

\[ C_2 \ F_2 \ B_2 \ E_3 \ A_3 \ D_4 \]

A variation on this tuning was used by Serif Muhiddin Targan: D_2A_2B_2E_2A_3D_4.

Things become complicated when it comes to Turkish sheet music. Firstly, Turkish music is conventionally written a fourth higher than Western music, so that middle C on a Western sheet will appear as the F above middle C on a Turkish sheet. Secondly, you have to remember that the oud sounds an octave lower than it is written in Western sheet music. The combined result is that if the highest string of the oud (1st string) is tuned to D_4 (D above middle C) as in the Bolahenck tuning above, it will be notated on a Turkish sheet as follows:

![Turkish tuning notation](image)
Holding the Oud

Although each player has their own preferences, a good example of how to hold the oud is shown in the diagram below. To ensure that the oud is at a comfortable height, many players use a footstool of the type used by classical guitarists, but you could simply cross one leg over the other. The face of the oud should be vertical and the strings/neck horizontal.

Plucking the Strings

The strings of the oud were traditionally plucked using an eagle's feather, known in the Arab world as a *rishā* (and in Turkey as a *mizrap*). However, eagle feathers are not readily available nowadays, so modern players have looked to other materials from which to fashion a pick. Many professional players use a *rishā* made from horn (of a cow, for example), which is softened first by being soaked in oil. Plastic *rishas* (see picture below) are also very popular with beginner and professional alike due to their cheapness and ready availability. If all else fails, you can always cut out your own *rishā* from a plastic bottle!
The *rishha* is held between the fingers as shown in the photos below, with around 1cm protruding. The strings of the oud are struck with the tip of the *rishha* - downstrokes, upstrokes or a mixture of both are used, depending on the player's preference or the desired effect (downstrokes tend to produce more volume and a sharper 'attack'). Rapid alternation between downstrokes and upstrokes is known as *tremolo*. A good *rishha* technique is one of the main signs of an accomplished oud player, so it is worth spending time on this aspect of your playing.
Music Theory for the Oud

The key components of Middle Eastern music are melody and harmony. Harmony in the Western sense does not exist, and so the development of melodic and rhythmic structure has been highly refined. The basis of melodic structure is called the maqam (plural maqamat) in Arabic and makam (plural makamlar) in Turkish, and a particular rhythmic pattern is known as the iqa’ (plural iqa’at) in Arabic and usul (plural usuller) in Turkish. The maqam (makam) is not just a scale - it consists of structural elements such as key phrases and important tone centres, and has a distinct ‘path’. In this respect it is quite similar to the Indian raga, to which it is distantly related.

Although much emphasis is placed on the differences between Arab and Turkish music, the two are in fact very similar and derive from the same Ottoman roots (with certain local characteristics). They share a common repertoire, and the maqams, rhythms and musical forms used are very similar. The main difference lies in the notation used to write the music down on paper, but as the tradition is an oral one this is of superficial importance. I have decided, however, to keep the distinction between Arab and Turkish music on this page and subsequent ones as this corresponds to current practice in relation to the oud.

- **Music notation**
- **Arab iqa’at**
- **Turkish usuller**
- **Arab musical forms**
- **Turkish musical forms**
- **Turkish makamlar**
- **Arab maqamat**

**Music Notation**
When listening to Arab or Turkish music, one of the first things you may notice is that the pitches of some of the notes do not correspond to those in Western music. The oud is the perfect instrument for playing such notes as the musician is not constrained by fixed frets as on the guitar, for example. However, this leads to further complications as not all musicians may agree on the exact pitch at which a note should be played. When attempting to write the music down on paper, questions of notation are bound to arise.

In Western music a system known as equal temperament is used, which means that an F sharp has the same pitch as a G flat, for example - the octave is therefore divided into 12 notes a semitone apart. In Middle Eastern music, however, notes may be sharpened or flattened by varying degrees, which often do not correspond to multiples of a semitone. A simplification which is often used is the idea of the 'quarter-tone', or half a semitone, but this is just an approximation to what is actually heard. The situation is very complicated and several solutions have been proposed in order to write down such music - these are outlined below.

The first method, which is often seen in Arab oud books, involves dividing the octave into 24 quarter-tones mentioned above (click here for a table showing the names of the notes in Arabic). Although not all of these notes are actually used in practice, it does enable the music to be notated. The following symbols are used to indicate the sharpening and flattening of notes by multiples of quarter-tones, and I have used them in my section on Arabic maqamat:

<table>
<thead>
<tr>
<th>Sharp</th>
<th>Flat</th>
</tr>
</thead>
<tbody>
<tr>
<td>one quarter</td>
<td>¹</td>
</tr>
<tr>
<td>one half</td>
<td>⁹</td>
</tr>
<tr>
<td>three quarters</td>
<td>⁸</td>
</tr>
</tbody>
</table>

The second method is more closely associated with the Turkish tradition, and involves dividing the octave into 53 divisions or commas (click here for a table showing the names of the notes in Turkish). The following symbols are used to indicate the different degrees by which a note may be sharpened or flattened, and I have used them in my section on Turkish makamlar:

<table>
<thead>
<tr>
<th>Sharp</th>
<th>Flat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 comma</td>
<td>¹</td>
</tr>
<tr>
<td>4 commas</td>
<td>⁹</td>
</tr>
<tr>
<td>5 commas</td>
<td>³</td>
</tr>
<tr>
<td>8 commas</td>
<td>⁸</td>
</tr>
</tbody>
</table>

For both systems you should bear in mind that the notation is only ever a guide to the actual notes you would hear played: the symbols really only 'represent' the notes rather than fix an specific pitch for them. As mentioned above, the fretless nature of the oud allows the musician considerable choice in the pitch of each note, but even fretted instruments such as
the tanbur have moveable frets to facilitate this choice. The only way to ensure that you are hitting the 'correct' notes is to listen to recordings or seek the advice of a good teacher.

**Arab Iqa'at**

The rhythmic modes of Arab music are known as iqa'at (singular iqa'), or sometimes as awzan (singular wazn). They consist of regularly repeating sequences of beats, with each beat represented by one of two different types of drumstroke: the 'dum' stroke is produced at the centre of the drum and the 'tak' stroke at its edge. The time signature at the beginning of the pattern consists of two numbers: the bottom number indicates the relative length of each beat and the top number indicates how many of these beats make up the repeating unit of the pattern. Some of the more common iqa'at are listed below, together with some of the rhythmic patterns associated with them.

**Sama'i Darij (Yuruk Sama')**

These two terms seem to be fairly interchangeable and refer to very popular 3/4 or 6/8 rhythms that are often used for the fourth khana in the performance of a sama'i. The word darij means 'popular' or 'common' in Arabic, which reflects the widespread use of this rhythm, whereas yuruk is Turkish for 'fast'.

```
\[ \frac{2}{4} \quad \text{dum} \quad \text{tak} \quad \text{tak} \quad \frac{3}{4} \quad \text{dum} \quad \text{tak} \]
```

**Masmudi Saghir**

Masmudi saghir ('small') is half the length of masmudi kabir ('big'), and is widespread throughout the Arab world:

```
\[ \frac{6}{8} \quad \text{dum} \quad \text{tak} \quad \text{tak} \quad \text{dum} \quad \text{tak} \]
```

**Nawakht**

The word nawakht comes from the Persian verb 'to beat'.

```
\[ \frac{4}{4} \quad \text{dum} \quad \text{tak} \]
```
Dawr Hindi

This is a very old pattern whose name means 'Indian cycle':

Masmudi Kabir

This pattern is twice the length of *masmudi saghir*, and there are two very similar versions which may be encountered:

Aqsaq

The name of this mode comes from the Turkish word for 'limping', which reflects its Turkish origins. The two main forms which may be encountered are shown below, and in the first of these, the rest on the sixth beat can also be replaced with a 'dum'.

Sama'i Thaqil
This is the standard rhythm used to accompany a sama’i, and the word thaqil means 'heavy' in Arabic. The two main forms are shown below - the first is the most common, although the second may also be encountered:

### Jurjina (Gurgina)

This an Armenian rhythm which has become very popular in the Arab world. Note that in Egypt it is pronounced gurgina.

### Awis

The word awis means 'difficult' in Arabic and may refer to the 11/4 time signature, which is not that common in Arab music. Note that the pattern begins on a 'tak'.

### Mudawwar

Three common variations of this rhythm are shown below. The first is called mudawwar masri (or often just mudawwar - mudawwar means 'round' or 'circular' and masri means 'Egyptian'). The second form is known as mudawwar halabi (where halabi means 'originating from Aleppo' in Arabic), and the third is called mudawwar shami (where shami means 'Syrian').
Murabba

The word *murabba* means 'fourfold' or 'square' in Arabic. It is often used to accompany a *muwashshah*, which is a vocal genre based on poetry.

Zarafat

This is a popular Arab dance rhythm.

Muhajjar

This mode, and its variations, are distinguished by the three 'dum' strokes at the beginning. Also used to accompany a *muwashshah*. 
Mukhammas

There are several different versions of this mode, one of which is shown below. The word *mukhammas* means 'fivefold' or 'pentagonal'. However, it can also refer to a type of Persian poetry with Sufi connections based on a pentameter, so it is possible that this rhythm was used to accompany such poetry.

![Mukhammas Rhythm](image)

Awfar

This is an old Persian pattern. The word *awfar* means 'more abundant' in Arabic.

![Awfar Rhythm](image)

Turkish Usuller

The rhythmic modes of Turkish music are known as *usuller* (singular *usul*). A composition will generally have a particular *usul* associated with it, and on a piece of Turkish sheet music this is indicated (together with the *makam*) below the title. An *usul* consists of regularly repeating sequence of beats, with each beat represented by one of two different types of drumstroke: the 'dum' stroke is produced at the centre of the drum and the 'tek' stroke at its edge. The time signature at the beginning of the pattern consists of two numbers: the bottom number indicates the relative length of each beat and the top number indicates how many of these beats make up the repeating unit of the pattern. Some of the more common *usuller* are listed below, together with some of the rhythmic patterns associated with them.

Nim Sofyan

![Nim Sofyan Rhythm](image)

Semai

![Semai Rhythm](image)
Arab Musical Forms

The most popular forms in Arab music have their roots in the Ottoman period, and their names are often Arabic versions of the original Turkish (e.g. Arabic *bashraf* from Turkish *pesrev*). In fact, most of the well-known pieces in the Arab classical repertoire were written by Ottoman composers, and the most famous pieces are referred to using the composer's name, e.g. *Samai Tatyos* (after Tatyos Efendi). Since the end of Ottoman rule these pieces have remained popular throughout the Arab world, although Arab musicians often perform them quite differently to their Turkish counterparts. The most frequently encountered instrumental forms are described below.
The Semai

The Arab samai is equivalent to the Turkish saz semai, and is made up of four sections called khanat (sing. khana), each of which is followed by a refrain (taslim). The first three khanat are in the samai thaqil rhythm (10/8) and the fourth is in samai darij (3/4 or 6/8), although each taslim remains in samai thaqil rhythm. A samai will be based on a particular maqam, and the melodic progression of the piece will follow loosely the sayr of the maqam. The melody will begin in the 'home' maqam for the first khana, introduce modulation to related maqamat in the second khana, move to the upper register of the scale in the third khana, and then return to the initial theme in the final khana.

The Bashraf

As mentioned above, the Arab bashraf derives from the Turkish pesrev. The bashraf is very similar in structure to the samai and also consists of four khanat, each followed by a taslim. The main difference is that the rhythmic structure of the bashraf is generally more complex (with a rhythmic grouping in 'twos' rather than a mixture of 'twos' and 'threes') and the same rhythm is preserved throughout the piece. As with the samai, the bashraf is based on a particular maqam and its melody follows the sayr of that maqam (including modulations).

The Longa

The longa is an instrumental form in a 2/4 rhythm consisting of several khanat, each followed by a taslim. Note, however, that the last khana is normally in a 3/4 rhythm, as in the case of a samai.

The Tahmilah

The tahmilah is an instrumental piece made up of alternating sections played by the ensemble and solo instruments. The parts played by the ensemble are relatively fixed compositions, whereas the solo parts are mostly improvised, providing plenty of room for individual expression.

The Doulab

This is a short instrumental prelude, normally performed in unison by an ensemble, with the aim of presenting the basic outline of a particular maqam before subsequent elaboration in a longer piece of music.

The Taqsim

The taqsim is a semi-improvised form (usually without rhythmic accompaniment) that demonstrates perfectly the structure of a particular maqam and its relation to similar maqamat. Its performance is a highly skilled art and relies on an intimate knowledge of the structure of the different maqamat and the relationships between them. During a taqsim the performer will follow the general sayr of the maqam, emphasising important tones and using key melodic phrases, and will usually modulate to several related maqamat before returning to the original maqam.

[Note: For more detailed information on a wide range of instrumental and vocal forms in Arab music, including those listed above, visit the comprehensive Arabic Maqam World website.]
Turkish Musical Forms

There are many different instrumental and vocal forms in Turkish music, and the structure and performance rules of these as we know them today were laid down during the Ottoman period. I shall restrict myself to listing the most common instrumental forms below, as these are the most likely to be encountered when listening to performances or recordings of Turkish oud.

The Saz Semaisi

A saz semaisi traditionally consists of four movements, and each movement (hane) is followed by a refrain (teslim). The usul, or rhythmic pattern, that accompanies the saz semaisi must always be a semai rhythm: the first three movements and all four refrains are normally in a 10/8 rhythm (such as aksak semai), whereas the fourth hane is in a 6/8 or 6/4 rhythm (such as yuruk semai).

The Pesrev

The Turkish pesrev is very similar to the saz semaisi, in that it consists of four movements, each followed by a refrain. However, all four sections will normally be in the same rhythm, and the choice of usul to accompany the pesrev is not restricted as in the case of the saz semaisi.

The Taksim

The taksim is a semi-improvised form that aims to demonstrate the structure of a particular makam. Each taksim must follow the general seyir of the makam, and can illustrate the relationship with similar makamlar via suitable modulations. The taksim was originally used as a prelude to a composition such as a pesrev, and its purpose was twofold: to introduce the audience to the makam of the following piece and to demonstrate the skill and virtuosity of the performer.
Turkish Makamlar

The Turkish *makam* is a compositional device which forms the basis for the melodic development of a piece of music and also provides some guidelines for its performance. The importance of the *makam* is evident from the fact that classical Turkish compositions are named and classified according to their *makam*, e.g. *Rast pesrev, Hicaz saz semaisi*. The traditional Turkish performance program, known as the *fasil*, would normally consist of a number of different pieces from the classical repertoire based on the same *makam*. However, the ideal showcase for the structure of a *makam* is the instrumental *taksim* that often precedes a *pesrev*, for example. The *taksim* is a semi-improvised form in which the performer introduces the *makam* of the subsequent composition, and may also modulate to several related *makamlar* before returning to the original one. This is a highly skilled art and relies on an intimate knowledge of the structure of the different *makamlar* and the relationships between them, something which can only be learned after many years of study and experience.

A *makam* scale can be thought of as being constructed from simple building blocks, each consisting of four or five notes (a tetrachord or pentachord). Each tetrachord or pentachord has a characteristic pattern of intervals and is usually based on a particular note. When two or more tetrachords/pentachords are combined to form the scale of a *makam*, the *makam* is often named after the lowest (or most important) of these. Clicking on the link below will reveal a list of the main tetrachords and pentachords used to construct the Turkish *makamlar*, which may also be transposed to start on a different base note. Note that adding a whole tone to the top of a particular tetrachords produces a pentachord of the same name.

- **Tetrachords/pentachords used to construct makamlar**

There are obviously thousands of ways to combine different tetrachords and pentachords, but only a small proportion of these combinations are used in actual *makamlar*. Around a hundred *makamlar* are currently in use, although some are much more common than others.

- **Common makamlar**

Each *makam* has its own particular progression or *seyir* which governs its performance. The *seyir* has a beginning, middle and end, as well as points of rest centred around particular notes along the way. These important notes include the *karar* or *durak* (tonic/final), the *tiz durak* (an octave above the tonic), the *guclu* (dominant), the *giris* (entry note), and *muvakkat kalislar* (temporary stopping points). A number of other tones are also important in shaping the particular flavour of the *makam* and function as additional 'stopping points': the *yeden* (leading tone) and the *asma karar* (suspended cadence). These are very important tones and convey a feeling of expectation. Another key feature of a particular *makam* is the melodic direction of its *seyir*, which is determined by the relative position of the *giris* and the *qarar*. The three different types of melodic direction are ascending (*cikici*), descending (*inici*) and ascending-descending (*inici-cikici*). In an ascending *seyir* the melody starts around the *karar*, moves up to the *guclu* and then returns to the *karar* again. In a descending *seyir* the melody starts around the *tiz durak*, and then descends via the *guclu* to the *karar*. Finally, in an ascending-descending *seyir* the melody starts around the *guclu*, moves above and below this note before returning to it, and then descends to the *karar*.

Tetrachords/Pentachords

The list below shows the tetrachords and pentachords used to construct the Turkish *makamlar*. Note that adding a whole tone to the top of a particular tetrachords produces a pentachord of the same name.
Each of the following pages includes a fingering diagram, which shows where the notes of the *makam* are played on the neck of the oud. The oud is viewed from above, so that the uppermost string corresponds to the highest string on the oud (the 6th string of the oud is not shown as the tuning of this string may vary depending on the *makam*). The tuning I have used is the standard Turkish tuning of B-E-A-D-G (low to high). Black ovals indicate the 'base' note of the *makam*, white ovals indicate the other notes, and red ovals show notes that appear in an alternate form of the *makam* where indicated. Ovals to the left of the nut indicate that the note produced by the corresponding 'open' string is also part of the scale. The roman numerals along the top of the neck indicate the standard positions on the neck used in oud methods (and show where the notes C,D,E etc. of the Western scale fall) - the separation in commas between these positions is marked below the neck. The vertical dotted lines indicate 1 comma either side of these standard positions.

*Example - Rast Makam:*
Common Makamlar

A list of some of the most popular makamlar is given below together with their associated seyr (in brackets) - just click on each makam for more detailed information. For a key to the oud fingering diagrams that appear on each maqam page, see below. The makamlar are classified as basic, transposed or compound. A transposed makam contains the same interval structure as one of the basic makamlar but starts on a different base note. A compound makam is constructed from two or more simpler makamlar.

Basic Makamlar

- Cargah Makam (ascending)
- Buselik Makam (ascending-descending)
- Rast Makam (ascending)
- Ussak Makam (ascending)
- Hicaz Makam (ascending-descending)
- Humayun Makam (ascending-descending)
- Uzzal Makam (ascending-descending)
- Zirguleli Hicaz Makam (ascending-descending)
- Neva Makam (ascending-descending)
- Huseyni Makam (ascending-descending)
- Karcigar Makam (ascending-descending)
- Suz-nak Makam (ascending-descending)
- Kurdi Makam (ascending)
- Bayati Makam (ascending-descending)
- Muhayyer Makam (descending)
- Tahir Makam (descending)
- Sehnaz Buselik Makam (descending)

Transposed Makamlar

- Acem Asiran Makam (descending)
- Mahur Makam (descending)
- Sultaniyegah Makam (descending)
- Nihavend Makam (ascending-descending)
- Kurdili Hicazkar Makam (descending)
- Zirguleli Suz-nak Makam (ascending-descending)
- Sedaraban Makam (descending)
- Evcara Makam (descending)
- Hicazkar Makam (descending)
- Suzoi Dil Makam (descending)

Compound Makamlar

- Ferahfeza Makam (descending)
- Irak Makam (ascending)
- Evic Makam (descending)
- Bestenigar Makam (ascending-descending)
- Ferahnak Makam (descending)
- Sevk-Elza Makam (descending)
- Nikriz Makam (ascending-descending)
- Nev'eser Makam (ascending-descending)
- Suz-i Dilara Makam (ascending-descending)
- Sazkar Makam (ascending)
- Zavil Makam (descending)
• Acem Makam (descending)
• Muhayyer Kurdi Makam (descending)
• Acem Kurdi Makam (descending)
• Gerdaniye Makam (descending)
• Hisar Buseilik Makam (ascending-descending)
• Saba Makam (ascending)
• Saba Zemzeme Makam (ascending-descending)
• Nisaburek Makam (ascending-descending)
• Isfahan Makam (ascending-descending)
• Bayati Araban Makam (descending)
• Tahir Buseilik Makam (descending)
• Sehnaz Makam (descending)
• Dugah Makam (ascending)
• Huzzam Makam (ascending-descending)
• Segah Makam (ascending)
• Mustear Makam (ascending)
Cargah Makam

The scale of this *makam* has the same intervallic structure as the Western C major scale, and has two forms an octave apart:
Buselik Makam

There are two forms of the Buselik makam which may be encountered, one of which has a G sharp in the upper part of the scale (Hicaz tetrachord) and the other a G natural (Kurdi tetrachord) - note, however, that the leading tone is always G sharp. Often the Hicaz tetrachord will be used in ascending and the Kurdi tetrachord in descending.

If the scale is extended beyond the octave the following structures are used:

The full two octaves are shown in the fingering diagram below, where the red ovals indicate the optional G natural as mentioned:

A Nikriz pentachord can also be used in the descending part of the scale, and this is shown below with the corresponding fingering diagram:
Rast Makam

Sometimes the F sharp (Rast tetrachord) is replaced by an F natural (Buselik tetrachord) in the descending part of the scale, which gives the so-called Acemli Rast scale:

If the scale is extended beyond the octave the following structures are used:

The full two octaves are shown in the fingering diagram below, where the red ovals indicate the optional F natural as mentioned:
Ussak Makam

The second note of the scale (Segah) is written as 1 comma flat, but is actually played 2-3 commas flat in practice. If the scale is extended beyond the octave the following structures are used:

The full two octaves are shown in the fingering diagram below:
Hicaz Makam

Sometimes the F sharp (Rast pentachord) is replaced by an F natural (Buselik pentachord) in the descending part of the scale:

If the scale is extended beyond the octave the following structures are used:

The full two octaves are shown in the fingering diagram below, where the red ovals indicate the optional F natural as mentioned:
Humayun Makam

Sometimes the F (Buselik pentachord) is replaced by an F sharp (Rast pentachord) in the descending part of the scale:

This optional F sharp is shown by a red oval on the fingering diagram below:
Uzzal Makam

If the scale is extended above the octave, then either a Hicaz or Buzelik pentachord is used:

The B (Tiz Buzelik) and C (Tiz Cargah) in the Buzelik pentachord are shown by red ovals on the fingering diagram below, to distinguish them from the B flat (Dik Sumbule) and C sharp (Tiz Nim Hicaz) in the Hicaz pentachord:
Zirguleli Hicaz Makam

Note that the F is usually sharpened by one comma as indicated. If the scale is extended above the octave a Buselik pentachord is used above the Hicaz tetrachord:
Neva Makam

Sometimes the F sharp (Rast pentachord) is replaced by an F natural (Buselik pentachord) in the descending part of the scale:

This optional F natural is shown by a red oval on the fingering diagram below:
Huseyni Makam

Sometimes the F sharp (Ussak tetrachord) is replaced by an F natural (Kurdi tetrachord) in the descending part of the scale:

If the scale is extended above the octave the following structure is used:

The optional F natural is shown by red ovals in the fingering diagram below:
Karcigar Makam

If the scale is extended above the octave then either of the following two structures can be used - either the straightforward addition of an Ussak tetrachord or the overlapping of a Buselik pentachord with the Hicaz pentachord:

The B flattened by five commas (Kurdi) that appears in the Buselik pentachord is shown by red ovals in the fingering diagram below to distinguish it from the B flat (Segah) in the Ussak tetrachord:
Suz-nak Makam

If the scale is extended above the octave a Buselik pentachord is used above the Hicaz tetrachord:
Bayati Makam

The scale of this *makam* is identical to that of Ussak, but the difference lies in the *seyir*: Bayati has an ascending-descending *seyir*, whereas Ussak has an ascending *seyir*.

If the scale is extended above the octave a Kurdi tetrachord is used above the Buselik pentachord:
Muhayyer Makam

The scale of this *makam* is identical to that of Huseyni, but the difference lies in the *seyir*: Muhayyer has a descending *seyir*, whereas Huseyni has an ascending-descending *seyir*.

If the scale is extended above the octave a Buselik pentachord is used above the Ussak tetrachord:
Tahir Makam

The scale of this *makam* is identical to that of Neva, but the difference lies in the *seyir*: Tahir has a descending *seyir*, whereas Neva has an ascending-descending *seyir*.

If the scale is extended above the octave a Buselik tetrachord is used above the Rast pentachord:
Sehnaz Buseilik Makam

The scale of this *makam* is identical to that of Buseilik (with G sharp), but the difference lies in the *seyir*: Sehnaz Buseilik has a descending *seyir*, whereas Buseilik has an ascending-descending *seyir*.

![Musical notation showing the comparison between Buseilik and Hicaz tetrachords and pentachords.](image)

If the scale is extended above the octave a Buseilik pentachord is used above the Hicaz tetrachord:
Acem Asiran Makam

This is essentially a Cargah scale on F (Acem Asiran). If the scale is extended above the octave a Cargah pentachord is used above the Cargah tetrachord:
Mahur Makam

This is essentially a Cargah scale on G (Rast). If the scale is extended above the octave a Cargah pentachord is used above the Cargah tetrachord:
Sultaniyegah Makam

This is essentially a Buselik scale of the 1st type on D (Yegah). If the scale is extended to two octaves a Buselik pentachord and a Kurdi tetrachord are used, which gives a Buselik scale of the 2nd type on D (Neva):
Nihavend Makam

This is essentially a Buselik scale of the 2nd type on G (Rast). If the scale is extended beyond the octave the following structures are used:
Kurdili Hicazkar Makam

This is essentially a Kurdi scale on G (Rast). If the scale is extended above the octave, then either a Kurdi or Hicaz tetrachord is used:

The A flattened by four commas (Sehnaz) and the B flattened by 1 comma (Tiz Segah) that appear in the Hicaz tetrachord are shown by red ovals in the fingering diagram below to distinguish them from the A flat (Nim Sehnaz) and B flat (Sumbule) in the Kurdi tetrachord:

The entire scale of Hicazkar makam can also be used within Kurdili Hicazkar makam:
There are two other structures which may be used. The first of these is a descending Bayati scale on D (Neva):

The second is an overlapping (descending) combination of a Rast pentachord on C (Cargah) and an Ussak tetrachord on A (Dugah), which is also known as Arazbar makam:
Zirguleli Suz-nak Makam

This is essentially a Zirguleli Hicaz scale on G (Rast). If the scale is extended above the octave, then either a Hicaz or Buselik pentachord is used:

The A (Muhayyer) and B flattened by five commas (Sumbule) that appear in the Buselik pentachord are shown by red ovals in the fingering diagram below to distinguish them from the A flat (Sehnaz) and B flat (Tiz Segah) in the Hicaz tetrachord:
Sedaraban Makam

This is essentially a Zirguleli Hicaz scale on D (Yegah). If the scale is extended above the octave, then either a Zirguleli Hicaz or Humayun scale is used on Neva:

The B flattened by five commas (Sumbule) and C (Tiz Cargah) that appear in the Buselik pentachord are shown by red ovals in the fingering diagram below to distinguish them from the B flat (Dik Sumbule) and C sharp (Tiz Nim Hicaz) in the Hicaz tetrachord:
Evcara Makam

This is essentially a Zirguleli Hijaz scale on F sharp (Irak). If the scale is extended above the octave, then either a Segah or Mustear pentachord is used:

The G sharpened by four commas (Nim Sehnaz) that appears in the Mustear pentachord is shown by a red oval in the fingering diagram below to distinguish it from the G (Gerdaniye) in the Segah pentachord:
Hicazkar Makam

This is essentially a Zirguleli Hicaz scale on G (Rast). If the scale is extended above the octave, then either a Hicaz or Buselik pentachord is used:

The A (Muhayyer) and B flattened by five commas (Sumbule) that appear in the Buselik pentachord are shown by red ovals in the fingering diagram below to distinguish them from the A flat (Sehnaz) and B flat (Tiz Segah) in the Hicaz tetrachord:
Suz-i Dil Makam

This is essentially a Zirguleli Hicaz scale on E (Huseyni Asiran). If the scale is extended above the octave a further Hicaz tetrachord is used:

A Buserlik pentachord on A (Dugah) can also be used in the descending part of the scale, and this is shown below with the corresponding fingering diagram:
Ferahfeza Makam

This *makam* is a combination of the a Buselik scale of the 2nd type on D (Yekah) and a Cargah scale on F (Acem Asiran):

Sometimes the B flattened by five commas (Kurdi) is replaced by B flattened by one comma (Segah), in allusion to Bayati *makam* - this is shown by red ovals on the fingering diagram at the bottom of the page. If the Ferahfeza scale is extended upwards a Cargah pentachord is used above the Cargah tetrachord:
Irak Makam

If the scale is extended beyond the octave the following structures are used:

The F (Acem) in the Buseilik pentachord is shown by a red oval on the fingering diagram below to distinguish it from the F sharp (Evic) in the original Irak scale:
Evic Makam

This makam is also known as Evc and is similar to Irak makam, in that it contains Segah and Ussak tetrachords. For comparison purposes, consider the two constituent tetrachords of Irak:

The notes Nim Hicaz and Acem can also be used in Evic makam, and these are shown by red ovals on the fingering diagram below:
The scale of this makam is made up of a Segah tetrachord on F sharp (Irak) overlapping with the lower part of a Saba scale on A (Dugah), and the scale does not contain the octave. Note that the use of the Hicaz pentachord is only an approximation, as in practice the interval between C (Cargah) and D flat (Hicaz) is usually six commas or more.
Ferahnak Makam

This *makam* is made up of a series of overlapping Rast, Hicaz and Ferahnak tetrachords/pentachords. The C (Cargah) which appears in the middle Ferahnak pentachord is shown by a red oval on the fingering diagram below to distinguish it from the C sharp (Nim Hicaz) that appears in the other structures:
Sevk-Efza Makam

This *makam* makes use of the following structures:

1. An Acem Asiran scale

![Acem Asiran scale diagram](image1)

2. A Nikriz pentachord on F (Acem Asiran)

![Nikriz pentachord diagram](image2)
(3) A Zirguleli Hicaz scale on C (Cargah)
Nikriz Makam

If the scale is extended below the octave a Rast tetrachord is used below the Nikriz pentachord.

Sometimes the F sharp (Evic) in the descending part of the scale is replaced by F natural (Acem), which amounts to replacing the Rast tetrachord with a Buselik tetrachord. This optional F natural is shown by a red oval on the fingering diagram at the bottom of the page.
Nev'esor Makam
Suz-i Dilara Makam

This *makam* can be thought of as two overlapping scales:

1. A Mahur scale on G (Rast)

2. A Cargah scale on C (Cargah)

Note that the F sharp (Mahur) in the upper part of the scale can be replaced by F natural (Acem), and this optional F natural is shown by a red oval on the fingering diagram below:
Sazkar Makam

This *makam* makes use of the following structures:

(1) A Rast scale

(2) An Ussak tetrachord on A (Dugah) and a Segah pentachord on B flat (Segah)

The E flat (Dik Hisar) in the Segah pentachord is shown by a red oval on the fingering diagram below to distinguish it from the E (Huseyni) in the Rast scale:
Zavil Makam

This *makam* makes use of the following structures:

(1) A Mahur scale

![Diagram of Mahur scale](image1)

(2) A Nikriz pentachord on G (Rast)

![Diagram of Nikriz pentachord](image2)
Acem Makam

This *makam* makes use of the following overlapping structures:

(1) A Bayati scale

![Bayati scale diagram]

(2) A Cargah pentachord on F (Acem)

![Cargah pentachord diagram]
Muhayyer Kurdi Makam

This *makam* makes use of the following structures:

(1) A Muhayyer scale

![Muhayyer scale diagram]

(2) A Kurdi scale

![Kurdi scale diagram]
(3) A Cargah pentachord on F (Acem)
Acem Kurdi Makam

The scale of this *makam* is the same as that of Kurdi, but with a descending rather than ascending *seyir*:
Gerdaniye Makam

This *makam* makes use of the following structures:

(1) A Rast scale (without leading tone)

(2) A Huseyni scale
Hisar Buseilik Makam

This *makam* makes use of the following structures:

(1) A Zirguleli Hicaz scale on E (Huseyni)

(2) A Huseyni scale with the leading tone changed to G sharp (Nim Zirgule)
(3) A descending Buselik pentachord on A (Dugah)
The scale of this *makam* is made up of a Segah tetrachord on A (Dugah) overlapping with a Zırğuleli Hicaz scale on C (Cargah), and the scale does not contain the octave. Note that the use of the Hicaz pentachord is only an approximation, as in practice the interval between C (Cargah) and D flat (Hicaz) is usually six commas or more. Note that the B flat (Tiz Segah) in the upper Hicaz tetrachord can be replaced with a B natural (Tiz Buselik), and this B natural is shown by a red oval on the fingering diagram below:

A Saba 'pentachord' can also be used in the upper part of the scale, and this is shown on the fingering diagram below.
Saba Zemzeme Makam

This *makam* makes use of the following structures:

(1) A Saba scale

(2) A Kurdi tetrachord on A (Dugah)
Nisaburek Makam

There are two forms of the Nisaburek makam which may be encountered, one of which has a G sharp in the upper part of the scale (Rast tetrachord) and the other a G natural (Buselik tetrachord) - note, however, that the leading tone is always G sharp.

If the scale is extended below the octave the following structure is used:

In the fingering diagram below, the red ovals indicate the optional G natural as mentioned:
Isfahan Makam

This *makam* makes use of the following structures:

(1) A Bayati scale

![Bayati Scale Diagram]

(2) A Rast tetrachord on A (Dugah)

![Rast Tetrachord Diagram]
Bayati Araban Makam

This *makam* makes use of the following structures:

(1) A Bayati scale

(2) A descending Zirguleli Hicaz scale on D (Neva)
(3) A Kurdi tetrachord on A (Muhayyer)
Tahir Buseilik Makam

This makam makes use of the following structures:

(1) A Tahir scale with the leading tone changed to G sharp (Nim Zirgule)

(2) A descending Buseilik pentachord on A (Dugah)

The B natural (Buseilik) in the Buseilik pentachord is shown by a red oval on the fingering diagram below to distinguish it from the B flat (Dik Hicaz) in the Tahir scale:
Sehnaz Makam

This makam makes use of the following structures:

(1) A Hicaz scale

(2) An Uzzal scale

(3) A Humayun scale

In the Humayun scale the F sharp (Evic) of the Hicaz and Uzzal scales is replaced with F natural (Acem), which is shown by a red oval on the fingering diagram below:
(4) A descending Humayun scale on E (Huseyni)
Dugah Makam

This *makam* makes use of the following structures, and it should be noted that the leading tone is G sharp (Nim Zirgule):

(1) A Saba scale (without leading tone)

(2) A Neveser scale on D (Yegah)
(3) A Segah tetrachord on A (Dugah)
Huzzam Makam

Note that the leading tone can be either A sharp (Kurdi) or A natural (Segah). The red oval indicates the optional A natural in the fingering diagram below:

The following variation is also possible, which consists of a Hicaz tetrachord on D (Neva) followed by a Buselik pentachord on G (Gerdaniye):
Segah Makam
**Mustear Makam**

This *makam* makes use of the following structures:

1. A Segah scale

   ![Segah scale diagram](image)

2. A Mustear tetrachord on B flat (Segah)

   ![Mustear tetrachord diagram](image)
(3) A Buselik tetrachord on D (Neva)
Arab Maqamat

The Arab maqam is a compositional device based on a scale with a particular interval pattern, and including a set of 'performance rules' indicating which notes should be emphasised and key melodic patterns. The ideal showcase for the structure of a maqam is an instrumental taqsim, a semi-improvised form in which the performer may modulate to several related maqamat before returning to the original maqam. This is a highly skilled art and relies on an intimate knowledge of the structure of the different maqamat and the relationships between them, something which can only be learned after many years of study and experience.

A maqam scale can be thought of as being constructed from simple building blocks, each consisting of three, four or five notes (a trichord, tetrachord or pentachord). Each building block or jins (plural ajnas has a characteristic pattern of intervals and is usually based on a particular note. When two or more ajnas are combined in a maqam, the maqam is often named after the most important jins. Clicking on the link below will reveal a list of eleven fundamental ajnas, together with related ajnas that start on a different root note but keep the same interval structure. Note that all ajnas are shown as tetrachords, but may be reduced or extended to form the corresponding trichord or pentachord, respectively, when constructing the maqam.

- Ajnas used to construct maqamat

There are obviously thousands of ways to combine different ajnas, but only a small proportion of these combinations are used in actual maqamat. Around a hundred maqamat are currently in use, although some are much more common than others and many are restricted to a particular country or region (for example, several maqamat are unique to Iraq, and this may be due to an earlier Persian influence). The common maqamat may be classified into around eight different groups, which are named after the principal maqam of the group: Rast, Bayati, Sikah, Nihawand, Hijaz, Nawa'athar, Ajam and Kurd. However, I have chosen to group them according to their 'base' note …

- Common maqamat

As mentioned above, during a taqsim the performer will usually start from the 'home' maqam, often beginning with phrases at the bottom of the scale and working up to a higher register. It should be evident from the scale diagrams of the maqamat that several different overlapping ajnas can often be found within the scale, and by changing the pitch of one of the notes in the scale slightly, one can form new ajnas. This is the starting point for modulation to related maqamat - the experienced performer will recognise that certain note sequences, either within the 'home' maqam or slightly modified from it, allude to other related maqamat. Of course, it is possible to keep modulating further and further away from the 'home' maqam, but in practice the performer will gradually and skilfully return to the 'home' maqam to conclude the taqsim. Click on the link below for more details of the rules governing modulation:

- Notes on modulation in Arab music

During the course of the taqsim the performer will follow the general melodic structure of the maqam, known as the sayr, and will stress a number of important notes within the scale. The main tone in the scale is the qarar or tonic/final. The starting pitch of the maqam is called the mabda' (also aghaz), and is not necessarily the same as the qarar. Also important is the ghammaz, which is the most prominent note of the climactic part of the melody, and is often a 5th above the qarar (but may be a 3rd or 4th above it). The term zahir is used both for the note a step below the qarar, i.e. a leading tone, and for a cadential phrase ascending towards the qarar. The zahir may be a semitone, three-quarter tone or whole tone below the qarar, depending on the maqam. The final significant tone is the markaz or medial stop, on which the melody may rest during the maqam.
Ajnas

The table below shows eleven basic *ajnas* (left column) together with a number of other *ajnas* (right column) that are derived from the basic ones - they keep the same interval structure but are based on a different note. For example, a Rast *jins* is based on C, but when it starts on G it becomes a Yekah *jins*.
Saha

Kurd

Sikah

Farahnak

Iraq

Huzzam

Rehat al-Arwh
Common Maqamat

A list of some of the most popular maqamat together with the family to which they belong (in brackets) is given below - just click on each maqam for more detailed information. The maqamat have been listed according to their "base" note, and a reminder of the Arabic names of notes can be found [here](#). For each maqam the scale is shown in terms of the constituent ajnas, and the basic form of each jins has been used (ignoring tranposition). This is followed by a fingering diagram which shows the position of the notes on the neck of the oud (see key below). Where appropriate, alternative structures that may appear within the maqam are also given.

---

**Maqamat based on Yekah (G):**

- Maqam Yekah (Rast family)
- Maqam Farahfaza (Nihawand family)
- Maqam Shadd Araban (Hijaz family)

**Maqamat based on Ashiran (A):**

- Maqam Husayni Ashiran (Bayati family)
- Maqam Suzidil (Hijaz family)

**Maqamat based on Ajam Ashiran (B flat):**

- Maqam Ajam Ashiran (Ajam family)
- Maqam Shawq Afza (Ajam family)

**Maqamat based on Iraq (B quarter flat):**

- Maqam Iraq (Sikah family)
- Maqam Rahat al-Arwah (Sikah family)
- Maqam Farahnak (Sikah family)
- Maqam Basta Nikar (Sikah family)

**Maqamat based on Rast (C):**

- Maqam Rast (Rast family)
- Maqam Suznak (Rast family)
- Maqam Suzidil 'Ara (Hijaz family)
- Maqam Nikriz (Nawa'athar family)
- Maqam Hijaz Kar (Hijaz family)
- Maqam Nihawand (Nihawand family)
- Maqam Nawa'athar (Nawa'athar family)
- Maqam Tarzanuyn (Kurd family)
- Maqam Hijaz Kar Kurd (Kurd family)

**Maqamat based on Dukah (D):**

- Maqam Bayati (Bayati family)
- Maqam Hijaz (Hijaz family)
- Maqam Saba (Bayati family)
- Maqam Kurd (Kurd family)
- Maqam Ushaq Misri (Nihawand family)
- Maqam Busalik (Nihawand family)
- **Maqam Hisar** (Nawa’athar family)

*Maqamat based on Sikah (E quarter flat):*

- **Maqam Sikah** (Sikah family)
- **Maqam Huzzam** (Sikah family)

*Maqamat based on Jahar Kah (F):*

- **Maqam Jahar Kah** (Ajam family)
Maqam Yekah

Alternative structures (ascending):

Maqam Farahfaza
Maqam Shadd Araban

Alternative structures (ascending or descending):

ninawand

ninawand
Maqam Husayni Ashiran

Alternative structure (descending):

\[
\text{bayati \hspace{1cm} bayati \hspace{1cm} bayati \hspace{1cm} bayati}
\]

\[
\text{bayati}
\]

Alternative structure (descending):

\[
\text{nawaather}
\]
Maqam Suzidil

[Diagram of musical notation and fretboard representation]
Maqam Ajam Ashiran

Alternative structure (descending):

hijaz
Maqam Shawq Afza
Maqam Iraq
Maqam Rahat al-Arwah

Alternative structure (descending):

bayati
Maqam Farahnak

Alternative structure (descending):

rast

rast
Maqam Suzidil 'Ara

Alternative structures (ascending):
Maqam Nikriz

Maqam Hijaz Kar
Maqam Nihawand

Maqam Nawa’athar
Maqam Tarzanuyn

Maqam Bayati
Maqam Hijaz

Alternative structures (ascending or descending):

rast

hijaz

bayati

nihawand
Maqam Saba

Alternative structure (ascending or descending):

saba

hijaz

ajan

hijaz

saba
Maqam Kurd
Maqam Ushaq Misri

Alternative structure (ascending or descending):

\[
\begin{array}{c}
\text{rast}
\end{array}
\]
Maqam Busalik

Alternative structures (ascending):

Alternative structure (descending):

rast

bayati
Maqam Hisar

Alternative structure (ascending):

bayat
Maqam Sikah
Maqam Huzzam

Alternative structure (ascending or descending):

Alternative structure (ascending or descending):
Maqam Jahar Kah

Alternative structures (ascending or descending):

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Basics of Modulation

When modulation takes place from one *maqam* to another, there are two possible scenarios. In the first case, the new *maqam* has the same tonic as the original *maqam*, e.g. modulation from Rast on C to Nahawand on C. In the second case, the new *maqam* is based on a note from the original *maqam* other than its tonic, e.g. modulation from Rast on C to Bayati on G (Bayati Nawa). More detailed information on these two possibilities is given below:

**Modulation to a maqam with the same tonic as the original maqam**

These modulations can either take place between *maqamat* in the same family (i.e. which share a common lower *jins*), or between *maqamat* from different families (i.e. which do not have the same lower *jins*) that have a common tonic.

(a) Modulation possibilities between *maqamat* in the same family

*Rast family:*

- Rast
  ![Rast diagram]
  (rast on C + rast on G)
- Suzidil 'Ara
  ![Suzidil 'Ara diagram]
  (rast on C + nihawand on G)
- Suznak
  ![Suznak diagram]
  (rast on C + hijaz on G)
- Nairuz
  ![Nairuz diagram]
  (rast on C + bayati on G)
- Mahur
  ![Mahur diagram]
  (rast on C + ajam on G)
- Dil Nishin
  ![Dil Nishin diagram]
  (rast on C + saba on A)

*Bayati family:*

- Bayati
  ![Bayati diagram]
  (bayati on D + nihawand on G)
- Shuri
  ![Shuri diagram]
  (bayati on D + hijaz on G)
- Bayatayn
  ![Bayatayn diagram]
  (bayati on D + bayati on G)

*Nawa'athar family:*

- Nawa'athar
  ![Nawa'athar diagram]
  (nawa'athar on C + hijaz on G)
(b) Modulation possibilities between maqamat in different families

First group (tonic = C):

<table>
<thead>
<tr>
<th>Maqam</th>
<th>Modulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rast</td>
<td>(rast on C + rast on G)</td>
</tr>
<tr>
<td>Nihawand</td>
<td>(nihawand on C + hijaz on G)</td>
</tr>
<tr>
<td>Nawa’athar</td>
<td>(nawa’athar on C + hijaz on G)</td>
</tr>
</tbody>
</table>

Second group (tonic = D):

<table>
<thead>
<tr>
<th>Maqam</th>
<th>Modulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayati</td>
<td>(bayati on D + nihawand on G)</td>
</tr>
<tr>
<td>Hijaz</td>
<td>(hijaz on D + nihawand on G)</td>
</tr>
<tr>
<td>Kurd</td>
<td>(kurd on D + nihawand on G)</td>
</tr>
<tr>
<td>Saba</td>
<td>(saba on D + hijaz on F)</td>
</tr>
</tbody>
</table>

Modulation to a maqam with a different tonic from the original maqam

The most common modulation of this type is to a maqam starting on the base note of the upper jins of the original maqam, which is usually G for maqamat starting on C or D. However, modulations can (theoretically) take place to a maqam that is based on any note of the original scale, although the second and seventh notes are usually avoided. Some examples of common non-tonic modulations from the maqamat Rast and Ajam Ashiran are shown below:
Non-tonic modulations from Rast:

Rast

(sikah on E half-flat + hijaz on G)

Huzzam

(bayati on G + nihawand on C)

Bayati on G

(saba on A + hijaz on C)

Saba on A

Non-tonic modulations from Ajam Ashiran:

Ajam Ashiran

(ajam on B flat + ajam on F)

Saba

(saba on D + hijaz on F)

Hijaz on F

(hijaz on F + nihawand on B flat)

What actually happens in practice?

From the above it is apparent that an almost limitless number of possibilities exists for modulation from a particular maqam. However, the number of modulations regularly encountered in practice is much smaller, and a sample of these is given below for two of the most popular maqamat, Rast and Bayati.

Common modulations from Rast:

Rast

(rast on C + rast on G)
Common modulations from Bayati:

Bayati

Shuri

Saba

Hijaz

Rast on G

(rast on C + hijaz on G)

(nihawand on C + hijaz on G)

(bayati on G + nihawand on C)

(hijaz on G + nihawand on C)

(sikah on E half-flat + hijaz on G)

(bayati on D + nihawand on G)

(bayati on D + hijaz on G)

(saba on D + hijaz on F)

(hijaz on D + nihawand on G)

(rast on G + rast on D)
A number of ‘rules’ governing modulation have been formulated by the US ethnomusicologist Prof. Scott Marcus (see below) based on what he has observed in practice:

- Modulation between *maqamat* with the same tonic can happen readily and is very common, e.g. from Rast to Suznak or from Bayati to Saba. These pairs of *maqamat* share the same lower *jins* and are therefore intimately related.

- Modulations between the two groups of *maqamat* based on C and D do not generally occur. However, if you wish to modulate from Rast (on C) to Bayati (on D), for example, you can always transpose the Bayati scale to start on G (Bayati Nawa) - modulation from Rast to Bayati Nawa is then possible. The note G is extremely important in modulation.

- Modulations between *maqamat* based on C and those based on E half-flat happen readily, as if they were based on the same tonic. However, to modulate from a *maqam* based on D to one based on E half-flat, you would either need to transpose the D *maqam* to start on G or transpose the E half-flat *maqam* to start on B half-flat.

- Modulations between *maqamat* based on D and those based on B flat also happen readily, as if they were based on the same tonic. However, to modulate from a *maqam* based on C to one based on B flat, you would need to transpose the B flat *maqam* to start on E flat (or possibly C).

- The *maqamat* based on F (such as Jahar Kah) need to be considered separately, and there are three different ways that they can be used. Firstly, in modulating from *maqamat* based on B flat, as F is often the base note of the upper *jins* in B flat *maqamat*. Secondly, in modulating from C or D *maqamat*, as F is an important note in these scales. Finally, *maqamat* based on F (as well as some C *maqamat* transposed to F) can be the target of modulation from the two *maqamat* Hijaz Kar and Hijaz Kar Kurd.

[Note: The information on this page is drawn from an excellent and comprehensive article by Scott Marcus: ‘Modulation in Arab Music: Documenting Oral Concepts, Performance Rules and Strategies’, *Ethnomusicology* 36(2), 171 (1992).]