

Oriental Jazz Improvisation  
Microtonality and Harmony



ORIENTAL JAZZ  
IMPROVISATION

Microtonality  
and  
Harmony

Thomas Mikosch

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الحمد لله

Psalm 144:9

## **Oriental Jazz Improvisation: Microtonality and Harmony**

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## Preface

In his book 'Theory of Harmony,' the great Arnold Schönberg once declared the discovery of our scale merely a *stroke of luck* for the development of our music [Schönberg: p. 22]. One could just as well, such as the Arabs, the Chinese, and Japanese, or the "Gypsies," have found another row. He did not call it the final – the *ultimate goal* of music – but just a *temporary station*. The overtone series does contain many *problems* one would have to deal with in the further course. Hence he referred to the equal temperament as a *compromise* between the perfect intervals and the *inability* to use them. Moreover, on the way of the system to a *higher order*, he considered the future use of *quarter tones* as quite conceivable. Even Olivier Messiaen labeled our Western musical system simply "our current chromatic system" [Messiaen: p. 85].

Several Turkish makamlar (pl. of *makam*) appear, for instance, in Bulgarian wedding music or Balkan jazz but are utilized also in Greek rebetiko music. The Ottoman music tradition had a significant impact on the music of these particular countries. Countries whose territories once were part of the *Ottoman Empire*, which ruled over large portions of South-Eastern Europe, Western Asia, and Northern Africa (an area stretching all the way over the Black to the Red Sea and from the Mediterranean Sea to the Tigris-Euphrates rivers), between round the 14th and early 20th centuries. Arabic maqamat (pl. of *maqam*) occur in Jewish klezmer and, until today, are heard in Sephardic synagogues. The muezzin's call to the five daily Muslim prayers has already at the Prophet's, may peace be upon him, lifetime (570-632) been performed by employing certain maqamat. Even the *Qira'at*, the readings of the Noble Qur'an, are held using maqamat. But just like the calls to prayer, they are never accompanied by musical instruments while doing so. There is a strong tradition of devotional a cappella singing in Islamic tradition, as it reveals the true beauty of God's, glorious and exalted is He, word.

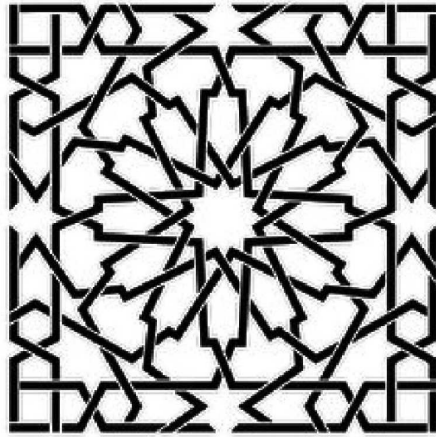
Many scales and modes in this book are commonly heard in Romani music across South-Eastern Europe, especially in the music of the Balkans or Greek rebetiko. But also in Jewish music. There are even hints of Arabic music in Andalusian flamenco. Particularly in the abundant pedal tone playing and the use of drones in the *toque* of the guitar player and, of course, in the *cante flamenco*, the flamenco singing. We will also see several rows that are actually very prevalent in today's modern jazz music. That is no surprise at all, taking under consideration that many swing musicians in fact had a Jewish background. So there can even be heard klezmer influences – already before Ziggy Elman (born *Harry Aaron Finkelman*) joined – in Benny Goodman's sound.

This book is in no way intended to be a scientific treatise of any kind. It will also make you neither a Turkish, Arabic, nor an Indian musician; but it surely will broaden your musical vocabulary. It was written with the practicing musician in mind that is interested in 'Oriental music.' Whatever this term means. It is also not a book that tells you how to do things. It is a book that is intended to share some ideas and to show some ways of how to implement those scales and modes into your playing. It also tells how different music traditions that use the same sequence of intervals treat the scales differently. The intent behind this book is to serve as a resource that one can experiment with and discover something new each time one picks it up, rather than just another reference book. A palette of *exotic colors* to add to your creative canvas, so to speak. The above-mentioned music traditions share a very open approach toward the field of improvisation. So it cannot be wrong to try and learn from them. I have tried to keep things as simple as possible and to provide as much information as possible. I recommend reading and playing through each chapter in sequence first. Chapter by chapter, because the examples build on each other and it is very important to understand some basics beforehand. In the comparison of all those exotic scales and modes, the initial challenge lies in preventing the loss of coherence. In this respect, the 'index of scales and modes' at the very end of this volume should be immensely beneficial. It should also be said that when transcribing Turkish, Arabic, and Northern Indian scales and modes into the equal temperament, the result can only be a scale 'inspired by' and *by no means* an adequate equivalent, let alone identical. This work represents the result of a period exceeding 25 years of comprehensive study and research, as well as a testimony of my personal spiritual journey and pursuit of absolute musical freedom up to this point. And, since I am not Bernard Shaw, let us now begin.

Ex oriente lux. Peace.

Third stone from the Sun, August 2022

Thomas Mikosch



## A Very Brief History of Arabic and Turkish Music Theory

The roots of the musical scales and modes of both the Arabs and the Turks can be traced all the way back to ancient Greece. The music-theoretical texts of ancient Greek scholars were translated by the Arabs at the onset of *the Golden Age of Islam* in the 8th century. At this time, the first books on Arabic music theory, like the 'Kitāb al-Mūsīqā al-kabīr' (Arabic *Great Book of Music*) by Abū Nasr Muhammad al-Fārābī (872-950), were written. A treatise that established the ground for a precise scientific approach to the subject of music. Al-Fārābī was a scholar of the so-called '*Greek Enlightenment*' and is credited for preserving the original Greek texts during the Middle Ages through his commentaries and treatises. In philosophy, he is considered to be the second in rank after Aristotle (384-322 BCE) and therefore also is referred to as '*the second teacher*' or even '*the second master*.' Regarding the supposed historical origins of the two, the Arabic maqām and the Turkish makam (Turk. *place*), this is quite a strong testimony. So both theoretical systems are founded on texts of ancient Greek scholars, especially the use of *tetrachords* (a series of four tones). However, it is essential to recognize the nuanced interplay between theory and practice in music traditions. While theorists like al-Fārābī provided structured frameworks for understanding music, practitioners relied on oral traditions such as meşķ (Arabic: meshk) to transmit practical knowledge across generations. In Turkey, this oral tradition is being referred to as *meşķ* (Arab. meshk). Musicians had no scientific approach toward the subject of music whatsoever. Many musicians can hardly tell the names of the scales and modes they are playing, let alone the names of the individual tones. Many of the ancient music theorists, on the other hand, were not even musicians. That is why they are being called 'theorists.'

At the beginning of the 14th century, with the foundation of the Ottoman Empire, the inception of a distinct Ottoman Turkish music tradition commenced. Which, while independent, has never been free from external influences by the Arabs and Persians. The latter, in turn, being heirs of the Assyrian-Babylonian music tradition. Given the close ties among these music traditions, it is more accurate to speak of an *interrelationship* rather than merely influences. Musicologists such as Hüseyin Sâdeddin Arel (1880-1955) and Râuf Yektâ Bey (1871-1935) have refuted the widespread allegations suggesting that Ottoman music originated from Byzantine and Persian traditions rather than from Turkish sources. They have presented compelling evidence through documents and information to support their refutation. Though many scales and modes were adapted from the Arabic repertoire into the Ottoman court music and a vast number of Turkish makamlar actually bear Persian designations. This is because the court language was Persian. Even before the Ottomans, and for some time it also was the empire's official language. Educated Ottoman Turks spoke, besides Ottoman Turkish (*Osmanlı Türkçesi*), both Arabic and Persian. Like in the West, where Latin is the language of science, whereas French is the language of art and poetry. Arel and Yektâ probably did this also out of national pride due to the then-recent foundation of the Turkish Republic. Insults are effective only where emotion is present.

By the end of the tragedy of World War I in 1918 and the ultimate collapse of the Ottoman Empire some four years later, this interrelationship decreased. Here the Western influence because of the occupation of Arab territories by the English and French began to affect the music tradition of the Arabs. Habib Hassan Touma even went so far as to call this Westernization frankly "degeneration of the authentic music" [Touma: p. 32]. Fortunately, the Turks were spared this fate. On October 29, 1923, Mustafa Kemal Pasha, later referred to as 'Atatürk,' founded the modern Republic of Turkey.

Then, in 1932, the '1st International Congress of Arabic Music' took place in Cairo. Here, a generally binding basic music theory was agreed on, which finally made it possible to notate Arabic music. Though there has been an Arabic musical notation since the 9th century, it never happened that it would have been accepted by more than just a few. There are even some, claiming that the Arabs rejected the accidental '#' because it resembles the fourth of the seven seals of the Magnificent Qur'an and represents a two-rung ladder to God, glorious and exalted is He. No stairway, denied. However, the general narrative was that the notation of Arabic music would simply *rob its soul*. The introduction of Western staff notation into the Arabic and Turkish music tradition marked a *paradigm shift* and the beginning of ongoing criticism and debate among musicians and theorists alike.

Until the Congress of Arab Music in 1932, Râst was the tone Yakâh in the Arabic music tradition. Meanwhile, Yakâh designates the lower G, in the Turkish musical system accordingly the D. Here, also, the Arabic tone Husayni was defined as equal to the Western pitch standard A. At that time 435 Hz, after the BSI conference in May 1939 in London 440 Hz. The Arabic system once also began on D. But, with the decline of the Ottoman Empire, was immediately changed to G by the Arabs. Comparing both musical systems, it is noteworthy that the pitch names are largely identical, in the Arabic they are just by a perfect fifth lower. The change from the Turkish scale now beginning on C and not on D, like Yektâ's *24-tone Pythagorean tuning*, was made by Arel-Ezgi-Uzdilek.

<b>Turkish tone and pitch name</b>		<b>Arabic tone and pitch name</b>	
<b>D</b>	<b>Yegâh</b>	<b>G</b>	<b>Yakâh</b>
E <sup>b</sup>	Kaba Nim Hisar	A <sup>b</sup>	Qarar Hisâr
E <sup>♯</sup>	Kaba Hisar		
E <sup>♭</sup>	Kaba Dik Hisar		
<b>E</b>	<b>Hüseynî Aşîrân</b>	<b>A</b>	<b>Ushayrân</b>
... etc.			

Many Turkish terms derive from Arabic or Persian, for many Turkish makamlar originate from there. Tones or makamlar with the suffix *-gâh*, for example, originate from Persia. Gâh is Persian for *place*. Their musical system is being referred to as *dastgâh* (دستگاه), standing for *place of the hand*; and, just like the Arabic term maqam (مقام), refers to the place of the hand in fingering the tones on the oud. Fairly similar to the Western 'Guidonian hand,' which's originator Guido d'Arezzo (992-1050) was in fact very well aware of Arabic music theory. Thus, the names of the tones are not equal in the octave, since the place on the fingerboard is not equal. The *place* is outgoing from Râst. Mind that Râst once was Yegâh, *the first place* (yek-gâh).

یک	<b>Yek-gâh</b>	on the first place	دو	<b>Dü-gâh</b>	on the second place
سه	<b>Se-gâh</b>	on the third place	چهار	<b>Çâr-gâh</b>	on the fourth place
پنج	<b>Penç-gâh</b>	on the fifth place	شش	<b>Şeş-gâh</b>	on the sixth place
هفت	<b>Heft-gâh</b>	on the seventh place			

While in the Turkish musical system Dügâh, Segâh, and Çâr-gâh are still in their old places, due to the change of Yegâh to Râst and the Arabic scale now beginning on G, the Turkish tone Pençgâh had to be renamed since it now was the octave of Yegâh. So it became Nevâ, while Şeşgâh and Heftgâh were renamed Hüseynî and Eviç, respectively.

Over the centuries, there has been a variety of tunings; and the intonation of the scales and modes themselves – due to their music tradition being an oral one, which is, moreover, dependent on the geographical region, school, or personal taste – was and still is, akin to a language with its countless dialects, very different from region to region. So a musician from Damascus will intonate the scales and modes differently, compared to one from Baghdad. Songs or pieces may sound completely different depending on the very region in which they are performed. According to oud virtuoso Munir Bashir (1930-1997), notating Arabic music would "kill its regionality" [El Mallah: p. 73]. That, of course, made and still makes a notation extremely difficult or even impossible. So even until today, there still is a not negligible discrepancy between the music as it is notated and how it is performed.

In Turkey, from 1910 on, Rauf Yektâ – who too was present at the Congress in Cairo – as well as Arel, Suphi Ezgi (1869-1962), and Salih Murat Uzdilek (1891-1967) had designed an own Turkish musical system that was widely accepted and is being used until today, though the conceptional construction of the (current) Turkish *A-E-U system* (short for Arel-Ezgi-Uzdilek) has caused quite a number of problems and therefore is an enduring target of criticism and subject of debate, especially among the devotees of the *old music* as it was performed in Ottoman times.

Arabic maqamat, as well as Turkish makamlar, contain in colloquial speech so-called 'quarter tones.' But this term is not quite correct. Within the Turkish musical system, a whole tone (large whole tone or also *Pythagorean second*) is divided into *nine commas*, whereof only a few are being used. Thus, in both the Yektâ and the A-E-U system, a modified form of the *Pythagorean tuning* is obtained, a scale in which the octave comprises 24 tones. Already Pythagoras' successor Philolaus (c. 470-c. 385 BCE) was of the opinion that the (large) whole tone is divided into nine commas. The apotome into five, plus the limma into four commas. Each term and interval is going to be explained in the following chapter.

"What science cannot declare, art can suggest; what art suggests silently, poetry speaks aloud; but what poetry fails to explain in words, music can express."

"One who knows the secret of sound, knows the mystery of the entire universe."

HAZRAT INAYAT KHAN (1882-1927)