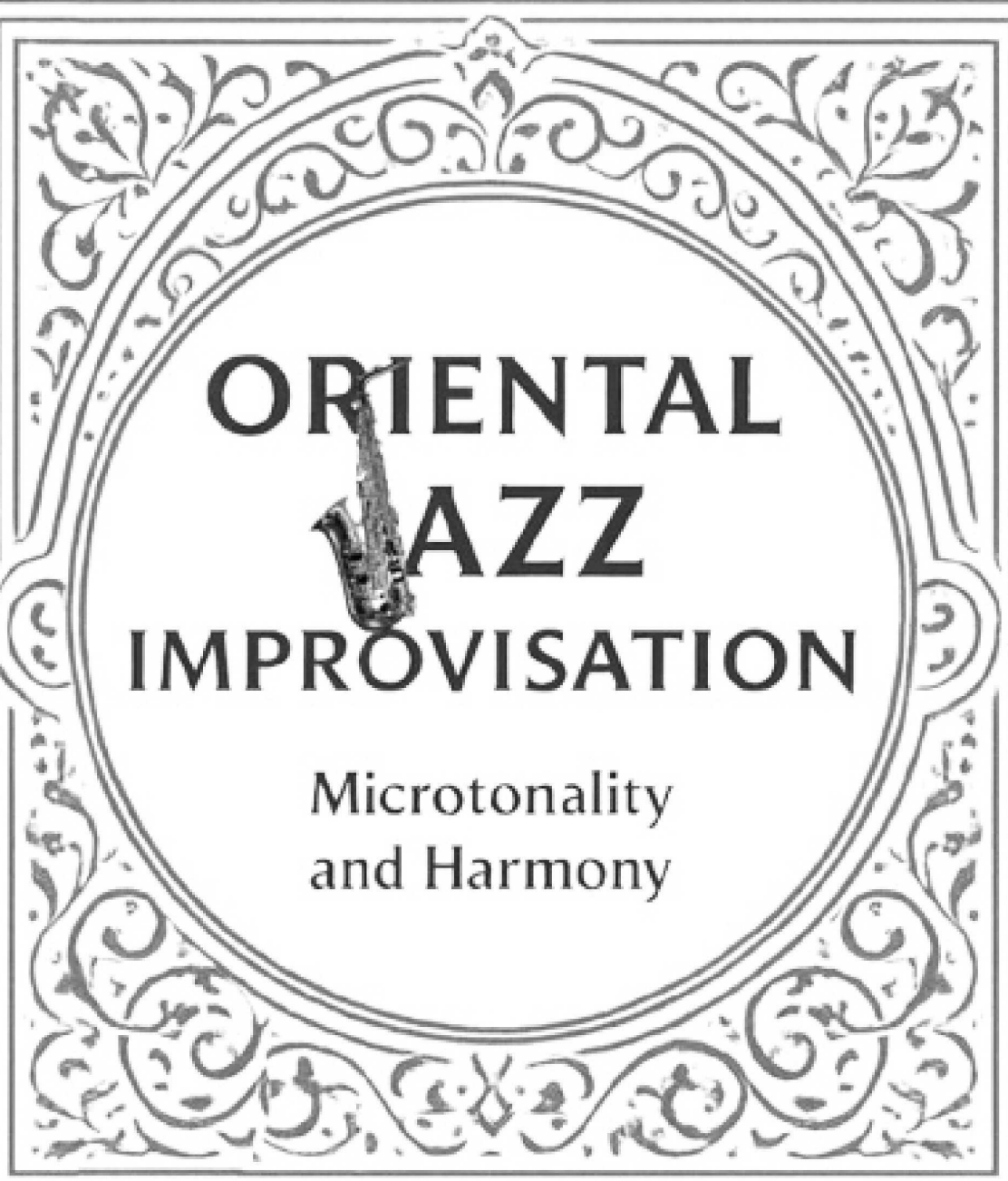


Oriental Jazz Improvisation  
Microtonality and Harmony





# ORIENTAL JAZZ IMPROVISATION

Microtonality  
and Harmony

THOMAS MIKOSCH





الحمد لله

Psalm 139:14

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

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## Preface

In his *Theory of Harmony*, the great Arnold Schönberg once declared the discovery of our scale a *stroke of luck* for the evolution of our music. One could have – like the Arabs, the Chinese, the Japanese, or the "Gypsies" – equally found another row [Schönberg: p. 22]. He did not call it the final – the *ultimate goal* of music – but essentially just an *interim stage*. The overtone series presents many problems that must be addressed in the future. Hence, he referred to equal temperament as a *compromise* between the perfect intervals and our *inability* to use them. Moreover, in pursuit of a *higher-order system*, he considered the future use of *quarter tones* within the bounds of possibility. Even Olivier Messiaen labeled our Western musical system merely "our *current* chromatic system" [emphasis added, Messiaen: p. 85].

Several Turkish makamlar (pl. of *makam*) appear, for instance, in Bulgarian wedding music and 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 expansive area stretching all the way over the Black to the Red Sea and from the Mediterranean Sea to the Tigris-Euphrates rivers), between roughly 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 was already performed during the Prophet's, peace and blessings be upon him, lifetime (570–632), using certain maqamat. Even the *Qira'at*, the readings of the Noble Qur'an, are held using maqamat; in the manner of the calls to prayer, they are never accompanied by musical instruments during the recitations, in keeping with the Islamic tradition of a strong devotional a *cappella practice*, revealing the beauty of God's, glorious and exalted is He, word.

Many scales and modes in this collection are commonly heard in Romani music across South-Eastern Europe, especially in the music of the Balkans and in Greek rebetiko, as well as in Jewish music. There are even traces 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.

Rather than a static reference, consider this book an ever-evolving companion, meant to inspire new paths of experimentation each time you return to its unfolding pages. This text is not intended as a scientific treatise or instructional guide. Instead, it serves as a wellspring of ideas for the practicing musician eager to explore "Oriental music," for whatever this term may mean. Think of it as a palette of *exotic colors* to enrich your creative canvas. These musical traditions share a profoundly open approach to improvisation, making them deeply rewarding to engage with. It will not make you a Turkish, Arabic, or Indian musician, but it will surely expand your tonal palette. It also demonstrates how different musical traditions, even when using the same set of intervals, approach these scales and modes in distinct ways.

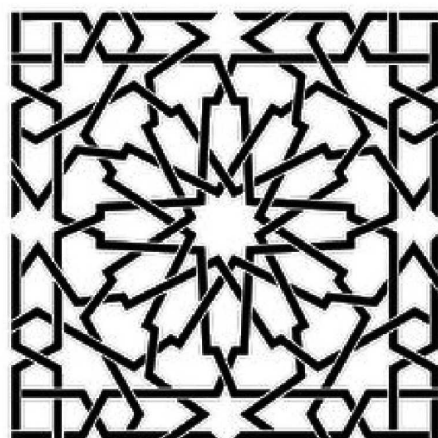
I have sought to balance accessibility with depth, providing a foundation for both the novice and the seasoned musician. The chapters are designed to build upon one another, encouraging a progressive path that mirrors the layered understanding required to grasp the essence of these scales and modes. To aid your exploration, the 'index of scales and modes' at the conclusion of this volume serves as a map, guiding you through the intricate landscapes of sound. It is essential to recognize that when transcribing Turkish, Arabic, and North Indian scales and modes into equal temperament, the result can only be an 'inspired by' interpretation rather than a faithful equivalent.

This modest work embodies more than 25 years of dedicated study, shaped by my personal spiritual journey and the pursuit of unbounded musical freedom. In the beginning, there was the word; and since I am not Bernard Shaw, let us now open the stage.

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 used by both Arabs and Turks trace 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, leading to the writing of the first books on Arabic music theory. One such influential work was the seminal *Kitāb al-Mūsīqā al-kabīr* (Arab. 'Great Book of Music') by the great philosopher Abū Naṣr Muḥammad al-Fārābī (872-950). This treatise established the ground for a precise scientific approach to the subject of music. Al-Fārābī, a scholar of the *Greek Enlightenment*, is credited with preserving many original Greek texts during the Middle Ages through his commentaries and treatises. In philosophy, he is regarded as the second in rank after Aristotle (384-322 BCE) and is therefore referred to as 'the second teacher' or even 'the second master.' The historical origins of the two – the Arabic maqam and the Turkish makam (Turkish 'position') – are strongly rooted in ancient Greek texts. Both systems are founded on the work of 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 within these music traditions. While scholars like al-Fārābī provided structured frameworks for understanding music, practitioners relied predominantly on the oral tradition of *meshk* (Turk. meşk) to transmit practical knowledge across generations. Musicians often lacked a scientific approach to music, with many unable to name the scales and modes they played, let alone individual tones. Conversely, many theorists were not musicians, hence the term 'theorists.'

At the beginning of the 14th century, with the foundation of the Ottoman Empire, a distinct Ottoman Turkish music tradition began to develop. While this tradition evolved independently, it was never entirely free from external influences, particularly from the Arabs and Persians. The Persian music tradition, in turn, is rooted in the Assyrian-Babylonian heritage. Given the close connections among these music traditions, it is more accurate to describe their relationship as an *interrelationship* rather than mere influence. Musicologists such as Hüseyin Sâdeddin Arel (1880-1955) and Râuf Yektâ Bey (1871-1935) have challenged the prevalent claims that Ottoman music originated solely from Byzantine and Persian traditions rather than from Turkish sources. They presented substantial evidence through documents and research to support their arguments. Although many scales and modes in Ottoman court music were adapted from Arabic music, and numerous Turkish makamlar carry Persian names – reflecting the historical use of Persian as the court language and, at times, the empire's official language – these elements were incorporated into a uniquely Ottoman context. Educated Ottoman Turks spoke, besides Ottoman Turkish (*Osmanlı Türkçesi*), both Arabic and Persian; akin to how Latin served as the lingua franca of science in the West, while French was the means of expression of art and poetry. Arel and Yektâ's assertions were most likely influenced by national pride, given the recent establishment 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 subsequent collapse of the Ottoman Empire some four years later, this interrelationship declined. At this point, Western influence stemming from the occupation of Arab territories by the English and French began affecting Arab music traditions. Habib Hassan Touma even went so far as to call this Westernization frankly "degeneration of the authentic music" [Touma: p. 32]. Fortunately, with the *Treaty of Lausanne*, signed on July 24, 1923, securing Turkey's sovereignty and preventing occupation, the Turks were spared this fate. Later that year, on October 29, Mustafa Kemal Pasha, who would go on to be known as 'Atatürk' – meaning *Father of Turkey* – founded the modern Republic of Turkey.

Then, in 1932, the *1st International Congress of Arabic Music* was held in Cairo. During this congress, a generally accepted foundational music theory was established, which finally enabled the notational transcription of Arabic music. Although systems of Arabic musical notation have existed since the 9th century, they had not achieved widespread acceptance. Some scholars even assert that the Arabs rejected the accidental '#,' due to its visual resemblance to the *Satitya*, a two-rung ladder representing the fourth of the seven seals of the Magnificent Qur'an and symbolizing a spiritual ascent to God, glorious and exalted is He. As Robert Plant sings, "sometimes words have two meanings." No stairway, denied. The prevailing narrative suggested that the notation of Arabic music would simply *rob its soul*. The introduction of Western staff notation into the Arabic and Turkish music

traditions marked a *paradigm shift*, igniting significant 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, moreover, the Arabic tone Husayni was defined as equal to the Western pitch standard A, which was 435 Hz at that time and, 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, with the Arabic being a perfect fifth lower. The change in the Turkish scale, now beginning on C instead of D as in Yektâ's *24-tone Pythagorean tuning*, was made by Arel-Ezgi-Uzdilek.

| Turkish tone<br>and pitch name |                       | Arabic tone<br>and pitch name |                          |
|--------------------------------|-----------------------|-------------------------------|--------------------------|
| <b>D</b>                       | <b>Yegâh</b>          | <b>G</b>                      | <b>Yakâh</b>             |
| E $\flat$                      | Kaba Nim Hisar        | A $\flat$                     | Qarar Hisâr              |
| E $\sharp$                     | Kaba Hisar            |                               |                          |
| E $\natural$                   | Kaba Dik Hisar        |                               |                          |
| <b>E</b>                       | <b>Hüseynî Aşîrân</b> | <b>A</b>                      | <b>Ushayrân ... etc.</b> |

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 *position*. Their musical system is being referred to as *dastgâh* (دستگاه), standing for *position of the hand*; and, just like the Arabic term maqam (مقام), refers to the position 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 position on the fingerboard is not equal. The *position* is relative to Râst. Mind that Râst once was Yegâh, *the first position* (yek-gâh).

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

While in the Turkish musical system Dügâh, Segâh, and Çârgâh are still in their old positions, 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 Evîç, 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 conceptual 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 and Turkish makamlar are often collectively referred to as 'quarter tones,' serving as a *pars pro toto*, representing the far more intricate microtonal framework inherent in both musical traditions. In the Turkish musical system, a whole tone (large whole tone or also *Pythagorean second*) is divided into *nine commas*, whereof only a few are typically 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's successor Philolaus (c. 470-c. 385 BCE) held that the (large) whole tone is divided into nine commas – the apotome into five, plus the limma into four commas. Each term and interval will 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)