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Reviews & Insights

# Theory and Practice of Classical Music from the Mediterranean and Near and Middle East

By Mariano Paternoster

*Introduction*

String instruments play a central role in the timbral and expressive articulation of traditional and classical performance practices in the Near and Middle East. In particular, instruments such as the *kamancheh*, *rabab*, and "Arabized" violin (tuned according to the microtones of maqamat) are used not only to accompany singing but also to express, through long melismas, wide vibratos, and refined glissandi, the emotional content of the *maqam* and the *tarab*. The bow, with its ability to sustain sound and finely model inflections, is the preferred instrument for creating heterophony and producing the ornamental embellishments that characterize Arabic, Turkish, and Persian music. In this context, the contribution of Western string instruments, readapted through new tunings and intonation practices, is crucial for constructing hybrid musical languages capable of blending tradition and experimentation.

In light of geopolitical changes, globalization, and technological developments, and contrary to certain public opinion that tends to irreversibly close barriers between cultures – effectively imposing borders, walls, and sharp classifications between disciplines – I believe it is necessary to address the theme of the "glocal" scientifically in Higher Artistic Education Institutions, as well as in university faculties. This means the inclusion of traditional cultures within a globalized context, proposing a way of thinking that integrates the education and creative production of new generations of artists.

The implementation of a laboratory on Theory and Practice of Near Eastern Music was a scientific and innovative educational and cultural proposal. Its primary objective was to start from a Conservatory of Music and then be replicable in all Italian and European conservatories with the aim of disseminating local traditions and those of countries and cultural systems distant from our own. More importantly, it aimed to develop transversal skills, raise important aesthetic and cultural questions, and promote the cross-fertilization of artistic languages as an inexhaustible source of human and creative enrichment.

Music is, in fact, a means to understand the relationship between cultures and diversity understood as richness. The study of musical cultures different from one's native culture and a hybrid, multicultural approach enrich student education, especially when theoretical study is supported by collective practice.

Indeed, music – like culture, visual arts, design, choreographic and dramaturgical languages, and perhaps even more than languages themselves – is by its very nature subject to mutual influence and creates new premises, paradigms, and quality artistic products that go beyond the simple juxtaposition of parts. Increasingly developed technology and more accessible sources of information contribute to facilitating the approach of both student and teacher, who are thus stimulated to overcome the paradigms of an anachronistic, exclusively academic and lecture-based teaching methodology.

Considering the value of collaborative teaching and the aid of technology in easily obtaining quality results, it would be interesting to extend the proposal promoted by the Foggia Conservatory not only to Italian and European conservatories but also to non-European institutions (music training schools in North Africa, Mediterranean basin countries, and the Near East) that can be reached through collaboration and exchange projects such as Erasmus+. Certainly, the same project approach should also be extended to other AFAM (Higher Artistic and Musical Education) institutions.

Due to my linguistic-political science background, parallel to my musical training as a composer, educator, and electronic musician, for several years I have studied Serbo-Croatian, Romani, and Arabic language, cultures, and literatures. These studies have stimulated me to study and deepen both theoretically and creatively the world of *maqamat*, *iqaat* (rhythms and melodies), and the so-called "Arabic-Turkish-Persian musical system".

This has led me to criticize the widespread tendency toward ethnocentrism, philology, and sterile "purism", and to develop research more oriented toward experimentation, hybridization, and linguistic fusion. From this premise, the entire laboratory path develops.

*Cultural Characteristics of Near and Middle Eastern Music*

By Arabic music, we mean the vocal and instrumental repertoire performed predominantly by instruments of Arabic, Turkish, and Persian tradition. Some theorists also consider certain traditional Balkan productions as Oriental repertoires (i.e., based on the *maqam* system). In truth, given the geographical position of the Balkan countries, although Turkish influence is easily identifiable, the constant presence of the Central Empires' domination, particularly the Austro-Hungarian Empire, has radically transformed over time – due to the use of polyphonic instruments – the assimilation of *maqam* into Western modes, thus negating the possibility of considering Serbian, Albanian, Greek, or Bulgarian music as part of the ensemble. By "classical Arabic music", however, we mean the music produced after the standardization that occurred with the Cairo Conference of 1932.

The characteristics of the repertoire codified from the beginning of the 20th century until the 1970s can be identified in the following points:

- Instruments are an extension of the human voice;
- Rhythmic cycles (*iqaat*) are successions of beats primarily consisting of two tones (*dum-tak*) that accompany a monodic melody;
- Improvisation prevails over written codification, based on the ornamentation of a maqam (scale);
- Heterophony replaces polyphony;
- The maqam system is the basis of music theory;
- Ottoman instrumental forms (*sama'i*, *bashraf*, *longa*) derive from standardized improvisational forms.

From a historical perspective, we can identify various periods that have contributed to preserving and transforming the repertoire based on cultural and historical changes in the area caused by exogenous and endogenous factors. It is interesting to note that the Arabic language does not have a word to define music, therefore it uses the Arabized Greek word (*musiqa*). Differently, it uses terms like wazn to indicate rhythm (which literally means "weight" or "measure") and *maqam*, which means position (of the fingers on the *'oud*).

At the origin of everything, we identify in the pre-Islamic poetry of the *Shu'ara al Jahiliya* (the so-called "Age of Ignorance") the origin of the qasida, that is, the poetic composition from the Bedouin environment (5th-7th century CE):

- Subsequently, in the First Islamic Period (801-1252), Al Kindi, Al Farabi, and Abu-l-Faraj emerge as the Pythagorean theorists of music in the Arab world;
- With the flourishing of the Caliphate in Europe (10th century), we identify the so-called "Al Andalus Period", which, with Tariq Ibn Ziyad's conquest of Andalusia and the development of the Caliphate of Cordoba, saw the maximum splendor of interculturality. This period witnessed the diffusion of musical instruments that gave rise to modern lutherie manufactures and musical practices that influenced the troubadour repertoires of Western Europe;
- At the end of the 13th century, we identify the Golden Period of Islamic culture with Al Ghazali and Safi al Din;
- The next passage is marked by the Fall of Granada (1492);
- And then the beginning of the Ottoman Era (16th - 19th Century);
- The first attempts at standardization date back to Mikhail Mishaqah (1800 – 1889);
- Only with the Cairo Conference (1932) did the official standardization of the intonation system based on the division of the octave begin (1932);

- As a consequence of standardization, the so-called Golden Age originated, marked by names such as Sayed Darwish, Abdel Wahab, and Umm Kultum. With it, Western instruments were introduced, and Arabic music entered the world record market (1930 – 1970).

*Similarities and Differences Between Western and Eastern Music*

Medieval musical production shows numerous similarities with Eastern repertoires, partly due to the historical influence of the Caliphate of Cordoba on the rest of Europe. But it is also useful to identify some substantial differences.

Medieval Western music and Eastern classical music share:

- A modal system based on the combination of two modules (tetrachords in the Western system) and two or more modules (*ajnas* in the Arabic system);
- The use of monody;
- A strophic form in some genres.

However, they differ in the following points:

- Aesthetic use of music in the Arab world only from the 18th century onward;
- Predominantly oral transmission of Arabic music;
- Non-tempered scales with the presence of quarter tones in some modes;
- Heterophony;
- Use of standardized bitonal rhythmic patterns (*iqaat*);
- Melodic hypertrophy;
- Presence of quarter tones;
- Active audience participation;
- Approximation in transcription.

*Melodic Instruments*

Musical instruments in the Arab world generally accompany the singer in stimulating *tarab* (emotion), performing the tarjama (lit. “translation“, heterophonic accompaniment). It is no coincidence that the word for solo singer in Arabic is mutrib, meaning “one who evokes emotions“. It is evident that the entire repertoire aims to diversify the representation of human emotions through the practice of improvisation on “scales“, each of which evokes a distinct emotional nuance and is chosen based on the expressive potential of the *mutrib* (the singer) and the instruments accompanying them. In particular, melodic instruments follow the vocal line in heterophony and are

distinguished as *naqqr*, or percussive-melodic instruments (plucked instruments like the *'oud*, *qanun*, *buzuq*, and *plucked strings*), and *sahb*, or instruments that sustain the vocal melody (violins, violas, cellos, flutes). In large ensembles, other accompanying instruments are sometimes included to support the percussion in rhythms and tones (cellos, double basses, pianos, and fixed-intonation synthesizers).

*Percussion Instruments*

Percussion instruments mediate between voice and melodic instruments, marking the pace of the melody. They announce changes in rhythm, tempo, dynamics, and instruments. They are generally played in pairs, alternating or playing together. In particular, the *riqq* (9-inch tambourine with jingles) and the *tabla* (darabuka) are commonly used. The function of the first is to control the speed of the entire piece; the second, instead, produces a series of other sounds with different tones, enriching the structure of the cycle.

*Ornamentation*

Ornamentation is an indispensable practice in performance and is learned orally through listening, imitation, and instrumental technique. The style varies from region to region.

The composer composes simultaneously on two superimposed levels: a basic melodic line and a line with ornamentation. The combination creates a situation of heterophony. Ornamenting means using embellishments, adding typical melodic patterns, syncopated and repeated notes with plucked instruments, wide and slow vibratos with bowed instruments, tremolos with both groups of instruments, rephrasing the notes of fragments with different rhythms, enclosing them in triplets, executing trills and glissandi with bows and traditional flutes (*nay*), but especially emphasizing the pivot notes of the *maqam*.

*Rhythms*

In Arabic music, rhythm is marked by a pattern that, as has been mentioned several times, is called iqa'a or usul in Turkish. It is not part of the *maqam* structure but indirectly determines its speed and accents, adapting to the text. The *iqa'at* (plural of *iqa'a*) are distinguished as even and odd, simple and complex. As they are not properly time signatures in the Western manner, they range from 2/4 to cycles of 17/8 and more. Unlike what happens in Western classical music, there is a vast number of rhythmic cycles, each with a name that defines it and is known to the performer.

*Intonation Systems*

The musical system of Arabic music is based on Pythagorean intonation, although with the advent of "Arabized instruments", it is not uncommon to encounter "tempered" performances. Therefore, since the entire scale is based on the tuning of fourths and fifths (3/2 and 4/3), it is very practical for string instruments, despite generating scales with almost dissonant thirds (in a ratio of 81/64). This makes the Pythagorean system particularly suitable for microtonal passages (e.g., from nahawand to rast to 'ajam, or from minor third to major third, passing through the neutral third, halfway between the flat and the natural). For this reason, the intonation of the sikah note is "negotiated" within the group from time to time.

*Ajnas and maqamat. The Emotional Content of Music, or Tarab*

A *maqam* is not precisely a "scale". However, it has an internal structure that includes the succession of two or more basic melodic units: the *jins* (from the word "genus", tetrachord; plural, *ajnas*). This is a fragment consisting of 3 to 6 notes, whose last note, unlike what happens in the Greek tetrachord system, coincides with the first (*qadar*) of the next *jins*. Within itself, it can present the following intervallic relationships between degrees: 1 tone, ¾ tone, ½ tone, 1 and ½ tones. In practice, each *jins* corresponds to a specific emotion (*tarab*). The main ajnas (i.e., the building blocks of Arabic, Turkish, or Persian melody) are the following: *'ajam*, *bayati*, *rast*, *hijaz*, *kurd*, *nahawand*, *nikriz*, *saba*, *sikah*.

The transition from one jins to another generates a strong emotional change in the listener and performer. Two or more ajnas constitute the *maqam* system, which builds a path in which the component *ajnas* develop and alternate. The modulating path is called *sayir*.

*The sama'yat Analyzed and Performed in the Laboratory*

During the laboratory, instrumental tradition pieces were performed, corresponding to the instrumental studies of Western music, in the most important *maqamat*. Subsequently, transcriptions were elaborated, and hints of harmonization on the scale were proposed, as an exercise in linguistic contamination. In particular, the following *samayat* and *dawalib* (plural of *doulab*) were explored: "*Samaii Rast Tatios*", "*Samaii Bayat*", "*Samaii Bayati Qadim*", "*Samaii Saba*" as preparatory exercises, and some pieces by Ziyad Rahmani historically interpreted by Fayrouz Qasaed and Umm Kultum ("*Saaluni el-nass*", "*Amara, Ya, Amara*", "*Bint el-Shalabiya*", and the instrumental introduction to the well-known song "*Elf Leyla wa Leyla*").

*Laboratory of Performance Practice and Improvisation on Near and Middle Eastern Repertoires*

At the opening of the 2021-2022 Academic Year, I presented to the Umberto Giordano Conservatory of Foggia, where I hold the Chair of Theory, Rhythm, and Audio Perception, a 30-hour teaching proposal titled "A Musical Theory Between East and West" - laboratory of Arabic classical music theory". The course was carried out within my own teaching hours and articulated in three teaching modules. It was a theoretical-practical activity with various disciplinary educational objectives, both specific and transversal, intended to develop skills and competencies in the student that go far beyond the simple notional knowledge of the musical repertoires in question.

The study of the theoretical aspects of Arabic music opens to the Western-trained musician the refinement of transversal musical abilities such as: a greater refinement of intonation aimed at recognizing and reproducing micro-intervals; a greater refinement in recognizing various intonation systems; a greater awareness in identifying rhythmic cycles, paying attention not only to metrical scanning but also to the correspondence between tone and accent; an improvement in active group listening; an enhancement of the ability to reproduce and imitate melodic fragments by ear; an improvement in the ability to "synthesize" a melody with ornamentations in a short time due to the practice of heterophony (absent in Western praxis); an improvement in the ability to anticipate music reading; a refinement in the taste for extemporaneous ornamentation; a greater detachment from the score in favor of a performance guided by ear and taste; and finally, an enhancement of the ability to mentally sing the melodic line to be performed, if not also a fruitful attempt to acquire a performance style different from the one to which one is accustomed.

Samai Sakil Rast Tatios

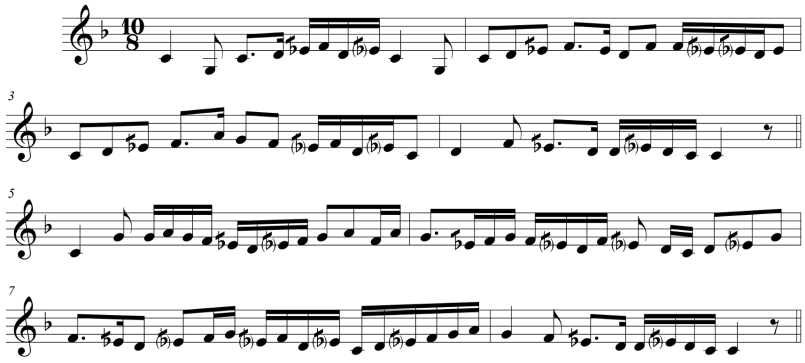

*Fig. 1 – Samai Sakil Tatios – instrumental form in maqam rast*

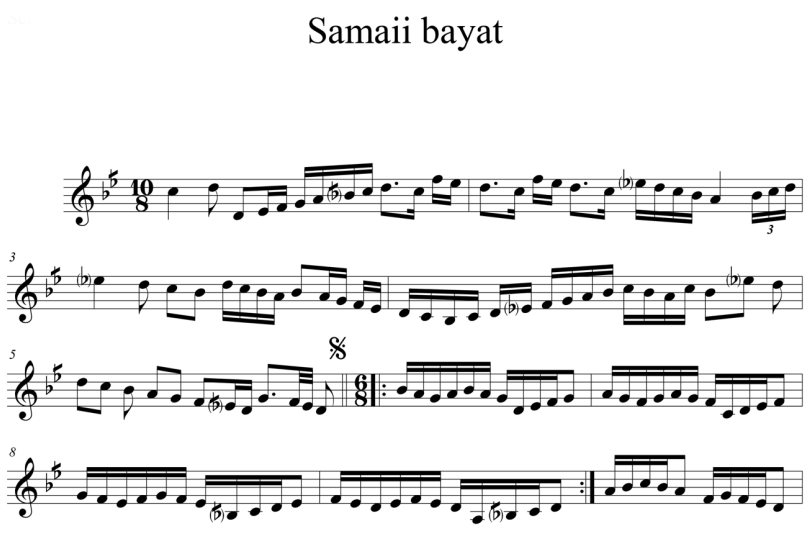


*Fig. 2 – Samai Bayat – instrumental form in maqam bayat*

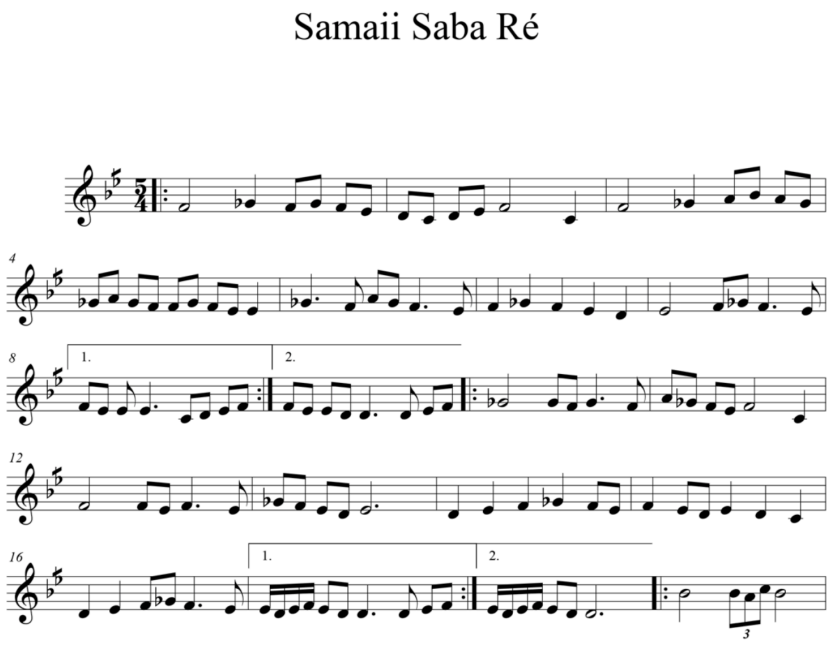


*Fig. 3 – Samai Saba – instrumental form in maqam saba*

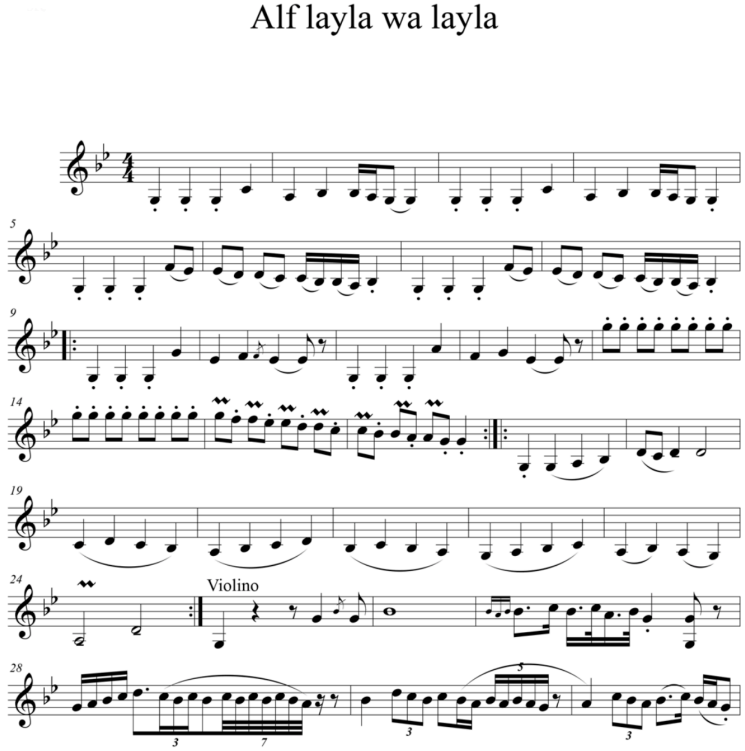


*Fig. 4 – The famous instrumental introduction (muqaddima) of the song Elf Leyla wa Leyla interpreted by Umm Kultum.*

The course, open to all academic students of any musical discipline at the First and Second Level, and to anyone who wants to participate as a free course, is articulated in three modules of 10 hours each. The first concerns theory and includes the following points:

- Historical aspects and general characteristics of classical Arabic music (with notes on culture and history of the Arab and Islamic world);
- Melodic instruments and "Arabized" harmonic instruments;
- Percussion instruments;
- Vocal and instrumental ensembles.

The second module concerns more specifically the analysis of repertoires, identifying in the arrangement and transcription from listening to chosen practices the practical exercise through the instruments available to students and develops the following points:

- The structure of the song;
- Instrumental and vocal forms;
- Techniques of analysis, transcription, and arrangement starting from listening to audio tracks;

- Theory and techniques of improvisation and imitation starting from practical exercises of reciprocal listening and performance;
- Composition of short instrumental melodies in *sama'i* style starting from the main *maqamat*.

The theoretical part of the third module, finally, dealt with the following points:

- Tonal system, traditional tunings, ajinas ("tetrachords"), analysis, and identification by listening to the maqamat of the Golden Age repertoire;
- Embellishments, styles, and ornamentation techniques;
- Rhythms and *Iqa'at*;
- Modulation and sayir (melodic turn around the *maqam*);
- Notation.

Specifically, the following topics were covered:

- Arabic music – historical aspects;
- Traditional instruments of the Arab world (including Arabized Western instruments);
- Performance styles and interpretative parameters;
- The *iqa'a* and the rhythmic pattern;
- Musical forms and genres: instrumental forms (*samaii, bashraf, doulab, muqaddima*); song forms (*qasida, muwashah, qadd, dawr, taqtuqa, wasla*);
- Transcription and arrangement;
- The intonation system;
- *Ajnas*, *maqamat*, modulation, and *sayir*;
- Vocal and instrumental improvisation (the *taqsim*).

The reference sources are mostly taken from my writings, subject to forthcoming publication, and the result of my field studies, elaborations of sources I translated from Arabic, Turkish, English, and other languages, and identified in previous years at the Universities of Istanbul, Cairo, Beirut, and Rabat. These are mostly national magazines presenting transcriptions of traditional and authored repertoires, reflections on the moods of the presented songs, analysis of texts, and specific reflections on intonation systems, particularly on the differences between the intonation system of Turkish music and that of North Africa or the Levantine one (Iraq, Syria, Lebanon, Egypt).

At the end of each module, 10 pieces from the repertoire of the so-called "Golden Period" of classical Arabic music, collected in the field and rewritten for Western instruments, were prepared and interpreted in Oriental style.

Twenty participants enrolled in the course, including violinists, cellists, two percussionists who were asked to play the *riqq* and *tabla* I provided, an electronic

musician, sound technicians, a Turkish singer identified among the Erasmus+ Project students, two clarinetists, an accordionist, and two pianists. Following the active participation of the students, I also requested the purchase of a theremin and an oriental keyboard with the aim of enriching the timbre of the ensemble that I structured during the lessons.

Most of the students came from string instruments, especially considering the importance these instruments play within the Middle Eastern *takht* (ensemble). The composition of the ensemble ultimately stimulated the group to study new and interesting balances in the arrangements of the repertoires.

Regarding the support of electroacoustic instruments, the electronic musician Feliciano Chiriaco compensated for the lack of *'oud* and *qanun* by designing and creating software, which he called "Pythabender", realized entirely in the Max/MSP environment and subsequently deposited. The creation of the instrument demonstrates how computer and mathematical skills with the aid of technologies help research and study of tradition, and how they fully contribute to developing new sounds and functional technical solutions within the framework of what was previously discussed.

The fundamental function of the digital application was therefore, in addition to introducing the timbres of instruments foreign to the Western tradition (such as the *'oud*, the *buzuq*, and the *nay*) through a direct connection with the Kontakt sound libraries, that of setting the Pythagorean tuning to the string instruments, tuning them according to Arabic tradition, managing intonation (a role that the oud usually assumes in Oriental ensembles), and finally tuning the so-called "*sikah* notes", i.e., altered by a quarter tone based on the reference *maqam* ("scale"). The instrument, performed by a pianist in the ensemble via a MIDI controller, perfectly fulfilled its task.

Based on the alterations of a certain scale, the software, in fact, is able to "detune" the B flat, F, A flat, and E flat, thus making itself an ideal instrument for tuning the string instruments of the ensemble and the voice. It is also able to construct particular tunings and *maqamat* in which tones with alterations even smaller than the quarter tone are present, and with which it is possible to regulate the intonation to the cent, in order to make the execution of certain particular repertoires credible that would otherwise be unplayable with Western instruments. It should be remembered, in fact, that certain particular *maqamat* would be unplayable even with the most traditional oriental keyboard.

The sound technicians, on the other hand, were given the task of recording the live performance of the ensemble with the equipment available at the Conservatory, respecting the sound pickup arrangements inspired by the arrangements visible in the videos and identifiable in the recordings of the performances broadcast by Egyptian TV from the 1950s onwards, and therefore to propose, based on their study experiences, a microphone arrangement appropriate to the rehearsal spaces and the structure of the ensemble composed of the participants.

Furthermore, among the multiple results achieved at the conclusion of the course, which included a merit examination, a cellist student, in light of the experience

acquired with the laboratory, decided to present, at the end of her three-year degree course, a thesis on orientalism in C. Saint-Saëns, articulating an analysis and arrangement for Arabic *takht* of the "Arabian Dance" for symphony orchestra from the opera Samson et Dalila.

In conclusion, in light of this small example, we can affirm that this type of innovative and transversal, multi-ethnic, technological, and traditional teaching approach can be directed to the entire AFAM sector, in order to foster inter-institutional dialogue and with the territory through exchanges, public tenders, private cultural and volunteer Associations, foundations, Regions and Municipalities, foreign Institutions, and Cultural Institutes. It would also have the potential to promote new and expendable skills aimed at innovating the educational offer to develop various specific and general transversal abilities while at the same time educating in interculturality, developing curiosity in the Western student and interest in cultures and music different from one's own and outside one's comfort zone, in traditions, in non-European cultures, and in all those borderline territories of knowledge generally ignored by academic culture. It is also able to develop the student's creative thinking by fostering the desire to explore linguistic and musical contaminations, to overcome the ethnocentric paradigm, to promote teamwork, innovation, and artistic and technological experimentation based on a design that starts from a practical task that is both creative and performative.

Regarding specific competencies, students learned to recognize the simplest *ajnas* ("tetrachords") and *maqamat*, the expressive potential of modulating paths (*sayir*), the most common rhythmic formulas present in the most important Middle Eastern vocal and instrumental repertoires, the execution of *sikah* notes (or quarter tones), the technique of Arabic ornamentation, and heterophonic execution.

Finally, regarding transversal musical competencies, the laboratory, as we had set out in the programming phase, allowed participants to enhance active listening, memorization of melodic lines, imitation of instruments and singing melismas, transcription exercise, taste for ornamentation, attention to micro-intonation, knowledge of non-tempered tunings, sense of rhythm through the recognition and reproduction of cycles (the *iqa'at*) through the decomposition and recomposition of patterns, and taste for arrangement based on the available ensemble, making a virtue of necessity.

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