The Delivered Effect of Arabian Musical Modes "Maqamat" within a Group of German Listeners – An Incentive to Motivate globalization of Musical Curricula

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دراسة تأثير المقامات الموسيقية العربية في المستمع الألماني وجعلها حافزاً من أجل عولمة المستمع المناهج الموسيقية

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ملخص

هدفت الدراسة إلى قياس أثر مقامات الموسيقى العربية على المستمع الألماني، حيث تمت التجربة على عينة من المستمعين في جامعة الفنون في برلين (UDK) واستمعت العينة إلى ثلاث مقطوعات موسيقية عربية الشتملت ثلاث مقامات هي؛ الراست، والصبا، والنهاوند. وقد تم إسماع العينة للمقطوعات في مرحلتين؛ في المرحلة الأولى تم تقديم المقطوعات بطيء وفي المرحلة الثانية تم تقديمها المقطوعات بليقاع بطيء وفي المرحلة الثانية تم تقديمها بإيقاع سريع.

افترضت الدراسة إعطاء وصف طابع محدد لكل من المقامات الثلاث، حيث وصف مقام الصبا بالمقام الحزين، ووصف مقام النهاوند بالمقام العاطفي، ووصف مقام الراست بالحيوي، وذلك استنادا إلى وصف طابع تلك المقامات من قبل معظم الموسيقيون العرب. وقد أظهرت التجربة أن المستمع الألماني قد أعطى المقامات المذكورة آنفا ذات الوصف وبالنتيجة يظهر أن التأثير الموسيقي مشابه بغض النظر عن أصل المتلقي وطبيعة ما هو معتاد على سماعه، وهذا يعزز نظرية عولمة المناهج الموسيقية.

Abstract

This study is an attempt to measure the impact of Maqam, a mode of Arabic music, on a sample of listeners at UDK (University of art in Berlin). The students listened to three Arabic musical pieces that covered three modes: Rast, Saba and Nahawand. The Rhythmic tempos of the three pieces were played in two phases: slow and fast.

Each of the three modes was given a specific description; the first mode was "Saba" and theoretically had a grieving effect, the second was "Nahawand" and theoretically had sentimental effect, and the third was "Rast" and theoretically had an energetic effect. The experiment showed that the three different modes have impact on German Ear, which generally correlates with what most of the Arab musicians propose.

Introduction

The majority of musicians define music as the global language. This definition indicates that music curricula can be globalised which implies that music audiences, no matter where they are, can share the same interests in all sorts of music. Based on Stålhammar (Stålhammar, 2006, P.126) accordingly, the research aims at proving the hypothesis which says that music curricula can also be globalized.

In a research carried out during the summer of 2007 and entitled "Integration of Arabic and western music through introducing Arabic music in The German primary curricula and published in (Musik, Tanz and Kunsltherapie)" in the 19th journal, book "1" in 2008 (Haddad, 2008, P.15), the researcher has discovered that most of the study sample had positive responses and enjoyed listening to Arabic music. The study also showed that Arabic music could be enjoyed and appreciated by European listeners.

The research gains foot to prove that Germans who are not accustomed to listening to Arabic music can really enjoy listening to it, which sheds light on two issues:

Firstly, Music is truly global and can generally be understood by all people in almost the same way whether they are previously acquainted with it or not.

Secondly; based on the first assumption, Arabic music can be a part of the music curricula in the European world.

Study Purpose

It is very conventional among Arab musicians and composers that each Arabic Music Mode "Maqam" has its own related effect, giving it a special character marked with a different feature among other modes.

However, European listeners are not quite accustomed to listening to these modes as they are not familiar with the quarter tone that exists in most Arabic music modes. Therefore, the purpose of this study is to examine how German music students in particular receive Arabic music tones, taking into account how the Rhythmic tempo of music pieces will affect the feelings of the audience.

Justification of the Study

It was the French composer, Joseph Sauveur who created the system of sound intervals in1701, and who simultaneously was interested in studying Arabic music

intervals (Ghrab, 2005, P.55).

Many researchers in the fields of musicology and music therapy believe that music has a special effect on the receiver's mood depending on the type of music he or she is listening to, and according to the rhythmic tempo of the piece.

In this context, "Al-Safadi Salah al-Deen" (2nd -3rd Century) wrote his book, "Resalah Fee Elm AlMusiqa" A letter in the science of music in which he says "Music is the wisdom that the soul cannot reveal in words, but in simple sounds". He goes on to say "When music is perceived and admired by the soul, it relives the soul of sins and rises to sublime levels where angels are. He adds, "Music relates to the glory and abandon evil. (Al-Safadi, 1991, P.14).

Germany is considered a pioneer among other European countries in carrying out musical researches and has the advantage of hosting Turkish and Arab nationalities that exposed Germans to oriental music through attending music concerts. It is to assume that this can affect the German musical taste. Hence, this study is an attempt to measure how German music students are affected and how the Rhythmic tempo pattern is received by such students in the terms of modes effectiveness.

Study Aim

This study aims at disclosing the delivered effect of Arabian music scales on occidental listeners. It also aims at globalizing music curricula and drawing up a bibliography reference for students who wish to study Arabic music theories or those who are interested in music as a mean of therapy.

Study Limitation

This study is meant to be used by music students at the University of Art, (UdK) in the state of Berlin and is limited to three music modes: Rast, Nahawand and Saba. It is also worth mentioning that further studies should be made to support the findings of this study. However, the study is merely a case which holds results that either conform or contrast on a larger study sample.

Study Methodology

To achieve the aim of this research, processes of measuring the effect of three different modes with three different rhythmic patterns have simultaneously been chosen. A group of German University music students have been exposed to listen to the three

different kinds of the Arabic musical modes "Maqam" which have been chosen theoretically as per their effect. The first mode was "Saba" and theoretically had a grieving effect. The second was "Nahawand" and theoretically had sentimental effect. The third was "Rast" and theoretically had an energetic effect. The experiment was accomplished in two phases. In the first phase, long and slow rhythmic pattern were used, where in the second phase short and fast rhythmic patterns were used. After each phase examiner responses were documented through a questionnaire and results were compared to the Arabic theoretical statements. The findings should either prove or disprove the hypothesis stated by the researcher. Thus the results can either motivate or discourage educators to conduct a process of globalizing musical curricula accordingly.

Statement of the Problem

European Modes are mostly common among many oriental listeners and Western music is taught widely in almost all schools of music and Universities in the Arab world. However, Europeans mostly avoid listening to Arabic musical modes, probably because the existence of the quarter tone which makes it unusual and more complicated than to be comprehended fairly by them. So far no research has been conducted to determine the effect of listening to Arabic music and to measure its effect on European listeners.

Depending on the results, this study should prove or disprove a statement which assert that music is really a global language and will lead to a conviction that conduct a process of globalizing music education curricula.

Research Questions

The following research questions will be addressed in this study:

- 1. How does Arabic music impact the European listeners?
- 2. Do Arabic rhythmic patterns make significant changes in feelings within the same mode according to European listeners?
- 3. Is it important to globalize music education curricula?

Review of Literature

In her article published in Chronicle of Higher Education; 3/23/2007, Vol. 53 Issue 29, Johanna Keller profiles cellist "Yo-Yo Ma" and his Silk Road Project, which he began in 1997. The Silk Road Project, a musical collaboration, has produced hundreds of performances and educational events, three recordings, and 24 commissioned works by international composers. The project is named after the Silk

Road that led from the Pacific Ocean through the Middle East and to the Mediterranean Sea, allowing trade in technology, culture, and ideas. The performers involved shared music from the cultures touched by the Silk Road, and Ma uses it to share ideas on aesthetics, philosophy, globalization, business practice, management, and cultural diversity. Ma embraces all genres of music and expresses a compulsion to understand and create meaning.

In her article published in Journal for the Scientific Study of Religion; Dec. 2006, Vol. 45 Issue 4, Lyns Schofield Clarck discusses music in the context of culture and religion. Of all the aspects that pertain to culture and religion, the question about why the role of music should be studied is considered. The author believes that music represents the very speech and soul of individuals and their communities and plays a significant role in relating a religion to its practices. She also talks about the role of Globalization and technology in rapidly spreading music genres and how it has impacted local cultures and religions.

Characteristics of Arabic Music

It is acknowledged that Rhythm and Melody are the basic elements of Music. However, there are differences between the order and the duration of musical notes as well as the notes' altitude "position" on the scale or what is physically known as note frequencies. These are the things which create the "approximately" unlimited musical melodies worldwide.

Arabic music is a part of the world music and consists of the same elements and is characterized with mostly a single melodic line. Moreover; it is probable that the quarter tone is the most distinguished character which endows Arabic music with a particular taste. Nevertheless the ancient Arabic music was only coupled with singing, but through time, especially during the Turkish rule of the Arab world, "instrumental music" started to emerge within Arabic music compositions deriving from Turkish forms such as "Beshrew", "Lunga", "Sama'i" etc. (Kamel, 1980, P.140), later on, and during the 20th century, Arabic music compositions imitated some Western music forms such as concerto and sonata. Nevertheless, most of the ancient Arabic music compositions were not scored or documented, but survived until now because of a special advantage of Arabs; in other words, they preserved their traditions and memorized most of their musical poems and songs (Gorgy, 1989, P. 50).

Arabic music is also characterized with a wide variety of Tempos and Rhythmic

patterns diversity in musical scoring construction. Arabic music compositions are mostly described as dance-music and have been widely used as a mean of entertainment. At the same time, some Arabic Rhythms are designed to achieve "Gleeful" or what is known in Arabic as "Tarab". Neubauer defined "Tarab" as the ability of music to fill the human soul either with happiness or with sadness (Neubauer, 1990, P.227).

The existence of the quarter tone makes a difference not only in the variety and the diversity of modes "Maqam" but also in the delivered effect or "impact" of Modes that are simultaneously correlated with the Rhythmic pattern and Tempo. Arabian musical modes are mostly a combination of two or more "Tetra-chords" joined together either continuously, overlapping, or separated (Fathalla, 2001 PP.38 – 41). To assign the quartertone a symbol of half sharp or half flat is added, leading the performer to do either ascending or descending quarter transposition of the note, depending on the sign before the transposed note or in the key signature.

The Three Arabic Modes "Magams" used in this Study

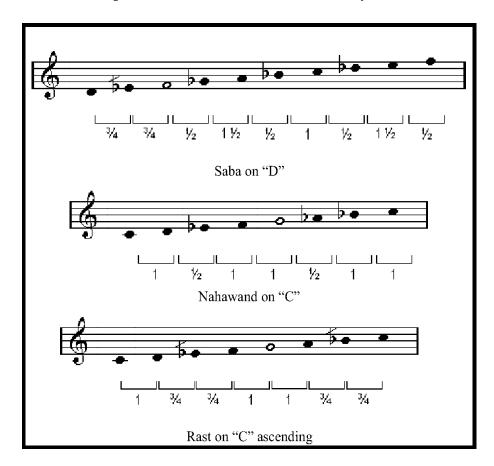
Most musicians and music therapists believe that music is associated with emotional feelings and is used as a social means of communication. It can be more effective than many other means of communication as it provides a vehicle for expressions and emotions (Gfeller, 1999, P. 47). The researchers believe that Arabic music expresses human feelings more efficiently because of the huge diversity in its' modes "Maqam" as well as rhythmic patterns.

Regarding the mentioned belief and through reviewing the Arabic music theories concerning the effect of each Mode, there was a consensus within most musicians that all Modes effect can be confined to three categories; "the emotional effect, the grieving effect, and the energetic effect". In addition, the researchers have chosen three kinds of different Modes successively where each one represents; "as most Arab musicians assert" one different effect to "Saba, Nahawand, and Rast". We find that some Arab music composers believe that there are twelve Arabic basic-modes that are represented in four characters: Fire, Water, Soil, and wind, and that the Rast mode represents Fire, which means that it has an energetic effect (Al Mahdi, 1986, p. 177), "Saba" mode represents sadness and grief, and "Nahawand" mode represents Emotions (Touma, 1996, p.43). Table 1 shows the Modes and their related effect selected by the researchers:

No.	Mode	Described effect
1	Saba	Grieved
2	Nahawand	Emotional
3	Rast	Energetic

Table 1: Modes and their related effect selected by the researchers

The essential difference between Mode "Maqam" and Scale is that the Mode consists of two or more "Tetra-chords" and may include microtonal interval "quarter tone". In addition, Modes' intervals could vary from one to another, e.g. the E[†] in Maqam "Bayat" is tuned slightly lower than the E[†] in Maqam "Rast". This can only be learned by continual listening but not by theoretical readings. That is why the traditional oral learning is the correct way to learn Arabic music. Finally, the Mode may vary in its intervals depending on the way it is played, e.g ascending or descending. A good example of that is the "Rast". This Mode consists of B[†] when it is ascending and a B[†] when it is descending. Table 2 shows the Modes used in this study and their intervals:



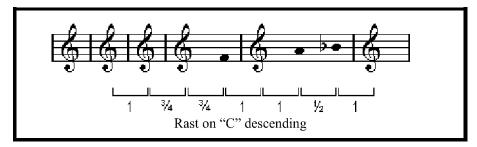


Table 2: Modes Scores used in this Research

Study Sample and Independent Variables:

The Study sample consists of a small group of music students at the University of Art – Berlin "UdK". It was hard to gather larger groups at the end of the semester. Almost 50% of the sample were males and 50% were females.

This was taken as an independent variable, and another two independent variables were excluded from the study. The first one was specialization sphere and was excluded because 95% of the sample were performers while the second one was the previous experience with listening to Arabic music and was excluded because almost 80% of the sample did not have experience in this sphere. The "Gender" variable is considered only for the questions related to the effect of modes "Maqam"; i.e. questions (4-6) and (13-15).

Study Tool:

A questionnaire was designed by the researcher and refereed by some university lecturers in the field of music education. The questionnaire contained 15 questions categorized as follows:

- The first three questions were the independent variables. Only one independent variable has been recognized "the Gender" and the other two were excluded for the reasons mentioned above.
- \bullet Questions 4 6 referred to the questions of the study in phase I.
- \bullet Questions 7 12 were general questions regarding Arabic music.
- Questions 13 15 referred to the questions of the study in phase II.

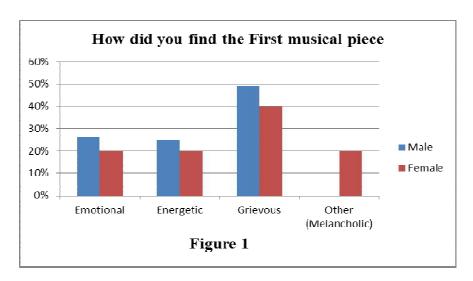
The Results:

After collecting data, a process of computer analysis took place using the "Graf Stat' program designed at the WWU-Muenster. The researcher considers a difference of

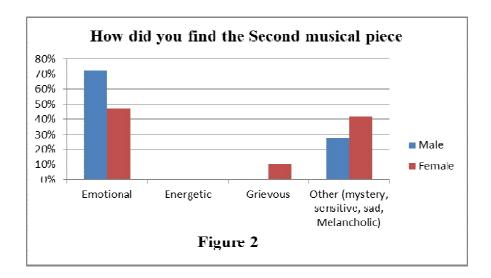
more than 20% and above in responses. However the small study sample showed a significant difference.

In the first phase, the study sample was submitted to the Modes "Saba, Nahawand, and Rast" in sequence and slow Rhythmic pattern were used. The following results were obtained:

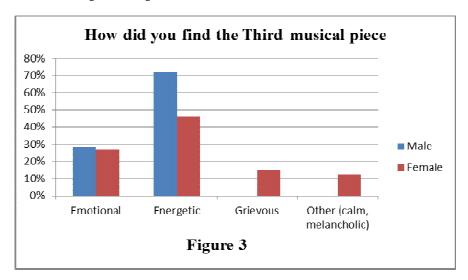
1- Regarding the first music piece in "Saba" mode, most of the study sample (average of 45%) pointed at the grievous effect of the mode with no significant difference, but only females pointed that the mode has a melancholic effect. Figure 1 shows the results:



2- As for the second musical piece in "Nahawand" mode, most of the study sample (average of 60%) pointed at the emotional effect of the mode with a significant difference of 25% for the males attributed to gender. A part of the study samples pointed at some other effects such as; Mystery, Sensitivity, Sadness, and Melancholy with no significant difference attributed to gender. Figure 2 shows the results:

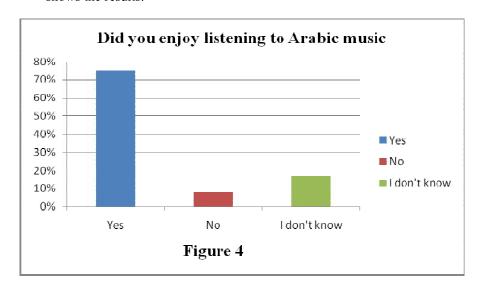


3- Regarding the third music piece in "Rast" mode, most of the study sample (average of 59%) pointed at the Energetic effect of the mode with a significant difference of 31% for the males attributed to gender. However, a part of the study samples also pointed at an emotional effect with no significant difference attributed to gender. Figure 3 shows the results:

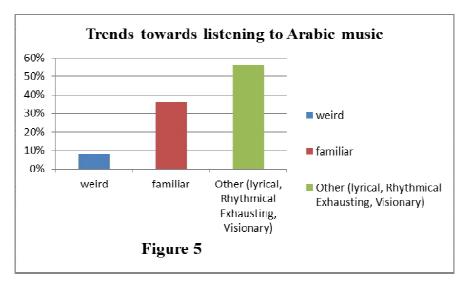


4- The following results were gained regarding the general questions about Arabic music :

• When people in the sample were asked if they enjoyed listening to Arabic music, most of the study sample (75%) answered with "Yes". Figure 4 shows the results:

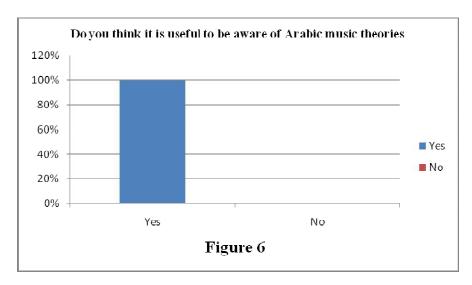


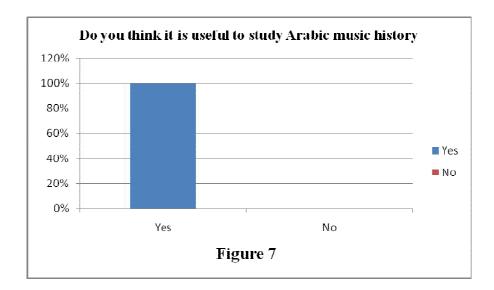
• When asked if they found what they had listened to weird, familiar, or else, the majority of the sample (56%) answered with "else" describing it with "lyrical, Rhythmical, Exhausting, and Visionary". The second majority answered with 'familiar" Figure 5 shows the results:



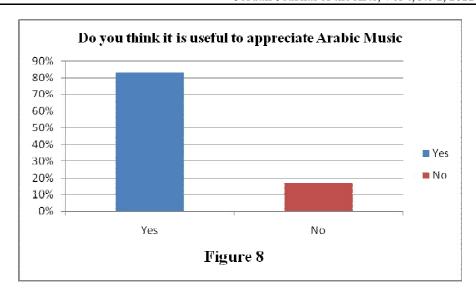
• The most surprising results were when asked if they think whether it was useful to be aware of Arabic music theories, all of the sample members answered with "yes", and the same responses came when asked it if they

thought it was useful to study Arabic music history. Figures 6 and 7 show the results.

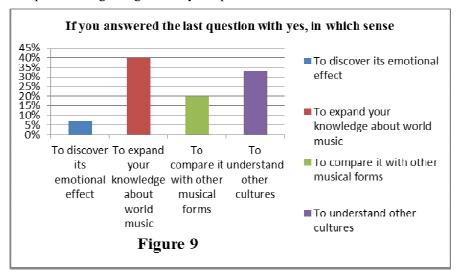




• The results came a little different when the sample members were asked whether they think it was useful to appreciate Arabic Music. The majority of responses were "yes" figure 8 shows the results.

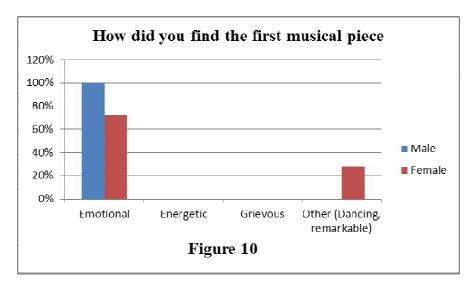


• The reasons why most of the study sample find it useful to appreciate Arabic music, as it came in their responses "in descending order the majority" said it was vital to expand their knowledge about world music, to understand other cultures, to compare it with other music forms, and to discover its emotional effect. Figure 9 shows the results, elaborating their priorities regarding the study sample.

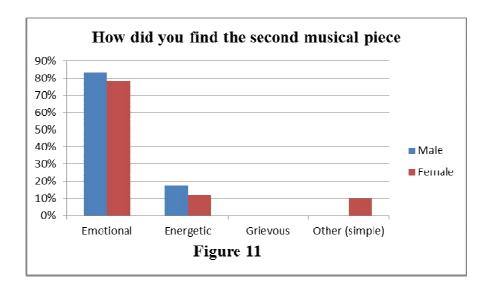


Moving to Phase II, there was almost no paradox between the responses attributed to gender, and most responses took the same trends. The Study sample was submitted to the same Modes "Saba, Nahawand, and Rast" in sequence but with a fast Rhythmic pattern. The following results were gained:

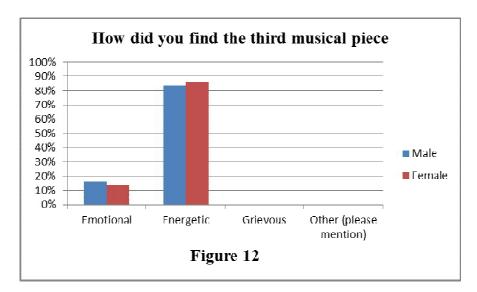
1- Regarding the first music piece in "Saba" mode, most of the study sample (average of 86%) pointed at the emotional effect of the mode with no significant difference, but only females pointed that the mode has a dancing and remarkable effect. Figure 10 shows the results:



2- Regarding the second music piece in "Nahawand" mode, most of the study sample (average of 81%) pointed out the emotional effect of the mode with no significant difference. Figure 11 shows the results:



3- Finally, regarding the third music piece in "Rast" mode, most of the study sample (average of 85%) pointed out the energetic effect of the mode with no



significant difference. Figure 12 shows the results:

Analysis of the Results

After reviewing the results of the study, the researcher analyzed them giving his point of view about those responses concentrating on the responses related to the study aim "the delivered effect of the Arabic modes" in both phases.

First: Analyzing of the Results in Phase I

According to the sample the results of first response, the results showed that "Saba" mode has a grievous with no significant difference attributed to gender. In addition, results showed that females pointed out melancholic effect of the mode.

This result corresponds with the hypotheses assumed by the researchers and cited from many Arab musicians. And since there is no significant difference between males and females opinions, the results conduct to a verification of the hypotheses proving that the grievous effect of "Saba" mode is perceived by German listeners as well as Arabic listeners.

As for the melancholic effect that was pointed out by females, the word has more or less the same meaning, i.e. both words "Grievous and Melancholic" indicate a sad feeling during "Audiation"iii.

Moving to the second response, the results showed that "Nahawand" mode has an emotional effect with a significant difference of 25% for the males attributed to gender In addition, results show that the mode has such effects as: Mystery, Sensitivity,

Sadness, and Melancholy with no significant difference attributed to gender.

This result also corresponds with the hypotheses assumed by the researchers and cited by many Arab musicians. The significant difference appeared because females have given the mode other different descriptions which also related to highly emotional senses appear during "Audiation".

By looking at the third response, the results showed that "Rast" mode has an energetic effect with a significant difference of 31% for the males attributed to gender. In addition, a part of the study samples pointed at an emotional effect with no significant difference attributed to gender.

The result corresponds with the hypotheses assumed by the researchers and cited by many Arab musicians. The significant difference appeared because there were trends towards giving modes' affected the other discretions concerning their effect. These trends were described only by females and affected the percentage.

The emotional effect, which a part of the study sample pointed out, might have appeared because the sample associate energy with another kind of western Rhythms such as "Marching and Fox" Rhythms.

The following responses that appear in figures 4-8 show a positive trend towards studying, understanding and appreciating Arabian music theoretically. Similar results are attained in a previous study accomplished by the researchers in the year 2007 achieved at WWU Muenster and published in "Musik-Tantz- und Kunsttherapie" in 2008 (Haddad, 2008, pp. 15 – 18).

Responses in figure 9 show that the most important reasons to appreciate Arabic music for study sample are to expand their knowledge about world music in the first place, and to understand other cultures.

These results tell us that Arabic music could be important and gain a good acceptance among European music students in general and Germans in particular, as a theme of study, and that they are interested in understanding such music for purely cultural purposes. These trends appear because Europeans always listen to Arabic music and comprehend it merely as melodies that do not correspond with their way of composing and harmonizing music. Also, Sahab has pointed this out in his book "The Great Seven" (Sahab, 2001, p46).

The results were expected as they appear and do not contradict with most existing

music theories. The results even correspond with and confirm the theory of Meyer landmark who emphasizes that emotions and music can be connected within different listeners in two broad ways; (Schubert & McPherson, 2006, p. 194).

"referentialism – where the meaning in music comes from direct association made with the situation, mood, and so forth and the music: something outside connected and associated with the music. Absolutism – suggested that the meaning of music comes from the structure of the music itself, without any need to make reference to something outside music".

Second: Analyzing Results in Phase II

In phase II study the members of the sample were out to the test for the same modes but with fast rhythmic tempos. The results showed that "Saba" mode, according to the study sample, has had an emotional effect with no significant difference attributed to gender. In addition, results showed that females pointed out a dancing remarkable effect of the mode.

The results in this case show a conversion in opinions regarding "Saba" mode because it is described as giving a grievous effect in phase I associated with the slow rhythmic tempo, whereas, it has an emotional effect associated with the fast one. This happened naturally because the tempo played an important role in reflecting the effect of the mode, but this doesn't mean that this happens frequently.

The reason why females felt that 'Saba' mode is related to dance is probably because their cultural background regarding the type of melody they have been listening to and the cultural background regarding Arab traditions which connect music to dancing and singing together. This explains Neubauer's theory which is mentioned at the beginning of this research. It also corresponds with the ethnomusicologist's theories that consider music as the most stable element of culture which encapsulates and symbolizes nature or the essence of a culture for its people thus enabling them to identify with their culture through music (Walker 2006, p.439).

Results for the modes "Nahawand" and "Rast" did not change and still reveal the emotional effect for "Nahawand" and an energetic effect for "Rast".

This indicates that the rhythmic tempo does not have that significant effect within the European listeners, because emotional and grievous effects could be pointing to one direction while the energetic effect directs to the other direction. Rhythmic tempo did not have any effect within the other two music modes.

It is appropriate here to mention that the factors which make the judgments on music depend on the cognition of autonomous form. This is also assured by many musical theorists such as Suzanne Langer and Leonard B. Meer, who do not only exclude emotions and sensuousness from their theories, but also ensure that we experience music as a "presentational symbol" of emotions, Bowman (2004) says that music shared common structural form with the realm of feeling (Barrett, 2006, p.172).

Recommendations:

Referring to the research results the following recommendations are to be taken into consideration:

- For cultural and knowledge purposes, Arabic modes (Maqam) should be introduced in the study plan of music schools and Universities in Germany.
- Arabic music should be introduced during the school phase and Arabic Rhythm should be taught during Orff's "schulwerk" at the German schools
- More investigations and researches should be done regarding the comprehension of Arabic music and Arabic Rhythms.
- Similar studies should take place in other regions of Europe and the world.

Endnotes

- i Both phases are elaborated in study methodology.
- ii This question was an open question and has been modified after the responses appeared in the four categories index appears in figure 9.
- iii Audiation is the process of mentally hearing and comprehending musichttp://en.wikipedia.org/wiki/Audiation.

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