Notation of nonmetric structures

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Abstract
In Turkish music, while the view regarding the non-inclusion of nonmetric musical structures in notation has been prevalent until recently, it can be accepted that some progress has been made in this regard nowadays. However, it cannot be said that the existing notation methods can meet the needs even today. We believe that the most important reason for this is that the emerging note cannot adequately reflect the performance of the resource person. The lack of the metronome of the note and the failure to develop a strategy for determining the unit time value can be shown as the main points that make us think that the current notation is not enough to reflect the performance. Gazel in Turkish classical music, qasida in religious music, and uzun hava in Turkish folk music and accordingly improvisation or taqsim in folk music are nonmetric musical structures. In this paper, an example of the applications performed to improve the notation of nonmetric structures was presented to those concerned. As a performance of notation, the work entitled Sarı Yazma, which was randomly performed by Çekiç Ali, was selected with nonmetric folk song samples in folk music. These applications were made using the Sibelius 6 software. Furthermore, the current notation of the same nonmetric folk song made by another researcher will be compared with the notation made by us.

Keywords
uzun hava in Turkish folk music, gazel, qasida, nonmetric melodies, notation

Gazels in Turkish music, qasidas in religious music, and uzun havas in folk music are musical forms with a nonmetric structure. It is also necessary to add improvisation and guidance in folk music and taqsims in Turkish classical music to them. Since this study was performed with uzun havas, other forms were excluded from the limits of the study. A nonmetric folk song is a form of music without a certain metric walk, in other words, without a regular rhythm (Şenel, 1992) (Sarısözen, 1962, s. 5); (Hoşsu, 1997, s. 12); (Özbek, 1998, s. 194); (Duygulu, 1995, s. 22); (Bartok, 1991, s. 221). Uzun havas in Turkish folk music are more common in the Aegean, Southern, Southeastern, Eastern, and Central Anatolian regions compared to other regions; however, they are also available in various parts of the country. According to Şenel, brothers Seyfettin and Sezai Asaf introduced and defined the term "uzun hava" to the scientific community for the first time. According to Şenel's citation, it is stated that Mahmut Ragıp Gazimihal mentioned the concept of dialect and that Ahmet Adnan Saygun, Sadi Yaver Ataman, Muzaffer Sarısözen, Nida Tüfekçi, and Mehmet A. Özbek made repetitive definitions (Şenel, 1992, pp.

287-309).

Although the notation of uzun havas has not reached a systematic instruction yet, it is observed to have been notated by many researchers/artists. We can list some of the leading researchers such as Ömer Şan, Ahmet Turan Şan, Nurettin Çamlıdağ, Kubilay Dökmetaş, Cihan Yurtçu (Yurtçu, 1996), Hamit Çine, Nurettin Demirbaş, Veysel Aydın, Altan Demirel, Muzaffer Sarısözen, Melih Duygulu, Kurt Reinhard, Yücel Paşmakçı, Süleyman Şenel, Uğur Kaya, Şenel Önaldı, and Ali Can. Despite the difficulty in including uzun havas in notation due to their nonmetric structures, these people have notated uzun havas and made a significant contribution to the field. The declamation of more than one word on a note in a speaking way (Recitative), the inclusion of a syllable in a note (Syllabic), the ornament of a syllable with more than one note persistently (Melismatic), and the mixed use of them are the features of uzun havas (Şenel, 1992). Therefore, the existing notation features were created within this framework. The notes of uzun havas are reflected in the performance at the disposal of its performer. It appears that a performer who wants to learn an nonmetric folk song needs to resort to the voice record of the resource person of the nonmetric folk song that he/she wants to learn. The note is not sufficient as it is.

The lack of knowledge of how fast the note will be read due to not providing any metronome, the fact that the notation forms of the rhythm make it challenging to read since they may be considered as a notation error, and they do not overlap with the performance of the resource person, and the non-overlapping of those with an indicated metronome with the performance are regarded to be the main problems encountered in the existing notations. The most critical problem in the notation of uzun havas is the question of what the unit note value will be. Therefore, it is essential to determine the unit note value on the works studied in nonmetric structures by the metronome test.

Although uzun havas may seem like a nonmetric structure, they have vibrational movements and frequencies with a frequency of repetition at certain seconds in the linear time space. The determination of vibration frequencies may be visible in the linear time space by the spectrum analysis based on Fourier transform, which also indicates that nonmetric structures have periodic movements based on the performance principles in the linear time space. With Fourier analysis, a function in the linear time space can be analyzed by reducing it to frequency elements. Therefore, the time period in which the frequency or frequency components appear can be determined.

Method

The questions of the study consist of questions such as what the problems experienced in the notation of uzun havas are, how to create a system that can be easily applied and gives the most accurate result to solve those problems, what the unit value will be, how to minimize the difference between notation and performance, and how to measure this difference. The problems of the study were revealed by the descriptive literature review, various software packages were examined for a feasible solution, Sibelius 6.0 notation software was preferred, and hypotheses were prepared on how to apply this program to uzun havas. Afterward, based on the resulting data, the difference that emerged as a result of the synchronous execution of performance and note was also measured with the same program. The synchronous execution of performance and note refers to the metronome test. Moreover, time markers were added. Accordingly, confirmation of the overlap of the performance time markers with the note or the overlap of

the note with performance time markers would be provided. For example, we aimed to obtain the overlap confirmation of the performance of Çekiç Ali in the same second with the note written at 00:00:04:22. The limits of the study were the nonmetric folk song (uzun hava) Sarı Yazma taken from Çekiç Ali. We selected this work from among the works that had been noted before us (Appendix 1), and we also notated it using our own method (Appendix 2) and compared them to see the difference. The name of the person who notated the work we compared (it will be mentioned as the compared note) was not given due to ethical reasons. In terms of the historical method, the reality of the work used in the study was considered correct since it was transferred from the resource person.

Tools and Materials

The tools and materials used in the study were a computer, Sibelius 6 notation program, and the recording of the work to be notated that was converted into an "audio" or "mp4" format.

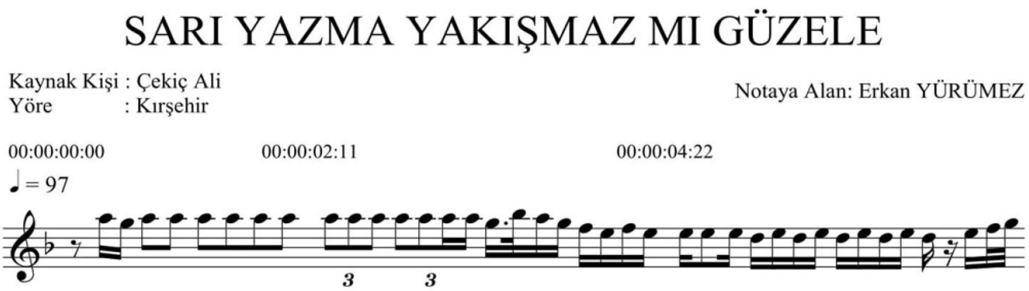
Procedure

After the Sibelius 6 program opens, a new notation page should be created on the window that appears. Afterward, the equipment and metronome are set to 100. On the tools bar, the file extension is made "All files" on the window "Play > Video and Time > Add Video," the "audio" or "mp4" format of the work that we would notate is selected, and the "Open" button is pressed. The letter "M" should be pressed so that the tone of the work and the tone of the notation program would match, the sign "(Show interface)" ▫ next to the first "GM - MODULE" panel should be clicked from the window that appears, and the tone should be matched using the "Transpose" and "Fine Tune" options on the window that appears, which will make audition and notation easier. In order to follow the time, the "Play > Video and Time > Timecode and Duration" instructions should be followed from the toolbar, the "Above every bar" option should be selected from the "Timecode" section on the left side of the window, and on the right hand, the time unit should be selected per meter, and the "OK" button should be clicked.

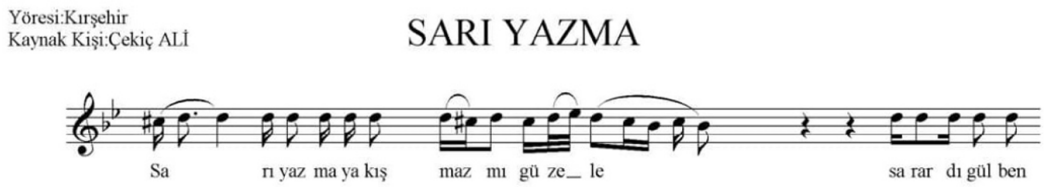
Results and analysis

The procedure was prepared in the notation program, and the metronome test was performed for real-time compliance with the performance. The appropriate metronome expense for this work was found to be 97 (Note 1).

Metronome speeds other than 97 were tested and found to be incompatible with the real performance. A line from the note sample compared in note 2 is given for the metronome test. When the real-time performance was carried out together with the sample note compared, it was observed that the note expense and performance or the performance and the note did not



Note 1: The first line for 97 Metronome confirmation.



Note 2: The sample note compared.

overlap.

The notation made by us (presented in the appendix) fully met the metronome test. When the note and the real performance were played synchronously, it was observed that there was an overlap in the time markers written on the top of the notation and running parallel to the note. Therefore, the closest note to the real performance was obtained with this notation technique.

Conclusion

The conclusions achieved in the examination are presented below.

The following was concluded:

- the first thing that should be done in the notation of nonmetric structures is the metronome test,
- the closest notation to real-time performance can be obtained by determining how fast the work will be read,
- notation according to Syllabic, Recitative, or Melismatic structures leads to notation errors,
- therefore, the notation should be preferred to provide the ease of reading the notes,
- the note should overlap with the time markers in the performance of the resource person,
- for example, depending on which motives are present in the 35th second in performance, the same motive should be present in the 35th second of the note.

The uzun hava notation method presented to the reader here is desired to be a practice that everyone can contribute to developing it further. We hope that it will be discussed in doctorate and postgraduate studies and that it will be further developed for both notation and articulation, tone and dialect features. We recommend this method to both experts and students for the notation of nonmetric melodies such as uzun hava, qasida, and gazel.

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Nonmetrik yapıların notasyonu

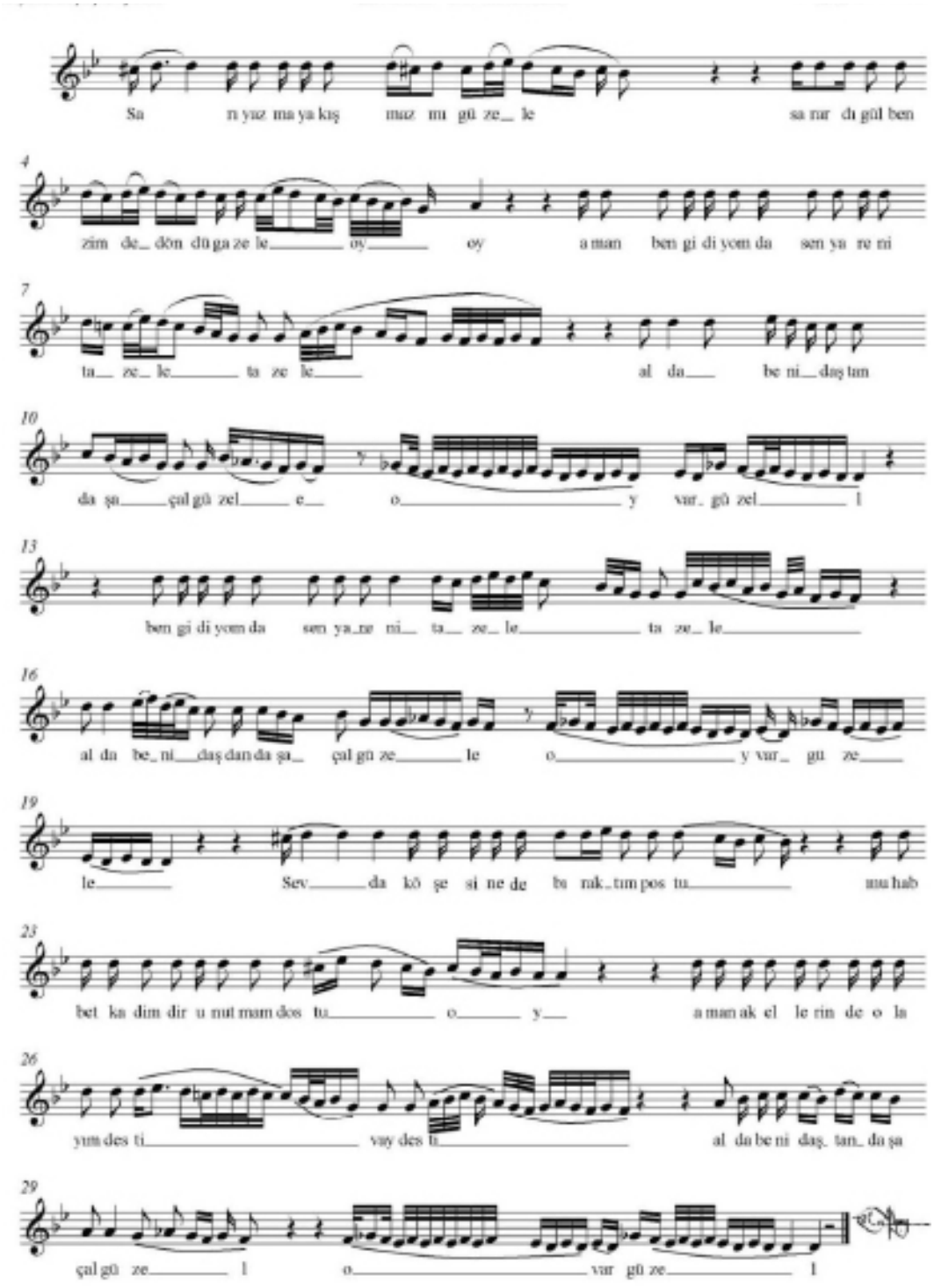
Özet

Türk müziğinde nonmetrik müzikal yapıların yakın zamana kadar notaya alınamayacağı görüşü hakim iken günümüzde bu konuda biraz yol alındığı kabul edilebilir. Ancak mevcut notasyon yöntemlerinin ihtiyaçları karşılayabildiğini bugün dahi söyleyemeyiz. Bunun en önemli nedeni ortaya çıkan notanın kaynak kişi icrasını yeteri kadar yansıtamaması olduğu kanaatindeyiz. Mevcut notasyonun icrayı yansıtmada yeterli olmadığını bize düşündüren noktalar başlıca notanın metronomunun olmaması, birim zaman değerini tespit etmede bir strateji geliştirilememesi olarak gösterilebilir. Sanat müziğinde gazel, dini musikide kaside, halk musikisinde ise uzun havalar ve bunlara bağlı açış veya taksimler nonmetrik müzikal yapılardır. Bu makalede nonmetrik yapıların notasyonunu iyileştirmek için yapılan uygulamalardan bir örnek meraklılarına sunulmaktadır. Notasyon uygulaması halk müziğinde uzun hava örneklemi ile gelişigüzel Çekiç Ali'nin okuduğu Sarı Yazma isimli eseri seçilmiştir. Bu uygulamalar Sibelius 6 yazılım programı kullanılarak yapılmıştır. Ayrıca aynı uzun havanın başkası tarafından yapılmış mevcut notasını ile tarafımızdan yapılan notasyon karşılaştırılacaktır.

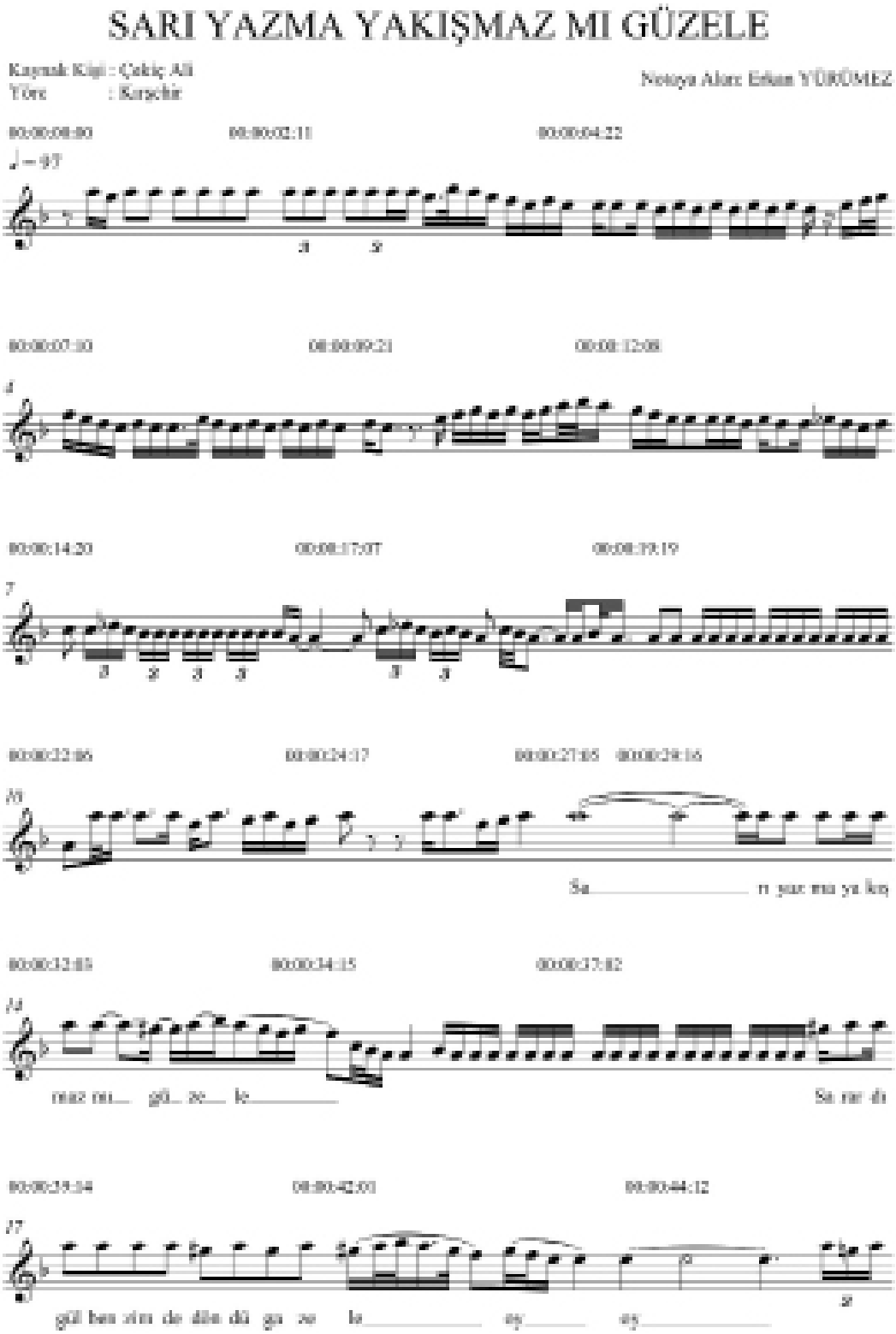
Anahtar kelimeler

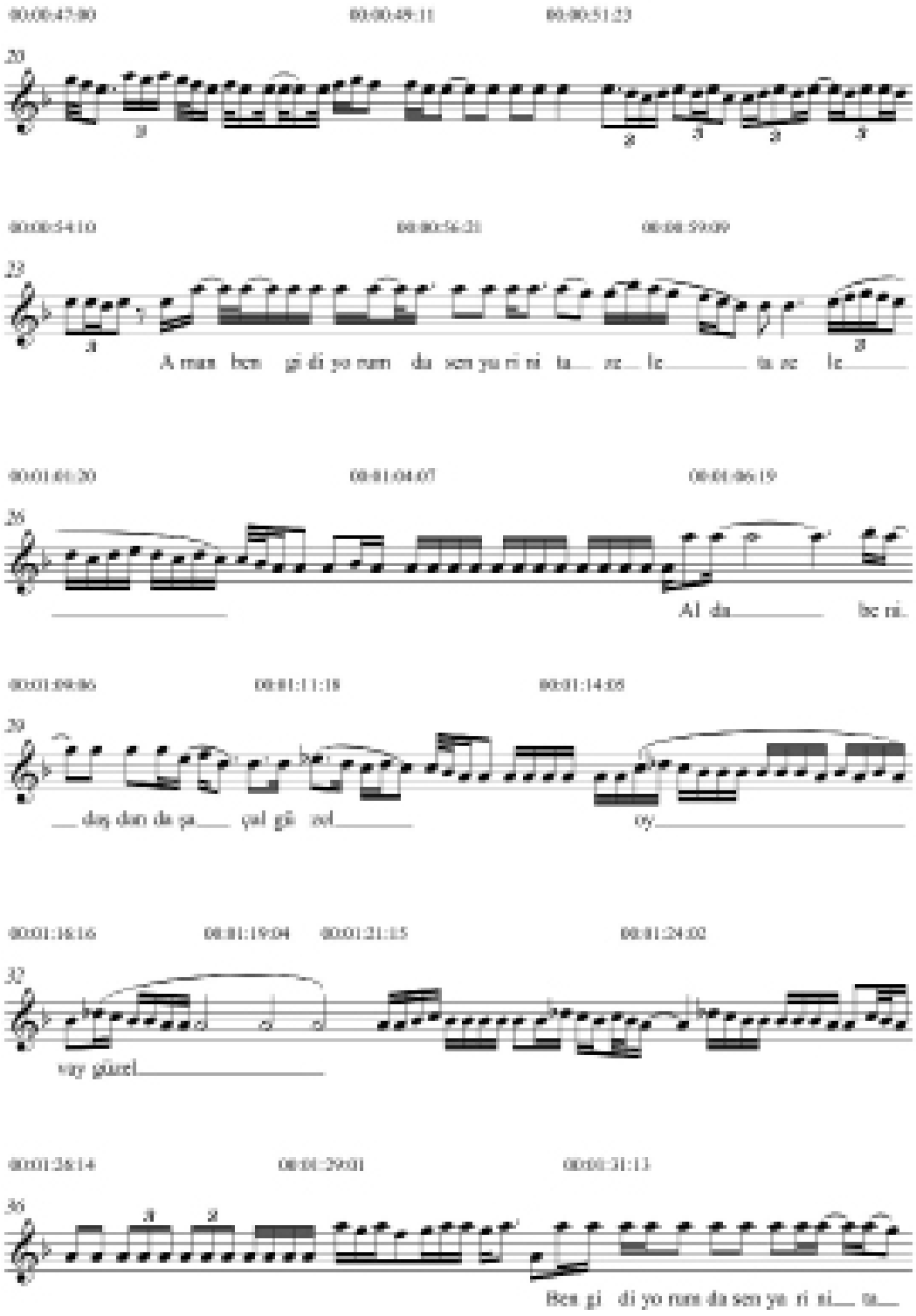
uzun hava, gazel, kaside, nonmetrik melodiler, notasyon, serbest ritimli ezgiler

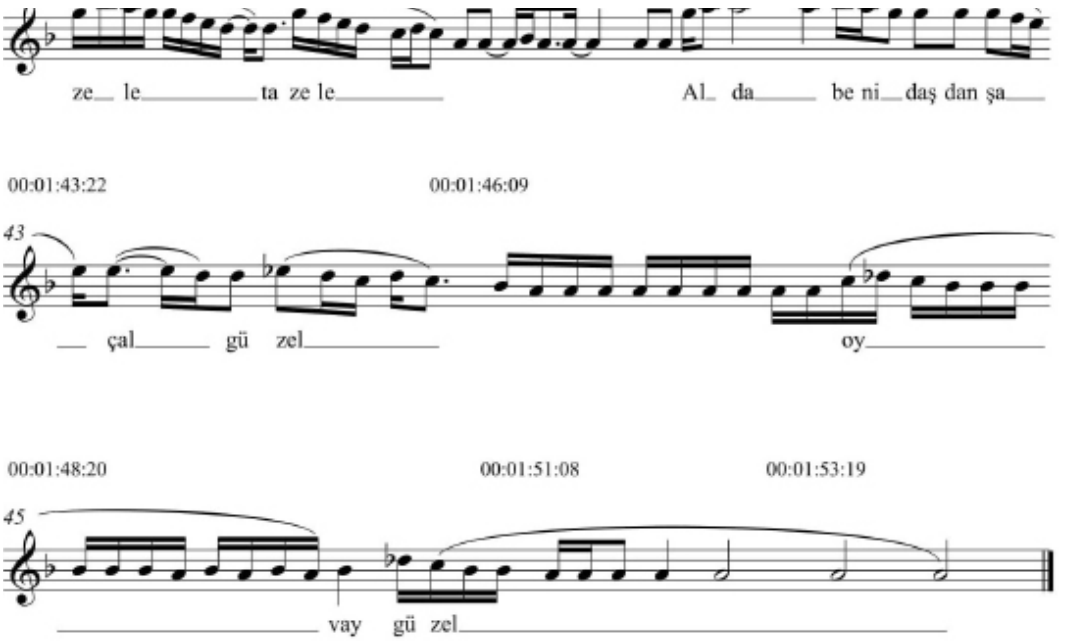
Appendix 1


Sa rı yaz ma ya kış maz mı gü ze_ le sa nar dı gül ben
4
zim de_ dön dü ga ze le_ oy_ oy a man ben gi di yom da sen ya re ni
7
ta_ ze_ le_ ta ze le_ al da_ be ni_daş tım
10
da şa_ çal gü zel_ e_ o_ y var_ gü zel_ l
13
ben gi di yom da sen ya_re ni_ ta_ ze_ le_ ta ze_ le_
16
al da be_ ni_daş dan da şa_ çal gü ze_ le o_ y var_ gü ze_
19
le_ Sev_da kö şe si ne de bı nak_tım pos tu_ ma hab
23
bet ka dim dir u nut mam dos tu_ o_ y_ a man ak el le rin de o la
26
yan des ti_ vay des ti_ al da be ni daş. tan_ da şa
29
çal gü ze_ l o_ var gü ze_ l

Appendix 2


SARI YAZMA YAKIŞMAZ MI GÜZELE
Kaynak Kişi : Çakiç Ali
Yöre : Karaçhir
Notaya Alan: Erkan YÜRÜMEZ
♩ = 97
Sa rı yaz ma ya kış
gül... ze... le
Sa rar di
gül ben zin de dün dü ga ze le ey ey


00:00:47:00
00:00:49:11
00:00:51:23
20
00:00:54:10
00:00:56:21
00:00:59:09
23
A man ben gi di yo rum da sen yu ri ni ta ze le ta ze le
00:01:01:20
00:01:04:07
00:01:06:19
26
Al da lic ri.
00:01:09:06
00:01:11:18
00:01:14:08
29
daş dan da ça çal gü zel oy
00:01:16:16
00:01:19:04
00:01:21:15
00:01:24:02
32
vay güzel
00:01:26:14
00:01:29:01
00:01:31:13
36
Ben gi di yo rum da sen yu ri ni ta



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Sevda köşesine bıraktım postu,
Muhabbet kadimdir de unutmam dostu,
Ak ellerine de olayım testi,
Al da beni daşdan daşa çal güzel.