

EXTENDED TECHNIQUES FOR THE CLASSICAL GUITAR

Written by TOLGAHAN ÇOĞULU

Published by VDM PUBLISHING (2011) in 'The Adaptation of Bağlama Techniques into Classical Guitar Performance'

3.3.3 Extended Techniques

In the second half of the 20th and early 21st century, parallel with trends in avant-garde music; new timbres, sounds and effects were being explored by the composers/guitarists. The classical guitar has a rich palette of colors and range of timber. This characteristic allows the invention of many new techniques for the classical guitar. These contemporary techniques are categorized under the percussive techniques, techniques to obtain microtones, the use of an apparatus, tapping techniques, multiphonics and the prepared guitar.

3.3.3.1 The Percussive Techniques

The classical guitar is rich in percussive effects due to its box-shaped resonator. The guitarists and composers of the 20th and 21st centuries have used this advantage and created various new percussive techniques. Any part of the guitar can be used for percussive effects. There is no standard method of showing percussive techniques in notation. Each composer or guitarist creates symbols and writes instructions.

A percussive effect can be either played independently with the right-hand and the left-hand like playing a percussive instrument or with the right-hand simultaneously with the notes executed by the left-hand fingers. Paulo Bellinati's percussive section in his piece *Jongo* for two guitars is an example of the former type: Both hands are used to slap the strings, fretboard and the several parts of the body. Each note on the staff refers to the parts of the guitar that will be slapped (Figure 3.20).

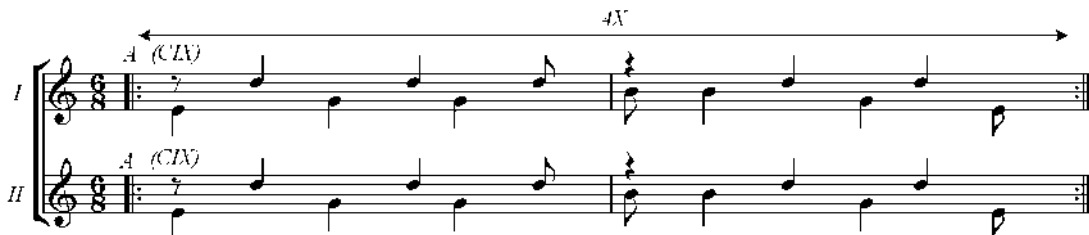


Figure 3.20: Paulo Bellinati, *Jongo*, the beginning of the percussive section.

For the latter type, Roland Dyens' jazz arrangement of *A Night in Tunisia* includes right-hand percussive effects on the soundboard while the left-hand is playing notes with the slurs (Figure 3.21).

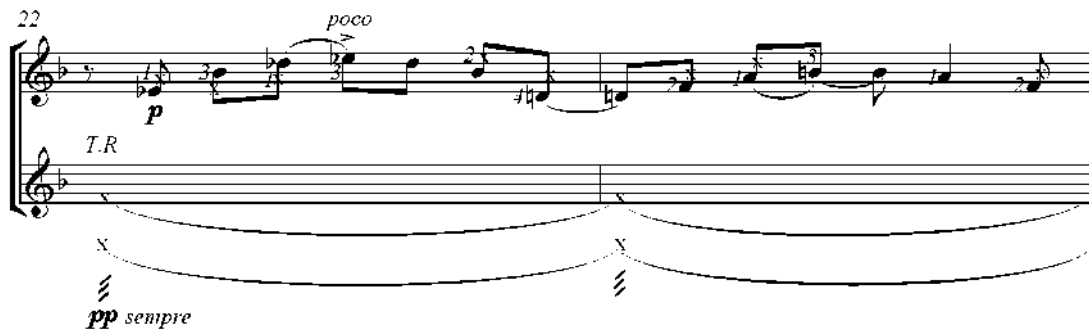


Figure 3.21: Roland Dyens, arrangement of *A Night in Tunisia*, measures 22-23.

Contemporary guitarists/composers use the snare drum effect that was mentioned in 3.3.1.5 in their pieces as a percussive effect. For example, Nikita Koshkin used this effect in *The Prince's Toys*, *Doll with Blinking Eyes* and *Grand Puppet's Parade* movements. Sometimes instead of holding the string, the snare drum effect is achieved by pushing the 2nd or the 5th strings off the edge of the fretboard behind the 1st and 6th strings respectively and fixed there.

A special type of *pizzicato* named 'Bartók *pizzicato*' can be categorized under the percussive techniques. The term came from the Hungarian composer Béla Bartók's last name. Bartók used this technique for bowed string instruments. In this technique the right-hand plucks the string very strongly in order to produce a *forte-fortissimo* (*fff*) snapping sound. A percussive sound is generated from the strings bouncing across the frets. It is generally shown with a symbol together with the abbreviation *Bartók Pizz.* This technique is similar to the bass guitar's slap technique (Figure 3.22).



Figure 3.22: Bartók *pizzicato* technique example.

As an example, Nikita Koshkin played a muted Bartók *pizzicato* on the 6th string to create an effect in his piece *The Prince's Toys*, *Mechanical Monkey*.

3.3.3.2 The Techniques to Obtain Microtones

Throughout the 20th and 21st century, microtonal music has achieved a significant place in contemporary classical Western music. The term *microtone* is used for an interval less than a half tone. Microtonal music refers to pieces that use microtones in contemporary Western classical music repertoire. In addition to this, it also encompasses music that uses intervals other than the equally-tempered 12 notes of an octave. Furthermore, in the *makam*-based music of the Middle East, the microtones are essential elements of the music. On conventional guitar fretboards, the frets are a half tone apart to provide notes for the equal temperament system. Thus new techniques to obtain microtones were needed. To date, many guitarists/composers have tried various techniques to achieve microtones on classical guitar.

3.3.3.2a Bending

Microtones can be achieved by bending the strings with the left hand fingers. When a string is bent, the pitch gets higher like a glissando on a fretless instrument. For example, Ricardo Moyano in his arrangement of Aşık Veysel's *Kara Toprak* and Hasan Cihat Örtter in *Çökertme* used string bending in order to obtain microtones of the related *makam*. Maurice Ohana in his *Tiento*, Yoshihisa Taira in his *Monodrame III* also used the bending technique.

3.3.3.2b Tuning of a String

Microtones can be achieved by tuning an open string to a specific microtone. All the frets on the re-tuned string will be different from the other strings and frets. For example, in *Two Miniatures*, a piece for two guitars by Tolga Tüzün, one of the guitars has been tuned a quarter tone higher than the other guitar. Brian Ferneyhough also tuned some of the open strings in quarter tones in his piece *Kurze Schatten II* (Figure 3.23).



Figure 3.23: Brian Ferneyhough, *Kurze Schatten II*, tuning required.

A string's tuning can also be changed in the course of the performance. The performer plucks the string and then turns the related tuning peg and thus achieves microtones. Lo (1999: 97) called this technique *scordatura-glissando*. This technique was used in pieces such as Turgut Pöğün's *Makine Bozuluyor mu?*, Tristan Murail's *Tellur*, Carlo Domeniconi's *Circus Music*, *The Ural Magic Voice and the Don Cossacks*.

3.3.3.2c Plucking Behind the Fretting Finger

When a hammer-on is executed on the fretboard with the left-hand finger, it causes two different vibrations on the string that is played, one is on the right part of the string which is heard strongly and the other one is on the left part of the string which is heard softly. Schneider (1985: 126) named these notes *bi-tones*.

Plucking behind the fretting finger creates many microtones. In order to achieve this, one of the left hand fingers presses on a fret and then, the right hand plucks the string between the pressed fret and the nut. This technique was used in pieces such as Ceyhun Şaklar's *Imitations of Anatolia, No.3*, Carlo Domeniconi's *Sindbad*, Gilbert Biberian's *Sonata*. In Figure 3.24, Şaklar used the 4th string. He wrote the fret numbers above the notes. The right-hand plucks the string between the pressed fret and the nut.



Figure 3.24: Ceyhun Şaklar, *Imitations of Anatolia, No.3*, introduction.

Playing the strings on the headstock is also included in this method. When the strings above the nut are vibrated, microtones are achieved. The guitarists/composers use these strings as an effect. This was used in pieces such as Alberto Ginastera's *Sonata*, Jaime M. Zenamon's *Casablanca*, Nikita Koshkin's *The Prince's Toys, Tin Soldiers*. In Figure 3.25, Zenamon wants the notes played behind the bridge.

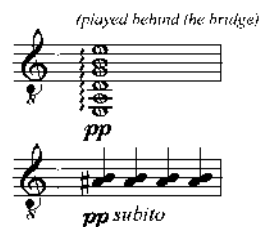


Figure 3.25: Jaime M. Zenamon, *Casablanca*, measure 9.

3.3.3.2d Using a Device for *Glissando*

Electric guitar slides, pencils or even pestles can be used to achieve microtones by playing *glissando* technique on the classical guitar. These tools are touched gently on a string and allow obtaining microtones when glissandi are made. For example, Mustafa Tinç has used a pestle to play microtones in his piece for two guitars entitled *It Takes Two*.

3.3.3.2e Surface *Pizzicato*

The left-hand fingers and sometimes fingernails touch the string gently without pressing the fret. When the related string is plucked, an effect is created. When the fingers are moved along the fretboard, microtonal effects are created as in a fretless *glissando*. Gilbert Biberian named this technique *surface pizzicato* and notates it with triangular note-heads (Schneider, 1985: 123). Paulo Bellinati in *Lun Duo*, Tristan Murail in *Tellur*, Maurizio Pisati in his transcription of Salvatore Sciarrino's *Addio a Trachis*, Leo Brouwer in *La Espiral Eterna* and Gilbert Biberian in *Prisms II* used this technique to achieve microtones. In Figure 3.26, Brouwer used the letter (x) next to the notes to indicate the surface *pizzicato* technique.



Figure 3.26: Excerpt from Leo Brouwer's *La Espiral Eterna*.

3.3.3.2f Horizontal Vibrato

After a fret is pressed by a left-hand finger, a microtone can be achieved by moving the pressed finger to the left or right as in a horizontal vibrato without releasing the pressure. The pitch gets higher when the finger moves to the left and lower when it moves to the right. According to Lo (1999: 94), "The amplitude of the pitch fluctuation ranges from less than a quartertone on lower frets to a potential of more than a semitone on the twelfth fret."

Besides these solutions to obtain microtones on standard guitars, the guitarists/luthiers have also strived to change the fretting systems of the classical guitar's fretboard. To date; fretless guitars, guitars with the fretlets (little frets) on their fretboard, guitars with interchangeable fingerboards, guitars with the fine-tunable precision fretboards and the author's design 'adjustable microtonal guitar' have been tried and used.

3.3.3.3 Use of a Device

Various devices have been used to create different effects on the guitar. These can be bows, electronic ventilators, pencils, pestles etc. For example, the Turkish composer Mustafa Tınç used a pestle rubbed on the strings to obtain sound effects as in an electronic music in his piece *It Takes Two*. Michael Quell uses a violin bow for his piece *Enigma* to achieve sustained notes and new timbres. The Bolivian composer Jaime Zenamon used an electric hand fan and achieved a continuous tremolo by making the fan's propeller hit to the strings in his piece *Casablanca*. This effect is similar to the e-bow¹ effect used for electric guitars (Figure 3.27).



Figure 3.27: Jaime M. Zenamon, *Casablanca*, measures 176-185.

3.3.3.4 Tapping

Although tapping means to make ascending and descending slurs with the right-hand, a tapping pattern is created with the combination of the right-hand and left-hand's slurs. The tapping technique was first used on an electric guitar in the 1950s by Jimmie Webster. Two methods (one-handed/ordinary and two-handed) have been used in electric guitar. The electric guitar tapping was developed by guitarists such as Emmett Chapman, Stanley Jordan, Eddie Van Halen, Dave Celentano. In acoustic guitar especially after 2000, some players such as Andy McKee, Antoine Dufour often used the tapping technique in combination with some percussive effects.

¹ E-bow (electronic or energy bow) is an electronic device that vibrates the strings in a continuous motion via the electromagnetic field that is created by the device.

Tapping is not a common technique in classical guitar due to the presence of the nylon strings. It is more difficult to sound the notes by tapping on nylon strings than steel strings. Nevertheless, the technique is used by some of the composers and guitarists such as Roland Dyens, Andrew York, Nikita Koshkin, Ceyhun Şaklar, Tristan Murail, and Leo Brouwer. In classical guitar the tapping pull-off is generally executed upwards parallel to the fretboard in contrast to the electric guitars downward tapping pull-off. There is no standard notation for the tapping technique.

3.3.3.5 Multiphonics

Creating multiphonics was especially developed for the woodwind instruments in 20th century contemporary classical music. According to Schneider (1985: 136), “multiphonics occur when, through the use of unusual performance techniques certain partials normally present in a tone are made to stand out or by changing embouchure or fingerings, new partials are created.” Multiphonics are generated like the natural harmonics from specific points of the fretboard especially on bass strings. For example, by playing a harmonic on the 6th string by leaning one of the left-hand fingers over the 6th fret wire or a little left to the 3rd fret wire, multiphonics are achieved.

3.3.3.6 Prepared Guitar

John Cage was the inventor of the prepared piano in which many objects are inserted on or between the strings in search for new sounds and effects. The classical guitar is also an appropriate instrument for this kind of preparation with its six strings. For example, Turkish composer Mustafa Tınç inserted a piece of paper between the strings above the rosette in his piece *It takes two*. The performer plays some notes with the presence of this paper. Composers generally provide a detailed description for the preparations. Dusan Bogdanovic also prepared the guitar in his *Gamelitar Music* by combining the 6th - 5th and 4th - 3rd strings by a staple.

3.3.3.7 Other Contemporary Techniques

Many contemporary guitarists/composers find new techniques and name them differently. The left-hand or right-hand finger nails or a plectrum can be grated across the bass strings and create an effect. This technique was used in pieces such as Carlo Domeniconi's *Circus Music*, *Duck Race* and *The Yogi Who Disappears Through the Key Hole* movements, Paulo

Bellinati's *Lun Duo*, Nikita Koshkin's *The Prince's Toys*, *Doll with Blinking Eyes* and *Grand Puppet's Parade* movements, Leo Brouwer's *La Espiral Eterna*.

The palm of the hand is used to brush all strings and results in an effect. Paulo Bellinati called this technique *esfregato*. Rafael Andia used the pad of the right hand thumb to create a similar effect. Andia named this technique *rasgueado without nail*.

Rafael Andia played a technique that he called *Elytron Noise* (URL- 8). He described this technique as follows:

“This is a very high buzzing that one can obtain by pushing the 6th string off the edge of the fret board between the V and VIII frets with the first finger of the left hand, and by a standard playing of the right hand. With the other three fingers on the following frets we have three quite perceptible supplementary pitches.”

REFERENCES

- Altuğ, N.**, 1990: *Uygulamalı Temel Bağlama Eğitimi*, Anadolu Matbaacılık, İzmir.
- Altuğ, N.**, 1997: *Teknik Bağlama Eğitimi: Düzenler*, Anadolu Matbaacılık, İzmir.
- Altuğ, N.**, 1999: *Teknik Bağlama Eğitimi: Yöresel Çalış Biçimleri*, Anadolu Matbaacılık, İzmir.
- Akdoğu, O.**, 1992: *Türk Müziğinde Perdeler*, İzmir.
- Aksoy, B.**, 1994: *Avrupalı Gezginlerin Gözüyle Osmanlılarda Musiki*, Pan Yayıncılık, İstanbul.
- Arafat, Z.**, 2008: *Kısa Sap Bağlama Düzeni Metodu*, Nota Yayıncılık, İstanbul.
- Behar, C.**, 1985: "Ziya Gökalp ve Türk Musikisi" In *Tanzimattan Cumhuriyete Türkiye Ansiklopedisi*, İletişim Yayınları, İstanbul.
- Bach, J. S.**, 1994: *Das Lautenwerk und Verwandte Kompositionen im Urtext*, Prim Musikverlag, Darmstadt.
- Bermudo, J.**, 1555: *El Libro Ilamado Declaracion de Instrumentos Musicales*, Juan de Leon, Osuna.
- Bordas, C. and Arriga, G.**, 1992: "The Guitar from the Baroque Period to the 1950's" In *La Guitarra Espanola / The Spanish Guitar*, Metropolitan Museum of Art, New York, USA.
- Durul, K.**, 2007: *Bağlama Metodu*, Bemol Yayıncılık, İstanbul.
- Duygulu, M.**, 1998: *Asya İçlerinden Balkanlara Saz*, Kalan Müzik, İstanbul.
- Ekici, S.**, 2006: *Bağlama Eğitimi: Yöntem ve Teknikler*, Yurt Renkleri, Ankara.
- Erzincan, E.**, 2008: "Erdal Erzincan" In *Kardeş Türküler: 15 Yılın Öyküsü*, BGST Yayınları, İstanbul.
- Feldman, W.**, 1996: *Music of the Ottoman Court: Makam, Composition and the Early Ottoman Instrumental Repertoire*, Verlag für Wissenschaft und Bildung, Berlin.
- Gazimihal, M. R.**, 2001: *Ülkemizde Kopuz ve Tezeneli Sazlarımız*, Kültür Bakanlığı, Ankara.
- Gökalp, Z.**, 1923: *Türkçülüğün Esasları*, Milli İhtimiyat Kitabhanesi, Ankara.
- Grout, D. J. and Palisca, C. V.**, 1996: *A History of Western Music*, W.W. Norton & Company, New York, USA.
- Hornbostel, E. M. and Sachs, C.**, 1914: "Systematik der Musikinstrumente" In *Zeitschrift für Ethnologie*, Vol. 46, pp. 553-590.
- Isbin, S.**, 1999: *Classical Guitar Answer Book*, String Letter Publishing Inc., California, USA.

- Jahnel, F.**, 2000: *Manual of Guitar Technology: The History and Technology of Plucked String Instruments*, Bold Strummer Ltd, Frankfurt.
- Kanneci, A.**, 2001: "Gitar için Beste Yapmış Türk Bestecilerinin Eğitimi ve Yapıtlarının Uluslararası Gitar Repertuarındaki Yeri", Master Thesis, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Müzik Öğretmenliği Bilim Dalı, Ankara.
- Kasha, M.**, 1968: "A New Look at the History of the Classical Guitar" In *Guitar Review*, Vol. **30**, pp. 3-12.
- Li, S. T.**, 1986: *The Techniques of Chinese Pipa Music*, Art Tune Publishing, Taipei from **Lo, W. T.**, 1999: "A Comparative Study of the Guitar and the Chinese Lute Pipa: An Overview of Their Origins, Construction and Techniques", Doctor of Arts Dissertation, Ball State University, UMI Publishing, USA.
- Lo, W. T.**, 1999: "A Comparative Study of the Guitar and the Chinese Lute Pipa: An Overview of Their Origins, Construction and Techniques", Doctor of Arts Dissertation, Ball State University, UMI Publishing, USA.
- Markoff, I.**, 1990: "The Ideology of Musical Practice and the Professional Turkish Folk Musician: Tempering the Creative Impulse" In *Asian Music*, Vol. **22**, no. 1, pp. 129-145.
- Markoff, I.**, 2002: "Alevi Identity and Expressive Culture" In *The Garland Encyclopedia of World Music*, Vol. **6**, pp. 793-800, Eds. Danielson V., Marcus, S. and Reynolds, D., Routledge, New York, USA.
- Markoff, I.**, 1986: "Musical Theory, Performance and the Contemporary Bağlama Specialist in Turkey", Doctor of Philosophy Dissertation, University of Washington, UMI Publishing, USA.
- Markoff, I.**, 2009: *Personal Interview*.
- Martin, J.**, 1978: *Juan Martin's Guitar Method: El Arte Flamenco de la Guitarra*. United Music Publishers, London, UK.
- Noad, F. M.**, 2002: *The Complete Idiot's Guide to Playing the Guitar*, Alpha Books, USA.
- Noad, F. M.**, 1974: *The Renaissance Guitar*, Ariel Publications, New York, USA.
- Noad, F. M.**, 1976: *The Classical Guitar*, Ariel Publications, New York, USA.
- Noad, F. M.**, 1986: *The Romantic Guitar*, Ariel Publications, New York, USA.

- Özdemir, U. and Peker, S.N.**, 1997: *Fethiyeli Ramazan Güngör ve Üç Telli Bağlaması*, Kalan Müzik, İstanbul.
- Özdemir, M. A.**, 2002: "Terim Sorunu" In *Proceedings of the Ankara Gazi Üniversitesi Türk Kültürü Sempozyumu*, Gazi Üniversitesi, Ankara.
- Özdemir, M. A.**, 1999: "Türk Halk Müziği ve Çokseslilik" In *Papirüs*, Vol **31**, pp. 22-25.
- Öztürk, O. M.**, 2000: "Tavir Kavramı ve Bağlamada Tezene Tavırları Üzerine" In *Coşkun Güla: Bağlamada Tezene Tavırları*, Kalan Müzik, İstanbul.
- Öztürk, O. M.**, 2006: *Zeybek Kültürü ve Müziği*, Pan Yayıncılık, İstanbul.
- Öztürk, O. M.**, 2010: "Bağlama Benzeri Çalgılarda Gözlenen Kimi Ortak Nitelikler ve Kısa Bir Tarihçe" In *AB-Türkiye Sivil Toplum Diyalogu Kültür Köprüleri Programı, Hattuşa Projesi Workshop Etkinlikleri*, İstanbul.
- Parlak, E.**, 2000: *Türkiye'de El ile (Şelpe) Bağlama Çalma Geleneği ve Çalış Teknikleri*, Kültür Bakanlığı, Ankara.
- Parlak, E.**, 2006: "Evvelim Sen Oldun" In *Gönül Dağında Bir Garip: Neşet Ertaş Kitabı*, Türkiye İş Bankası Kültür Yayınları, İstanbul, pp. 257-270.
- Parlak, E.**, 2001: *Şelpe Tekniği Metodu 1*, Ekin Yayınları, İstanbul.
- Parlak, E.**, 2010: *Personal Interview*.
- Picken, L.**, 1975: *Folk Musical Instruments of Turkey*, Oxford University Press, UK.
- Postlewate, C.**, 2002: "Extending Right-hand Technique to Include the Little Finger" In *Soundboard*, Vol **28**, no. 4, pp. 7-13.
- Randel, D. M. Eds**, 2003: *The Harvard Dictionary of Music*, Harvard University Press, USA.
- Sağ, A. and Erzincan, E.**, 2009: *Bağlama Metodu*, Pan Yayıncılık, İstanbul.
- Schneider, J.**, 1985: *The Contemporary Guitar*, University of California Press, USA
- Serrano, J. and Whitehead, C.**, 2008: *The Flamenco / Classical Guitar Tradition: A Technical Guitar Method and Introduction to Music*, Vol. **1**, Mel Bay Publications, USA.
- Sparks, P.**, 2002: "The Guitar Before Torres" In *The Classical Guitar Book: A Complete History*, Backbeat Books, London, UK.
- Stokes, M.**, 1992: "The Saz and Elektrosaz in Urban Turkish Folk Music" In *British Journal of Ethnomusicology*, Vol **1**, pp. 89-102, British Forum for Ethnomusicology, UK.

Stokes, M., 1992: *Türkiye’de Arabesk Olayı*, İletişim Yayınları, İstanbul.

Summerfield, M. J., 2002: *The Classical Guitar: Its Evolution, Players and Personalities since 1880*, Ashley Mark Publishing Company, UK.

Şimşek, E., 2009: *Personal Interview*.

Tennant, S., 1995: *Pumping Nylon: The Classical Guitarist’s Technique Handbook*, Alfred Publishing Co., USA.

Tschernokoshewa, E., 2006: “Hybridity as a Musical Concept: Theses and Avenues of Research” In *The Human World and Musical Diversity: Proceedings From the Fourth Meeting of the ICTM Study Group Music and Minorities*, Bulgarian Musicology Studies, Sofia.

Turnbull, H., 1974: *The Guitar From the Renaissance to the Present Day*, Bold Strummer, USA.

Tyler, J. and Sparks, P., 2002: *The Guitar and Its Music: From the Renaissance to the Classical Era*, Oxford University Press, UK.

Url-1 <<http://www.erolparlak.com.tr>>, accessed at 01.04.2010.

Url-2 <<http://0-www.oxfordmusiconline.com.divit.library.itu.edu.tr>>, accessed at 03.03.2010.

Url-3 <<http://0-www.oxfordmusiconline.com.divit.library.itu.edu.tr>>, accessed at 04.03.2010.

Url-4 <<http://www.rafaelandia.com>>, accessed at 11.03.2010.

Url-5 <<http://0-www.oxfordmusiconline.com.divit.library.itu.edu.tr>>, accessed at 06.03.2010.

Url-6 <<http://0-www.oxfordmusiconline.com.divit.library.itu.edu.tr>>, accessed at 07.03.2010.

Url-7 <<http://www.rafaelandia.com>>, accessed at 14.03.2010.

Url-8 <<http://www.rafaelandia.com>>, accessed at 15.03.2010.

Wade, G., 2001: *A Concise History of the Classical Guitar*, Mel Bay Publications, USA.

Yeprem, M. S., 2003: *Flamenko Sanatı ve Gitar*, Bemol Müzik Yayınları, İstanbul.