

MUSICAL THEORY OF FLAMENCO GUITAR

FUNDAMENTALS OF HARMONY AND PRINCIPLES OF COMPOSITION

COLLECTION OF FLAMENCO INSTRUCTION

MANUEL GRANADOS

VOLUMEN 1 - ENGLISH

MUSIC & TABLATURE

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All musical examples composed by Manuel Granados.

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*Dedicated to my wife, Maria
and my son, Alejandro*

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AUTHOR'S PROLOGUE

In the Romantic era Spain, and Andalusia in particular, like a magnet, attracted artists, writers and innovators from near and far. Spain projected an exotic, authentic image, and this, with its long, rich history, was exactly what many Westerners were looking for in an epoch when the Orient and its flavours were the fashion of the day.

Andalusia was the Orient within the West. The prevailing Western society, bored with the stagnation of the times, reached across its borders to the foreign in order to embrace a return to the past in which people saw different ways of life and refreshing attitudes formerly considered vulgar, thus considerably widening their experience and ideas. This digging into roots far and wide also helped to assert inchoate nationalisms. Another side effect of all this was a vision confounded by stereotypes, a confusion that has come down to the present day in which, for example, the Gypsy is confused with the Andalusian, and Flamenco with folklore.

In the Classical Music world there are and have been many composers who, enchanted by the rich Andalusian folklore, have, in their musical writings and compositions, attempted to explain and imitate for musical posterity (both Spanish and international) just what Flamenco is about, but they do not come close to grasping Flamenco's essence or form.

These composers' opinions on Flamenco have been used by many Flamencologists, but unfortunately none of them has done any serious study of analysis and research as they view the material sideways, as it were, allowing it to remain wrapped in the folklore "paper", thus unthinkingly maintaining the reigning confusion.

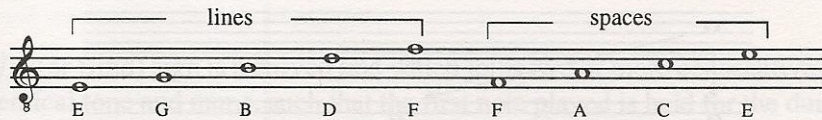
A serious study of Flamenco Guitar has to include the normalization of its melodic, harmonic and formal aspects, so that its traditional concepts must be learned first, with the consequent understanding of true Flamenco, its history, and where it's at today.

The purpose of these current volumes is the creation of complementary studies for the guitar within the conventions of the Conservatories and Schools of Music, said conventions formalized years ago in the Superior Conservatory of Music of the School of Barcelona (Conservatorio Superior de Música del Liceo de Barcelona).

My most sincere thanks to Jaume Doncos, Rafael Ramirez, Dani Maso, Jean Huth, Andres Montes, Josep Gomez and Toni Pelegrin, as well as all my students of the Conservatory for their enthusiastic support of this project, without which it could not have been done.

THE BASICS OF MUSICAL THEORY

1. NOTES OF THE MUSICAL STAFF (LINES AND SPACES)



2. THE TREBLE (G) CLEFF AND THE BASS (F) CLEFF

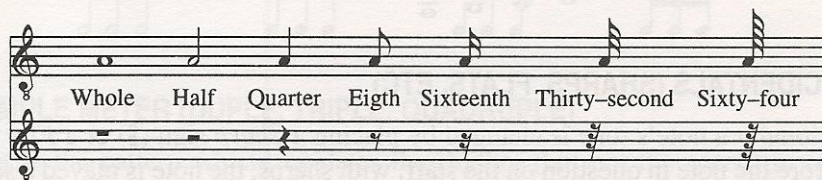
The CLEFF is always placed on the musical staff and serves to identify the names of the notes and the position they occupy in the general scale.

The Treble and Bass Cleff are the most commonly used cleffs, the former identifying G of the second line on the staff, the latter F of the fourth line.



This book is based entirely in the Treble Cleff, which is the musical range of the guitar.

3. NOTE TYPES, THEIR DURATION, VALUE AND EQUIVALENT IN PAUSES AND SILENCES



Each note type listed below (in descending order of value), is equivalent to twice the following note.

Whole Note (which represents musical unity) is equivalent to: 2 half notes, 4 quarter notes, 8 eighth notes, 16 sixteenth notes, 32 thirty-second notes or 64 sixty-fourth notes.

Half Note: 2 quarter-notes, 4 eighth notes, 8 sixteenth notes, 16 thirty-second notes or 32 sixty-fourth notes

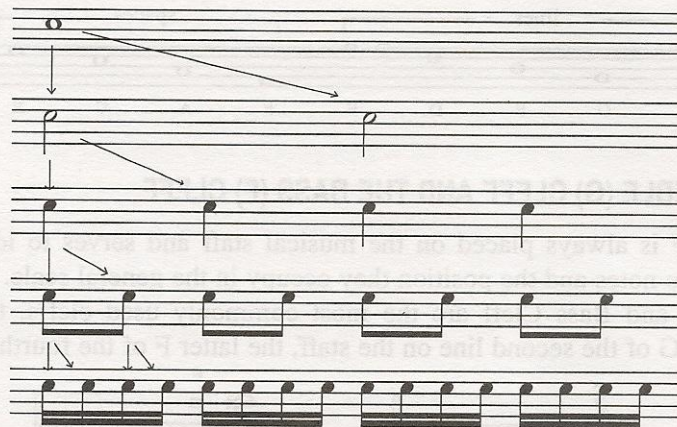
Quarter Note: 2 eighth notes, 4 sixteenth notes, 8 thirty-second notes or 16 sixty-fourth notes

Eighth Note: 2 sixteenth notes, 4 thirty-second notes or 8 sixty-fourth notes

Sixteenth Note: 2 thirty-second notes or 4 sixty-fourth notes

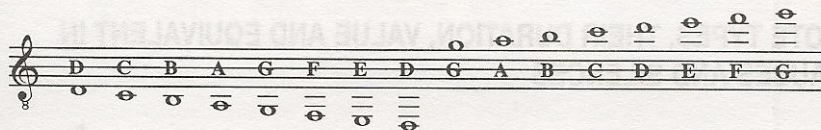
The Thirty-Second Note: 2 sixty-fourth notes

(And, of course, any combination of the above types of notes as long as they add up to the correct value)



and so on

4. NOTE NAMES OF ADDITIONAL STAFF LINES AND SPACES



5. ACCIDENTALS (SHARPS, FLATS, ETC)

Occasionally a note's tone is changed by placing a *Sharp* sign (#) or a *Flat* sign (b) before the note in question on the staff; with sharps, the note is played a semitone higher, with flats, a semitone lower.

Other signs we use are the *Natural* sign (♮) which when placed before a note annuls any previous accidentals appli to that note; also, there is the *double sharp* (x) which raises a note's tone 1 tone, and the *double flat* (bb) which lowers a note 1 tone.

6. THE DOT AND TIE SIGN

The placing of a *dot* after a note means that the note's value is extended by one half of its original value. For example, a *dotted half note* is equivalent to 2

Diagrams for dotted half, quarter and eighth notes:

$\dot{p} = \hat{p} \hat{p} \hat{p} = \hat{p} \hat{\quad}$
 $\dot{p} = \hat{p} \hat{p} \hat{p} = \hat{p} \hat{\quad}$
 $\dot{p} = \hat{p} \hat{p} \hat{p} = \hat{p} \hat{\quad}$

The *Tie* (or *Bind*) sign is a curved line which joins two or more consecutive notes of identical tone and name, such that the first note played is held for the duration of the two notes' combined value.



7. THE TRIPLET

The *Triplet* is an artificial group of three notes of the same type, whose time value is equal to only two of the note types (eg., a triplet of three eighth notes has the time value of two eighth notes). The number 3 always designates a triplet. See for examples using whole, half, quarter and eighth notes.



8. SIMPLE METER (DUPE, TRIPLE, QUADRUPLE)

Meter is the pattern which regulates the rhythm (but not the speed) in music, controlling note values by dividing a piece of music into equal parts called Bars or Measures; these bars or measures are delineated by black lines, a bar being enclosed between two lines, on the musical staff.

Duple meter occurs in groups of two, triple meter in three, and quadruple in four (which is really duple meter repeated). It is expressed as a fraction and placed on the musical staff. The Numerator tells us how many beats are in any one bar, and the Denominator tells us the type of note to utilize. 2/4 time, then, means two beats to the bar, each beat having the value of a quarter note.

Numerator : 2, 3 or 4

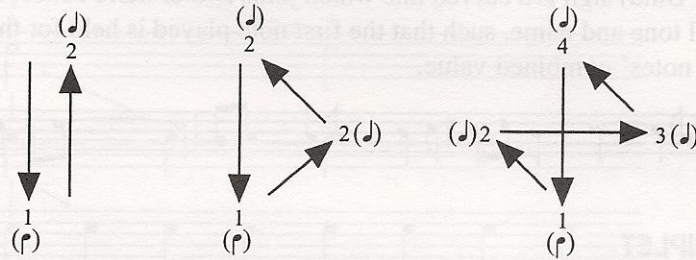
Denominator: 1 (representing a whole note)

2 (a half note)

4 (a quarter note)

8 (an eighth note)

Common Simple Meters are 2/4, 3/4 and 4/4, one beat being equal to a quarter note (♩).



9. COMPOUND METER

The pulse or beat (the numerator) of Compound meter, unlike Simple meter, is comprised of multiples of three.

The basic beat will be represented by a dotted note.

Numerator: 6 (six beats in one bar)

9 (nine beats in one bar)

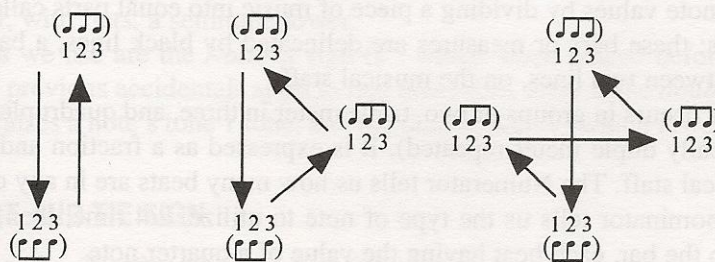
12 (twelve beats in one bar)

Denominator: 2 (half note)

4 (quarter note)

8 (eighth note)

Common Compound Meters are 6/8, 9/8, and 12/8, one beat here being equal to a dotted quarter note (equal to 3 eighth notes).



10. BEATS AND ACCENTS

Each bar is divided into beats (and these in turn may be further divided in sub-beats). Beats and sub-beats are divided into three categories: *Strong*, *Medium*, and *Weak*.

In *Time Signatures* where the numerator is 2, the first beat of the bar is *Strong* (S) and the second beat is *Weak* (W).

With a numerator of 3, the first beat is *Strong* while the second and third beats are *Weak*.

With a numerator of 4, the first beat is *Strong*, the third beat is *Medium*, and the second and fourth beats are *Weak*.

In the case of sub-beats, the first note is always *Strong* whereas the rest are *Weak*.

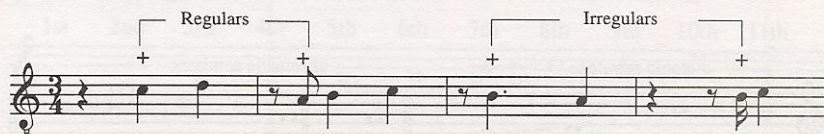


11. OFF-BEATS AND SYNCOPATION

The *Off-Beat* is a note which attacks on a *Weak* beat and comes after a silence (or pause) but whose duration does not extend through the next *Strong* or *Medium* strength beat.

Regular Off-Beat: the preceding pause and note are of equal duration.

Irregular Off-Beat: when the duration differs.



Syncopation is the alteration of accents, so that *Strong* beats become *Weak* and vice versa; the note attacks on a *Weak* beat and lasts, via a Tie, through the next *Strong* beat.

Regular Syncopation: when the two notes are of equal duration

Irregular Syncopation: when they are not



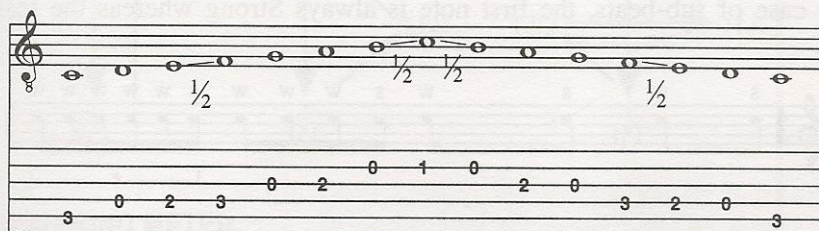
12. NATURAL NOTES AND INTERVALS

The seven Natural notes in ascending order are **C, D, E, F, G, A and B** (whereupon the series keeps repeating from C again).

An *Interval* is the tonal distance which separates any two notes, and it may be ascending or descending.

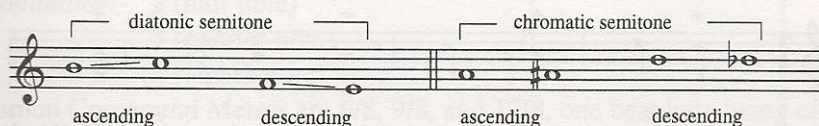
In Western Music the smallest distance possible between any two notes is the **semitone**, of which we find two naturally, one between **E and F**, and the other between **B and C**.

The remaining Intervals between Natural Notes are all of one tone (or two semitones): C-D, D-E, F-G, G-A, A-B.



13. DIATONIC SEMITONES & CHROMATIC SEMITONES

The *Diatonic Semitone* is defined by the two notes of the Interval having different names (eg, E-F); a *Chromatic Semitone*, however, is when the two notes have the same name but one of them is changed by an Accidental (eg, A-A \sharp). This naming holds true whether the interval is ascending or descending.



14. CHROMATIC NOTES

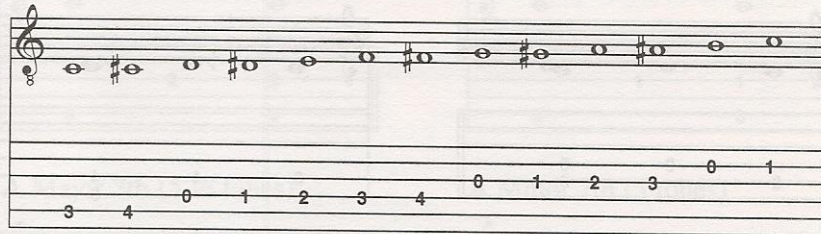
The *Chromatic Notes* are ten in number: 5 Sharps (a sharp raising the tone of a note a semitone), and five Flats (a flat lowering a note's tone one semitone).

15. THE CHROMATIC SCALE

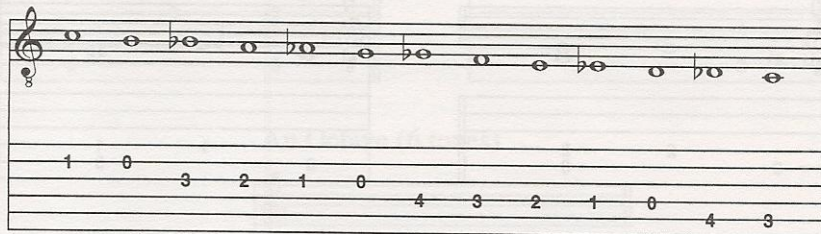
Our musical system, called *Tempered*, has only twelve tones (seven Naturals, five Accidentals), and any tone may be written in more than one way (eg. C

sharp is the same as D flat). We call this variable notation *Enharmonic*.

- An ascending Chromatic scale with sharps:

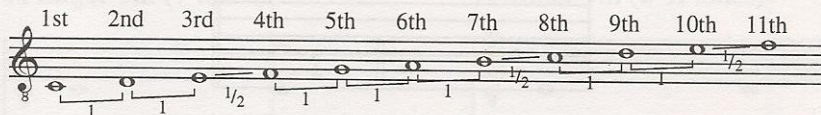


- A descending Chromatic scale with flats:



16. NOTE RELATIONSHIP: NUMBERED INTERVALS, TONES AND SEMITONES

- Example beginning on C :



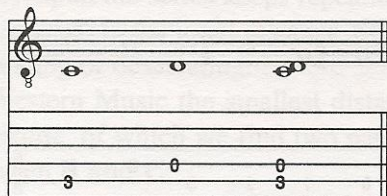
17. MELODIC & HARMONIC INTERVALS: MAJOR AND MINOR

Intervals can be either *Melodic* or *Harmonic*. When the two notes of the interval are played sequentially, this is called a Melodic Interval; when the two notes of the interval are played simultaneously, this is called an *Harmonic Interval*.

The total number of tones in an Interval is the summation of the tones and semitones of which the interval is comprised.

Example in the C scale using both Melodic and Chromatic intervals.

A Major 2nd (1 tone)



A Minor 2nd (1 semitone)



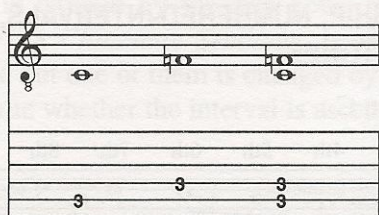
A Major 3rd (2 tones)



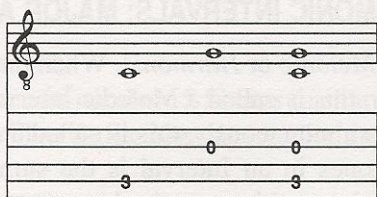
A Minor 3rd (1 1/2 tones)



A Perfect 4th (2 1/2 tones)



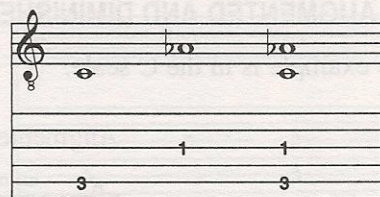
A Perfect 5th (3 1/2 tones)



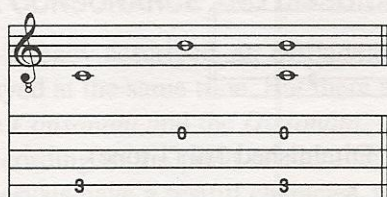
A Major 6th (4 1/2 tones)



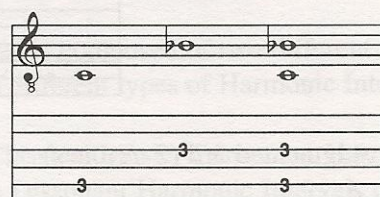
A Minor 6th (4 tones)



A Major 7th (5 1/2 tones)



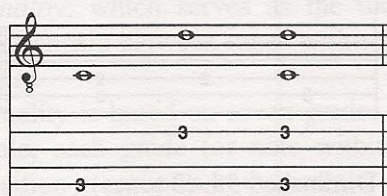
A Minor 7th (5 tones)



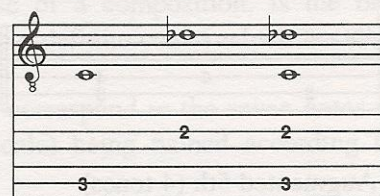
An Octave (6 tones)



A Major 9th (7 tones)



A Minor 9th (6 1/2 tones)



A Major 11th (9 tones)



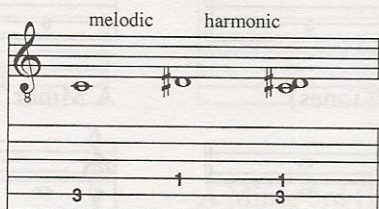
A Minor 11th (8 1/2 tones)



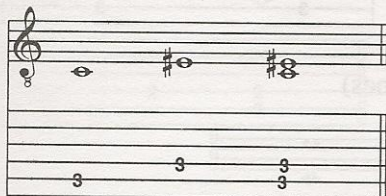
18. MELODIC AND HARMONIC INTERVALS: AUGMENTED AND DIMINISHED

The example is in the C scale:

Augmented 2nd (1 ½ tones)



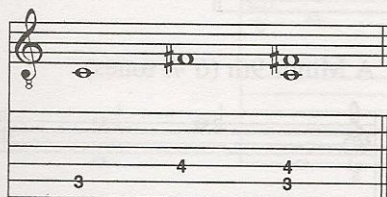
Augmented 3rd (2 ½ tones)



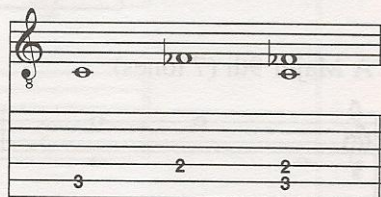
Diminished 3rd (1 tone)



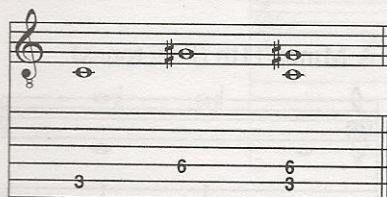
Augmented 4th (3 tones)



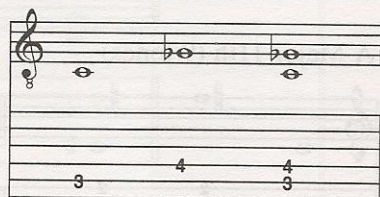
Diminished 4th (2 tones)



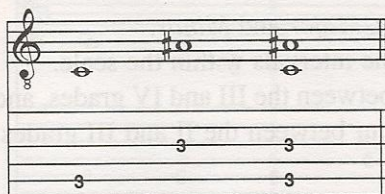
Augmented 5th (4 tones)



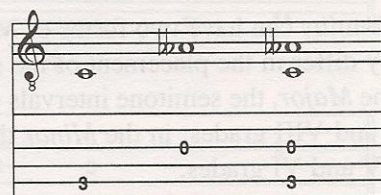
Diminished 5th (3 tones)



Augmented 6th (5 tones)



Diminished 6th (3 1/2 tones)



19. CONSONANCE AND DISSONANCE

As already described, an *Harmonic Interval* is composed of two different notes played at the same time. But there are two different types of Harmonic Interval, the *Consonant* and the *Dissonant*.

According to the point of view held by Classical Music, Consonant Harmonic Intervals have a restful character, whereas Dissonant Harmonic Intervals create a certain tension which demands their resolution into something more akin to Consonance, or a peaceful sound.

We can divide the Consonant Intervals into 2 groups:

- a) *Perfect Consonance*: Perfect 4th, Perfect 5th and the Octave
- b) *Imperfect Consonance*: Major and Minor 3rds and 6ths

This leaves the *Dissonants*: all the Major and Minor 2nds, 7ths and 9ths, as well as all the Augmented and Diminished Intervals.

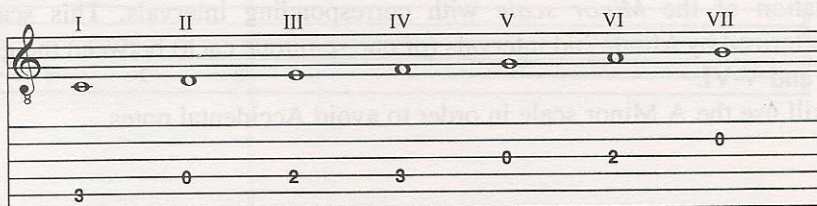
20. TONALITY

Tonality, which serves as the tonal base of a composition, is the ordered relationship between tones with respect to a definite centre which is called the *Tonic*.

Tonality is based on seven grades which correspond to the seven notes of the scale, each grade (or note within the scale) being named according to the position it occupies in the scale.

Example: The C Scale

I=C, II=D, III=E, IV=F, V=G, VI=A, VII=B



21. MODALITY

A *Tonality* can have two forms of Modality, *Major* and *Minor*.

They differ in the placement of the semitone intervals within the scale.

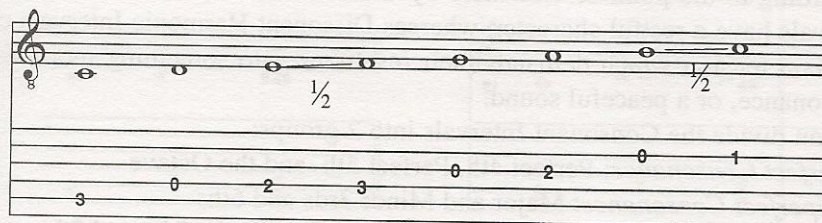
In the *Major*, the semitone intervals occur between the III and IV grades, and the VII and VIII grades; in the *Minor* they occur between the II and III grades and the V and VI grades.

22. THE MAJOR SCALE: FORMATION IN TONES AND SEMITONES

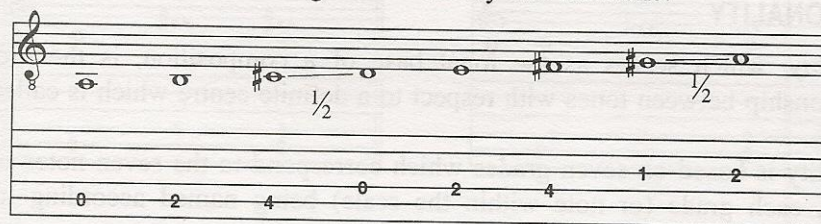
Formation of the *Major Scale* with corresponding intervals.

This scale, as already described, is characterized by two semitone intervals (a semitone interval is a Minor 2nd) between the grades III-IV and VII-VIII.

We will use the C Major scale as an example in order to avoid any Accidental notes.



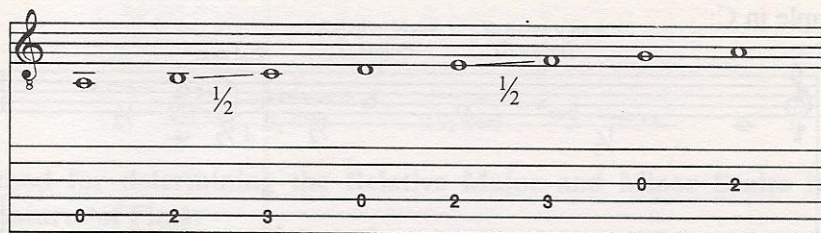
Example in A Major. In order to maintain the relationship of tones and semitones as required in a Major scale, we must place Accidentals (in this case, sharps) against F, G and C, thus raising these notes by one semitone.



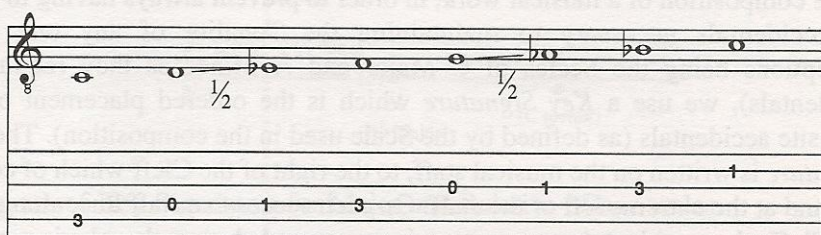
23. THE MINOR SCALE: FORMATION IN TONES AND SEMITONES

Formation of the *Minor scale* with corresponding intervals. This scale is characterized by Minor 2nd intervals (of one semitone each) between the grades II-III and V-VI.

We will use the A Minor scale in order to avoid Accidental notes.



Example in C Minor. In order to maintain the relationship of tones and semitones, we must use Accidentals (flats) against the notes B, E and A, thus lowering these notes one semitone:



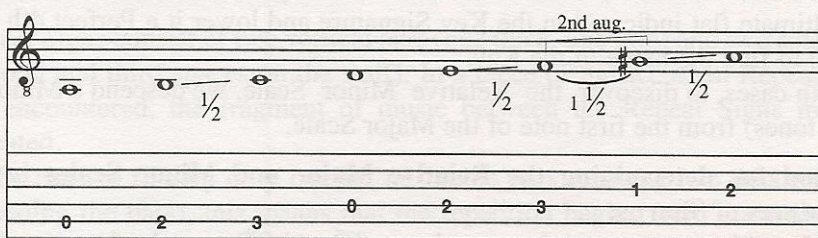
24. HARMONIC MINOR SCALE: FORMATION IN TONES AND SEMITONES

Formation of the *Harmonic Minor Scale* with its corresponding intervals.

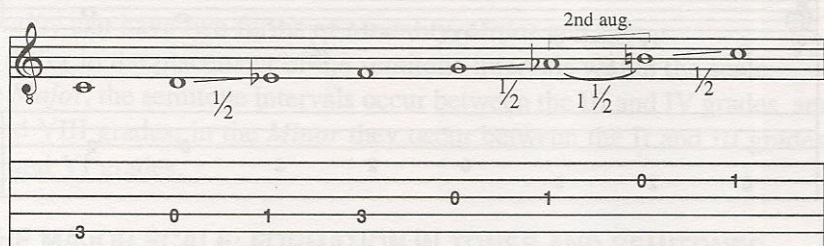
This scale has three Minor 2nd intervals, located between grades II-III, V-VI, VII-VIII.

These intervals thus create an Augmented Second interval ($1 \frac{1}{2}$ tones) between grades VI and VII.

Example in the A scale:



Example in C:



25. KEY SIGNATURE

In the composition of a musical work, in order to prevent always having to write in Accidentals necessary to maintaining the Tonality of any one scale (exceptions being the Scales of C Major and A Minor as they require no accidentals), we use a *Key Signature* which is the ordered placement of the requisite accidentals (as defined by the Scale used in the composition). The *Key Signature* is written on the musical staff, to the right of the Cleff which of course is found at the extreme left of the staff. On each successive staff line, along with the Cleff, the accidentals are written in once, and during the playing of the composition in the specified Tonality, these accidentals, unless otherwise indicated, are respected.

Key Signatures are of two types, composed of either *sharps* or *flats*. In the case of the sharps they are inalterably ordered in ascending fifths (F, C, G, D, A, E and B); in the case of the flats, a descending order of fifths (B, E, A, D, G, C and F). The Key Signature specifies which scale, and represents both the Major and Relative Minor forms (which share the same Key Signature) of the scale.

To determine the Key of a composition (or its particular Tonality), in the case of sharps, we take the ultimate sharp indicated in the Key Signature and raise it a Minor 2nd (1 semitone) to find the name of the Key; in the case of flats, we take the ultimate flat indicated in the Key Signature and lower it a Perfect 4th (2 1/2 tones) to find the name of the Key.

In both cases, to discover the Relative Minor Scale, we descend a Minor 3rd (1 1/2 tones) from the first note of the Major Scale.

Method for determining the Relative Major and Minor Scales in Key Signatures of Sharps:

For a Key Signature containing two sharps (F# and C#), we take the second (and ultimate) sharp, C#, raise it a diatonic semitone to D, and thus D is the Major scale we are in.

To determine its Relative Minor Scale, from D we descend a Minor 3rd interval where we find B, and thus we are in B Minor.



Method for determining the Relative Major and Minor Scales in Key Signatures of Flats:

For a Key Signature of three flats (B, E, A), we descend from the ultimate flat (A) a Perfect Fourth (2 and a half tones) where we find E flat, and thus we are in the Key of E Flat Major.

To determine the Relative Minor Scale, we descend a Minor 3rd from E flat, and find ourselves at C, which defines the Key of C Minor.

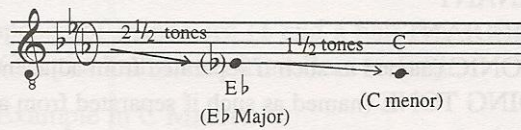
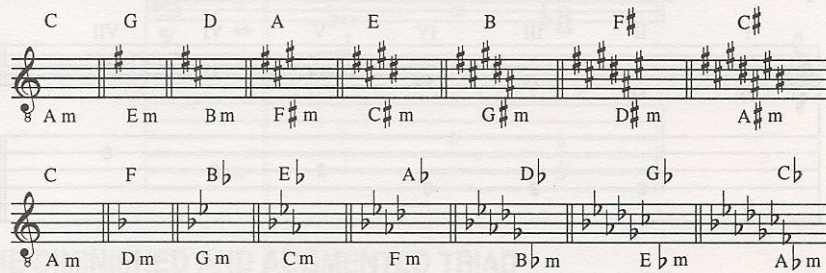


Diagram of Key Signatures for Major and Relative Minor scales.



26. REPEAT SIGNS

Repeat Signs consist of two vertical bars (one thick, one thin) and two small dots (second and third spaces on the staff). In a piece of music, when Repeat Signs are encountered, the fragment of music between the Repeat Signs must be repeated.

In the case of finding only one set of double bars with the two dots (the dots preceding the bars), this means that the repetition begins from the start of the composition.



TRADITIONAL HARMONY

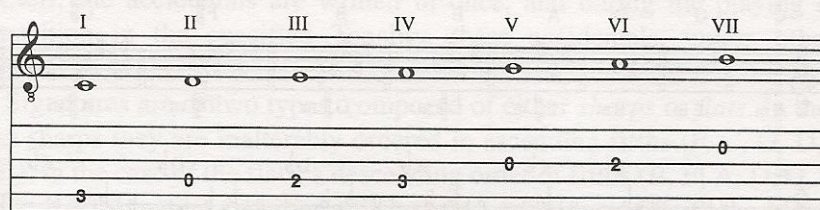
ELEMENTARY AND INTERMEDIATE

1. THE DEGREES OF THE SCALE

The Scale Degrees are numbered and named as follows:

- I TONIC
- II SUPERTONIC
- III MEDIANT
- IV SUBDOMINANT
- V DOMINANT
- VI SUBMEDIANT
- VII SUBTONIC (named as such if separated from adjacent Tonic by one tone)
- VII LEADING TONE (named as such if separated from adjacent Tonic by a semitone)

Example in C Major



2. THE MAJOR AND MINOR TRIAD CHORD

A *Triad* is a group consisting of three diatonic notes or pitches, played simultaneously, and superpositioned in either major or minor 3rds:

- The *Root* the lowest note
- The *Third* the middle note
- The *Fifth* the highest note

Formation of a Perfect Major Triad (M) with its corresponding relationship of intervals:

This Triad is composed of a Major 3rd (2 tones) from Root to Third, and a Perfect 5th (3 $\frac{1}{2}$ tones) from Root to Fifth.

Example in C Major:

Formation of a Perfect Minor Triad (m) with its corresponding relationship of intervals:

This Triad is composed of Minor 3rd (1 and a half tones) from Root to Third, and a Perfect 5th (3 and a half tones) from Root to Fifth.

Example in C Minor:

3. THE DIMINISHED AND AUGMENTED TRIAD

Formation of a Diminished 5th Chord (5) with its corresponding intervals:

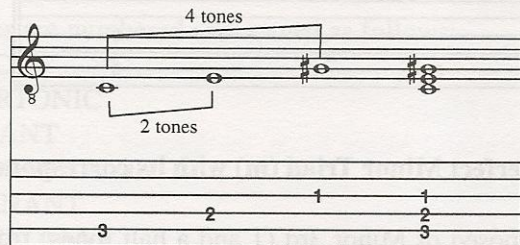
This chord is composed of a Minor 3rd (1 and a half tones) from Root to Third, and a Diminished 5th (3 tones) from Root to Fifth.

Example of a C Diminished Fifth Chord:

Formation of an Augmented Fifth Chord (+5) with its corresponding intervals:

This chord is composed of a Major 3rd (2 tones) from Root to Third, and an Augmented 5th (4 tones) from Root to Fifth.

Example of an Augmented Fifth C Chord:

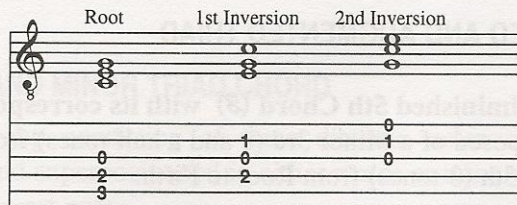


4. THE THREE FORMS OF THE TRIAD

There are three arrangements of the Triad. In whichever arrangement, the chord's name does not change, it is only qualified accordingly:

- *Root* (or Fundamental): 1-3-5; Root names the chord
- *First Inversion*: 3-5-1; lowest pitch being the Third note of chord
- *Second Inversion*: 5-1-3; lowest pitch being the Fifth note of the chord

Examples in C Major:



5. THE POSITION OF THE CHORD

A chord can be in one of two *Positions*, open or closed, irrespective of its Form. In the *Closed Position*, the three notes of the chord are as close together as possible on the Staff; in the *Open Position*, they are spaced out.

Example of Open and Closed chords in C major:

The diagram shows three sets of chords in C major on a treble clef staff. Above the staff are labels: 'Root', '1st Inversion', and '2nd Inversion'. Below the staff are labels: 'Closed' and 'open'. The chords are: Root Closed (C4, E4, G4), Root open (C4, E3, G4), 1st Inversion Closed (E4, G4, C5), 1st Inversion open (E4, G4, C5), 2nd Inversion Closed (G4, C5, E5), and 2nd Inversion open (G4, C5, E5). Below the staff are fingerings: Root Closed (0, 2, 3), Root open (0, 0, 3), 1st Inversion Closed (1, 0, 2), 1st Inversion open (1, 0, 2), 2nd Inversion Closed (0, 1, 5), and 2nd Inversion open (0, 1, 5).

6. THE NOTATIONAL FIGURE IN TRIAD CHORDS

This Figure serves to describe notationally the Form of a chord (as discussed in #4 above). In other words, it tells us where the Root (or Fundamental) is.

- *Root position*—no Figure is used; chord is formed atop the Root note with the Third and Fifth above, in the Position we desire.
- *1st Inversion*—the Figure is **6**, the chord formed atop the Third note with the Fifth and the Root above, in the Position we desire.
- *2nd Inversion*—the Figure is **6/4**, the chord formed atop the Fifth note with the Root and the Third above, in the Position we desire.

The Figure is written under the staff, directly below the chord's lowest note.

Example in C Major:

The diagram shows three sets of chords in C major on a treble clef staff. Above the staff are labels: 'Root position', '1st Inversion', and '2nd Inversion'. Below the staff are fingerings: Root position (0, 2, 3), 1st Inversion (1, 0, 2), and 2nd Inversion (0, 1, 5). Below the staff are notational figures: Root position (no figure), 1st Inversion (6), and 2nd Inversion (6/4).

7. THE MELODIC MOTION OF VOICES

Melodic Motion is the *melodic movement* of each voice, described as either *Conjunct* or *Disjunct*.

A Voice is defined as any of the notes which comprise a chord, and each note's respective motion is said to be Conjunct if it moves by an interval equal to a diatonic 2nd, and Disjunct if the interval is greater.

8. HARMONIC MOTION OF THE VOICES

Harmonic Motion is the comparison of the movement of *two* voices with their preceding or following positions (ie., comparing the positions of Voices (or notes) in one chord with their positions in an adjacent chord).

There are three types of Harmonic Motion:

- *Parallel*—two voices moving in the same direction
- *Contrary*—two voices moving in opposite directions
- *Oblique*—one voice remains stationary while the other voice either ascends or descends.

Parallel		Contrary		Oblique	
0	0	2	3	2	2
2	0	3	5	3	0

9. DEGREE INTERVALS OF MAJOR MODE TONALITY

The intervals which separate the Tonic from the other degrees are:

- I to II is a Major 2nd
- I to III is a Major 3rd
- I to IV is a Perfect 4th
- I to V is a Perfect 5th
- I to VI is a Major 6th
- I to VII is a Major 7th

10. MAJOR SCALE CHORD TYPES

As has been seen, we use Roman numerals to indicate the degree of the scale over which chords are formed.

- Perfect Majors (M): **I, IV, V**
- Perfect Minors (m): **II, III, VI**
- Diminished (Dim): **VII**

Example in C Major:

	I	II	III	IV	V	VI	VII
0	0	2	0	1	3	0	1
1	2	3	0	2	4	1	3
2	3	5	2	3	5	2	4

11. DEGREE INTERVALS IN MINOR MODE TONALITY

The intervals which separate the Tonic from the other degrees are:

- I to II is a Major 2nd
- I to III is a Minor 3rd
- I to IV is a Perfect 4th
- I to V is a Perfect 5th
- I to VI is a Minor 6th
- I to VII is a Minor 7th

12. MINOR SCALE CHORD TYPES

Perfect Majors (M): **III, VI, VII**

Perfect Minors (m): **I, IV, V**

Diminished (Dim): **II**

Example in A Minor:

	I	II	III	IV	V	VI	VII
0	0	1	3	5	7	8	10
1	1	3	5	6	8	10	12
2	2	4	5	7	9	10	12

13. HARMONIC MINOR SCALE CHORD TYPES

Perfect Majors (M): **V, VI**

Perfect Minors (m): **I, IV**

Diminished (Dim): **II, VII**

Augmented (Aug): **III**

Example in A Minor Harmonic:

Example in A Minor Harmonic showing chords I through VII with their corresponding scale degrees:

Chord	Scale Degrees
I	0, 1, 2
II	1, 3, 4
III	4, 5, 6
IV	5, 6, 7
V	7, 9, 10
VI	9, 10, 12
VII	10, 12, 13

14. CONCLUSIVE CADENCES

Just like oral declamation or the written word, music has moments of repose that delimit the different harmonic parts which constitute a piece of music. We call this musical repose or resolution a Cadence.

Under the term *Conclusive Cadences*, which bring about this conclusion of repose, we have the *Authentic* (harmonic progression from the Dominant V to the Tonic), and the *Plagal* (harmonic progression from the Subdominant IV to the Tonic).

If we add to the triad a duplicated Fundamental, Third or Fifth in another pitch (and in this order of importance), then we create a chord of four voices which is essential to the development of effective harmonic linkings.

Example in C Major

Example in C Major showing chords V, I, IV, and I with their corresponding scale degrees:

Chord	Scale Degrees
V	3, 3, 4, 5
I	1, 1, 2, 3
IV	1, 2, 3, 5
I	1, 1, 2, 3

Example in A Minor:

Example in A Minor showing chords V, I, IV, and I with their corresponding scale degrees:

Chord	Scale Degrees
V	0, 0, 1, 2
I	0, 1, 2, 3
IV	3, 3, 5, 5
I	0, 1, 2, 3

15. DECEPTIVE CADENCES

Deceptive (or interrupted) Cadences are those cadences which do not resolve onto the Tonic in its Root Position but into the 1st or 3rd Inversion of the Tonic chord, or onto other scale degrees such as the VI, III, V or the IV.

Example in C Major:

V I V VI V III IV V V IV

3	3	3	0	3	3	1	3	3	5
3	1	3	1	3	5	1	3	3	5
4		4	2	4	4	2	4	4	5
5	2	5		5	2	3	5	5	8

(* In the tabature we have left out the Ties as these are more theoretical than practical for the guitar.)

16. TRADITIONAL HARMONIC MOTION OF I, V AND IV

a) From the Tonic (I) to the Dominant (V); and from the Tonic to the Subdominant (IV).

Example in C Major:

I V I IV

1	0	1	1
0	0	0	2
2	0	2	3
3	3	3	1

b) From the Dominant to the Tonic; and from the Dominant to the Subdominant.

Example in C Major:

V I V IV

0	1	0	1
0	0	0	2
0	2	0	3
3	3	3	1

c) From the Subdominant to the Tonic; and from the Subdominant to the Dominant.

Example in C Major:

IV I IV V

1	1	1	0
2	0	2	0
3	2	3	0
1	3	1	3

17. TETRACHORDS AND PENTACHORDS

Tetrachord here to be understood harmonically, that is, 4 notes played simultaneously, as distinct from the Tetrachord of the Greek scales—see below, ANDALUSIAN CADENCE, paragraph #1.

Formation of the *Perfect Major 7th tetrachord* in Major and Minor modes (called respectively Major 7th, and 7th) with corresponding intervals.

Example in C Major:

Major 7th (5 1/2 tones) minor 7th (5 tones)

2 tones 2 tones

Perfect 5th Perfect 5th

0	0	0	0
0	0	0	0
3	2	0	0
5	2	0	0

0	0	0	0
0	0	0	0
8	7	0	0
8	7	0	0

Formation of the *Perfect Minor 7th tetrachord* in Major and Minor modes (called respectively Major-minor 7th, and Minor 7th) with corresponding intervals.

Example in A Minor:

Major 7th (5 1/2 tones) minor 7th (5 tones)

1 1/2 tones 1 1/2 tones

Perfect 5th Perfect 5th

1	1	0	0
2	0	0	0
3	2	0	0
5	3	0	0

1	1	0	0
2	0	0	0
5	3	0	0
5	3	0	0

Formation of a *Major Ninth Chord* (pentachord) in both its Major and Minor modes with corresponding intervals.

Example in C Major:

* We purposely leave out the fifth in the guitar tabulature in order to create a chord characteristic of Flamenco, thus obtaining a four-voiced chord or tetrachord.

Formation of a *Minor Ninth Chord* (pentachord) in both Major and Minor modes with corresponding intervals.

Example in A Minor:

* We purposely leave out the seventh in the guitar tabulature in order to create a chord of four voices.

18. THE SEVENTH CHORD OF THE DOMINANT

The *Triad of the Dominant* (V) is invariably a Perfect Major chord, but upon adding a *minor 7th* to the group we create an aural need of resolution towards the Tonic, which is realized as an Authentic Cadence, the strongest of the cadences as it is the most musically conclusive.

Its notational figure is the number 7 (indicating the 7th) and is preceded by the Roman numeral V. Thus: V7.

19. THE CHARACTERISTIC PROGRESSION I - V7 - I - IV - I - V7 - I

A *Progression* is a specified succession of chords. Popular music's most typical Progression starts on the Tonic, from where it passes through the Dominant (V), the Subdominant (IV), back to the Dominant (V), finally to resolve (from where it began) on the Key's defining centre, the Tonic.

As we shall see in the chapter on FLAMENCO MUSICAL FORM, these harmonic linkings are used extensively in the diverse styles of Flamenco as was established in its traditional conception.

These harmonic linkings, while theoretical, have been worked out practically as they relate to the guitar.

Example in C Major

Example in A Minor:

The diagram shows the characteristic progression I - V7 - I - IV - I - V7 - I for both C Major and A Minor. Above the staff, the chords are labeled: I, V7, I, IV, I, V7, I for C Major and I, V7, I, IV, I, V7, I for A Minor. The staff shows the chord voicings. Below the staff is a guitar fretboard diagram with numbers indicating fingerings for each chord.

20. MODULATION

Although the number of musical combinations available to us in any one particular Key is limitless, there is no doubt that changing the Key occasionally during the course of a piece of music enormously enriches the sonority of the piece.

Modulation describes this changing of Key, when we pass from one to another within a musical piece. The most common Modulations are as follows:

- Major to Minor: the changing of the Key from its Major mode to its Minor mode, such as E Major to E Minor.
- Major Scale to its Relative Minor: if, for example, we are in C Major, the Key change is to A Minor, which is the Relative Minor of C Major.
- Tonic to Dominant: the Key change in this case is to the Dominant of the Key currently in use, so that, if we are in C Major, the new Key is G Major, as G is the Dominant in the Key of C.

THE ANDALUSIAN CADENCE

ELEMENTARY AND INTERMEDIATE LEVELS

In Flamenco we find two different harmonic concepts: the Andalusian Cadence (also termed Flamenco Doric Mode), and Traditional Classical Harmony.

1. THE GREEK MODES (OR SCALES)

Pythagoras, father and architect of Greek musical theory (6th Century B.C.E.), elaborated a systematical connection between music and numbers. This knowledge was abandoned and ignored by the Western world until the Arabs re-discovered and spread it throughout Medieval Europe. It transformed our culture.

The Greek Modes (or scales) were linked directly to the day's stringed instrument par excellence, the Lyre, using it to create groups of four descending notes (encompassed within a 4th interval) which the Greeks called *Tetrachords* (Tetrachordon in Latin).

The Greek musical system was developed as an extension of the human voice, and the Modes were ordered and sung in descending fashion (from higher notes to lower), unlike our modern musical system where we generally ascend the scale.

Flamenco uses the descending Greek form which is so characteristic of the Cantes Puros (Pure Songs).

The Greek Tetrachord, then, is made up of four successive notes descending in 2nds or conjunct Scale degrees which can be either Major (of 1 tone) or Minor (a semitone), their totality contained within the 2 1/2 tones of a Perfect 4th. The position of the semitone in the Tetrachord is what determines each Mode:

- LYDIAN (semitone between the first and second notes)
- PHRYGIAN (semitone between the second and third notes)
- DORIAN (semitone between the third and fourth notes)

Pure Flamenco utilizes the Dorian (or Doric) Mode as a structural harmonic base.

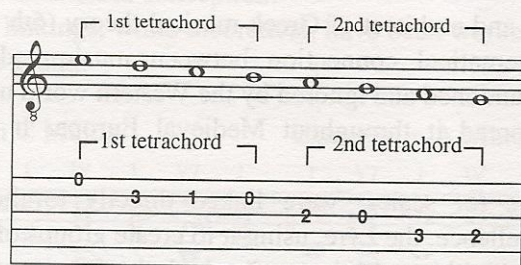
2. THE GREEK DORIC MODE

It is incorrectly said that the *Gregorian Modes* were derived from the *Greek Modes*. In reality, the former only borrowed the latter's nomenclature (*Doric*, *Phrygian*, *Lydian*, *Mixolydian*, also known as *Protus*, *Deuterus*, *Tritus* and *Tetrardus*). The names of the Greek Modes were applied to the Gregorian Modes

by *Heinrich Glarean* (15th - 16th C.E.), not by reason of the semitone's position but for the Modes' numbered order. *Zarlino* (16th C.E.) maintained Glarean's nomenclature but placed the Mode beginning on C first.

As a result of this confusion the old Greek Doric Mode became the Phrygian, and the Phrygian the Doric. This change in nomenclature was generally accepted and continues to the present day.

Formation of the *Greek Doric Mode* (or Gregorian Phrygian Mode) in tetrachords:



3. THE FLAMENCO HARMONIC PROGRESSION: ANDALUSIAN CADENCE

The *Flamenco Harmonic Progression* or *Andalusian Cadence* is rooted in the second melodic tetrachord of the Greek Doric Mode. As such it is numbered, not according to prevailing musical logic that works in an ascending order, but rather according to a Descending order. In doing this the *Principal or Grand Tonic* note becomes **IV**, and the *Secondary Tonic*, as at the end of a phrase or cycle, becomes **I**. This, therefore, creates the final cadence of resolution between **II** and **I** of the Mode.

Peculiar to this progression is the conversion of the I chord into a Perfect Major (2 tones between Root and Third) as opposed to a Perfect Minor Chord to which it would normally correspond, this owing to the influence of other musical systems.

Transformation of the second Doric Tetrachord into harmonic chords.



4. PRINCIPAL AND SECONDARY CHORDS

Harmony as applied to Flamenco is an indisputable method for a general study of the Guitar, its technical and musical aspects, the particular layout of the notes on the instrument.

From Flamenco's very beginnings, two forms for developing the Andalusian Cadence were created, one which is called *From Above* (Sp. por arriba), based on the note E but in the Key Signature of A Minor (this placing the resolving cadence between notes F and E); the other form is called *From the Middle* (Sp. por medio), based on the note A but played in the Key of D Minor (this having the resolving cadence between the notes B \flat and A). The two forms together are called *Basics* (Sp. básicas).

The later invention of the *Capo* (Sp. Cejilla), really just a moveable Nut, allowed the player to change the key yet maintain the original chord positions, with the consequence of greatly expanding the number of keys without in any way losing these singular musical characteristics.

As examples we will utilize the **Doric Mode of E** (remembering that it is played in the Key Signature of A Minor) and the **Doric Mode of A** (this in the Key of D Minor).

Proceeding, then, we can now develop and number seven degrees which correspond to the seven notes of the descending Doric Mode. We will thus have as the primary support the IV, which will function as the *Principal Tonic* (the defining tone of the scale), which will then resolve onto I (the Secondary Tonic) as a Perfect Major chord, this resulting in what is known as *Doric Flamenco*.

Formation in Triads of the descending Flamenco Doric Scale with corresponding types of chords:

Example in E (with A Minor Key Signature):

PERFECT MAJORS: **E (I)**, **F (II)**, **G (III)**, **C (VI)**

PERFECT MINORS: **A (IV)**, **D (VII)**

DIMINISHED FIFTH CHORD (\mathcal{S}): **B (V)**

VII	VI	V	IV	III	II	I
5	3	1	0	3	1	0
6	5	3	1	4	2	0
7	5	4	2	5	3	2

PRINCIPAL CHORDS: IV A Minor, III G, II F, I E
 SECONDARY CHORDS: VI C, VII D Minor, V B dim5

Example in A (with Key Signature of D Minor)
 PERFECT MAJORS: A (I), B \flat (II), C (III), F (VI)
 PERFECT MINORS: D (IV), G (VII)
 DIMINISHED FIFTH CHORD (δ): E (V)

PRINCIPAL CHORDS: IV D minor, III C, II B \flat , I A
 SECONDARY CHORDS: VI F, VII G minor, V E dim5

5. CHARACTERISTIC PROGRESSION IV - III - II - I

It is very important to bear in mind that the restrictions and limitations of classical music's harmonic structure and motion do Not affect Flamenco, because in music considered sophisticated, that which might be prohibitive is absolutely coherent in Flamenco.

Examples in E and A:

6. CADENCES

Refer back to paragraphs 14 and 15, CONCLUSIVE AND DECEPTIVE CADENCES, in *Traditional Harmony*.

Characteristic Flamenco Cadence: II -I of a minor second

Example in E

II I

F E

Example in A:

II I

B \flat A

Substituted Cadences: V7-I, VII-I

These cadences, of lesser importance, similarly create that feeling of resolution. In the case of V (Diminished Fifth), we add a minor 7th (see paragraph 16 of *Traditional Harmony* and paragraph 8 of *The Andalusian Cadence*).

These harmonic linkings, while theoretical, have been worked out practically as they relate to the guitar.

Example in E

V7 I VII I

Bdim7 E Dm E

Example in A:

V7 I VII I

Edim7 A Gm A

Deceptive cadence or Semi-cadence III-VI

This cadence serves to create a temporary sense of repose on a chord other than the Tonic (I).

Example in E

Example in A:

7. USING SECONDARY CHORDS

Use of VI in substitution of III in the Characteristic Progression.

Example of the Cadence in E

Example of the Cadence in A:

Use of VII in substitution of IV in the Characteristic Progression

These harmonic linkings, while theoretical, have been worked out practically as they relate to the guitar.

Example in E

VII III II I

6 8 6 5
7 7 5 4
7 9 7 6
5 10 8 7

VII III II I
Dm G F E

Example in A:

VII III II I

3 5 3 2
3 5 3 2
5 5 3 2
3 3 6 5

VII III II I
Gm C B \flat A

8. USING THE 7TH AND THE 9TH

Musical necessity dictated the adding of 7ths and 9ths to the basic chords, as well as these added notes helping the guitar player use the fret board more efficiently.

Although the melody sung by the *Cantaor* (the Flamenco singer) is theoretically defined, what isn't defined is how to treat it in terms such as feeling and nuance. Unlike the great schools of vocal tradition in the Orient, Flamenco singing's weak sense of tuning is due to the want of clarity in the Chromatic scales which are further subdivisible into smaller-tone intervals in the majority of cases. In compensation, Flamenco guitar, with its various dissonant chords, creates an atmosphere to match the vocal's melodic ambiguity.

Traditionally the 7ths were always Minors in each of the seven chords of the particular Key, and the 9ths were Majors on the II, III, IV, VI, VII and Minors on I and V.

Example: All chords have a minor 7th, conform to the Doric Mode, and are guitar-friendly. In E and A.

These harmonic linkings have been worked out with the guitar.

in E

VII VI V IV III II I

6 5 3 1
5 3 2 0
7 5 3 2
5 3 2 0
3 1 0
3 1 0
3 1 0

in A:

VII VI V IV III II I

11 10 8 6
10 8 7 5
12 10 8 7
10 8 7 5
5 3 1 0
5 3 1 0
5 3 1 0

Example: All chords having a Major 9th (II, III, IV, VI, VII), and a Minor 9th (I and V), conforming to the Doric Mode, and guitar-friendly. In E and A. These harmonic linkings have been worked out with the guitar.

in E

VII VI V IV III II I

6	5	3	1			
9	7	5	4	4	2	1
7	5	3	2	7	5	3
5	3	2	0	5	3	2
				3	1	0

in A:

VII VI V IV III II I

11	10	8	6	5	3	2
14	12	10	9	7	5	3
12	10	8	7	5	3	2
10	8	7	5	3	1	0

9. EXCEPTIONAL INTERIM CHORDS OF THE ANDALUSIAN CADENCE

It is common to mix Traditional Harmonic concepts with the harmonic successions peculiar to the Andalusian Cadence. Like this we are able to use the destined chord's Dominant (V) as we pass through (or between) two principal or secondary chords, with the exception of the succession II-I.

10. THE DOMINANT SECONDARY CHORD

Any of the chords which pertain to a cadence (with the exception of I) can be used if preceded by a Perfect Major chord with a minor 7th (V7); this 7th chord will function as if it were a Dominant (V).

Example of a V7 chord on II as it moves between III and II, in E and A.

Example in E

III V7/II II

3	5	6
4	3	5
5	5	7
3	3	8

III V7/II II

G C7 F

Example in A

III V7/II II

0	1	1
1	4	3
0	2	3
3	1	1

III V7/II II

C F7 Bb

Example of a V7 on III as it moves between IV and III, in E and A.

Example in E

IV V7/III III

Am D7 G

Example in A

IV V7/III III

Dm G7 C

Example of a characteristic progression: a V7 chord on VII, III, VI and II, in E and A.

These harmonic linkings have been worked out with the guitar in mind since the resolutions of the 7ths and the Leading Tones are not theoretically correct as we shall see at more difficult levels.

Example in E:

V7/VII VII V7/III III V7/VI VI V7/II II I

A7 Dm D7 G G7 C C7 A E

Example in A:

Example in A: Musical notation showing a sequence of chords and their fretboard positions. The chords are: V7/VII (D7), VII (Gm), V7/III (G7), III (C), V7/VI (C7), VI (F), V7/II (F7), II (Bb), and I (A). The fretboard positions are shown below the chords, with fingerings indicated by numbers 1-5.

11. THE 7TH AND 9TH CHORDS MOST OFTEN USED IN THE ANDALUSIAN CADENCE AND THEIR POSITION (OPEN OR CLOSED)

- using chords on I, II and III
- played in Primary Chord Form on the fretboard

Example in A:

Example in A: Musical notation showing the 7th and 9th chords most often used in the Andalusian cadence. The chords are: I (7), II (9), III (7/9), and IV (7/9). The fretboard positions are shown below the chords, with fingerings indicated by numbers 1-5.

12. THE PEDAL NOTE IN HARMONIC PROGRESSIONS

The *Pedal note* (or point) is one which is sustained through a harmonic succession, which may or may not actually form a part of any of the chords.

Concerning the characteristic theoretical Progression of A (Dm, C, Bb and A), on the guitar we find this pattern slightly altered to Bb (with a bass D), C 7/9, Bb and A, which is a result of substituting the IV (of Dm) with a II (Bb) in the cadence. This change allows us to maintain the notes Bb and D in three of the chords, which in turn creates a Pedal Note on E (first open high string on the

guitar); this E Pedal Note does not form a part of B \flat (II), but does with chords C (III) and A (I).

In the characteristic E progression, like that of A, we encounter the E Pedal Note belonging to IV (Am) and I (E) but not to III (G) and II (F).

This peculiarity is often found in the Themes and Variations of the diverse styles pertaining to the Flamenco Doric Modes of E and A, as well as in the harmonic progressions of the *Taranta* (F \sharp Doric), *Granaina* (B Doric) and *Rondeña* (C \sharp Doric), these latter to be examined later on.

Example of a traditional theme of *Siguiriyas* (A Doric):

FLAMENCO FORM

As in any music, Flamenco is built on *Rhythm*, *Melody* and *Harmony*. Each of its styles, as they have been developed over the years, remain fluid and open to new ideas of transformation with the aim of enriching the material.

The *Theme* of any style is its defined Melody, developed through the Harmony and having a definite duration usually within a rhythmic cycle. This musical fragment may be either simple or complex.

The *Variation* is the Theme re-interpreted or altered, according to predetermined guidelines concerning rhythm and tonality, and which requires what's called a basic Question and Answer.

The *Bridge* is a period of cycles or bars that joins one developing musical idea to another by linking together the different sections of a piece of music.

The *Finale* is the end of a section or of the entire piece, that in general is comprised of either one or two rhythmic cycles. This is the same in the *Cante* (singing) and the *Baile* (the dance, also known as: Sp. Replante, Desplante or Llamada).

The basic traditional composition alternated the Theme and Variations indiscriminately, using the characteristic Finale of each style as a Bridge or the end of each section in the musical piece. In the course of Flamenco's evolution, not only from the technical stand point but from the perspective of solo (unaccompanied) performance, certain thematic ideas have developed that, although they do not follow predetermined standards, do obey some general guidelines:

IN SET TIME SIGNATURES: based on Question and Answer with subsequent development. Theoretically the Question and Answer cycles should be of equal duration, and subsequent development the sum total of said cycles. Their specific order is personally decided, and sections are connected by using Bridges.

IN FREE TIME (defined as not possessing a determined rhythm):

The composition is as such: *Introduction* in which the Main Theme is introduced, followed by an indeterminate number of *Variations*, inherently free interpretation-wise and developed accordingly, each Variation connected to

another by way of technical manipulations (a la the virtuoso) in the form of Bridges, and finally the Conclusion.

Examples of basic Set Time and Free Time compositions:

Set Time

INTRODUCTION

THEME 1 (QUESTION/ANSWER)

DEVELOPMENT 1

BRIDGE

THEME 2

DEVELOPMENT 2

FINALE

Free Time

INTRODUCTION

VARIATION 1

DEVELOPMENT 1

BRIDGE

VARIATION 2

DEVELOPMENT 2

CONCLUSION

THE PRINCIPAL STYLES OF FLAMENCO GUITAR RHYTHMIC AND TONAL FEATURES

Solo Flamenco guitar, when not accompanying the strictures of the Cante (the Flamenco singing style), has gained a freedom which allows the composer to create and develop new musical aspects at his/her own discretion. This freedom comes from not having to strictly follow the Cante's style with its predetermined Modes and Keys.

3/4 Time

SOLEÁ (E Doric)

SOLEÁ POR BULERÍAS (A Doric)

BULERÍAS (A and E Doric, Major or Minor mode*)

ALEGRÍAS (any Key in Major or Minor mode*)

FANDANGO (E and A Doric)

* Bulerías are traditionally played in A Major and Minor

Alegrías traditionally played in E, A and C Major, and in E and A Minor

Alternating Times 3/4 and 6/8

SIGUIRIYA (A Doric)

SERRANA (E Doric)

CABALES (A Major)

PETENERA (E Doric)

GUAJIRA (any Major key*)

* Guajiras are traditionally interpreted in A

Binary and Quaternary Time 2/4 and 4/4

TIENTOS (A Doric)

TANGOS (A Doric)

FARRUCA (any Minor key*)

ZAPATEADO (any Major key*)

TARANTO (F# Doric)

* Farruca traditionally played in A Minor

Zapateado traditionally played in C Major

Free Time

TARANTA (F# Doric)

GRANAINA (B Doric)

MALAGUEÑA (E Doric)

RONDEÑA (C# Doric)

MINERA (G# Doric)

RHYTHMIC STRUCTURES

ELEMENTARY LEVEL

SOLEÁ

(TERNARY TIME)

FEATURES OF THE CANTE

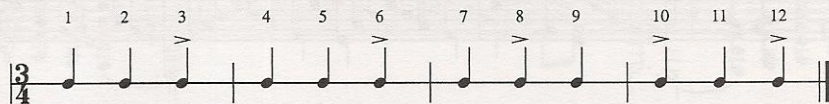
This singing style's lyric consists of either three or four eight-syllable verses, with a consonant or assonant rhyme:

Example A (three verses): *Anda que te den un tiro
nunca llueve como truena
con esa esperenza vivo.**

Example B (four verses): *Anda vete ar simenterio
y llévate un Santo Cristo
y encomiéndale tu arma
q'es mu grande tu delito.**

* Demófilo. *Colección de Cantes Flamenco*, Seville, 1996

The Soleá Cante is developed just like the guitar which accompanies it, in cycles of **twelve** beats. We use a Time Signature of 3/4, thus four bars to each cycle, bearing in mind that, unlike traditional theory where the accent falls on the first beat of each bar, in Soleá the accent falls on cycle beats 3, 6, 8, 10 and 12. We will see how the harmonic divisions are generally defined on the first beat of each bar.



Example of a melodic, rhythmic Soleá fragment, composed in the traditional style by the present author, with guitar accompaniment. As we lack the proper notation for representing the Cante's melody, its chromaticisms and nuances, it is not reproduced exactly but in an approximate way.

Vocal

Guitar

Fretboard diagram for the first system:

0	0	0	0	0	0	0	0	0	0
1	2	1	0	1	1	0	1	1	0
3	2	2	3	2	2	3	2	1	0
2	3	2	1	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0

Fretboard diagram for the second system:

0	0	0	0	0	0	0	0	0	0
1	2	1	0	1	1	0	1	1	0
3	2	2	3	2	2	3	2	1	0
2	3	2	1	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0

1st time only

Fretboard diagram for the third system:

0	0	0	0	0	0	0	0	0	0
1	2	1	0	1	1	0	1	1	0
3	2	2	3	2	2	3	2	1	0
2	3	2	1	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0

The first system of musical notation consists of three staves. The top staff is a single melodic line in treble clef, ending with a triplet of eighth notes. The middle staff is a guitar-style accompaniment in treble clef, featuring a complex rhythmic pattern with many beamed sixteenth and thirty-second notes. The bottom staff is a bass line in bass clef, using a numeric notation system (0-3) with various fingerings and slurs.

The second system of musical notation also consists of three staves. The top staff continues the melody with a triplet. The middle staff continues the complex guitar-style accompaniment. The bottom staff continues the numeric bass line. This system includes numerous upward and downward arrows above the guitar staff, likely indicating fretting or picking techniques.

The third system of musical notation consists of three staves. The top staff begins with a repeat sign and ends with a first ending bracket labeled "1st time only" above a triplet. The middle staff continues the guitar-style accompaniment. The bottom staff continues the numeric bass line. The system concludes with a double bar line.

INSTRUMENTAL ANALYSIS

E Doric being the Key most typical of the Soleá, in guitar accompaniment with the Cante as well as in solo guitar, we will use it as a guideline for explanations and examples.

1. TONAL BASE OF THE KEY SIGNATURE

A Minor acts as the *Grand Tonic* (IV) in the progression of the Andalusian Cadence.

2. CHARACTERISTIC HARMONIC PROGRESSION

Andalusian Cadence: Am/G/F/E (IV, III, II, I)

3. RESOLUTION CADENCE

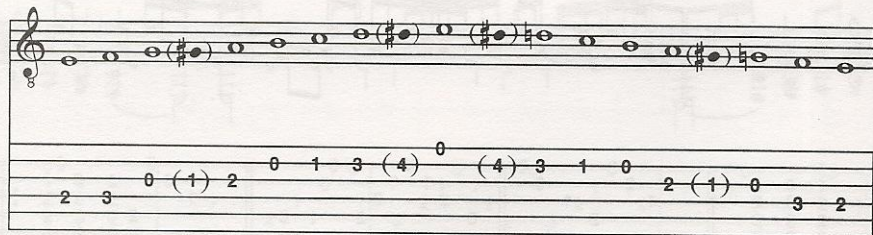
The *resolving cadence* is found between chords II and I (F and E).

4. THE SCALE

The Soleá scale corresponds to the *Greek Doric Mode* (or the Gregorian Phrygian mode) beginning on E.

The most common Accidentals in the scale are found on the III (Leading Tone of the IV harmonic or Grand Tonic, the accidental necessary to make chord I a Perfect Major), and, less importantly, on the VII (Leading Tone of the I Harmonic or Tonic); these accidentals allow us, if we so desire, to create Augmented 2nd intervals between scale degrees II/III and VI/VII.

These accidentals in the scale may be in the manner of a substitution or an addition.



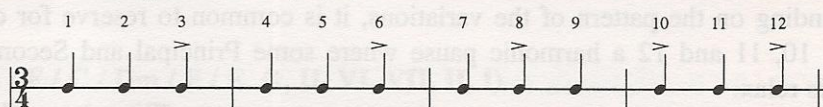
5. TIME SIGNATURE

The metrical structure of the Soleá is based on a cycle of twelve beats in $3/4$ time, needing 4 bars or measures for each cycle. Typical accents fall on beats 3, 6, 8, 10 and 12 (for graphic representation see intro *Features of the Cante*)

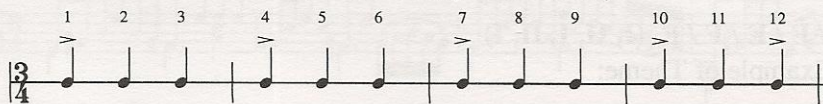
6. CYCLICAL STRUCTURE AND VARIATIONS

By varying the main accents we discover a multitude of possibilities with which to enrich the style.

a) Accents falling on beats 3, 6, 8, 10 and 12. This is the most traditional form.



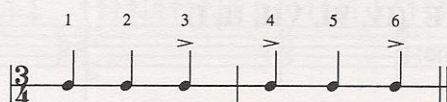
b) Accents falling on beats 1, 4, 7, 10 and 12. This form is used in defined variations whose character lies in the changes of tonality.



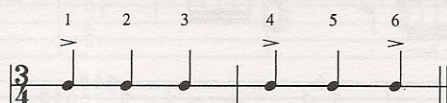
c) Accents falling on beats 1, 3, 4, 6, 7, 9, 10 and 12. This form is used in variations that mix characteristic accents with changes in Tonality.



d) Accents falling on beats 3, 4 and 6 (this sequence is always doubled in order to complete the twelve-beat cycle). This form is used for the "Half-Variation" of 6 beats.



e) Accents falling on beats 1, 4 and 6 (this sequence is always doubled in order to complete the twelve-beat cycle). This form is used for the "Half Variation".



f) Accents falling on beats 2, 4 and 6 (this sequence is always doubled in order to achieve the twelve-beat cycle). Form used for the "Half Variation".

siempre duplicada para obtener un ciclo de 12 tiempos).
Utilizado como el anterior para la llamada “media variación”.



7. ESTRUCTURAS ARMÓNICAS TRADICIONALES

Para el tema tradicional se reservará el tono de MI en los tiempos 10, 11 y 12 (último compás de 3/4 que tiene como singularidad la acentuación fuerte del primer y tercer tiempo), para crear así la Cadencia resolutive característica y dar finalización de esta manera al ciclo.

Es también común en las variaciones, dependiendo de su diseño, reservar para los tiempos 10, 11 y 12 una pausa armónica donde descansen algunos acordes principales y secundarios de la Cadencia andaluza.

Ejemplos de algunos encadenamientos armónicos en Tema y Variación:

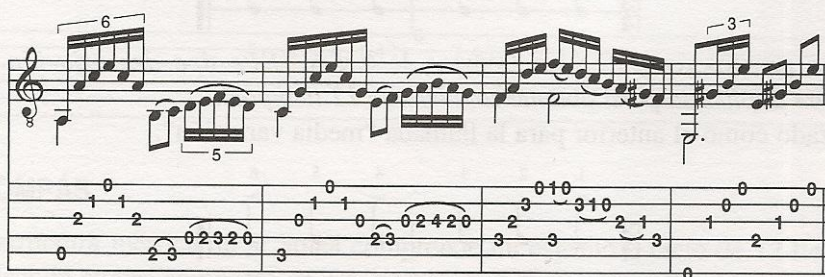
a) MI/ FA/ MI/ FA/ MI (I/ II/ I/ II/ I)

Ejemplo de Tema:



b) Lam/ DO/ Rem/ FA/ MI (IV/ VI/ VII/ II/ I)

Ejemplo de Tema:



c) E / F / C / F / E (I, II, VI, II, I)

Example of Theme:

Example c) shows a melody in treble clef, 3/4 time, with a key signature of one sharp (F#). The melody consists of five measures. Below the staff is a six-string guitar system with fingering numbers (0-4) and a bar line.

d) E / F / C / Dm / F / E (I, II, VI, VII, II, I)

Example of Theme:

Example d) shows a melody in treble clef, 3/4 time, with a key signature of one sharp (F#). The melody consists of six measures. Below the staff is a six-string guitar system with fingering numbers (0-4) and a bar line.

e) F / C7 / F / Dm / E (II, VI, II, VII, I)

Example of typical passage of *Rasgueo* (Flamenco strumming motion):

Example e) shows a *Rasgueo* strumming pattern in treble clef, 3/4 time, with a key signature of one sharp (F#). The pattern consists of four measures of strumming, indicated by downward arrows. Below the staff is a six-string guitar system with fingering numbers (0-4) and a bar line.

f) Am / G7 / F / E (IV, III, II, I)

Example of Variation:

g) **F / G7 / F / E** (II, III, II, I)

Example of Variation in a 12-beat cycle:

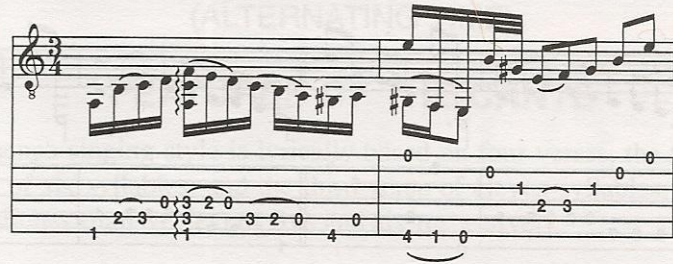
h) $\mathbf{Bdim7/ F/ Bdim7/ E} \quad (\mathbf{V7 / II/ V7/ I})$

Example of Variation in a 12-beat cycle:

[illegible]

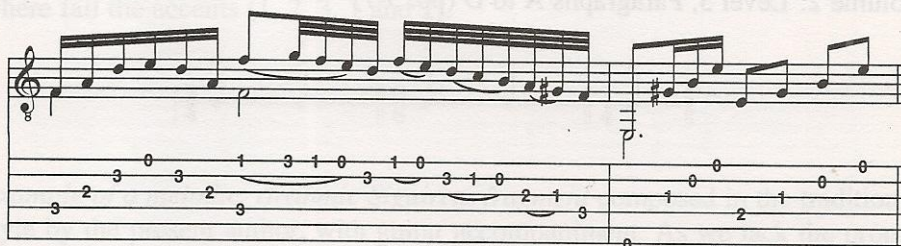
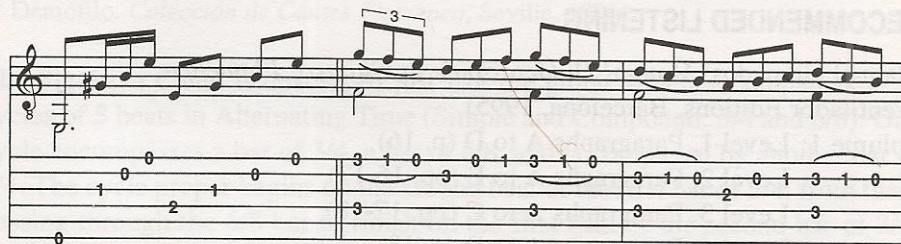
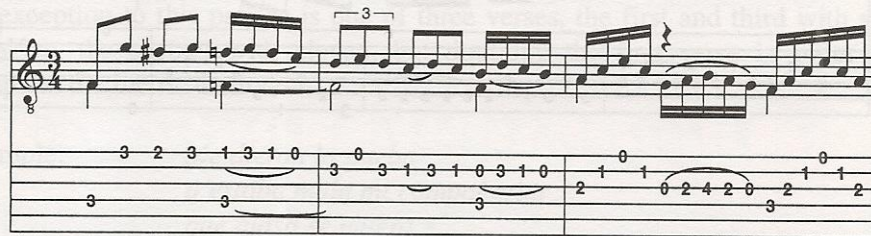
i) F / E (II, I)

Example of a Half Variation of six beats (half cycle):



8. VARIATIONS: BASICS OF THE TRADITIONAL DESIGN

Example of the Question in one cycle (12 beats), and the Answer in one cycle:



Example of the Question in a half-cycle (6 beats), doubled, and of the Answer in one cycle (12 beats):

The image displays two musical staves for guitar. The first staff contains a half-cycle (6 beats) of a 'Question' pattern, followed by its doubling. The second staff contains the 'Answer' pattern, which is one cycle (12 beats) long. Both staves include standard musical notation (treble clef, 4/4 time signature) and a corresponding line of fingerings (numbers 0-3) below the staff. The notation includes various rhythmic values and accidentals (sharps and naturals).

RECOMMENDED LISTENING

Manuel Granados: *Manual Didáctico de la Guitarra Flamenca*
(Ventilador Editions, Barcelona, 1995)

- Volume 1: Level 1, Paragraphs A to D (p. 16)
 - Level 2, Paragraphs A to E (pp. 16-17)
 - Level 3, Paragraphs A to C (pp. 17-18)
 - Level 4, Paragraphs A to D (p. 18)
- Volume 2: Level 5, Paragraphs A to D (pp. 5-7)

SIGUIRIYAS

(ALTERNATING TIME)

FEATURES OF THE CANTE

This Flamenco singing style is lyrically based on four verses, the first two and the fourth of six syllables, and the third verse of eleven syllables, divided into two hemistiches (half-verses) of five and six respectively.

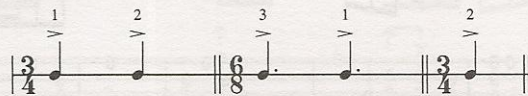
Lyric Example: *Anda compañera,
 permitan los sielos
 que con er cuchillo que matarme quieres
 mueras tú primero.**

An exception to this pattern is one of three verses, the first and third with six syllables, the second with eleven, but doubling the first verse in order to complete the metrical structure.

Example: *Me dieron la nueva
 q' estaba mala mi compañerita
 que quisá se muera.**

(* Demófilo. *Colección de Cantes Flamenco*, Seville, 1996)

The Siguiriya Cante is developed just like the guitar which accompanies it, in cycles of 5 beats in Alternating Time (Simple and Compound; 3/4 and 6/8). One cycle encompasses a bar of 3/4, a bar of 6/8, and is completed by another bar of 3/4. The cycle proper begins on the second beat of the first bar of 3/4, from there passing through the 6/8 bar to finish on the first beat of the second bar of 3/4. Thus, we have five cycle beats over the three bars, and it is on these cycle beats where fall the accents (1, 2, 3, 1 and 2).



Example of a melodic, rhythmic Siguiriya fragment composed in the traditional style by the present author, with guitar accompaniment. As we lack the proper notation for representing the Cante's melody, its chromaticisms and nuances, it is not reproduced exactly but in an approximate way.

1 Vocal

1 Guitar

3/6 4/8

8

The first system of the musical score covers measures 1 through 3. It features a vocal line (labeled '1 Vocal') and a guitar line (labeled '1 Guitar'). The time signature is 3/6, and the key signature has one sharp (F#). The guitar part includes a bass line with fret numbers (0, 2, 3, 2, 0) and a treble line with chords and single notes. The vocal line is mostly rests.

4

8

The second system of the musical score covers measures 4 through 6. It features a guitar line (labeled '4') and a bass line. The guitar part includes a treble line with chords and single notes, and a bass line with fret numbers (0, 2, 3, 2, 0). The vocal line is mostly rests.

7

8

The third system of the musical score covers measures 7 through 9. It features a guitar line (labeled '7') and a bass line. The guitar part includes a treble line with chords and single notes, and a bass line with fret numbers (0, 2, 3, 2, 0). The vocal line is mostly rests.

11

11

11

2

1 3 1 0

2

2

2

0 0 0 0

3 3 3 3

1 3 1 0

15

15

15

2

0 3 3 3

3 2

1 3 0 3 1 0

2

0 0 0 0

3 3 3 3

0 2 3

18

18

18

3 3 3 3

3 3 3 3

1 4 3 1 0

2

2

2

0 2 0 3

1 3 1 0

2

2

0 0 1 0 0

3 3 3 3

0 2 3

INSTRUMENTAL ANALYSIS

The A Doric key being the most typical of the Sigüiriya, in guitar accompaniment with the Cante as well as in solo guitar, we will use it as a guideline for explanations and examples.

1. TONAL BASE OF THE KEY SIGNATURE

D Minor acts as the *Grand Tonic* (IV) in the progression of the Andalusian Cadence.

2. CHARACTERISTIC HARMONIC PROGRESSION

Andalusian Cadence: Dm/C/B \flat /A (IV, III, II, I)

3. RESOLUTION CADENCE

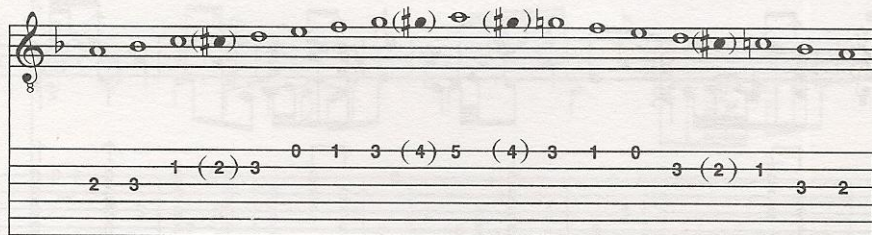
The *resolving cadence* is found between chords II and I (B \flat and A)

4. THE SCALE

The Sigüiriya scale, like that of the Soleá, corresponds to the *Greek Doric Mode* (or the Gregorian Phrygian mode), the Tonic being A.

The most common Accidentals in the scale are found on the III (Leading Tone of the IV harmonic or Grand Tonic, the accidental necessary to make chord I a Perfect Major), and, less importantly, on the VII (Leading Tone of the I Harmonic or Tonic); these accidentals allow us, if we so desire, to create Augmented 2nd intervals between scale degrees II/III and VI/VII.

These accidentals in the scale may be in the manner of a substitution or an addition.



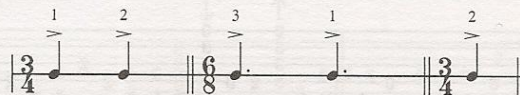
5. TIME SIGNATURE

The metrical structure of the Sigüiriya is based on a cycle of five beats, using a combination of 3/4 and 6/8 time.

Accents fall on each of the five beats of the cycle over the course of the three bars which comprise each cycle. (for graphic representation see intro *Features of the Cante*)

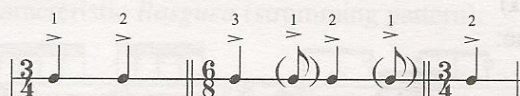
6. CYCLICAL STRUCTURE AND VARIATIONS

a) Accents falling on cycle beats 1, 2, 3, 1 and 2



b) Accents falling on cycle beats 1, 2, 3, (1*) 2, (1*) 2

* accent is of Medium strength



7. TRADITIONAL HARMONIC STRUCTURES

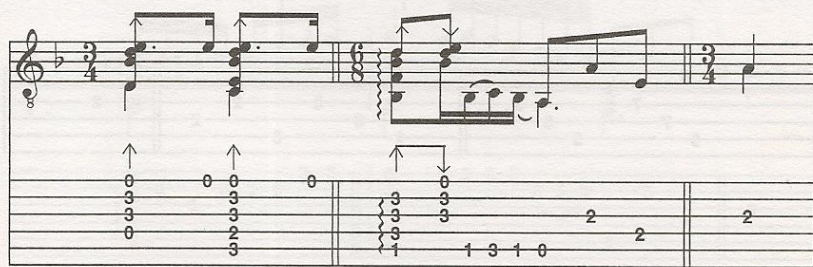
The note A, in the traditional theme, is the base on the second beat in 6/8 time and on the first beat of 3/4 time; this creates the characteristic cadence of resolution and finishes the 12-beat cycle.

Depending on the pattern of the variations, it is common to reserve for these specified beats (2nd in 6/8 and 1st in 3/4) a harmonic pause where some of the Principal and Secondary chords relax.

Example of some Theme and Variation harmonic linkings:

a) B \flat / C7/9 / B \flat / A (II, III, II, I)

Example of Theme:



b) $B\flat / A$ (II, I)
Example of Theme:

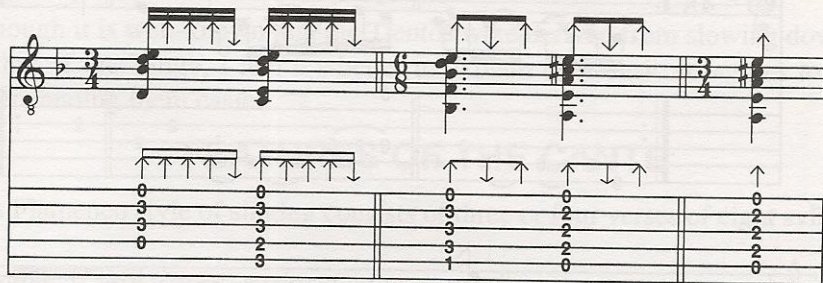
c) Gm / A (VII, I)
Example of Theme:

d) $Dm / C7 / B\flat / A$ (IV, III, II, I)
Example of Theme:

e) F / Gm / B \flat 7 / A (VI, VII, II, I)
Example of Theme:



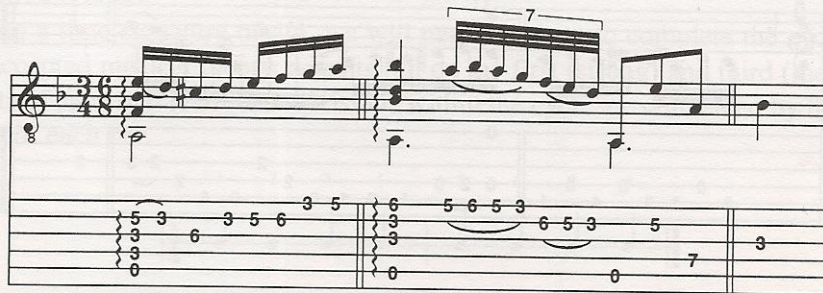
f) B \flat / C7/9 / B \flat / A (II, III, II, I)
Example with characteristic *Rasgueo* (strumming pattern):

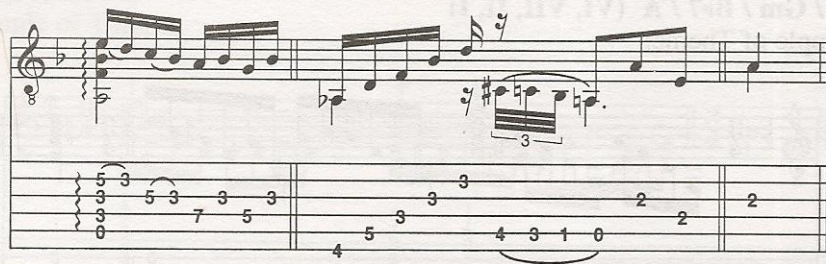


8. VARIATIONS: BASICS OF THE TRADITIONAL DESIGN

The Variation may begin on any of the cycle's beats though it usually starts on the first one (beat 2 of the 3/4 section); however, the Variation's end must always come on the second beat of the 6/8 bar.

Example of a Question cycle and of an Answer cycle:





Example of a doubled Question cycle and a two-cycle Answer:

Example of a doubled Question cycle and a two-cycle Answer musical notation. The notation is organized into three systems, each with a treble staff and a bass staff. The bass staves include fingerings (0-4) and slurs. The first system is marked with a repeat sign and a first ending bracket. The second system is marked with a repeat sign and a first ending bracket. The third system is marked with a repeat sign and a first ending bracket.

RECOMMENDED LISTENING

Manuel Granados: *Manual Didáctico de la Guitarra Flamenca*
(Ventilador Editions, Barcelona, 1995)

Volume 1: Level 1, Paragraphs A to E (p. 21)

Level 2, Paragraphs A to E (p. 22)

Level 3, Paragraphs A to C (p. 23)

Level 4, Paragraphs A to C (p. 23)

TIENTOS

(QUATERNARY TIME)

Although it is well-known that the Tientos were derived from slowing down the rhythm of the Tango, I feel it's better to explain their basic structures to make understanding them easier.

FEATURES OF THE CANTE

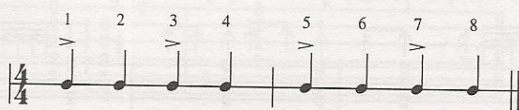
This Flamenco style of singing consists of three or four verses of eight syllables.

Example: *Me tiraste varios tientos
por ver si me blandeaba,
y me encontraste mas firme
que las murallas del alba.**

(* traditional song)

The Cante of the Tientos, along with its accompanying guitar, is developed in a cycle of 8 beats.

Using a time signature of 4/4, we will need two bars to complete the cycle. As in accepted musical theory, accents fall on the first (strong) and third (medium) beats of each bar. Harmonic divisions within the cycle are delineated by the first beat of each bar.



Example of a melodic, rhythmic Tiento fragment, composed in the traditional style by the author, with guitar accompaniment. As we lack the proper notation for representing the Cante's melody, its chromaticisms and nuances, it is not reproduced exactly but in an approximate way.

1 Vocal

1 Guitar

4

7

[illegible][illegible]

INSTRUMENTAL ANALYSIS

The A Doric key being the most characteristic of the Tiento, in accompaniment with the Cante as well as in solo guitar, we will use it as a guideline for explanations and examples.

1. TONAL BASE OF THE KEY SIGNATURE

D Minor acts as the *Grand Tonic* (IV) in the progression of the Andalusian Cadence.

2. CHARACTERISTIC HARMONIC PROGRESSION

Andalusian Cadence: Dm/C/B \flat /A (IV, III, II, I)

3. RESOLUTION CADENCE

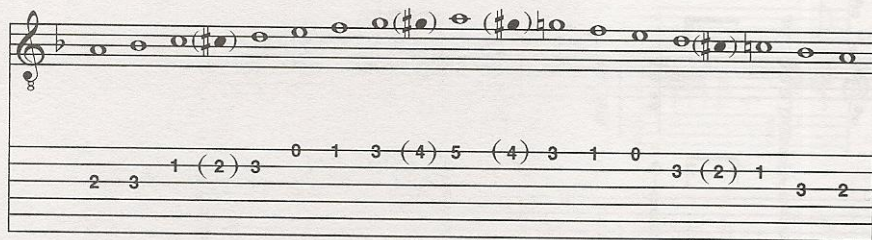
The *resolving cadence* is found between chords II and I (B \flat and A)

4. THE SCALE

The Tiento scale, like that of the Soleá, corresponds to the *Greek Doric Mode* (or the Gregorian Phrygian mode), the Tonic being A.

The most common Accidentals in the scale are found on the III (Leading Tone of the IV harmonic or Grand Tonic, the accidental necessary to make chord I a Perfect Major), and, less importantly, on the VII (Leading Tone of the I Harmonic or Tonic); these accidentals allow us, if we so desire, to create Augmented 2nd intervals between scale degrees II/III and VI/VII.

These accidentals in the scale may be in the manner of a substitution or an addition.



5. TIME SIGNATURE

The metrical structure of the Tiento is based on a cycle of eight beats, using two bars in the time signature of 4/4.

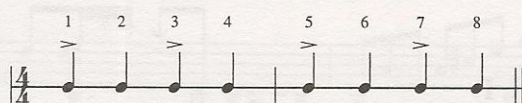
Accents fall on beats 1, 3, 5 and 7 over the course of the two bars which comprise each cycle. (for graphic representation see intro *Features of the Cante*).

6. CYCLICAL STRUCTURE AND VARIATIONS

Accents fall on cycle beats 1, 3, 5 and 7.

a) Beginning of Cycle on beat 8 of the preceding bar.

b) Beginning of Cycle on beat 1 (off-beat).



7. TRADITIONAL HARMONIC STRUCTURES

The note A, in the traditional theme, is the base on beats 5, 6, 7 and 8; this creates the characteristic cadence of resolution and finishes the 8-beat cycle.

Depending on the pattern of the variations, it is common to reserve for these specified beats (5, 6, 7 and 8) a harmonic pause where some of the Principal and Secondary chords relax.

Example of some Theme and Variation harmonic linkings:

a) A / Gm / A (I, VII, I)

Example of Theme:

b) A / Gm / C7/9 / Gm / A (I, VII, III, VII, I)
Example of Theme:

c) A / B \flat / A (I, II, I)
Example of Theme:

d) B \flat / C7/9 / B \flat / A (II, III, II, I)
Example of Theme:

e) Dm / C7 / B \flat / A (IV, III, II, I)
 Example of Variation in two Cycles:

The first cycle of exercise e consists of two measures. The right hand plays a descending eighth-note pattern: D4, C4, B3, A3, G3, F3, E3, D3. The left hand plays a corresponding bass line: D3, C3, B2, A2, G2, F2, E2, D2. The second cycle also consists of two measures, with similar descending patterns but with some variations in the bass line. Fingering numbers (0, 1, 2, 3) are provided for the left hand.

f) F / Dm / C7 / B \flat / A (VI, IV, III, II, I)
 Example of Variation in 2 Cycles:

The first cycle of exercise f consists of two measures. The right hand plays a descending eighth-note pattern: F4, E4, D4, C4, B3, A3, G3, F3. The left hand plays a corresponding bass line: F3, E3, D3, C3, B2, A2, G2, F2. The second cycle also consists of two measures, with similar descending patterns but with some variations in the bass line. Fingering numbers (0, 1, 2, 3, 4) are provided for the left hand.

8. VARIATIONS: BASICS OF THE TRADITIONAL DESIGN

Example of a Question cycle and of an Answer cycle:

The first system shows a Question cycle in 4/4 time. The treble clef staff contains a melody starting with a triplet of eighth notes (G4, A4, B4), followed by quarter notes C5, D5, E5, and a half note F#5. The bass clef staff contains a bass line with a triplet of eighth notes (G3, A3, B3), followed by quarter notes C4, D4, E4, and a half note F#4. The second system shows an Answer cycle in 4/4 time. The treble clef staff contains a melody starting with a quarter note G4, followed by quarter notes A4, B4, C5, D5, E5, and a half note F#5. The bass clef staff contains a bass line with a quarter note G3, followed by quarter notes A3, B3, C4, D4, E4, and a half note F#4.

Example of a doubled Question cycle and a 2-cycle Answer:

The first system shows a doubled Question cycle in 4/4 time. The treble clef staff contains a melody starting with a triplet of eighth notes (G4, A4, B4), followed by quarter notes C5, D5, E5, and a half note F#5. The bass clef staff contains a bass line with a triplet of eighth notes (G3, A3, B3), followed by quarter notes C4, D4, E4, and a half note F#4. The second system shows a 2-cycle Answer in 4/4 time. The treble clef staff contains a melody starting with a quarter note G4, followed by quarter notes A4, B4, C5, D5, E5, and a half note F#5. The bass clef staff contains a bass line with a quarter note G3, followed by quarter notes A3, B3, C4, D4, E4, and a half note F#4.



RECOMMENDED LISTENING

Manuel Granados: *Manual Didáctico de la Guitarra Flamenca*
(Ventilador Editions, Barcelona, 1995)

Volume 1: Level 1, Paragraphs A to C (p. 24)

Level 2, Paragraphs A and B (p. 24)

Level 3, Paragraphs A to C (pp. 24 and 25)

Volume 2: Level 4, Paragraphs A and B (p. 12)

Level 5, Paragraphs A and C (pp. 13 and 14)

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