

## Rough Guide to Classical Harmony

By Dennis Winge

This article will analyze Vivaldi's Concerto in A Minor, Op. 3, No. 6, 1<sup>st</sup> Movement. This piece is highly exemplary of how classical harmony works. As a result of following the analysis and playing through the chords of the piece, your understanding of Western harmony will be greatly enhanced.

Why was this specific piece chosen? A contemporary of Bach, Vivaldi was a composer of the Baroque Period, which influenced all the later periods of classic music right up to the present day. Classical music, of course, had and still has a direct influence on mainstream Western genres such as pop, rock, jazz, and country. This piece, therefore, is a good example of how Western harmony works in general.

There are many examples of this piece on the internet. I have made my own version arranged for two guitars here: <https://www.youtube.com/watch?v=2is9t6ZtOQg>

Since the full sheet music for this piece is public domain, we are sharing it here in its entirety at the end of the article, with the chord names written above the melody line. However, for your convenience we've also copied the chord chart on its own, four bars at a time (although be forewarned: the melodic phrasing often does line up with 4-beat cycles, so you may have count beats as you strum so as not to get lost. If you read music it would be better to follow along the score attached at the end of the article instead.)

If you are unfamiliar with reading chord charts such as the one below, I suggest you first read my article "Guide to Chord Notation Shorthand Symbols." A short summary of the symbols used here is:

| is a bar line

The time signature is 4/4.

/ means a beat of current chord, and each chord symbol counts as a beat hence the 2<sup>nd</sup> bar is 3 beats of Am followed by 1 beat of E7.

Two chords underlined means they share a beat, so bar 8 is 3 beats of Am followed by Bb7 on beat 4 and Bbdim on the & of beat 4.

Play through the piece a couple of times with the following chord chart. Keep in mind that the melody has lots of 8<sup>th</sup> and 16<sup>th</sup> notes, so it sounds like it is going fast, but the tempo is 94 bpm, which is not fast. After playing through the piece with chords at least twice, you can go to the analysis sections of the article.

## The Chords

	Am	/// E7	Am A7	Dm G7
C F	Bm7b5 E7	Am	/// Bb7 Bbdim	
Bb7 E7 ///	///	/// Am Dm	Am E7 Am /	
Am	/// E7	Am A7	///	
A7 Dm Em7b5 A7	Dm G7	///	/ C / G7	
C Am	Am	/ E7 Am /	Am	
A7	/// Dm /	Dm	G7/B C	
G7 Am	Em F	G7 C	B7 Em	
C/E Em //	B7b9 Em F#m7b5 B7	Em	%	
Em B7 Em /	E7 Am	D7 G	C F#m7b5	
B7 Em	B7/D# Em B7/D# A/C#	B7 Em	B7 Em B7 Em /	
B7 Em	E7/G# E7	E7 Am	D7	
D7 G	Em7b5	A7 Dm	G7 C	
F Bm7b5	E7 Am	Am	%	
E7 Am	Am	/// E7	Am	
A7	D	D7 G	G	
C / Am D7	G E7 Am Dm	G7 / C A7	B7 E7	
E7	Am Dm Am E7	Am A7	D7 / G G7	
C F	Bm7b5 E7	Am	Am Bb7 Bdim7 Bb7 E7	
E7	%	Am Dm Am E7	Am	

## Analysis

This analysis assigns Roman Numerals for each chord; and we will assume you are familiar with what a harmonized scale is, but for your convenience, here it is in the key of Am (the key of the piece):

Am	Bm7b5	C	Dm	E7**	F	G
I*	II	III	IV	V	VI	VII

\* I don't use small roman numerals for minor like many music theoreticians do. In other words, in the key of C, the second chord in the key is Dm, for which many would write ii. Since I was brought up using John Mehegan's adaptation of classical notation for jazz, I was taught that since the II chord is diatonically minor, we just use II and we'll use additional notation if there's something different about it. If the chord were D, for example, we'd write II maj. Otherwise, we leave it as II without constantly reminding the reader that the II is minor by writing it as ii.

\*\* In this analysis, we will treat V7 chords simply as V. In the key of Am, the V chord, diatonically speaking, is Em. But in practice, most of the time the V chord will be a 7<sup>th</sup> chord, i.e. E7 in the case of the key of Am. Thus when E7 is used, you will see a V notated, and when Em is used, you will see the notation Vm.

I also didn't get into analyzing inversions, as it's not really relevant to our purposes here. For example, the chord G7/B is a first inversion VII chord in piece's key of Am. We simply indicated it as VII without notating the fact that it's inverted.

One final note: if the chord is a 7<sup>th</sup> chord and is diatonic to the key, ex: G7, we will still notate that as VII without distinguishing it from the chord G.

bars 1-4

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| Am | /// E7 | Am A7 | Dm G7 |  
| I | /// V | I I7 | IV VII |
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bars 5-8

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| C F | Bm7b5 E7 | Am | /// Bb7 Bbdim |  
| III VI | II V | I | /// blI7 blldim |
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bars 9-12

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| Bb7 E7 /// | /// | /// Am Dm | Am E7 Am / |  
| V (alt) V | V | V / I IV | I V I / |
```

bars 13-16

```
| Am | /// E7 | Am A7 | /// |  
| I | /// V | I I7 | % |
```

bars 17-20

| A7 Dm Em7b5 A7 | Dm G7 | // // // // | / C / G7 |  
| I7 IV Vm7b5 I7 | IV VII | VII |

bars 21-24

| C Am | Am | / E7 Am / | Am |  
| III I | I | I V I / | I |

bars 25-28

| A7 | // Dm / | Dm | G7/B C |  
| I7 | I7 IV | IV | VII III |

bars 29-32

| G7 Am | Em F | G7 C | B7 Em |  
| VII I | Vm VI | VII III | II7 Vm |

bars 33-36

| C/E Em // | B7b9 Em F#m7b5 B7 | Em | % |  
(temporary new key of Em:  
| I (add b6) I // | V I II V | I | I |

bars 37-40

| Em B7 Em / | E7 Am | D7 G | C F#m7b5 |  
| I V I / | I7 IV | VII III | VI II |

bars 41-44

| B7 Em | B7/D# Em B7/D# A/C# | B7 Em | B7 Em B7 Em / |  
| V I | V I V IVmaj | V I | V I V I |

bars 45-48

| B7 Em | E7/G# E7 | E7 Am | D7 |  
| V I | (back to key of Am) V7 | V7 I | IV7 |

bars 49-52

| D7 G | Em7b5 | A7 Dm | G7 C |  
| IV7 VII | Vm7b5 | I7 IV | VII III |

bars 53-56

| F Bm7b5 | E7 Am | Am | % |  
| VI II | V I | I | I |

bars 57-60

| E7 Am | Am | // // E7 | Am |  
| V I | I | I // V | I |

bars 61-64

| A7 | D | D7 G | G |  
| I7 | IVmaj | IV7 VII | VII |

bars 65-68

| C / Am D7 | G E7 Am Dm | G7 / C A7 | B7 E7 |  
| III / I IV7 | VII V I IV | VII / III I7 | V |

bars 69-72

| E7 | Am Dm Am E7 | Am A7 | D7 / G G7 |  
| V | I IV I V | I I7 | IV7 / VII VII7 |

bars 73-76

| C F | Bm7b5 E7 | Am | Am Bb7 Bbdim7 Bb7 E7 |  
| III VI | II V | I | I V7alt Vdim7 V7alt / |

bars 77-80

| E7 | % | Am Dm Am E7 | Am ||  
| V | V | I IV I V | I ||

## Things to notice:

### 1. Use of V7 chords

Of all the chords, the V chord provides the strongest tension to resolution. In other words, play all the chords in the key of Am, making them all 7<sup>th</sup> chords (i.e. Am7, Bm7b5, Cmaj7, Dm7, E7, Fmaj7, and G7). The one that most feels like it want to resolve back to Am is, far above the others, E7. The movement from V to I is called a perfect cadence, and it can be used for any chord, not just the I chord. For example in bar 3 the A7 takes you to Dm in very satisfying manner. The piece is loaded with V-I cadences, notably in bars:

3-4, 20, 25, 28, 31, 32, 37, 38, 47, 68, 71, 72, 77,

### 2. Back-cycling

Back-cycling is when you have a I-V-I cadence. It gets its name because harmonic motion often moves around the circle of fifths in a counter-clockwise direction, which is actually movement in fourths. In other words, C to F to Bb to Eb to Ab to Db to Gb (F#) to B to E to A to D to G, and back to C again, is going around the circle in fourths. We will look at this motion in more detail in a little while, but for now just note that if you have the chords Dm – A7 – Dm, a I – V – I in the key of Dm, it was necessary to go backwards in the progression of 4<sup>ths</sup> just listed in order to get to the A7. Back-cycling is

not limited to just going back one chord; it could be several. However, it is not necessary to go deeper into that right now. Back-cycling occurs in bars:

12, 14, 23, 34, 57, 70,

### 3. Use of the II V I progression

Extending the perfect cadence of V-I a little further using the movement in fourths described above, a very common harmonic sequence is II-V-I. In the key of C this would be Dm – G7 – C. In Am it's Bm7b5 – E7 – Am. Sometimes you find the II-V without the I chord. Here are examples of II-Vs in the piece:

to the tonic, Am, bar 6; 53-54; 74

to relative major (the III chord), C, bars 4-5; 18-20; 27-28; 63-65; 72

to the IV chord, Dm, bars 17; 50-51

to the Vm chord, Em, bars 34; 40-41

### 4. Movement in 4ths

If you consider the progression | Am | Dm | G7 | C | F | Bm7b5 | E7 |, the chords are all in fourths from each other. Notice that the *f* to *b* notes are not perfect fourths from each other; the *b* is a raised fourth, but it is a fourth nonetheless. To reinforce the influence that this type of movement has on Western pop / rock / jazz, we could cite countless examples, but the one that fits perhaps most perfectly is the disco classic “I Will Survive” by Gloria Gaynor. Movement in fourths occur in bars:

3-7; 38-41; 50-54; 61-65; 66-67; 71-75

### 5. Modulation

Modulation is movement to a different key. Unlike a V-I or II-V-I that can take you different harmonic places of temporary resolution, a modulation is a key change that lasts for at least a few bars, typically. Although there are some jazz tunes that modulate to different keys in rapid succession, most tunes modulate for at least long enough to make you forget about the original key and bathe in the new one for a while before returning or moving elsewhere. In this Concerto, a modulation to the neighboring key of Em happens in bars:

32-46

## 6. Tritone Substitution

The theory concept of the tritone substitution is a big one and won't be dealt with in detail here, except to summarize by saying that two 7<sup>th</sup> chords whose roots are three whole steps apart, share the same notes as 3<sup>rd</sup> and 7<sup>th</sup> (although the 3<sup>rd</sup> of one is the 7<sup>th</sup> of the other and vice versa), and thus can function the same way harmonically. In the key of C, if you had | C | F | E7 | Am |, and you substituted a Bb7 chord for the E7 (a "tritone substitution"), you would achieve a very similar harmonic movement, even though the notes *bb* and *e* are very distant from each other. The progression would be | Am | F | Bb7 | Am |. It works because the 3<sup>rd</sup> and 7<sup>th</sup> of E7 are the notes *g#* and *d*, and the 3<sup>rd</sup> and 7<sup>th</sup> of Bb7 are the same notes reversed (and in the case of one of them, spelled differently: *d* and *ab*). In the case of this piece those exact same chords come in rapid succession in bars:

9, 76

Even if you didn't understand every concept above fully, you will start to recognize them in many different contexts the more music you play and analyze. At minimum, play along with the recording cited above and enjoy the harmonic movement of the piece!

SEE BELOW FOR COMPLETE SCORE.

$\downarrow = 94$

### 4 Concerto in A Minor, Op. 3, No. 6, 1st Mvt.

Concerto en la mineur, Op 3, N°6, 1<sup>er</sup> Mvmt    Konzert in a-Moll, Op. 3, Nr. 6, 1. Satz  
Concierto en la menor, Op. 3, n.º6, 1.º Mov.

A. Vivaldi/Arr. T. Nachéz

Allegro  
Tutti

The musical score is written on nine staves in treble clef with a 4/4 time signature. It features various musical notations and performance instructions:

- Staff 1 (Measures 1-4):** Starts with a forte (*f*) dynamic and a *Tutti* marking. Includes a handwritten *A-* chord above the first measure.
- Staff 2 (Measures 4-7):** Continues with *f* dynamics. Handwritten chords *G7*, *C*, *F*, *Bb*, and *E7* are present.
- Staff 3 (Measures 7-10):** Features a *Solo* marking and a *V* (Vibrato) instruction. Dynamics range from *f* to *mf*. Handwritten chords *A-*, *D-*, *A-*, *E7*, and *A-* are shown.
- Staff 4 (Measures 10-13):** Includes a *martellato* marking and a *Sfz* (sforzando) dynamic. Handwritten chords *E7*, *A-*, and *A7* are present.
- Staff 5 (Measures 13-16):** Features a *p dolce* marking. Handwritten chords *D-*, *E7*, *A7*, *D-*, and *G7* are shown.
- Staff 6 (Measures 16-19):** Includes a *martellato* marking and a *f* dynamic. Handwritten chords *C*, *G7*, *C*, and *A-* are present.
- Staff 7 (Measures 19-22):** Features a *Tutti* marking and a *f* dynamic. Handwritten chords *E7*, *A-*, and *A7* are shown.
- Staff 8 (Measures 22-25):** Includes a *Solo* marking and a *V* instruction. Dynamics range from *p* to *mf*. Handwritten chords *A7*, *D-*, and *A7* are present.
- Staff 9 (Measures 25-28):** Continues with *p* dynamics. Handwritten chords *D-* and *A7* are shown.



Handwritten musical score with ten staves (measures 28-55). The score includes various musical notations such as notes, rests, and dynamic markings. Handwritten annotations include chord symbols (e.g., G7/B, C, G7, A-, E-, F, B7, E-, C/E, E-, F#ø, B7, E-, E7, A-, D7, G, B7/b#E-, B7/b#A/C#, B7, E-, B7, E-, E7, A-, D7, G, Eø, A7, D-, G, C, Bø, E7, A-, E7, A-) and performance instructions (e.g., *f*, *largamente*, *cresc.*, *p dolce*, *martellato*, *Tutti*, *Solo*, *dolce*, *mp*, *mf*, *f*).

58 *A-* *E7 Solo A-*  
*p*

61 *A7*  
*p*

63 *D7* *G*  
*p*

65 *C* *A-* *D7* *G* *E7* *A-* *D-*  
*pp* *cresc.*

67 *G7* *C* *A7* *B7* *E7* *Tutti*  
*f* *(3)*

69 *A-* *D-* *A-* *E7* *A-* *Solo* *A7*  
*f* *martellato* *p dolce*

72 *D7* *G* *G7* *C* *F*  
*p*

74 *Bb7* *E7* *A-* *Tutti* *Bb7* *Bb7* *Bb7* *E7*  
*f* *p* *f*

77 *A* *D-* *A-* *E7* *A-*  
*p*