# ThePopFormulas

Harmonic Tools of the Hit Makers



When you read this book, you will hear, see and understand Pop music differently.

## ThePopFormulas

$$\int \left( \int X \right)^2 = \int X$$

#### **Terminology used in this book!**

This text follows the music theory terms and abbreviations developed by german musicologist, teacher and author Hugo Riemann (1849-1919).

Riemann uses the following names for the chords built on the steps of the major scale:

Scale Step	Name	Riemann	Abbr.
I. III. III. IV. V. VI. VI. VII.	Tonic Supertonic mediant in major mediant in minor subdominant dominant submediant in major submediant in minor subtonic	Tonic subdominant parallel dominant parallel tonic parallel subdominant dominant tonic parallel/US relative tonic parallel/US relative	T Sp Dp tP S D Tp sP

All other harmonic relationships can be named accordingly.

In this context, capital letters are used for major chords, while lower-case letters are used for minor chords.

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#### **Foreword**

In 1954, Rock'n'Roll was christened and so was I – and thanks to my older, dance-crazed sisters and my Beat-fanatic cousin I then experienced all further developments in the wide field of Pop music. Screaming girls at concerts, long Sunday afternoons at the parish – all this was soon to be replaced by intense personal experience in many different groups which all had one thing in common: We musicians wanted to write our own songs.

Why did some songwriters seem to have it so easy by writing one hit after another? The answer was quite simple: These guys knew the standardized harmony usage which had been woven for many decades like a thick red piece of yarn into what we simply called Pop music.

As soon as you understand it, everything else falls into place really easily: Take a chord progression and think about if and how to possibly change it. Find a suitable melody and arrange it in the current hot music style and that's it ... No, not yet a hit though. For that you need a well-known artist, good lyrics, a good studio and a portion of luck and last but not least a clever management.

In this book you at least discover the basic fundamentals which have been used in many hit songs, namely one of the Pop formulas or at least one particular part. Your listeners know and love them, even if they don't know the single formula by name. But you will now learn them to the very last detail. And don't worry, the compact and clear chord progressions still offer many possibilities for you to add your personal touch while performing them for your audience.

Maybe you thought that these chord progressions were secret recipes for a chosen few, but believe me they have always been available to everyone. So, get to know them, use and enjoy them, the Pop Formulas!

Volkmar Kramarz

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Introduction

#### Introduction

This book will introduce you to the world of Pop music theory. You will discover the basics of a typical tender Pop song and then continue on to the world of Blues and Rock. Soon you will learn the typical tricks which might bring you on your way to becoming a hit songwriter.

This means you will understand what makes the songs of big stars so special. You yourself can decide if you want to follow this type of song path or take another direction and perhaps experiment some. You will at least have a clearer overview of what you are doing when you write songs. The usual songwriting book or books about music theory (most musicians get intimidated just by the word) start right away with lots of chords, scales and countless rules. Most Pop musicians don't feel comfortable with chord names and music notation. Therefore, we will try to use the few that are necessary and avoid them wherever possible.

Let's enter the mysterious and colorful world of Pop music step by step until we understand how a typical and most importantly successful song is formed and made. And who knows, perhaps one day your song will be the basis for a hit and will storm the charts. Good luck!

Let's make it clear from the very beginning: Pop music is

- very easy to understand
- quick to grasp and
- · easily recognizable.

This is why since the beginning of Pop music in the 1950s, certain chord progressions were developed that have been used in an unbelievable number of songs. Then a melody and of course all the work done in the studio with the lyrics, rhythm and the whole arrangement is added – and there you have the current candidate for a potential hit!

Sounds easy and to some degree it is. For you as a potentially successful future songwriter, it is important to learn

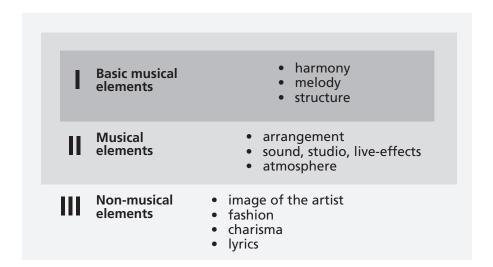
- the chord progressions
- · their effect and
- possible variations.

Such a chord progression may then be the key to a song. And certain progressions can be the basis of many, many songs. And just like the formulas in chemistry or mathematics, these can be used to express many things in a simple but detailed manner.

So, welcome to the kingdom of Pop formulas!

- A Pop formula consists of several chords.
   This is called harmony.
- The chords appear in a specific order.
   This is called structure.
- In addition, each song has a melodic line for either the voice or the instruments that goes well with the chords of the respective structure. This is called **melody**.

Sooner or later, you might want to change these formulas or even leave them behind. But keep in mind that, to a large extent, Pop music is based on these standard patterns – and your audience loves them! Of course, you can reject or willingly avoid them. However, you should first work your way into them. Feel them, shape them – learn to love them. Only because an endless number of composers has achieved incredible successes with these formulas, you shouldn't be intimidated. Take it as a challenge to work with them as well. Show the audience that you have something to offer, too, on a basis that your audience knows and is familiar with. Include the creative expression of your personality, statement and interpretation.



The basic elements are now the real core of the music for us and will therefore be what this book is about. All the other things are additional elements. What does a Pop song consist of?

The basic musical elements harmony, melody and structure.
 These are based on certain harmonic sequences that we call formulas.
 Mostly, these are consciously recognized only after years of intense work. Successful Pop composers often keep them like a secret treasure. Over the years, these formulas have barely changed – however, they are presented in a constantly new outfit. This new presentation requires:

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## The Honorable La Folia Progression

The Honorable La Folia Progression

#### The Formula

Now I would like to present you with another well-known formula that has been used successfully plenty of times. Like the Pachelbel formula, this again is a progression that originates from the area of traditional music and therefore comes from classical periods of long-gone. This chord progression has been used in various dance and concert pieces and has been modified and re-embellished for centuries. But it hasn't lost any of its special effect. It has been tried by big and small composers and songwriters of all styles – maybe you want to try it, too!

We have the following chords in C-major (A-part + A'-part, 2 x 8 bars):

This is a chord progression that is commonly called "La Folia". By the way, "La Follia" (la Folia, les Folies d'Espagne) was originally a very wild, Portuguese dance that has evidently been around since the end of the 16th century. As "Moresca", it used to be an original, religious demon dance and was regarded by the officials with a large degree of suspicion. The typical form of the La Folia is built on a 16-bar bass line which is the basis for this particular chord progression. However, the progression was as well used by the big, established royal-court composers for a great number of dance and musical works.

Today, this La Folia progression works really well for Folk or Rock songs with a more dramatic, pompous structure or even a classically instrumentated arrangement. For a long time, an original La Folia progression from the 18th century that had been recorded with a big orchestra provided last but not least the background music for a successful TV commercial promoting hot jeans for young people. And this mixture of old music and crazy pictures was accepted extremely well! What is it that makes this rather complex and not particularly compact 16-bar progression so interesting? There are several issues that turn this progression into a treasure box for plenty more great ideas:

#### 1. Start On A Minor Chord!

When looking back on the previous chapters you will see that all formulas contained one or more minor chords but none started with a minor chord. However, this is a very specific feature of the La Folia progression and highly affects its sound. If we start a song with a minor chord now, we theoretically have the same chords available as in the previous formulas; but now these occur in a different order and therefore with a different priority. The minor chords aren't mere extensions of the major cadence anymore, but represent independent harmonies.

The Honorable
La Folia
Progression

## 2. The Dominant Of The Minor Harmony As Major Chord

The following chords are available for a C-major cadence:

F C G S T D

The corresponding relative minors are:

Dm Am Em Sp Tp Dp

These harmonies in their combinations of major cadence and relative minors are modified in a progression such as the La Folia. We can see in the La Folia formula how this chord material can be extended:

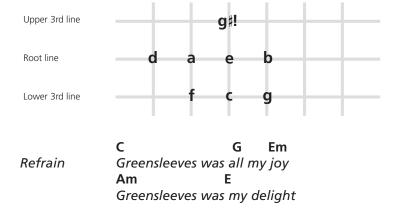
Because the minor chord occurs at the beginning and is emphasized by a subsequent dominant, a major dominant is now often accompanied by a minor chord. This can be seen at the very beginning of the La Folia progression and is a typical feature:

Am E Tp DP

By the way, this major chord was already frequently used in early Folk songs that have always been played gladly in the Pop and Rock world. For example, a known Folk song such as Scarborough Fair can be harmonized this way. The available elements are: The major chords of the cadence, the relative minor of the cadence as the opening harmony, and the corresponding subdominant and dominant (both as major chords).

Am G Am
Are you going to Scarborough Fair
Am C D Am
Parsley sage rosemary and thyme

The Honorable La Folia Progression Another most honorable traditional such as "Greensleeves" even shows the (minor) dominant relative as a part of the minor cadence and the relative (major) dominant together, which clearly leads back to the minor tonic Am.



#### 3. The Second Step In The La Folia Progression

An especially significant feature in the La Folia progression is the step from the subdominant to the dominant of the relative tonic, which is only a minor second, i.e. a half step.

This step is highly striking and is considered a typical feature of many Folk songs – but it also works great in well-arranged Pop songs.

#### 4. Repeating Single Parts Of The Formula

Single parts of the La Folia formula may be extracted and repeated one or more times. The beginning of the La Folia alone has inspired plenty of pieces and can develop an almost magical power when constantly repeated.

You may also take other smaller elements from the La Folia formula. Used by themselves, these have a great effect. For example, this part

is so attractive that not only the legendary oldie hit "Lady In Black" could live off it. The immediate relationship with the La Folia formula can of course be seen clearly:

Am E Am G C F E Am Tp DP Tp D T S DP Tp

The Honorable
La Folia
Progression

#### 5. Emphasizing The Second Step

The significant change from the subdominant to the major dominant of the starting minor chord is such a striking feature that this element may sometimes carry an entire song part or even a complete song. Mostly, it is then completed by the relative tonic that may end this progression. The actual tension however is in the second step that can be clearly emphasized by repeating it as often as wanted:

F E F E F E Am S DP S DP S DP Tp

#### Song examples:

- "Conquest of Paradise" by Vangelis is a real study on the La Folia subject and shows revelling arrangements and various structural details ...
- "Donna Donna" by Donovan uses the chords of the La Folia formula in a slightly modified order and extends it a little. But it is still clearly based on this chord material.
- "Sarabande" is basically an impressively beautiful study of La Folia in a "truly classical" version by Handel. It can be heard in various commercials and sounds like Pop music there!

The La Folia progression isn't only interesting because it is a great formula in itself. First and foremost, it provides such effective options. Now try and write your own song with this classical standard formula. And then see for the next attempt if only single pieces will do for a song.

## The Honorable La Folia Progression

#### **Deviations And Developments**

#### The Subdominant As A Major Chord

Just like the La Folia progression presents the major dominant for its opening minor chord, many Folk songs, as we have seen, have the corresponding subdominant as well as a major chord.

Another very well-known example is the traditional "House of the rising sun", where the major dominant as well as the major subdominant occur next to each other and relate to a minor tonic:

This is an immediate connection between a minor key and its corresponding major chords, which is apparently very effective.

#### **More Descending Bass Lines**

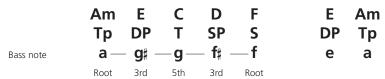
This connection of minor and major chords again allows for beautifully descending bass lines that may create an additional melodic effect. The existing second step from the La Folia formula is then used for other chord progressions, which can be very attractive and successful for a song.

It applies to the descending bass lines of these chord combinations that the root note of the starting chord is in the bass. The same is true for the final chord, which is the subdominant in this case (for "House of the rising sun"). As we know from the turnaround formula, these two chords have two notes in common and blend well. The harmonies in between may now be built up with their 5th or 3rd being the bass note. It is important that the result is a descending line with the distance between the notes being not bigger than a major second. The minor seconds work especially well and are most effective for such descending bass lines.

For instance, it is possible to harmonize a descending bass line that is made up of a chord progression like in "House of the rising sun".

Bass note

If the dominant is introduced right at the beginning, we'll have minor second steps only, i.e. the steps are a half-tone apart from each other:



The Honorable
La Folia
Progression

Now the descending bass line you have here is a so-called chromatic scale, in which the single tones are each a half step apart.

The most touching songs have been written with this formula and the corresponding descending bass lines, ones with a folky touch as well as even melodramatic and pompous ones. Some of the most successful examples may be these:

- "House of the rising sun" is best-known in the Animals-version.
   But also Bob Dylan (with descending bass line) and first and foremost a band called Frijd Pink delivered interesting versions.
- "Babe I'm gonna leave you" by Led Zeppelin is a great example of
  a descending bass line under the chords of "House of the rising
  sun", while of course "Stairway to heaven" is probably the most
  famous song with a descending bass line. This song has an additional chord, the dominant E-major occurring right after the aminor. It may have inspired at least
- "Dream on" by Aerosmith, which also shows descending bass lines that start on a minor chord.
- In addition, there is "Michelle", in which The Beatles used a descending bass line with much emotion.

#### **Example "La Folia"**

Song structure	):	Playback Track	7.8
Intro	8 bars	Intro	8 bars
1. verse	8 bars	verse	8 bars
2. verse	8 bars	verse	8 bars
transition	2 bars	transition	1 bar
refrain	16 bars (2 x 8)	refrain	8 bars
Outro	8 bars (like intro)	verse	8 bars
		verse	8 bars
		transition	1 bar
		refrain	8 bars
		outro	8 bars (like intro)

In this example as well, two related formulas are used for simplicity at the same time:

The Honorable La Folia Progression At the beginning, the typical La Folia progression is presented. This may have different variations at the end, which can be seen at the ends of the verses in bars 15 and 16 respectively 23 and 24.

In bars 24 and 26, two complete bars have been simply inserted: This can work well for songs with many chords like this one, often after or before a refrain like it is done here. The art lies in doing this in a way that the listener doesn't perceive this insertion as disturbing or as an uncomfortable interruption. It is done best when it is unnoticeable and gives the song some air and space at this point in a guite subtle manner.

The refrain is based on the "House of the rising sun" progression that occurs twice. At the first time through, D-major(!), that is emphasized by an f# in the melody in bar 29, is immediately succeeded by an F-major chord creating an explosive tension. If you use it wisely, you will feel the real effect of this formula!

At the second time through, there is an additional descending bass line that again presents the neighboring (bass) notes # and f in bars 37 and 38. Especially this progression shows how attractive this nearly chromatic scale is (a, g, f‡, f). It has been used in many songs and the world will certainly warmly welcome a few more ...!

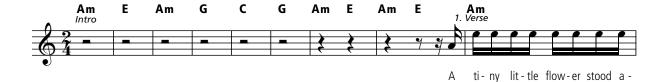
At the end of the refrain, the major dominant E-major of the relative tonic a-minor occurs. For emphasis, the major 3rd g# can be found in the vocal melody of bar 40 as well.

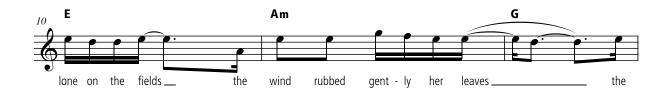
#### **Key Selection:**

Usually, the La Folia progression feels at home in a folky environment of C and F, i.e. a-minor or d-minor. The further the distance to the original point of C, the more other keys tend to give this progression a more complicated touch that doesn't necessarily fit too well. But perhaps this is exactly what you're after, a weird impression along with a usually pleasantly convenient combination ...

#### Example "La Folia"

Tempo: BpM 130 CD-Track 4, 16





## The Honorable

### The Honorable





### **Appendix**

To get a better overview, I will now show you a tonal network and a chord diagram for the important keys.

The **tonal network** consists of single notes which can either form a chord together or can occur individually in the vocal melody or in one of the instrumental parts. You can see that there are notes in the center on the middle root line that have a 5th relationship with one another: To their right is the upper 5th or dominant, on the left is the lower 5th or subdominant. Above these are the upper 3rds and below are the major lower 3rds.

As an additional special feature, the single notes can be equipped with minor 7ths, which are indicated on the basic root line in these diagrams. For a better overview, I have entered the II. degree twice: first as the 5th of the dominant 5th and then as the upper 3rd of the second subdominant 5th.

When at least three notes are played at the same time, we speak of a harmony or chord. This can also be displayed in a diagram where the subdominants are on the left and the dominants on the right like it was done for the 5th-relations in the tonal network. Everything starts on the chord in the center, which is indicated as "tonic" (T). Every chord has a **function**, too, which, as you can see, is indicated next to the respective name in the relevant key. This way you can identify the name e.g. of the respective relative minor over the chords on the root line or the corresponding secondary subdominants and dominants on the 5th level.

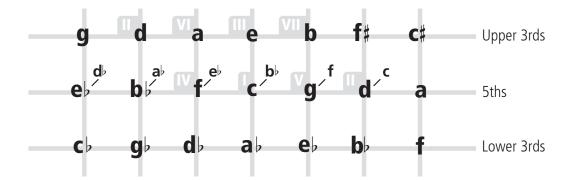
Below this root line, the harmonies with the same names can be found, this time as minor chords. On another level below are the corresponding relative majors. You see, such a tonal range can be extended endlessly in all directions.

But of course this isn't needed for a common Pop song. What matters most is that you use all your love and taste to write a beautiful combination of the appropriate chords. For this, the Pop Formulas can be a great help!



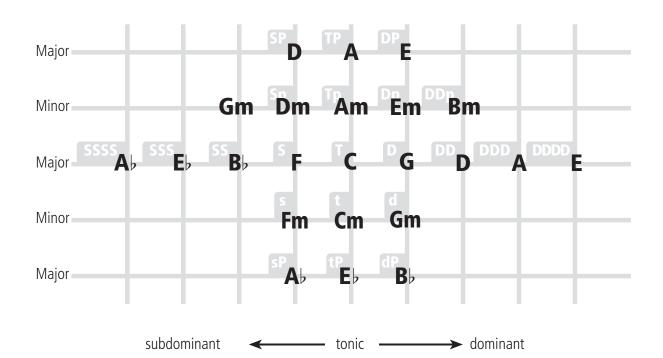
#### **Melodic Tonal Network**

Root note c



#### **Chords – Functions**

Tonic C



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#### **Notes On The Audio-CD**

On the included CD, you find music examples for the respective chapters  $\cdot$ 

CD-No.		Page	Time
1	Example "Turnaround Formula"	24	01:43
2	Example "Pachelbel Formula"	35	01:30
3	Example "II-V-I-Formula"	46	01:42
4	Example "La Folia"	54	01:42
5	Example "Combinations"		
6	Example "Blues Progression"	79	02:17
7	Example "The White Blues"	90	02:47
8	Example "Double Subdominant"	102	02:29
9	Example "Progressive Rock Formula"	114	01:43
10	Example "Major Cadence"	124	02:35
11	Example "Heavy Formula"	133	01:42
12	Example "Songwriter Song"	145	02:34

These examples are more or less complete songs even if they are kept short for overview reasons. Each example includes a complete sequence e.g. with intro, verse and refrain, which more or less form an arranged song. The tunes are in C-major like the notated examples, which will help you make easy and quick comparisons. Of course you can as well transpose them into other keys: A Blues works great in E-major, the Progressive Rock formula loves the A-major environment and the double subdominant appreciates key D-major. Check it out!

Because these examples always include an entire singing voice, I have put socalled playbacks of the single songs on the CD as well. These have a simple accompaniment and some rhythm support for the different formulas, but no solo guitars, piano melodies or vocals.

13	Playback "Turnaround Formula"	)2
14	Playback "Pachelbel Formuls"	
15	Playback "II-V-I-Formula"	26
16	Playback "La Folia"	36
17	Playback "Combinations"	25
18	Playback "Blues Progresseion"	7
19	Playback "The White Blues"90 92:1	8
20	Playback "Double Subdominant"	3
21	Playback "Progressive Rock Formula"	
22	Playback "Major Cadence"	8(
23	Playback "Heavy Formula"	ŀ5
24	Playback "Songwriter Song"	7

This will allow you to try out your ideas at length and to design the song according to your wishes with any instruments you like. Most of all however, you will be able to try out your own melodies for the respective formulas any way you want to on the guitar, piano, saxophone or for the vocals. This is your opportunity to write the next hit – or at least practise how to get there. Enjoy and have a good write!