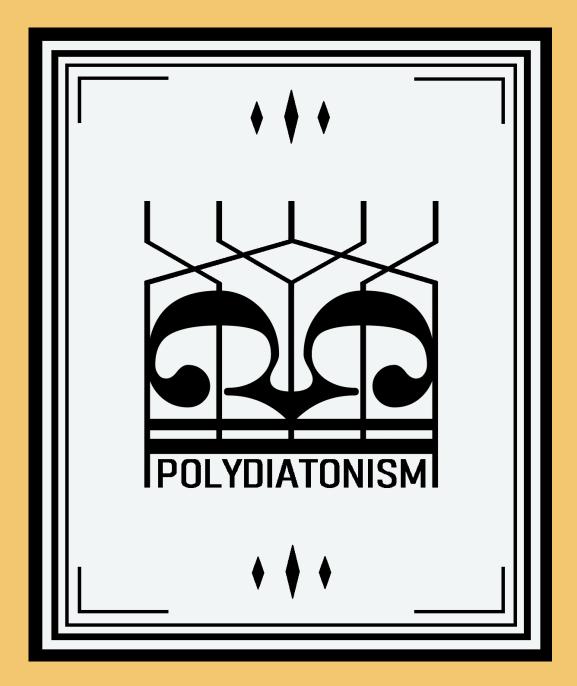
# Polydiatonism for the listener



Heikki Ruonaniemi



# © Heikki Ruonaniemi

# Polydiatonism for the listener

#### **Table of Contents**

Polydiatonism	2
Scale structure	2
Scale Model	2
Adi	2
Adi Group	
Composing Practice	
Autonomous music	
The Rules of Polydiatonism	
Comparison Principle	
Harmony	
Sound Pattern	
Inner Harmony	
Mutual Harmony	
Scale Feel	
The stages of composition	
Binding	
Score	
Folder	
Performance	
Composition structure	
Overall structure	
Cord	
Phases	
Fraction	
Link	
Annex 1	
A very brief description of Polydiatonism	
A very oner description of roryulatonism	10

# Polydiatonism

*Polydiatonism* is the name of a composing method that is based on both a scale structure in accordance with the principles of Diatonic scales and a polyphony type composing practice.

At the end there is an annex where is a very brief description of polydiatonism (Annex 1 page10).

There are several concepts and attributes which related only to the *Polydiatonism*. These words, which have their own intrinsic meaning in *Polydiatonism*, are shown in *italics* throughout the text.

#### Scale structure

The music of *Polydiatonism* is based on heptatonic scales which consist seven tones. Into these scales are selected the Western music traditions scales which consist only of half steps and whole steps. Thus in every scale there are five whole steps and two half steps in one octave. The position of the half steps inside scales produce *Scale Model Table* which have three different scale structures. The first structure of the *Scale Model Table* produces Diaconic Scales. According to the same principle, two other structures gives scales corresponding to diatonic scales.

# Scale Model

The *Scale Model* is the seven tone scale structure which can be found in the *Scale Model Table*. Every composition based on one *Scale Model*.

# Adi

The concept of the *Augmented Diatonic Scales* are formed due to the common way in which scales are made using a scale model table. Based on this, every single scale are called *Adi*. The opening note of each *Adi* is called *Mark Note*.

#### Adi Group

Through the various steps prescribed by the *Polydiatonism* rules, an *Adi Group* is formed for the *Scale Model* chosen for the composition. The *Mark Notes of Adis* of the *Adi Group* form the *Link*, which is the only chord of *Polydiatonism*. *Adis* of the *Adi Group* are used at the same time. If the composition contains transpositions, they are made by transposing the *Adi Group* as a whole.

# **Composing Practice**

The composition practice is polyphonic, where the composition is based on independent melodies. *Polydiatonism* does not include theoretical structures comprising chords, so does chord power or anything related to them. The only exception is the chord i.e. *Link* at the end of each *Fraction*.

# Autonomous music

*Polydiatonism* includes the idea of *Autonomous Music*. In the concept of absolute music, music is built from its own starting point, according to its own internal rules, reflecting only its own inner beauty. The starting point for *Autonomous Music* is the same, but the goal is pursued through a strict set of rules that define a composition and its structure.

# The Rules of Polydiatonism

The *Rules of Polydiatonism* is drafted based purely on music's own premise and Gestalt psychology. By adhering to these rules as closely as possible, non-musical influences can be minimized in the composition work. Thus, a

composition based on *Polydiatonism* will construct by self-directed or autonomously.

# **Comparison Principle**

The main idea of *Polydiatonic* music is the *Comparison Principle*. It is the starting point for understanding *Polydiatonic* music and perceiving of the architectural structure of composition. In the *Comparison Principle*, what hears is always compared with the initial situation given in the first part and everything that has previously been heard. At its lowest the *Degree of Change* is when a part is repeated exactly the identical. The greater the differences in comparison, the higher the *Degree of Change*. According to the comparisons, the content and architectural form of the composition is built.

#### Harmony

The Polydiatonism includes concepts of Inner Harmony and Mutual Harmony.

#### Sound Pattern

The *Sound Pattern* is the combination of Melody Pattern and Rhythm Pattern and its length is not defined.

#### Inner Harmony

*Inner Harmony* is the harmony generated by the notes in the *Sound Pattern*. This is made up of *Adis* selected to the composition and melodies which has been created for the *Sound Patterns*.

#### Mutual Harmony

Mutual Harmony is the harmony generated by Sound Patterns of the Cords together. In addition to the Inner Harmony, it is influenced by Adi Rotations and transpositions. In Polydiatonism Mutual Harmony is variating very wide

area between pure consonance and very strong dissonant. It is sought to favor this wide variation because of the richness of harmony it brings.

#### Scale Feel

Each *Adi* has its own character i.e. *Scale Feel*. It depends on the relationship between the *Mark Note* and the half steps in the scale. The *Scale Feel* of the melody is strengthened by terminating each *Span* of each *Cord* to the *Mark Note* of the current *Adi*. Then, to the end of each Fraction, will automatically form the end chord i.e. the Link that merges *Adis* of the *Adi Group*. Because the *Adi Group's Adis* are based on the notes of the *Anchor Adi*, the *Link* stress the unity of *Adi Group*. One of the most prominent points of the *Scale Feel* comparison is the *Adi Rotation*. This difference of melodies, when they appear in different *Adis*, is also unified by the *Link*.

# The stages of composition

According to *Polydiatonism*, the whole of the work is divided into the creation of a *Binding*, arranging of it as a *Score* and performance.

#### Binding

In the beginning the composer creates the basic composition i.e. a *Binding*. It is a independent composition what has done following as closely as possible the *Rules of Polydiatonism*. *Binding* is not intended to be performed, but must always be arranged as a *Score*.

An arranger can create multi-part works i.e. *Folders*, by combining *Bindings* of his/her choice. For this reason the *Bindings* are one-piece.

#### Score

On the basis of the *Binding*, an arrangement is made which results in a *Score*. In this form the opus can be performed. The work performed can freely be

arranged for any instrument, orchestral ensemble or computer. The arrangement is made in accordance with the rules and restrictions of *Polydiatonism*. Thus, the arranging in *Polydiatonism* is not as free as the arranging of music in general.

The most important and most creative task of arranging is to bring forth the *Degree of Change* in the *Binding* that follow the *Comparison Principle*.

From the *Binding* it can be made an unlimited number of arrangements.

#### Folder

An arranger can create multi-part works i.e. *Folders*. They have several *Bindings* arranged into a single multipart *Score*. The arranger can freely select the *Bindings* of the *Folder*. It is possible to create a *Folder* by arranging a single *Binding* in a number of different ways, or by arranging many *Bindings* of a single composer, or by arranging the *Bindings* of different composers together.

#### Performance

Finally, the score is performed. The performer can make small changes and increments which are important for the performance and which do not change the information content of the *Binding*.

# Composition structure

#### Overall structure

The overall architectural structure of the *Binding* is controlled by *Cords* which are divided in the *Fractions*.

Each Cord of the Fraction forms a Sound Pattern which length is the Fraction.

The *Cords* of *Phases* are formed by chaining together *Cords* of the *Fraction*. Each *Cord* of *Phase* forms a *Sound Pattern* which length is the *Phase*.

The *Cords* of the *Binding* are formed by chaining together the *Cords* of *Phases*. Each *Cord* of *Binding* forms a *Sound Pattern* which length is the *Binding*.

#### Cord

The *Binding* is built on one or more *Cords*. The *Cord* is the *Sound Pattern* which length is the *Binding* and it is running through each part of the *Binding*. If a composition has more than one *Cord*, they are made up of parts of the same length. In terms of Gestalt psychology capacity of human, three *Cords* are a practical maximum. This amount is also sufficient for all the composer's needs.

Each *Cord* must always be in some *Adi* of the *Adi Group*, but they must not be in the same *Adi* at the same time.

Large entities are obtained when the *Cords* exchange *Adis* with each other. After this *Adi Rotation* the *Sound Patterns* are played in different *Adis* and as a consequence of that the character of the *Sound Patterns* changes. With *Adi Rotation* are created larger architectural entities i.e. *Phases*.

The largest architectural entities are the transpose of *Sound Patterns* of the *Cords* to the different pitch. After that all the intervals of tones remain but they sound in different sound level. The *Adi Group* is always transposed as a whole.

All Adi Rotations and transposes are done inside of the Transition Phase.

#### Phases

The architectural structure of the *Binding* is done by using *Phases*. *Phases* are *Index Phase*, *Comparison Phase*, *Final Phase* and *Transition Phase*. The *Cords* of *Binding* are running through the *Phases*. The part of the *Cord* which is inside the *Phase* is the *Sound Pattern of the Phase*.

#### Index Phase

The *Index Phase* presents all the musical information in the composition in its basic form. Exception is the small variations of the *Sound Pattern of the Index Phase* in the *Comparison Phase* which is not presented in the *Index Phase*. The proportion of such variation must be very small for the opus as a whole.

The *Index Phase* sets the basic level to the *Decree of Change* to which everything what will come are compared.

It is possible that in the beginning of the *Binding* there is a short *Transition Phase* type phase before the *Index Phase*. It is a very weak part of the *Bindin*'s architectural structure, which prepares and emphasizes the beginning of the composition.

#### **Comparison Phase**

There can be several *Comparison Phases*. The variations in the *Degree of Change* in these are compared with both the Index Phase and previous *Comparison Phases*. The basic variations of the *Comparison Phases* are *Adi Rotations* and changes of some *Fraction of the Index Phase*. Usually, the changing is made at the level of the *Sound Patterns of the Fraction*.

The most largest architectural structures are transposes which can happen alone or together with *Adi Rotation* and which can happen only inside the *Transition Phases*.

#### **Final Phase**

In the *Final Phase* are presented *Fractions of the Index Phase* in they basic form. The *Fractions* need not to be in same order or in same key.

#### Transition Phase

*Transition Phases* separates other *Phases* from each other and that is why they are always in between other *Phases*. Normally they also are shorter than other *Phases*. *Transition Phases* must be distinguishable from other *Phases* by listening.

All *Adi Rotations* and transposes must always happen inside of *Transition Phases*.

#### Fraction

By *Fractions* are controlled the architectural structure of the *Phase*. The *Cord* of the *Binding* which is also the *Cord* of the *Phase* is running through the *Fractions*. The part of the *Cord* which is inside the *Fraction* is the *Sound Pattern of the Fraction*.

The *Sound Patterns of the Fractions* are recognizable and distinctive, independent musical elements. The *Sound Patterns of the Fractions* will always end to the *Mark Note* of the *Cord* in use at that moment. The resulting chord is the *Link*.

#### Link

The *Link* is the only chord of *Polydiatonism* that has a meaning related to the *Comparison Principle*. It forms from the *Mark Notes of the Adis* and will born in the selection of the *Adi Group*.

# Annex 1

### A very brief description of Polydiatonism

For the managing architectural structure of composition, I have created a new kind of composing method. I call it *Polydiatonism*. Here is a very brief description of it. There is much more information on my website <u>https://www.polydiatonism.com</u>.

- *Polydiatonism* is absolute music which is based on its own premises without outside influence. So, absolute music only expresses of itself and its own intrinsic world.

- It is not possible to achieve perfect absolute music because of outside influences. *Polydiatonism* includes the idea of *Autonomous music*, with which is used to get as close as possible to the absolute music.

- In the idea of *Autonomous music* the rules of composing are formed so that they are based on the premises of music and take into account human cognitive limitations. Strict adherence to the rules automatically results in absolute music.

- Getting to absolute music is the task of the composer. The listener does not have to abide by these restrictions. The listener is free to enjoy all the imaginations that music brings.

- In *Polydiatonism* is used heptatonia prima, heptatonia secunda and heptatonia tertia scales as a generic scale. They are used to form composition-specific scales on the same principle as church modes i.e. diatonic scales are formed. That's why I call them all by the generic name *Augmented Diatonic Scales* or the abbreviation *ADI*.

- *Polydiatonism* is polyphonic music that is built on independent sound lines (melody + rhythm) and it does not include anything related to chords. Instead, the architectural structure of the composition is formed and perceived according

to the *Comparison principle*. If a composition has more than one sound line, each of them has its own *ADI*. They form the *ADI Group*. The *ADI Group* is formed by using only one generic scale at composition.

- In *Comparison principle* the structure is perceived by comparing what is currently being heard with what has been heard before. For that reason melodies must be recognizable and memorable.

- The actual composition is the *Binding* that is not intended to be played, but it must be arranged to be the performable score. Arranger can be the composer or someone else. From one *Binding* is possible to arrange unlimited amount of scores. Arranging must always be done according to the rules of *Polydiatonism*.

- The *Binding* is divided into *Phases*, and the melodies within them are divided into *Fractions*. The first phase is *Index Phase* where all *Fractions* are in they basic forms. Next will come *Comparison Phases* which are made of the variated *Fractions* of the *Index Phase*. The difference to the *Fractions* of the *Index Phase* is the *Degree of Change* and according to the *Comparison Principle* it gives the architectural form to the composition. The last phase is the *Final Phase* where the *Fractions* of the *Index Phase* are repeated in their original form but not necessarily in the same key. Between those phases there is always a short *Transition Phase* within which the basic variations take place which basically are *ADI Rotations* and transposes.

In ADI Rotation sound lines exchanges their ADIs but the order of notes will remain. The character of melody changes because the position of semitones are changed compared to the base note i.e. the Mark Note of ADI.

- The *Binding* is always one-piece. A *Folder* is the multipart performance that is arranged from several *Bindings*. The arranger can select the *Bindings* at will to the *Folder* and arrange them to be a multipart score.

- The name *Polydiatonism* comes from its basis: the polyphony style music and the use of composition specific scales, which are formed on the same principle as diatonic scales i.e. church modes.

- In the arrangement, I divide the large orchestra into several small ensembles. They play one at a time *Fractions* of the *Phases*. In this way by interacting with each other, they form the performable score.