

Artinfuser Counterpoint rules

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Color legend

High priority rule – should not be violated.

Medium priority rule – generally recommended not to violate, but special cases should be consulted with professor.

Low priority rule – sometimes following this rule can increase quality of exercise.

Prohibited.

Not recommended.

Allowed, but avoiding this can increase quality of counterpoint.

This rule is considered not important and is not implemented in Artinfuser Counterpoint yet.

Definitions, principles and limitations

Definitions

1. Counterpoint

Counterpoint is the science of melodic lines and their interactions. Counterpoint studies music in horizontal aspect.

Harmony is science of chords and their combinations – studies music in vertical aspect. Harmony and counterpoint complement each other.

2. Strict counterpoint

Strict or scholar counterpoint studies interaction of short vocal melodies without modulations¹.

These melodies have to be written over cantus firmus (c.f.) while following strict rules.

3. Cantus firmus

Cantus firmus is a given melody, which should be combined with a new melody during counterpoint exercise. *Cantus firmus* is written in whole notes in one of modes described below.

Principles

4. Modes

Counterpoint is studied in classic major and minor scales, and also in ancient modes (except locrian mode).

¹ **Exception:** short-term modulations into adjacent mode (see §60).

Major

Melodic minor

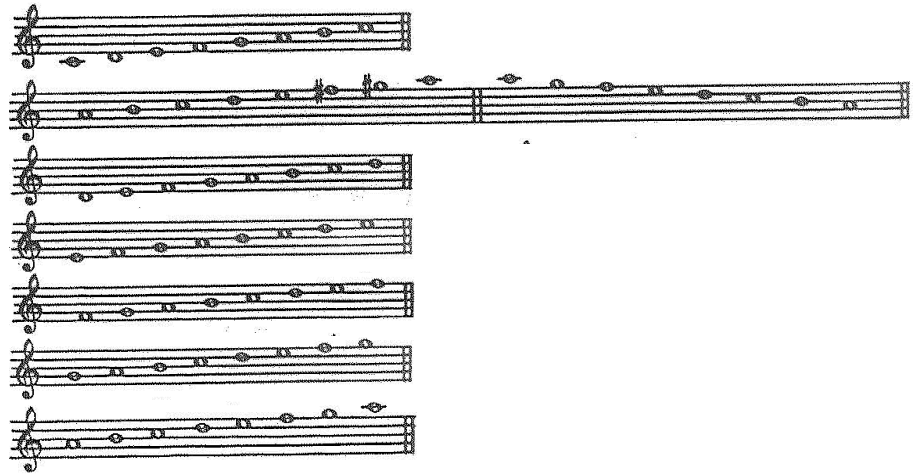
Dorian mode

Phrygian mode

Lydian mode

Mixolydian mode

Aeolian mode



Ancient modes, which are interesting due to their specific sound, are easier to use in counterpoint, than melodic minor (because they do not have leading tone and do not contain altered variants of degrees VI and VII). Melodic minor rules can be found starting from §33.

5. Main principles of combining the voices

Voices are combined with cantus firmus and with other voices so that in each voice there are chord tones on the first beat of each harmony². Each voice can move freely between these reference points. This freedom leads to unexpected combinations of notes, which constitute the main interest of counterpoint. These note combinations should be evaluated by ear. Even if the voice starts not on the first beat of the first measure, the first note of the voice should follow the same rules as each note on the first beat of the harmony.

In case of suspension or PDD, the resolution of the suspension or PDD should be a chord tone:



6. Chord and non-chord tones

Notes, which are required to be part of a chord, have both vertical and horizontal meaning. They can be called “chord tones” or “harmonic notes” shortly.

² Exceptions:

1. Suspension (§61).
2. Passing downbeat dissonance (PDD) is described in §70.

Non-chord tones (melodic notes) should be surrounded by chord tones. They have only horizontal meaning. Each non-chord tone should be surrounded by stepwise movement³, should not start on downbeat⁴ and should not be longer than a previous note, especially if previous note is also a non-chord tone. Chord tones do not have such limitations.

In strict counterpoint we allow a small number of harmonic and melodic tones due to use of diatonic scale and triads.

All notes of major mode and ancient modes can have harmonic or melodic meaning. It is not true for melodic minor (see §34 и §35).

Leading tone is a VII chord tone in major or VII# chord tone in melodic minor, except when current chord is III and next chord is not I:

First chord ⁵	Second chord						
	I	II	III	IV	V	VI	VII
III	LT (up)	Not LT	Not LT	Not LT	Not LT	Not LT	Not LT
V	LT (up)	LT	LT	LT (up/down)	LT	LT (up)	LT
VII	LT (up)	LT	LT	LT (up/down)	LT	LT (up)	LT

Not LT – in this combination of chords, VII or VII# chord tone in the first chord is not a leading tone.

LT – in this combination of chords, VII or VII# chord tone in the first chord is a leading tone and it can go by leap to any chord tone of the second chord (if allowed by other rules).

LT (down) – in this combination of chords, VII or VII# chord tone in the first chord is a leading tone and it has to go stepwise down to chord tone (VI in major or VI# in melodic minor) of the second chord.

LT (up/down) – in this combination of chords, VII or VII# chord tone in the first chord is a leading tone and it has to resolve stepwise up to I chord tone of the second chord or go stepwise down to chord tone (VI in major or VI# in melodic minor) of the second chord.

LT (up) – in this combination of chords, VII or VII# chord tone in the first chord is a leading tone and it has to resolve stepwise up to I chord tone of the second chord. Pay attention, that leading tone should resolve up, not down when going to VI chord.

Exception: Leading tone resolution is not needed if leading tone ends before the end of the current chord.

³ **Exception:** the following melodic shapes can include leaps before or after a non-chord tone:

- Double neighboring tones (§68),
- Cambiata (§70),
- Suspension resolution ornament (§64),
- Anticipation (§31).

⁴ **Exception:** Passing downbeat dissonance (§70).

⁵ Each of the first and the second chords in the table can be in root position or first inversion.

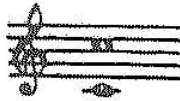
VII note in major and VII# note in melodic minor cannot be non-chord tone if it is the last note in penultimate measure.

In other modes (ancient modes) except major and melodic minor there is no leading tone. This means that VII note in ancient modes does not have to resolve to any particular note.

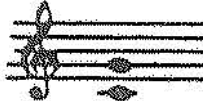
7. Harmonic intervals

The following intervals (simple or compound) are considered consonances between voices:

Unison, perfect octave



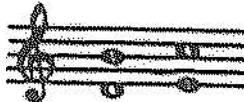
Perfect 5th



Major and minor 3rd



Major and minor 6th



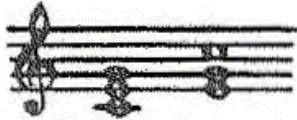
Unison is prohibited in some cases (see §53).

Harmonic perfect 4th and harmonic tritone are prohibited between two chord tones in two voices if one of tones is in bass (see §54). In other cases, harmonic perfect 4th or harmonic tritone are allowed.

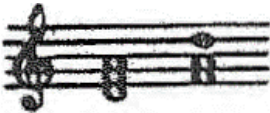
8. Chords

Only the following chords are allowed:

- Major chord in root position and first inversion (6th chord):



- Minor chord in root position and first inversion (6th chord):



- First inversion of diminished chord (6th chord):



- Diminished chord in root position is prohibited.

Exception: Diminished chord in root position is allowed only when both notes of tritone with bass do not sound simultaneously (see §55).

Augmented chord III# (e.g. CEG# in A melodic minor) is prohibited (even if notes of augmented 5th interval do not sound simultaneously during this chord).

7th chords should be avoided in scholar counterpoint.

9. Non-harmonic tones

Non-harmonic tones can be used in the following cases:

1. Passing and neighbor tones (§66).
2. Suspensions (§61).
3. Double neighbor tones (§68).
4. Cambiata (§69).
5. Passing downbeat dissonance (§70).
6. Anticipation (§31).

All non-chord tones should resolve correctly (described in respective paragraphs).

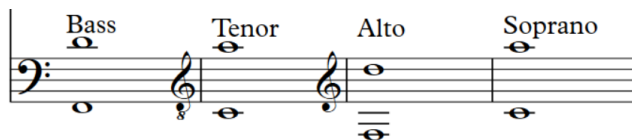
Limitations

10. Number of voices

School counterpoint is written for vocal ensemble of 2 to 8 voices (most often – of 2 to 4 voices).

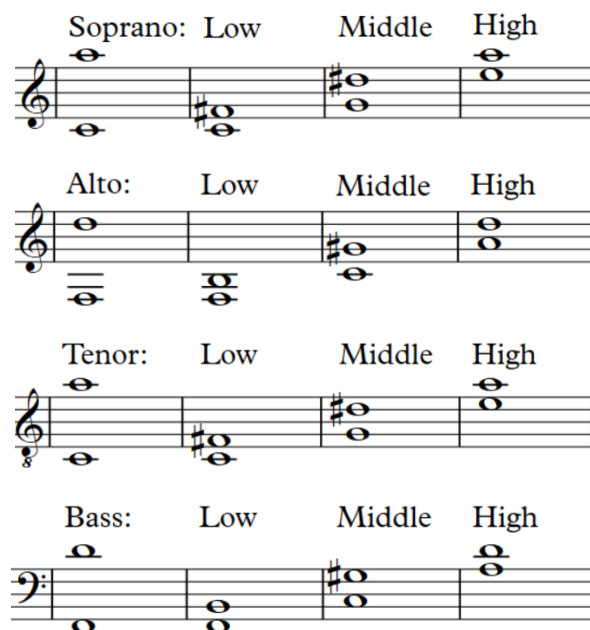
11. Vocal ranges

Each voice should be limited within one of the following vocal ranges:



Do not overuse notes that are close to the limits of these ranges (lower and higher).

Each vocal range is evenly divided into three registers. Each voice sounds quiet in the lowest register and loud in the highest register:



Avoid imbalance between vocal ranges, when one of voices is in its lowest register, while another voice is in its highest register⁶.

12. Counterpoint species

Counterpoint is studied in 5 species. Each species is characterized by obligatory rhythm (see §17).

Starting from 5 voices and above, we limit our study to only first species (whole notes) and 5th species (free rhythm counterpoint).

There should always be one whole note cantus firmus in each exercise. Other whole note voices are considered to be in species 1.

13. Mixed species

See §20.

14. Voice order

When writing exercises, in each species or mixed species, *cantus firmus* is located successively in each voice, which gives more combinations.

Cantus firmus can be transposed when it is being moved to another voice.

15. General counterpoint principles

Counterpoint rules create limits, which contribute to development of music imagination of a student. Student should achieve flexibility, independence and variety of melodic lines.

The strictness of the rules decreases with increase in voice count. If additional voices are introduced during the course of the exercise, more rules can be ignored as soon as enough voices start to sound simultaneously.

Imitations should be avoided in simple counterpoint, because they are studied in a separate exercise.

⁶ Disbalance is acceptable between vocal ranges if it is shorter than a whole note. In difficult cases disbalance is acceptable up to three half notes in a row (or equivalent time).

Rhythm rules

16. Time signature

We usually study binary counterpoint (2 or 4 notes in measure). It is also useful to write counterpoint in other time signatures.

In this book most examples are given in 2/2 or 4/4 time signature. Cantus firmus always consists of notes of the same length, which equals the length of one full measure in current time signature.

Each measure has one downbeat and multiple upbeat:



In this example, note G sounds on downbeat (first beat). Notes A, B and C sound on upbeat (second, third and fourth beats).

17. Rhythmic limitations of each counterpoint species

Allowed rhythm inside each measure for combination of species with time signature. Rhythms marked with yellow background are not recommended for this combination of species with time signature:

Time signature	Species 1	Species 2	Species 3	Species 4	Species 5
2/4			*		free rhythm **
3/4			*		free rhythm **
2/2			*		free rhythm
4/4				*	free rhythm
5/4	*	*			free rhythm **
6/4					free rhythm **
3/2			*		free rhythm **

* This time signature is not recommended for this species (use 4/4 instead of 2/2 for species 3; use 2/2 instead of 4/4 for species 4; use 6/4 instead of 3/2 for species 3; use species 2 instead of species 3 for time signatures 2/4 and 3/4)

** This combination of species with time signature is used rarely in scholar counterpoint.

Species 1. One note against one note. Counterpoint is written using whole notes in time signature 4/4.

Species 2. Two or three notes against one note. In time signature 2/2 counterpoint is written using half notes and starts with half note rest. For more counterpoint endings diversity, suspension is allowed in penultimate measure if it resolves to a leading tone.

Species 3. Four or more notes against one note. Counterpoint in time signature 4/4 is written using quarter notes and starts with a quarter note rest.

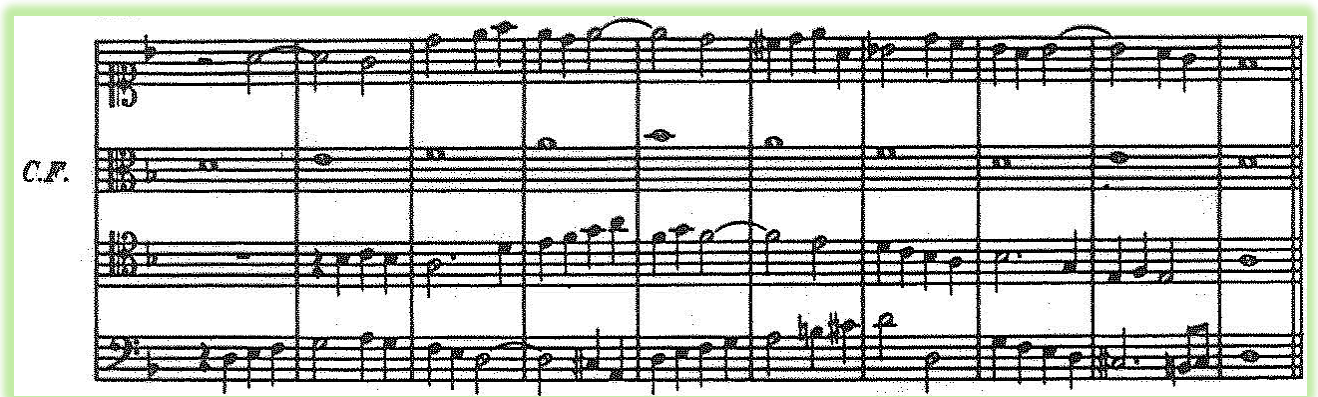
Species 4. Syncopations. In time signature 4/4 counterpoint is written using tied half notes and starts with a half note rest. In difficult cases, one syncopation can be interrupted per 10 consecutive measures. More interruptions of syncopation per 10 consecutive measures is not allowed.

Species 5. Counterpoint in free rhythm. This counterpoint can use all rhythms of previous species, and also some additional rhythms (see §§ 21-23).

Starting from three voices and above, only one voice obeys rhythmic rules of species 2, 3, 4. Other voices use only notes of full measure length:



In species 5, on the contrary, only cantus firmus uses whole notes:



18. First measure

No rests are allowed in cantus firmus.

Counterpoint voice should always start with a rest, except for species 1. No more rests are allowed in counterpoint voices other than this starting rest.

Allowed voice start for each species:

Time signature	Species 2	Species 3	Species 4	Species 5
2/4		-		-
3/4		-		-
2/2		-		-
4/4	-		-	
5/4	-			-
6/4				-
3/2		-		-

* This starting rhythm is not recommended

If there is no cantus firmus or species 1 voice in exercise, one species 5 voice can start without rest. In this case first measure can have any species 5 rhythm (see §21).

Two voices (except for voices containing only whole notes) should not start simultaneously in the same measure on the same beat⁷. In each of first measures at least two counterpoint voices should be introduced (one voice can be introduced, if it is the last voice to be introduced)⁸. In this example digits in blue circles show sequence of voice starts:

The image shows a musical score for exercise 115, consisting of eight staves. The first staff is labeled 'C.F.' (Cantus Firmus). The other seven staves are numbered 1 through 8 in blue circles, indicating the sequence of voice starts. The score is written in a single system with a common time signature. The notation includes various note values, rests, and accidentals. The blue circles are placed at the beginning of each voice's entry in the first measure.

Exception: Any starting rest or no starting rest is allowed if there is no cantus firmus in the exercise.

19. Last measure

Counterpoint in any species in any number of voices should always end with a note of full measure length.

20. Mixed species

In 3 and 4 voices we can mix different species of counterpoint in the same exercise. In this case each voice belongs to one particular species.

In three voices *cantus firmus* is combined with half notes (species 2), quarter notes (species 3), or syncopations (species 4). Voices should be introduced as close to each other, as possible, but not simultaneously⁹. Such a mixed species is called *mélange*.

⁷ **Exception:** Two voices of species 2 or 4 can start simultaneously (but not more than 2 voices).

⁸ In difficult cases only one voice can be introduced in measure, even if it is not the last voice to be introduced.

⁹ Fifth species rhythm also can be introduced in one of the voices.

In four voices *cantus firmus* is combined with half notes (species 2), quarter notes (species 3) or syncopations (species 4). Such a mixed species is called *grand mélange*.

5th species usually should not be combined with species 2, 3, or 4, but this is acceptable.

Fifth species counterpoint

21. Allowed rhythms

The following rhythms are allowed in fifth species scholar counterpoint:

- The rhythms of previous counterpoint species, except for whole notes:



- New rhythms:



- Quavers:



- Half note with a dot:



Quavers should be used in pairs; they should be surrounded by stepwise movement. Quavers should never appear on downbeat. One measure should not contain more than two quavers.

There should not be more than four notes in one measure¹⁰.

Exception: Exceptions for these rhythms  without syncopations:

- Allowed in penultimate measure, irrespective of number of voices.
- Allowed if in any other voice note starts on third quarter (thus evening the aggregate rhythm).

Exception: A note of full measure length within the exercise is allowed if not all voices contain whole note in the same measure.

22. First measure

See §18.

23. Rhythms distribution

- In a single voice adjacent measures should not have the same rhythm.
- All voices should not have same rhythm in the same measure.

¹⁰ **Exception:** Five notes in measure are allowed if first note in measure is tied with the previous measure.

Exception: Starting from 5 voices and above half notes and quarter notes can be imposed over each other.

Melodic rules

24. Stepwise movement

Stepwise movement should generally be used as much as possible. Stepwise movement in conjunction with contrary movement comprises the essence of the counterpoint.

Yet, avoid excessive use of stepwise movement:

1. Unidirectional stepwise movement:
 - a. In species 1, 2, 4, 5 do not use more than 7 stepwise movements in one direction.
 - b. In species 3 do not use more than 9 stepwise movements in one direction.
2. Stepwise movement:
 - a. In species 1, 4 do not use more than 10 stepwise movements in any direction.
 - b. In species 2 do not use more than 14 stepwise movements in any direction.

25. Leaps

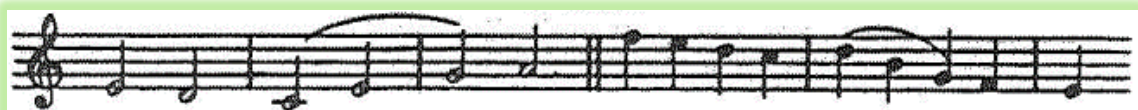
Excessive leaps should be avoided if possible, especially between shorter notes:

1. In species 1, 4, 5 and cantus firmus do not use:
 - a. more than 8 leaps within 10 consecutive notes;
 - b. more than 10 leaps within 15 consecutive notes.
2. In species 2, 3 do not use:
 - a. more than 6 leaps within 10 consecutive notes;
 - b. more than 8 leaps within 15 consecutive notes.

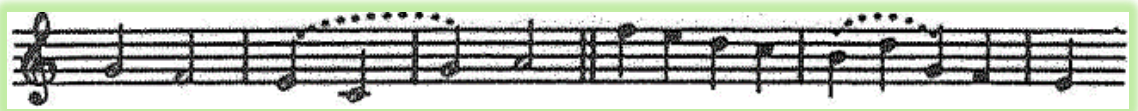
Leaps from a quaver or to a quaver are prohibited.

Do not use more than 2 consecutive leaps in species 1-4. Do not use more than 3 consecutive leaps in species 5.

Do not use 2 or more unidirectional leaps in any species (except 2 unidirectional 3rds in species 4 or 5).



2 consecutive leaps are allowed if they are not unidirectional in species 1-4:



3 consecutive leaps are allowed if they are not unidirectional in species 5.

3 consecutive leaps are allowed if they are not unidirectional and one of leaps is a 3rd leap in species 1-4.

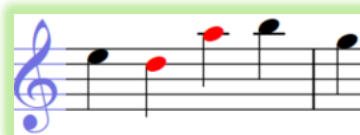
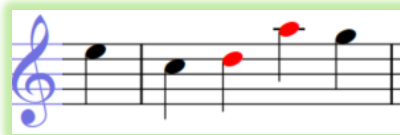
4 consecutive leaps are allowed if they are not unidirectional and one of leaps is a 3rd leap in species 5.

5th, 6th and 8ve leaps should be prepared and left by opposite voice movement immediately:

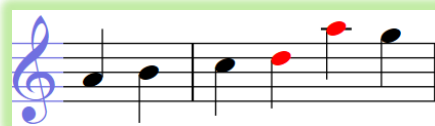


Exception: Species 4.

Exception: 5th leap can have opposite voice movement after one note on one side if on the other side it has opposite voice movement immediately:



Exception: 5th leap can have no opposite voice movement before it, if it has opposite voice movement immediately after it:

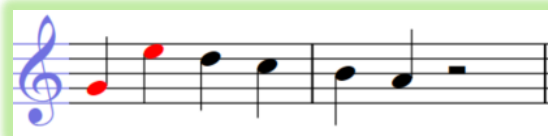


Exception: Any leap can have a neighbor tone immediately before, after or on both sides – but this tone should not be longer than a quarter note:



Leaps compensation

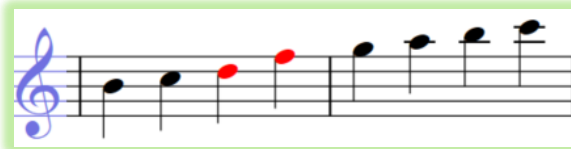
5th leaps and above should be compensated by stepwise opposite movement from the last to the first note of the leap:



Exception: If a leap is immediately followed or preceded by a greater leap, then only this greater leap has to be compensated:



1. 3rd or 4th leaps do not necessarily need compensation:



Especially if they are preceded by stepwise opposite movement (precompensated):



2. 5th leap compensation should be accomplished within 8 or less following notes (example shows maximum length of compensation):



During 5th leap compensation one pitch can be omitted (C in example):

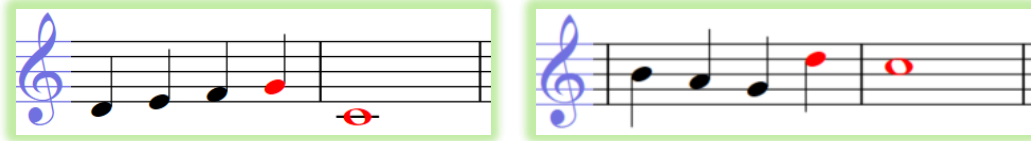


Two successive 3rd leaps in one direction need the same compensation as a 5th leap:



3. 6th leap compensation should be accomplished within 10 or less following notes.
During 6th leap compensation one pitch can be omitted.
4. 8ve leap compensation should be accomplished within 14 or less following notes.
During 8ve leap compensation two pitches can be omitted.

Exception: The leap between the two last notes (or two penultimate notes) in the exercise does not necessarily need compensation if it is precompensated. Precompensation follows the same rules as compensation, depending on the leap size:



Exception: The leap longer than 5th within the last 8 notes (last 4 measures) can have compensation to 5th if it is precompensated. Precompensation follows the same rules as compensation, depending on the leap size:

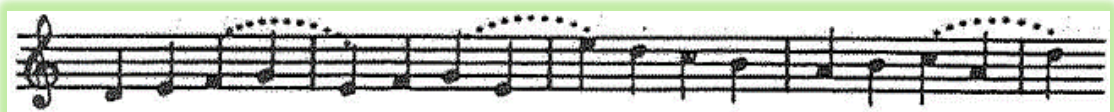


Exception: Leap in species 4 does not need compensation if it is precompensated.

26. Leaps between measures

Leaps of 3rd, 4th, 5th and above between measures should be particularly avoided.

Exception: Leaps are allowed between measures, if melody moves in an opposite direction before the leap¹¹:



Exception: Leaps are allowed between harmonies with the same root (except I or I6 -> I64) and between I64 and V harmonies.

27. Melodic intervals between two consecutive notes

A. Allowed:

- Minor, major and perfect intervals less or equal to major 6th (minor 3rd, major 3rd, perfect 4th, perfect 5th, minor 6th, major 6th);
- Perfect octave (except octave leap from or to a leading tone).

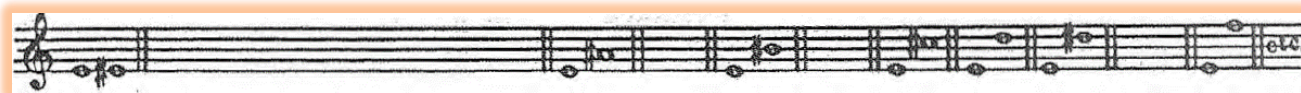
¹¹ Leaps of a 3rd or 4th are allowed between measures in difficult cases, even if they are prepared by movement in the same direction:





B. Prohibited:

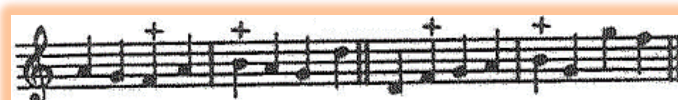
- a. Chromatic intervals:
 - i. intervals formed by non-diatonic notes;
 - ii. intervals between altered and non-altered forms of the same degree.
- b. Diminished and augmented intervals (VI – VII#, VII# – VI, VI# – III, III – VI#, VII# – III, III – VII#¹²), tritone¹³;
- c. Minor 7th interval;
- d. Major 7th interval;
- e. Intervals greater than octave;
- f. Perfect octave leap from or to a leading tone in major or melodic minor key.



Leaps of an octave should not be abused. In general, the longer the leaps, the less leaps should be used in close proximity (especially in species 2 and 3).

28. Melodic intervals between more than two consecutive notes

- A. Tritone within 3 or 4 consecutive notes should be prepared or left by stepwise movement in the same direction, because in this case tritone is made inaudible:



- B. Tritone within 3 or 4 consecutive notes can be surrounded by movement in opposite direction on both sides, if both tritone notes are prepared or resolved correctly (resolution notes are circled, tritone notes are red):



In major:

Tritone note	Should resolve to
---------------------	--------------------------

¹² **Exception:** Except III – VII# – I (III-VII# downward notes, then note I).

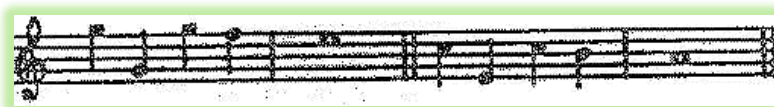
¹³ **Exception:** Adjacent tritone can be allowed in difficult cases if it is correctly resolved on both sides (see §28).

IV	III
VII	I

In minor:

Tritone note	Should resolve to
II	III
III	II
IV	III
VI	V
VI#	VII
VII#	I

- C. Even if tritone within 3 or 4 consecutive notes is prepared or left by stepwise movement in the same direction, both tritone notes should be resolved correctly, if last tritone note is repeated inside measure or if last tritone note is longer than previous.
- D. Two consecutive octaves or 6th leaps are allowed in difficult cases:



29. Obligatory note preparation

Suspension should be prepared obligatory (see §63).

Neighbor tone should be surrounded by chord tones (see §66).

Passing downbeat dissonance (§70), cambiata (§69) and double neighbor tones (§68) should be prepared as described in respective paragraphs.

Melodic tritone preparation is described in §28.

30. Obligatory resolution of chord tones

Leading tone has to resolve stepwise up or down in particular cases (see §6).

Neighbor tone should be resolved to chord tone (see §66).

Passing downbeat dissonance (§70), cambiata (§69) and double neighbor tones (§68) should be resolved as described in respective paragraphs.

Melodic tritone resolution is described in §28.

Harmonic tritone resolution is described in §55.

31. Notes repeat

Note should not be immediately followed by note of the same pitch in any voice in any counterpoint species (especially in cantus firmus).

Exception: Full measure length notes can be repeated or tied in first species, but it should be used as seldom as possible (one repeat within 10 consecutive notes is allowed).



Melodic minor

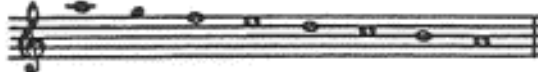
33. Two forms of melodic minor

Melodic minor can be presented in one of two forms, depending on melody direction:

Ascending form:



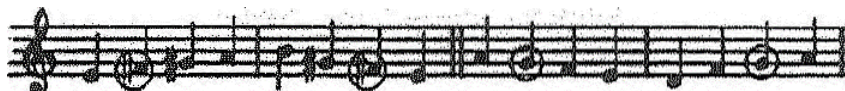
Descending form:



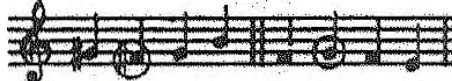
34. Use of non-chord tones VI# or VII

Tones VI# (F#) or VII (G natural) in previous example are non-chord. They are used as passing or neighbor tones in the following cases:

Passing tone:



Neighbor tone:



VI# tone (F#) should not go immediately before or after VII tone (G natural), even if one or both tones are non-chord tones.

35. Use of chord tones VI# or VII

A. Note F# can be a chord tone only inside an ascending stepwise movement:

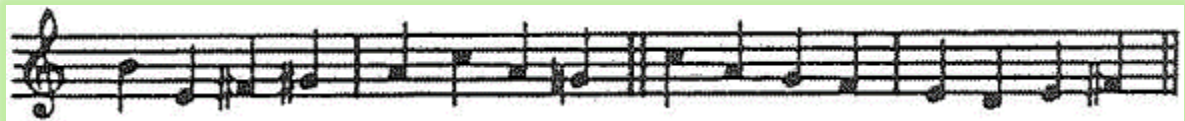


B. Note G (natural) can be a chord tone only inside a descending stepwise movement:

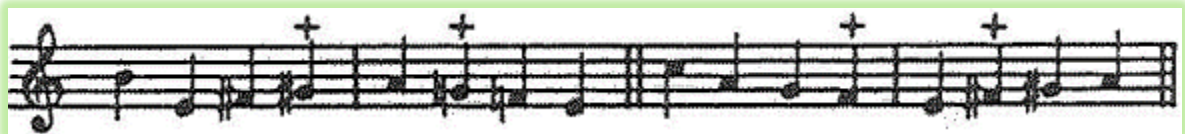


36. Close positioning of two forms of VI or VII degree in melodic minor

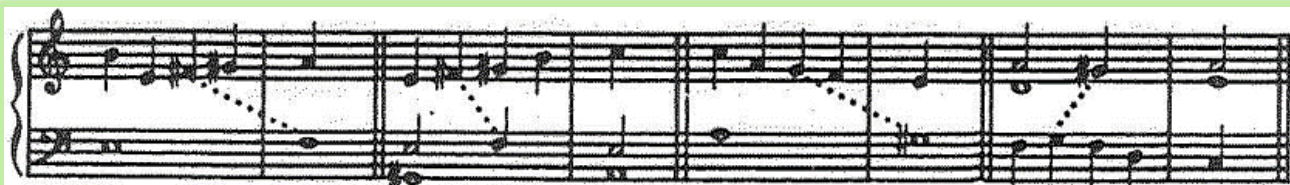
A. Altered and unaltered forms of the same note (VI or VII degrees in melodic minor) should not be used in the same voice close to each other. **At least 2 other notes or another chord should be placed between them:**



In difficult cases it is acceptable that these notes can become closer, especially if at least one of them is not a chord tone – but at least one other note should be placed between them:



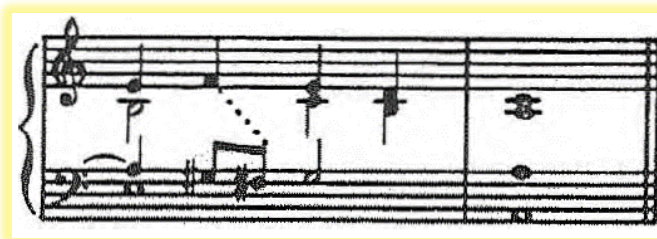
- B. False chromatic relation is a chromatic contradiction between the altered and the unaltered forms of the same note sounding simultaneously (or in close proximity), in two different voices. It is allowed in close proximity only when there is another harmony between related notes or when at least one of the related notes is not a chord tone:



False chromatic relation is allowed if notes are separated at least by a distance equal to one measure length.

Starting from 3 voices and above, false chromatic relation of chord tones is allowed if not between outer voices, especially when related notes are separated in time by other notes.

Simultaneous false chromatic relation is acceptable only when at least one of the related notes is not a chord tone:



Harmonic rules

To get best sound from counterpoint ensemble, voices movement should be strictly controlled¹⁶. In this section you will find the rules, which work for any pair of voices in counterpoint. Also, counterpoint chord rules can be found in this section.

Each measure should contain only one chord except penultimate measure (see §57). All tones, that cannot be considered to be non-chord tones due to being surrounded by stepwise movement or other conditions (see §6), have to be part of current chord.

37. Contrary motion of voices

Contrary motion of voices should be used as much as possible, especially between outer voices.

Contrary stepwise motion sounds great and comprises the essence of the counterpoint.

38. Oblique motion

Oblique motion also sounds great.

Oblique motion to unison is prohibited in some cases (see §53).

Oblique motion to non-chord tone suspension on first beat of harmony should be resolved (see §64).

Oblique motion to harmonic tritone should be resolved (see §55).

Oblique motion to parallel perfect consonance is prohibited in some cases (see §43).

39. Similar motion

During similar or contrary motion both notes of first interval end simultaneously, at the same moment both notes of second interval start simultaneously in the same voices.

Similar motion is generally undesired and should be used as seldom as possible. Its usage is regulated by rules, which are described below.

If intervals before and after similar motion are the same, this is called “consecutive (parallel) intervals”. Consecutive intervals are two same harmonic intervals in two voices. If one interval is minor and another is major, they are still considered consecutive intervals (e.g. consecutive 3rds).

Starting from 3 voices, all voices should not move in the same direction to the first beat of the next harmony. At least one voice should move in the opposite direction¹⁷.

¹⁶ Number of voice pair that have to be controlled when number of voices in counterpoint grows:

Number of voices	Number of voice pairs
2	1
3	3
4	6
5	10
6	15
7	21
8	28

¹⁷ **Exception:** Allowed if second chord is a 6th chord.

40. Consecutive 3rds, 4ths and 6ths

Do not use more than 3 consecutive 3rds, 4ths or 6ths of the same duration (parallel motion)¹⁸.

Do not move all voices with the same interval (parallel motion) more than once sequentially when all voices use whole notes (e.g. three consecutive 6th chords)¹⁹:



41. Similar motion to 3rd, 4th or 6th

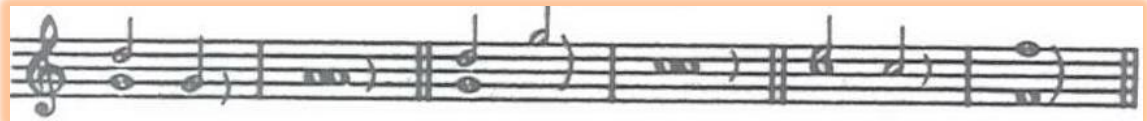
Allowed.

42. Consecutive 5ths or 8ves

Two consecutive perfect 5ths or 8ths are prohibited in all species, even in contrary motion:



Unison is subjected to the same rule as octave. It is prohibited to use two consecutive unisons or octave after unison (or unison after octave):

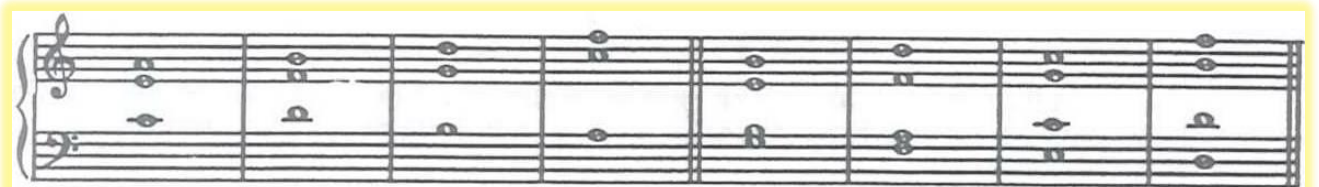


Exception: Starting from 6 voices and above, consecutive perfect 5ths or 8ves (and unisons) are allowed in contrary motion between inner voices.

Exception: Starting from 7 voices and above, consecutive perfect 5ths or 8ves are allowed in contrary motion between any voices.

¹⁸ Compound intervals follow the same rules as simple intervals (e.g. 10th and 3rd). Only unison and octave, 2nd and 9th have different rules.

¹⁹ You can write three or more consecutive 6th chords, if at least two voices have contrary motion:



Exception: Starting from 3 voices and above, tritone (diminished 5th) is allowed immediately after perfect 5th (when harmonic tritone is not prohibited by harmonic tritone rules §55). Perfect 5th is always prohibited immediately after tritone (diminished 5th) when harmonic tritone has to be resolved (see §55)²⁰.



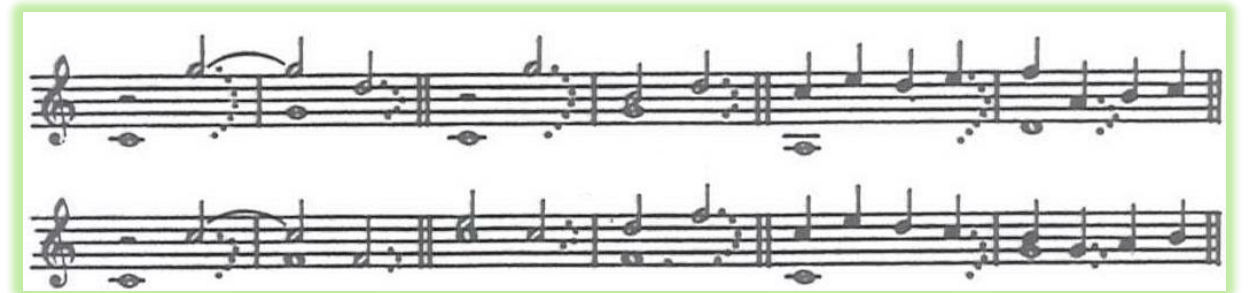
43. 5ths or 8ves, separated by one or multiple notes

Two 5ths or two 8ves are allowed when they are separated by at least a measure length or its equivalent (e.g. two half notes or four quarter notes in 4/4 time signature), or when these intervals are in non-adjacent harmonies:



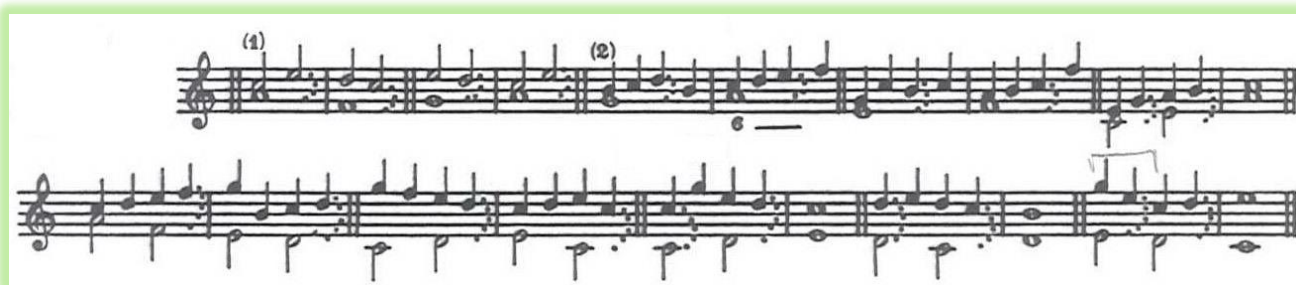
Exception: Two 5ths or two 8ves, separated by less than a measure length, are allowed in the following cases if the second interval is not on the first beat of measure and if both notes of second interval do not start simultaneously:

A. In contrary movement between the two intervals:



B. Even in similar movement between the two intervals, if one of the intervals is formed by a non-harmonic tone in species 3 or 5 (but not on downbeat):

²⁰ In these two exceptions we are only talking about diminished 5th, not augmented 4th – because augmented 4th is not prohibited near perfect 5th by this rule – yet, harmonic augmented 4th may need resolution in some situations (see §55).



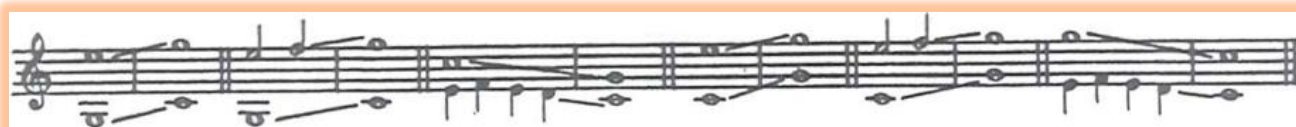
Two 5ths or two 8ves, separated by less than a whole note, are allowed if the second interval is on the first beat of the last measure in exercise, and movement between the two intervals is contrary.

Oblique movement between the two 5ths or two 8ves is not prohibited.

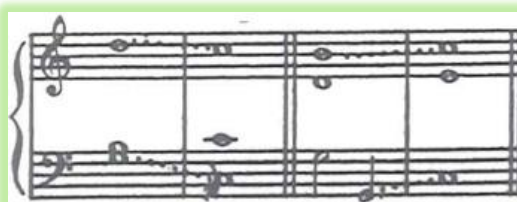
Starting from 5 voices and above, 5ths or 8ves, separated by less than a measure length, are allowed if second interval is on upbeat, without any additional conditions²¹.

44. Similar motion to 5th or 8ve between outer voices

Similar motion to 5th or 8ve between outer voices is prohibited between different chords, especially when second interval is on downbeat:



Exception: Similar motion to 8ve between outer voices, if second interval is on downbeat of the last measure and higher voice is moving stepwise to the second interval:



Exception: Starting from 6 voices and above, similar motion only to 5th or 8ve on main degrees (I, IV, V) is allowed between outer voices, if higher voice is moving stepwise (because increasing accent on these main degrees is not a problem).

See similar motion to unison rules in §53.

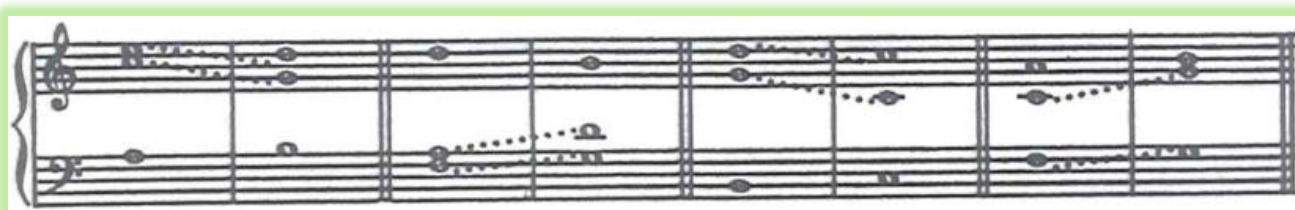
45. Similar motion to 5th or 8ve except between outer voices

Similar motion to 5th or 8ve between is allowed when one of voices is not outer²², especially when the following conditions are met:

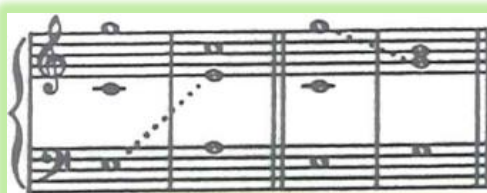
²¹ In difficult cases this exception can also be used in 4 voices.

²² This means between two internal voices or between one internal voice and one external voice.

- A. If one of voices is moving stepwise²³:



- B. Even when both voices have leaps, if one of notes forming interval is part of a previous harmony (common note):



See similar motion to unison rules in §53. Similar motion to harmonic tritone is allowed when tritone is allowed (see §55).

Exception: Starting from 6 voices and above, similar leaping motion to 8ve is allowed even without a common note, except when both voices are outer.

46. Consecutive 2nds, 7ths, 9ths

- A. Consecutive 2nds should be avoided²⁴:

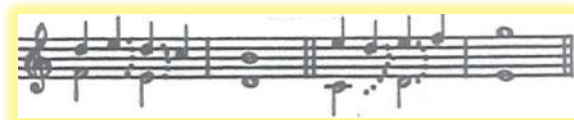


- B. Consecutive 7ths or 9ths are allowed only in non-outer voices, especially if second interval is minor 7th or major 9th:

²³ If only lower voice is moving stepwise, then similar motion to 5th on secondary degrees (II, III, VI) should be avoided in 5 voices. Also, similar motion to 8ve down should be avoided:



²⁴ **Exception:** two consecutive 2nds are allowed in difficult cases if second interval is a major 2nd (and never if it is minor 2nd).



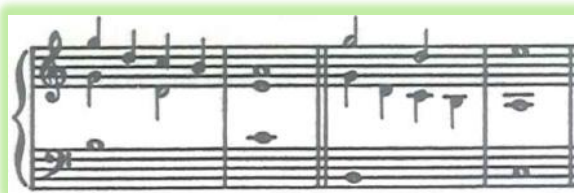
Major 7th and minor 9th sound harsh without another voice. They are allowed if they are accompanied by the third voice, which forms harmonic consonance interval with one of notes of major 7th or minor 9th.

47. Similar motion to 2nd, 7th and 9th

- A. Similar motion to major or minor second should be avoided²⁵.



- B. Similar motion to 7th or 9th is acceptable if one or both voices are not outer, especially if it is minor 7th or major 9th:



Similar motion to 7th or 9th is prohibited between outer voices.

Major 7th and minor 9th can be alleviated with a common note when there are at least three voices:



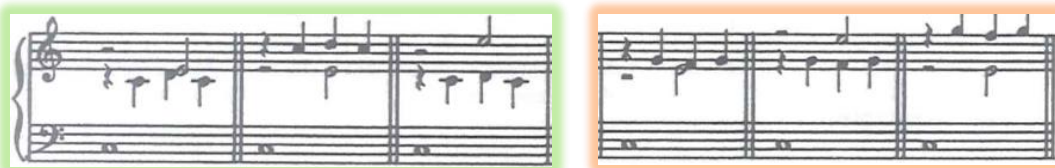
48. 2nd, 7th or 9th at the beginning of the voice

It is allowed to start the voice with vertical major 2nd, minor 7th or major 9th.

It is prohibited to start voice with vertical minor 2nd, major 7th or minor 9th, especially if the other voice does not form consonance interval with one of notes, which form a dissonance interval:

²⁵ Similar motion to major second is acceptable in difficult cases, if one of notes of this interval sounded immediately before this second:





49. Distance between voices

The distance between voices is not limited if each voice is in range and there is no range disbalance (see §11).

50. Voice crossing

Voice crossing is the intersection of voices in a composition, leaving a lower voice on a higher pitch than a higher voice (and vice versa). Voice crossings are often justified by melodic development of the voices. Yet, because this can cause registral confusion and reduce the independence of the voices, it should be avoided for good polyphonic balance. **Voice crossing between non-adjacent voices is always prohibited.**

Exception: Starting from 3 voices and above, short voice crossings between adjacent voices (up to one and a half measures) are allowed between adjacent voices, except the first and the last measure.

Exception: Starting from 5 voices and above, longer voice crossings between adjacent voices (up to two and a half measures) are allowed (including the first and the last measure).

Voice overlapping happens when two voices move together, and the lower voice passes where the upper voice was (or vice versa). For example, if two voices sound G and B, and move up to C and E. The overlapping occurs because the second note (C) in the lower voice is higher than the first note (B) in the upper voice. Voice overlapping leads to ambiguity, as the ear interprets the step from B to C in one voice, and is fairly consistently avoided in contrapuntal writing:



Exception: Voice overlapping is allowed between adjacent voices starting from 4 voices and above if there is no gap between voice pairs (lower voice of one of the note pairs has the same pitch as higher voice of another note pair).

Exception: Voice overlapping is allowed between adjacent voices starting from 5 voices and above.

51. Voice crossing arrangement

Voice crossing can happen during contrary or oblique motion of the voices, but should not happen during similar motion of the voices²⁶.

A. Contrary motion of the voices:

²⁶ Voice crossing is acceptable during similar motion of the voices, if at least one voice moves stepwise:



- a. Through unison – good:



- b. Through second – possible:



Yet, two consecutive seconds should be avoided, because this degrades sound quality:



- B. During oblique motion unison is possible if §53 rules are not violated.

52. Doubling

Doubling of a suspension tone is prohibited.

Doubling of a leading tone in major or melodic minor key is prohibited²⁷.

Doubling of any note of harmonic tritone is prohibited if both notes of tritone are chord tones²⁸.

Exception: Starting from 5 voices and above, doubling of a leading tone is allowed if neither of the doubled leading tones is in bass.

Exception: Doubling of a leading tone or of any chord tone of harmonic tritone is allowed if two doubled notes are resolved stepwise in opposite directions, while the note which resolves downwards is also prepared by stepwise motion.

If allowed, note doubling should be accomplished across octave or two octaves. Unison doubling is allowed only when §53 rules are not violated.

53. Unison

- A. **Unison can be used on upbeat. Unison is allowed on downbeat only in the first and the last measure.**

Exception: Starting from 5 voices and above, unison is acceptable on downbeat in any measure²⁹.
Unison should be used on downbeat as seldom as possible, because it impoverishes polyphony.

- B. **The approach of the unison should be with contrary motion (stepwise or by leap) or with oblique motion (by leap only).**



In difficult cases you can use oblique motion to unison from major 2nd (but not from minor 2nd):

²⁷ Doubled notes do not have to begin or end together, but have to sound simultaneously to be prohibited.

²⁸ Both tritone notes and the doubled note do not necessarily need to begin or end together, but all three of these notes have to sound simultaneously to be prohibited.

²⁹ **In 4 voices unison can be used between two lowest voices on downbeat if this is needed for melodic development.**



Similar motion to unison is prohibited, especially when unison is on downbeat³⁰:



Exception: Similar motion to unison on first beat of the last measure is allowed, if higher voice is moving stepwise to unison.

- C. Unison can be left by any movement (similar, oblique, contrary), stepwise (to major or minor 2nd) or by a leap.

54. Harmonic 4th

- A. Perfect 4th is not allowed between bass and any other voice if both notes of the interval are chord tones.
- B. Perfect 4th is allowed between any notes as long as neither of them is in the bass.
- C. Perfect 4th is allowed between any voices if at least one of its notes is not a chord tone.

55. Harmonic tritone

Harmonic tritone is a vertical interval formed between two chord tones. Notes of harmonic tritone do not have to start or end together, but they have to sound simultaneously at some point in time to be considered a harmonic tritone.

- A. Harmonic tritone is prohibited between bass and any other voice.

Exception: Starting from 3 voices and above, harmonic tritone (diminished 5th) is allowed with bass only in penultimate harmony, when suspension resolves to leading tone in bass, which then resolves to last tonic chord in root position:



- B. Harmonic tritone is prohibited between any voices of ancient modes (not major or melodic minor key).
- C. Harmonic tritone is allowed between any two voices except bass in major and melodic minor, but each of its notes requires correct resolution in the same voice to chord tone in the next chord³¹:

³⁰ **Exception:** Direct approach of the unison with stepwise motion in higher voice is allowed when unison is on downbeat of last measure.

³¹ Resolution note should follow immediately the note of the tritone, except situation when note of the tritone is a suspension (in this case suspension resolution has to resolve tritone too).

In major:

Note	Should resolve to
IV	III
VII	I

In minor:

Note	Should resolve to
II	III
III	II
IV	III
VI	V
VI#	VII
VII#	I

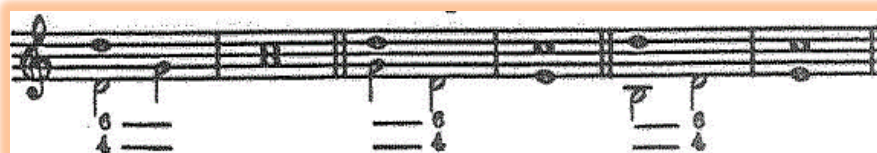
Exception: Each tritone note, which does not continue until the end of current harmony, will not require resolution.

Exception: If next chord does not contain notes that resolve tritone, then tritone resolution is not required.

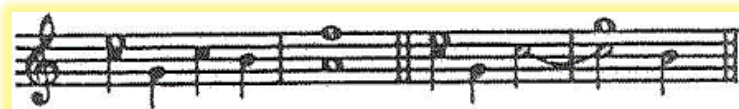
D. Harmonic (vertical) tritone is allowed if at least one of notes is not a chord tone.

56. Second inversion chords

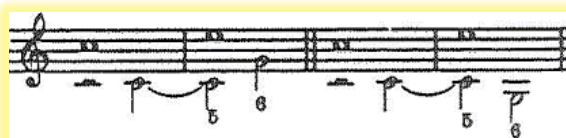
Second inversion chords are prohibited³²:



Exception: Temporary second inversion chord is allowed on upbeat if bass immediately returns to tonic and 5th note in bass is not repeated:

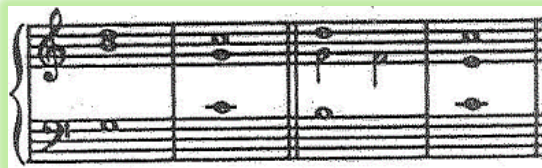


³² The following examples are allowed because here no second inversion chord is present:

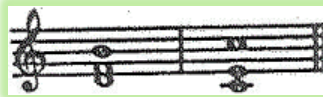


57. Obligatory harmonies

- A. The first and the last measures have to be harmonized with tonic chord in root position³³.
- If voice starts without syncopation, first note has to be degree I or V. If first note is a syncopation, it can be degree III³⁴.
 - Outer voices (the lowest and the highest) should end with degree I35. Inner voices can end with degree I or III or V.
- B. Penultimate chord should be:
- Chord V (in root position or first inversion). Leading tone is required³⁶.

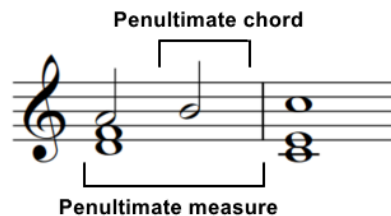


- Chord VII (in first inversion). Leading tone is required.



Starting from 4 voices and above, chord VII is allowed in root position if suspension resolves to leading tone in bass (see §55).

There should be only one chord in any single measure except penultimate measure. Penultimate measure can contain two chords, in this case the second chord is penultimate:



Second chord should not be longer than first chord in the measure – this is because second chord can start only on particular beats:

Time signature	Second chord can start on beat
2/4	Second quarter note
3/4	Second or third quarter note
2/2	Second half note
4/4	Third or fourth quarter note
5/4	Third or fourth quarter note

³³ **Exception:** The first measure can be harmonized with any chord if there is no cantus firmus.

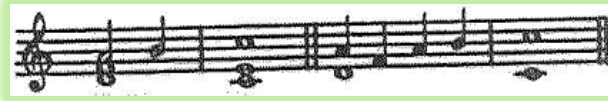
³⁴ **Exception:** Even if voice starts without syncopation, first note can be degree III in difficult cases.

³⁵ **Exception:** Even outer voices can end with degree III or V in difficult cases.

³⁶ **Exception:** Leading tone can be omitted if note V in bass in penultimate chord resolves into note I in bass in the last chord.

6/4	Fourth quarter note
3/2	Second or third half note

Examples of two chords in penultimate measure:



The following chord sequences are prohibited in counterpoint exercises, because they can create modulations:

- In melodic minor II major chord (DF#A in Am) in root position followed by bVII major chord (GBD in Am) in root position is prohibited.
- In melodic minor bVII major chord (GBD in Am) in root position followed by III major chord (CEG in Am) in root position is prohibited.
- In melodic minor and aeolian mode b5II diminished chord (BDF in Am) followed by III major chord (CEG in Am) in root position is prohibited.

V – I cadential progression with bass melody going from note V in chord V (or V7) to note I in chord I on downbeat is allowed only between penultimate and last measure if note I also starts in the highest voice at the same moment when it starts in bass (because this pattern creates the sense of exercise finish in the wrong place).

58. Incomplete chords

Any chord should have at least one chord tone starting on the first beat of this chord (not tied with the previous chord and not passing downbeat dissonance)³⁷. If not, this chord is considered ambiguous.

Starting from 3 voices and above, chord 3rd tone and at least one other tone (root note or 5th tone) are required on the first beat of any chord³⁸. If not, this chord is considered incomplete. All three chord tones (root, 3rd, 5th) are recommended on the first beat of any chord for rich sound, if possible.

Starting from 3 voices and above, any chord in penultimate measure should have all three chord tones on its first beat. In two voices any chord in penultimate measure should have at least two chord tones on its first beat (including sus resolution and PDD resolution).

- Chords in the first and the last measure can be incomplete (3rd or/and 5th chord tones can be missing) in any counterpoint species (including mixed species) in any number of voices.**
- In other measures (not the first and not the last) incomplete chords are allowed in three voices in the following cases:
 - Two incomplete chords should not follow each other immediately.
 - Penultimate chord should always be complete.

³⁷ This means that at least one voice should not have passing downbeat dissonance or non-chord suspension on the first beat of the chord.

³⁸ If chord starts with suspension or PDD, then their resolution to the needed chord tone can be counted for this rule.

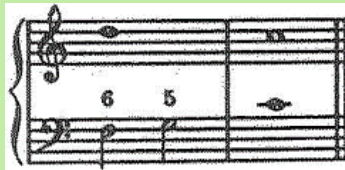
59. Harmonic rhythm

Same chord should not repeat in the next measure.

Exception: Chord can repeat once, if its inversion changes – but not twice.

There should not be more than one harmony in a single measure.

Exception: Penultimate measure can include two harmonies if penultimate harmony follows §58 rules:



60. Modulation

If all other counterpoint rules are followed, modulation will not occur.

Counterpoint usually does not modulate. Yet, short temporary modulation is possible into closely related key (dominant, subdominant or relative minor scale) – but not more than once per exercise.

Note, which characterizes new key, should be a chord tone. Return to main key should also happen with a chord tone. Exercises in minor key should not modulate to relative major scale via chord III.

Chromatic interval is always prohibited.

Non-chord tones

Suspensions

Suspension is only allowed in species 4 and 5.

Exception: In species 2 suspension is allowed when it resolves to leading tone in penultimate measure (only in major or melodic minor key, because leading tone does not exist in ancient modes).

A note should not be tied with previous and next measure at the same time:



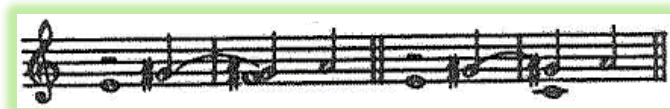
61. Suspensions, which resolve downwards

Suspension of any degree can resolve downwards.

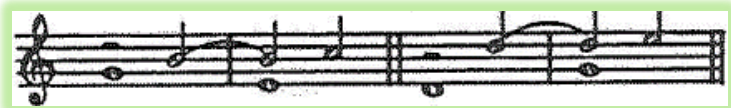
62. Suspensions, which resolve up

Suspension resolution up can be used in the following cases:

- A. Leading tone resolution into tonic note of a melodic minor or major key (not ancient modes):



B. Chord tone suspension:

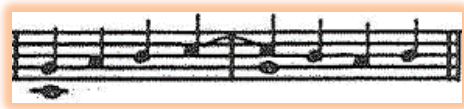


In the latter case, a perfect 5th can be considered a chord tone – in this case there would be two harmonies in a measure, which is allowed in case of suspension resolution.

63. Suspension preparation

Suspension should be prepared with a chord tone.

A. Suspension preparation should not be shorter than the suspension:



Allowed lengths of suspension preparation and suspension:

Time signature	Suspension preparation	Suspension	Suspension resolution position
2/4	♩ or ♩*	♩	Second quarter
3/4	♩ or ♩.*	♩ or ♩	Second or third quarter
2/2	♩ or ♩*	♩ or ♩.	Second half
4/4	♩ or ♩*	♩ or ♩ or ♩.	Second or third or fourth** quarter
6/4	♩. or ♩.*	♩ or ♩. or ♩	Fourth or sixth quarter
3/2	♩ or ♩.*	♩ or ♩	Second or third half note

* This note length is allowed only when other voices move during it.

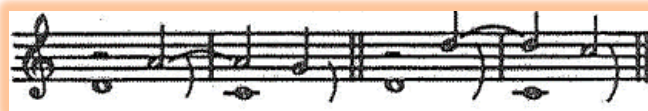
** Allowed only when both suspension and suspension resolution occur in the same measure (can be possible only when there are more than one harmony in measure)

In time signature 4/4 suspension between two chords in the same measure is allowed if suspension length is not longer than a quarter note.

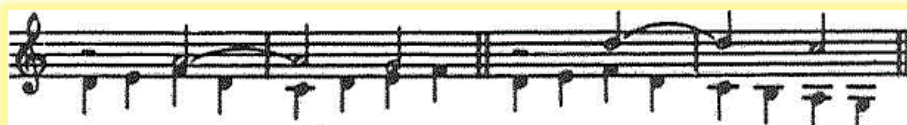
If suspension is a chord tone, it can last up to the end of harmony.

Suspension resolution should not be shorter than a quarter note in all time signatures except 3/2 (in 3/2 suspension resolution should not be shorter than a half note).

- B. If suspension resolves to 5th interval, this suspension should not be prepared by 5th interval (same for 8th):



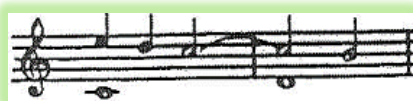
Exception: This is acceptable if second voice moves during the suspension resolution:



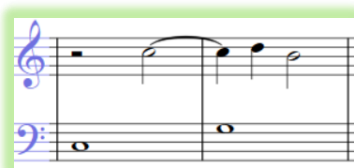
64. Suspension resolution

If suspension is a non-chord tone, it should resolve to a chord tone with a stepwise motion (see §61-62)³⁹.

In time signature 4/4 suspension should resolve on second, third or fourth quarter of the measure (resolution to a note shorter than a quarter is prohibited) – see §63 for other time signatures:



There can be one ornament non-chord quarter tone between suspension and suspension resolution surrounded by a leap of 3rd and stepwise motion:



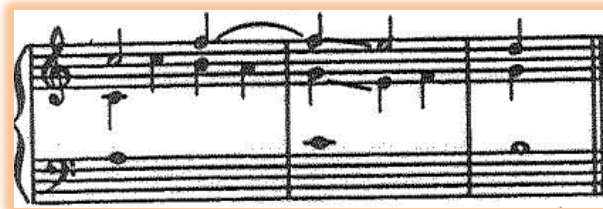
³⁹ Suspension can go through multiple harmonies without resolution until it becomes a non-chord tone, but never through more than two measures.

There can be two non-chord quaver ornament tones in stepwise motion between suspension and suspension resolution (use upper neighbor tone for resolution up, lower neighbor tone for resolution down):



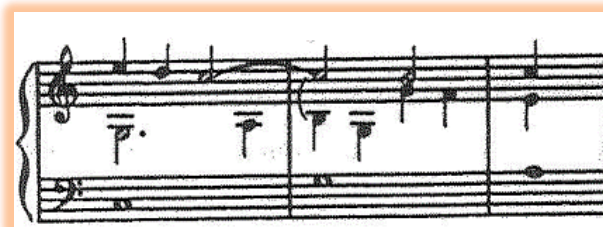
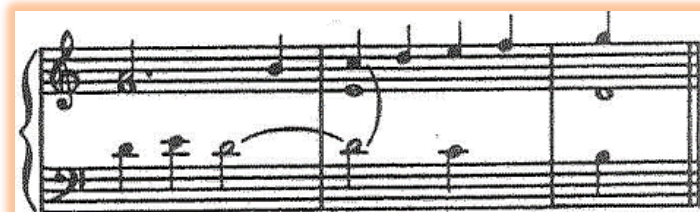
If suspension is a chord tone, it still can have one or two non-chord resolution ornament tones, if suspension is resolved stepwise upwards or downwards according to the rules.

If suspension resolution doubles, avoid similar motion to 8ve:



65. Suspension and suspension resolution

Suspension should not sound simultaneously⁴⁰ with suspension resolution, especially if suspension resolution is above suspension when they sound together:



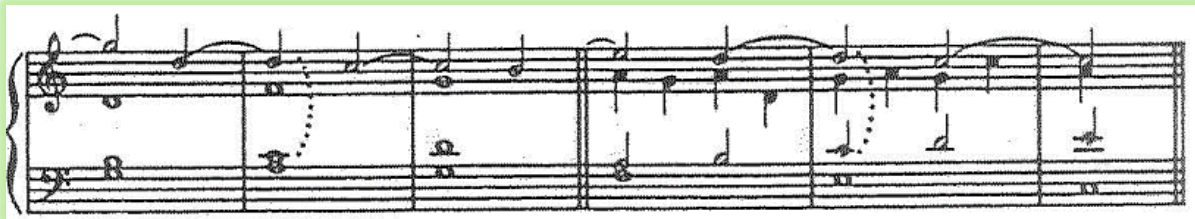
Exceptions: (only when suspension resolution sounds below suspension):

Suspension resolution can sound simultaneously with suspension, when suspension resolution is in bass and the interval between suspension and suspension resolution is greater than 2nd:

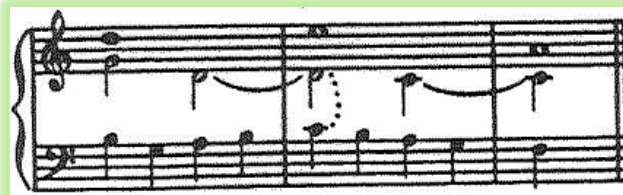
⁴⁰ If the sounding interval between suspension and suspension resolution is on first beat of chord, this is especially bad. But this is prohibited on any beat as long as two notes sound simultaneously.



Starting from 4 voices and above, suspension can sound simultaneously with suspension resolution if resolution is in inner voice, there is a chord tone between voice with suspension and voice with suspension resolution, and the interval between suspension and suspension resolution is greater than 2nd, especially when voices have stepwise contrary motion:



In 2 voices without cantus firmus or starting from 3 voices with cantus firmus, the interval between suspension and suspension resolution can be a major 2nd in some cases:



Passing and neighbor tones

66. Passing and neighbor tones

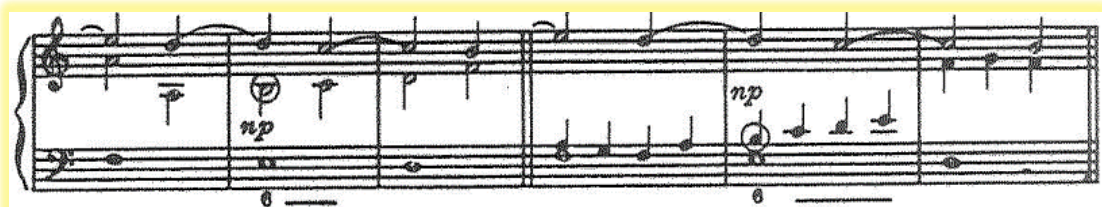
Descending and ascending passing tones



Upper and lower neighbor tones



Usually passing and neighbor tones appear on upbeat. As an exception, passing tone is acceptable on downbeat simultaneously with suspension, especially with contrary stepwise motion:



When harmony does not change during two measures, passing or neighbor tone can occur on downbeat of the second measure.

Each neighbor tone has to be surrounded by chord tones on both sides. Multiple passing tones can go one after the other if melody direction does not change. Such a series of passing tones has to be surrounded by chord tones on both sides.

67. Simultaneous sounding of melodic and harmonic notes

Passing and neighbor tones can sound simultaneously with chord and non-chord tones in case of contrary motion.

In case of similar motion these intervals obey the rules § 44, § 45.

See § 53 concerning oblique motion to unison.

See § 34 concerning the use of passing and neighbor tones in melodic minor.

Double neighbor tones, passing downbeat dissonance and cambiata

68. Double neighbor tones

Double neighbor tones (changing tones or DNT) consist of two consecutive non-chord tones. First melody moves in one direction by a step from a chord tone (first chord tone) to the first non-chord tone, then skips by a third in the opposite direction to another non-chord tone, and then finally resolves back to the original chord tone (second chord tone). Double neighbor tones appear to resemble two consecutive neighbor tones; an upper neighbor and a lower neighbor with the chord tone missing from the middle. The double neighbor tones function as a way to decorate, or embellish, a chord tone and are also used to provide rhythmic interest between common tones:



The first and the last chord tones of DNT should not be shorter than a quarter note. The double neighbor tones should not be longer than a quarter note and should not be longer than the first and the last chord tones of DNT.

DNT sound better if before the first chord tone there is no leap, especially if there is stepwise motion in the same direction as after the first chord tone. The same is especially true for the last chord tone in DNT.

DNT and their chord tone can sound simultaneously (resolution to octave). DNT cannot be followed by unison.

69. Cambiata

Cambiata is a melodic pattern of 4 consecutive notes (chord tone, non-chord tone, non-chord tone, chord tone) where a note is skipped from by an interval of a 3rd in one direction and this is followed by the stepwise motion in opposite direction:



The first and the last chord tones of cambiata should not be shorter than a quarter note. Non-chord tones should not be longer than a quarter note and should not be longer than the first and the last chord tones of cambiata.

70. Passing downbeat dissonance

Passing downbeat dissonance (PDD) is a passing tone on the first beat of any harmony. It is allowed in species 1, 3, 5. In species 2, 4 PDD is allowed in difficult cases:



PDD is allowed only in descending stepwise motion.

PDD cannot be longer than previous or next note. Also, PDD cannot be longer than half note.

Unlike a usual passing tone, PDD has to immediately resolve to a chord tone inside the same measure.

71. Combining multiple melodic patterns

Depending on harmony in measure, any melodic pattern (PDD, DNT, cambiata) may not be analysed as such. In the following examples melodic patterns may not be analysed as such (circled notes are non-harmonic) – DNT in the first example and cambiata in the second example:



Multiple melodic patterns can be combined in one measure. Some of patterns may not be analysed as such. In the following example (circled notes are non-harmonic) measure starts with PDD, then there is a cambiata pattern, which is not analysed as such, because notes around the leap are harmonic. Starting from third note in measure there is a DNT pattern:

