

BASIC MENSURAL NOTATION REFERENCE
BY TED DUMITRESCU (MAY 2004)

I. RHYTHM

NOTE SHAPES

| Name | <i>Maxima</i> | Long | Breve | Semibreve | Minim | Semiminim | Fusa | Semifusa |
|------|---------------|------|-------|-----------|-------|-----------|------|----------|
| Note | | | | | | | | |
| Rest | | | | | | | | |

LIGATURES

1. Basic ligatures with no stems

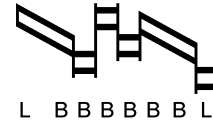
a. Two-note ligatures:

| | |
|---|--|
| <p><i>recta</i> descending</p> <p style="text-align: center;">Long Long</p> | <p><i>obliqua</i></p> <p style="text-align: center;">Long Breve</p> |
| <p><i>recta</i> ascending</p> <p style="text-align: center;">Breve Breve</p> | |

b. Ligatures of more than two notes:

- Beginning and ending notes follow the rules for two-note ligatures
- Every note in the middle is a Breve (B)

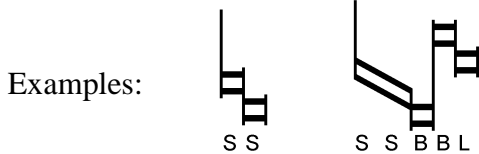
Example:



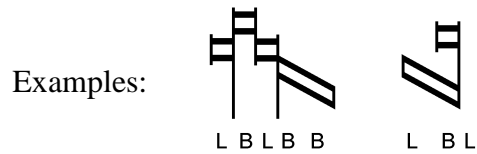
2. Stems and other effects

a. At the beginning of a ligature:

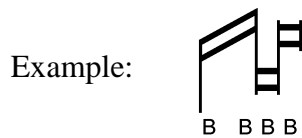
- An upward stem to the left always makes the first two notes Semibreves (S)



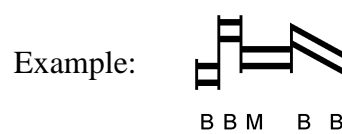
b. At the middle or end of a ligature, a stem is always downward, and turns the note to the left into a Long (L)



- A downward stem to the left makes the first note a Breve (B)



c. Any stretched notehead is a *Maxima* (M)



STANDARD MENSURATIONS AND PROPORTIONS

1. Mensuration

- \circ and \textcircled{C} are the signs of perfect and imperfect *tempus*: i.e., whether a Breve (♩) contains 3 or 2 Semibreves (♩) by default
- Presence or absence of a dot (\bullet) in the center of the *tempus* sign indicates major or minor **prolation**: i.e., whether a Semibreve (♩) contains 3 or 2 Minims (♩) by default

| | |
|--|---|
| \textcircled{C} (imperfect <i>tempus</i> , minor prolation): | $\text{♩} = \text{♩} \text{♩} = \text{♩} \text{♩} \text{♩} \text{♩}$ |
| \textcircled{C} (imperfect <i>tempus</i> , major prolation): | $\text{♩} = \text{♩} \text{♩} = \text{♩} \text{♩} \text{♩} \text{♩} \text{♩}$ |
| \circ (perfect <i>tempus</i> , minor prolation): | $\text{♩} = \text{♩} \text{♩} \text{♩} = \text{♩} \text{♩} \text{♩} \text{♩} \text{♩}$ |
| \circ (perfect <i>tempus</i> , major prolation): | $\text{♩} = \text{♩} \text{♩} \text{♩} = \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \text{♩}$ |

- **Major modus** refers to the number of Longs (♩) in a *Maxima* (♩) (perfect is 3, imperfect is 2)
- **Minor modus** refers to the number of Breves (♩) in a Long (♩) (perfect is 3, imperfect is 2)
- Modus is detected most easily by observing how many Long rests are in a *Maxima* rest, and how many Breve rests are in a Long rest:

| | | | |
|--|--|--|--|
| Imperfect major <i>modus</i> , Imperfect minor <i>modus</i> | Imperfect major <i>modus</i> , Perfect minor <i>modus</i> | Perfect major <i>modus</i> , Imperfect minor <i>modus</i> | Perfect major <i>modus</i> , Perfect minor <i>modus</i> |
| $\text{̄} \text{̄} \text{̄}$ | $\text{̄} \text{̄} \text{̄}$ | $\text{̄} \text{̄} \text{̄}$ | $\text{̄} \text{̄} \text{̄}$ |

2. Other signs and proportions

- *Modus cum tempore* signs use the circle to show **minor modus** and a numeral to show **tempus**:

| | |
|--|--|
| $\textcircled{2}$ = Imperfect minor <i>modus</i> , Imperfect <i>tempus</i> | $\textcircled{3}$ = Imperfect minor <i>modus</i> , Perfect <i>tempus</i> |
| $\textcircled{O2}$ = Perfect minor <i>modus</i> , Imperfect <i>tempus</i> | $\textcircled{O3}$ = Perfect minor <i>modus</i> , Perfect <i>tempus</i> |

- Under these mensurations, the tempo is quicker and the beat is on the Breve
- A numeral or pair of numerals changes the speed of a part proportionally; e.g., 3 2 changes the speed so that 3 notes are sung in the time of 2 (usually Semibreves or Minims)
- Shorthand proportion signs:

$$\textcircled{O} = 4:3 \qquad 3 = 3:2 \qquad 2 = 2:1$$

- When the sign \textcircled{C} or \textcircled{O} appears in one or more voices simultaneously with \textcircled{C} or \textcircled{O} in other voices, the music in \textcircled{C} or \textcircled{O} is twice as fast as the other voices (2:1 diminution)
- By the late 15th century \textcircled{C} or \textcircled{O} in all voices at once often indicates some type of speeding up

————— IMPERFECTION AND ALTERATION —————

1. Imperfection: Taking away 1/3 of the length of a ternary note

| | |
|--|---|
| <p style="text-align: center;">From the back (“<i>a parte post</i>”):</p> <p style="text-align: center;">○ □□◇□ = ○. ○ d ○. </p> <p style="text-align: center;">⊙ ◇↓◇□ = d d d. ○. </p> | <p style="text-align: center;">From the front (“<i>a parte ante</i>”):</p> <p style="text-align: center;">○ ◇□◇↓◇□ = d○ d d d ○. </p> <p style="text-align: center;">⊙ ↓↓↓◇□ = d d d d ○. </p> |
| <p style="text-align: center;">By smaller values:</p> <p style="text-align: center;">○ □↓↓□ = ○ d d ○. </p> <p style="text-align: center;">⊙ ↓↓↓↓↓□ = d d d d d ○. </p> | <p style="text-align: center;">From both sides:</p> <p style="text-align: center;">○ ↓□↓□□ = d d d ○. ○. </p> |
| <p style="text-align: center;">“Like before like” (“<i>similis ante similem</i>”) is never imperfected:</p> <p style="text-align: center;">⊙ ↓↓↓↓↓□ = d d. d d d d d. ○. </p> | <p style="text-align: center;">By “remote parts” (“<i>a partibus remotis</i>”):</p> <p style="text-align: center;">⊙ □↓◇◇□ = d. d d d. d. ○. </p> <p style="text-align: center;">⊙ ◇↓□↓□ = d d d. d d ○. </p> |
| <p style="text-align: center;">Never by a ternary group:</p> <p style="text-align: center;">○ □◇◇◇□ = ○. d d d ○. </p> <p style="text-align: center;">⊙ ◇↓↓↓◇◇□ = d. d d d d. d. ○. </p> | <p style="text-align: center;">Rests are never imperfected (but they can imperfect notes):</p> <p style="text-align: center;">○ □⊔□◇◇◇□ = □. □○ d d d ○. </p> |

2. Alteration: Doubling a note value to complete a ternary grouping

| | |
|--|--|
| <p style="text-align: center;">○ ◇◇□ = d○ ○. </p> <p style="text-align: center;">⊙ ↓↓◇□ = d d d. ○. </p> | <p style="text-align: center;">Between two perfect notes, always occurs:</p> <p style="text-align: center;">○ □◇◇□ = ○. d○ ○. </p> <p style="text-align: center;">⊙ ↓↓↓↓◇◇□ = d. d d d d. d. ○. </p> |
| <p style="text-align: center;">Always the last possible note:</p> <p style="text-align: center;">○ ◇◇◇◇◇□ = d d d d○ ○. </p> | <p style="text-align: center;">Rests are never altered:</p> <p style="text-align: center;">○ ⊔⊔□◇□ = □. □↓○ d ○. </p> |

————— DOTS —————

1. Dot of Addition (“*punctus augmentationis/additionis*”)

- Increases the length of a note by half (like the modern dot)
- Can only be applied to binary note values (e.g., a Semibreve under ○)

$$\circ \diamond \diamond \cdot \diamond \square = \text{♩} \text{♩} \cdot \text{♩} \mid \circ \cdot \parallel$$

2. Dots of Division/Perfection/Alteration/etc.

- Act as measure dividers for ternary values (e.g., a Semibreve under ⊙)
- In order to separate ternary groups, can force imperfection and alteration or prevent them

$$\circ \square \diamond \cdot \diamond \square = \circ \text{♩} \mid \text{♩} \circ \parallel \qquad \circ \diamond \diamond \cdot \diamond \diamond \diamond \square = \text{♩} \text{♩} \text{♩} \mid \text{♩} \cdot \text{♩} \mid \circ \cdot \parallel$$

- The rare *punctus reductionis* or *syncopationis* (dot of syncopation) can appear in the middle of a ternary group; by preventing alteration or imperfection it causes syncopation

$$\circ \diamond \cdot \diamond \diamond \diamond \cdot \diamond \square = \text{♩} \text{♩} \text{♩} \text{♩} \text{♩} \mid \circ \cdot \parallel$$

————— COLORATION —————

1. Imperfection coloration

- At ternary mensural levels, colored notes are always imperfect and cannot be doubled through alteration
- Colored notes are often found in groups adding up to pairs of ternary measures
- Dots in coloration groups are dots of addition (affecting the imperfect, unaltered values)

$$\circ \square \blacksquare \blacksquare \blacksquare \square = \circ \cdot \mid \circ \text{♩} \downarrow \text{♩} \circ \mid \circ \cdot \parallel \qquad \circ \diamond \blacksquare \cdot \diamond \cdot \diamond \square = \text{♩} \circ \downarrow \text{♩} \text{♩} \cdot \text{♩} \mid \circ \cdot \parallel$$

- Such groups fall at measure beginnings, causing alteration if necessary

$$\circ \diamond \diamond \blacksquare \square = \text{♩} \circ \mid \circ \cdot \downarrow \text{♩} \circ \mid \circ \cdot \parallel$$

2. Proportional coloration

- For binary note values, coloration takes away 1/3 of the value (creating modern triplets)
- The rules for imperfection coloration still apply (all notes imperfect, no alteration)

$$\circ \diamond \diamond \diamond \diamond \square = \text{♩} \text{♩} \mid \overset{3}{\text{♩} \text{♩} \text{♩}} \mid \circ \parallel \qquad \circ \diamond \downarrow \downarrow \downarrow \downarrow \diamond \square = \text{♩} \text{♩} \text{♩} \mid \overset{3}{\text{♩} \text{♩} \text{♩}} \mid \circ \parallel$$

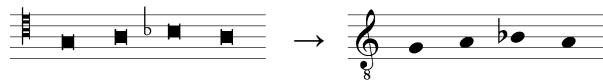
- Some special cases (later 15th and 16th centuries):

$$\circ / \circ \diamond \downarrow = \diamond \cdot \downarrow \qquad \circ \blacksquare \diamond = \diamond \cdot \downarrow \qquad \circ \blacksquare \downarrow \downarrow = \diamond \cdot \downarrow \downarrow$$

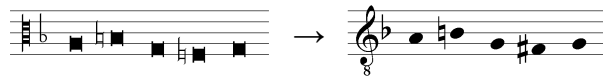
II. PITCH

| Gamut | Hexachords | Note names | Principal clefs |
|-------|------------|------------|-----------------|
| ee | | la | |
| dd | | la sol | |
| cc | | sol fa | |
| bb/♭♯ | | fa mi | |
| aa | | la mi re | |
| g | | sol re ut | ♩ |
| f | | fa ut | |
| e | | la mi | |
| d | la sol re | ut | |
| c | sol fa ut | | ♩ |
| b/♭♯ | fa mi | | |
| a | la mi re | | |
| G | sol re ut | | |
| F | fa ut | | ♩ |
| E | la mi | | ♩ |
| D | sol re | | ♩ |
| C | fa ut | | |
| ♯ | mi | | |
| A | re | | |
| Γ | ut | | Γ |

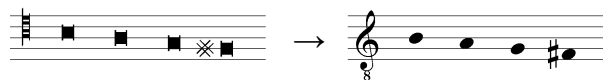
- In any hexachord, the step *mi – fa* is a semitone; every other step is a whole tone
- The sign ♭ (“round b”) marks a note as *fa*, which means it is only a semitone above the step below it; usually this means the marked note must be flattened by a semitone



- The sign ♯ (“square b”) marks a note as *mi*, which means it is a semitone below the step above it; this usually causes the marked note to be sharpened by a semitone, cancelling the effect of ♭ if necessary








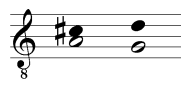


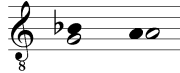


- The sign * (“dyesis”) simply causes a note to be sharpened by a semitone, without necessarily changing the hexachord syllable; it is often used loosely, however, with the same meaning as ♯



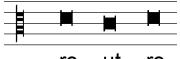
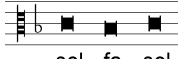
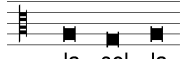





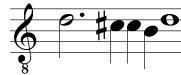

DIRECTED PROGRESSIONS

- In counterpoint, when an imperfect consonance (3rd, 6th) moves to a perfect consonance (unison, 5th, octave), the imperfect consonance should be performed as major or minor in order to approach the perfect consonance with the smallest movement (e.g., a 6th expanding to an octave should be major, a 3rd contracting to a unison should be minor)
- Sharps and flats can be performed to ensure this type of “closest approach”

| | | | | |
|---|---|---|--|---|
| 6 - 8 | 3 - 1 | 3 - 5 | 6 - 8 | 3 - 5 |
|  |  |  |  |  |
| ↓ | ↓ | ↓ | ↓ | ↓ |
|  |  |  |  |  |
| OR | | | | |
|  | | | | |

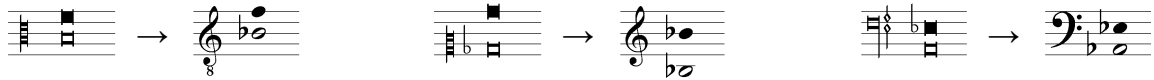
MELODIC LEADING TONES

- The “returning note” melodic phrases *re ut re*, *sol fa sol*, and *la sol la* should be performed with a sharp leading tone (raising the lower neighbor note by a semitone)
- Such melodic phrases often appear in ornamented forms, which require the same sharpening

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| re ut re | sol fa sol | la sol la | | |
| ↓ | ↓ | ↓ | ↓ | ↓ |
|  |  |  |  |  |

————— PERFECT INTERVALS IN COUNTERPOINT —————

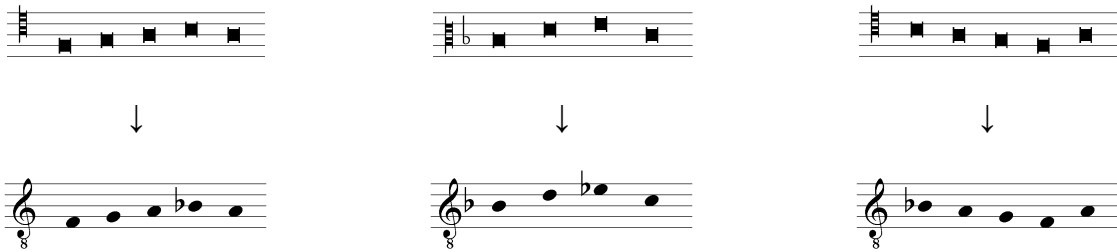
- In counterpoint, “false consonances” (augmented and diminished perfect consonances) between two voices are to be avoided: augmented and diminished 5ths, octaves, unisons
- If the default reading produces a false consonance, one voice should lower its pitch by a semitone and call that note *fa*, which will produce a perfect consonance



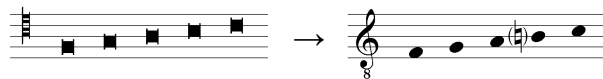
————— PERFECT MELODIC INTERVALS —————

1. Melodic phrases

- If a melodic phrase outlines a tritone (an augmented 4th, e.g., F *fa* - \flat *mi*), the higher note should be lowered by a semitone and called *fa*, to make a perfect 4th



- If the phrase continues by step in the same direction to complete a melodic 5th, no flattening is necessary



2. Leaps

- Leaps of a 4th, 5th, and octave should be rendered as perfect intervals, using flattening (with the syllable *fa*) if necessary

