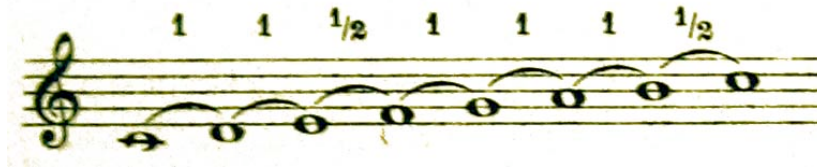


Scales and Keys

The Major Scale¹ (The C Scale)

The most universally known melody—one might even call it the *ideal melody*—is the major “scale.” It is composed of a succession of seven notes, or five steps and two half steps in the order: two steps, half step, three steps, half step.



The first scale degree (first note of the scale) is designated by the symbol $\hat{1}$ and is known as the *tonic*.*

The 2nd note ($\hat{2}$) is called the super-tonic.

“ 3rd “ ($\hat{3}$) “ “ “ “ mediant.

“ 4th “ ($\hat{4}$) “ “ “ “ sub-dominant.

“ 5th “ ($\hat{5}$) “ “ “ “ dominant.

“ 6th “ ($\hat{6}$) “ “ “ “ sub-mediant.

“ 7th “ ($\hat{7}$) “ “ “ “ leading-tone.

There are two types of scales, which are called the major scale and the minor scale. We will start with the study of the major scale. [p.13]

¹ The minor scale will not be studied until much later.

After having studied the major scales, beginning always on C (# b) -- which is to say by giving to C (# b) alternatively the meaning of scale degrees $\hat{1}$, $\hat{2}$, $\hat{3}$, $\hat{4}$, $\hat{5}$, $\hat{6}$ or $\hat{7}$ -- the *ear* is already prepared to feel $\hat{6}$ as tonic. We will review all the exercises from the chapters on major scales, always starting from C (# b), replacing the major dichord of $\hat{4}$ - $\hat{5}$ from the major scale with the *augmented dichord* of $\flat\hat{6}$ - $\natural\hat{7}$ from the harmonic minor scale.

We will act similarly for the exercises from the chapters on trichords, tetrachords, pentachords, hexachords and heptachords.

To the chapter on tetrachords we add the *diminished tetrachord*: leading tone – mediant.

To the chapter on pentachords we add the *augmented pentachord*: mediant – leading tone.

To the chapter on heptachords we add the *diminished heptachord*: leading tone – submediant.

* Dalcroze uses roman numerals to represent scale degrees (e.g. “I” for $\hat{1}$). I have replaced these with the modern carrot symbol notation throughout, so as to not raise confusion with the use of roman numerals to represent harmonies within a key. *trans*

The two half steps in a major scale are placed thus: the first between $\hat{3}$ and $\hat{4}$; and the second between $\hat{7}$ and $\hat{8}$ ($\hat{1}$).

In all scales, scale degree $\hat{7}$ has a tendency to be followed by $\hat{1}$. When it obeys this law of attraction, we say that it *resolves*. A note which calls for a resolution is known as a *tendency tone*^{*}, and the note which responds to this call is the *resolution tone*.



Scale degree $\hat{3}$ has a tendency to resolve to $\hat{4}$ when ascending and $\hat{4}$ has a tendency to resolve to $\hat{3}$ when descending. Scale degree $\hat{7}$, though, has a much stronger pull than either $\hat{3}$ or $\hat{4}$.






Any note that does not call for a resolution is known as a *stable* note. The stable notes of the major scale ascending are $\hat{1}$ $\hat{2}$ $\hat{4}$ $\hat{5}$ and $\hat{6}$. Those of the descending scale are $\hat{7}$, $\hat{6}$, $\hat{5}$, $\hat{3}$, $\hat{2}$, and $\hat{1}$.

We have used the C Major Scale as a model for the major scale. It is called the C scale because C is the tonic.

If we take as tonic a note other than C, the scale will take the name of that note. If the tonic of the scale is D, the scale will be called the D scale; if it is E, the scale will be called the E scale, etc... But starting a scale on one note or another does not suffice to give that scale the character of the major scale. You must also have the correct progression of whole and half steps in the established order: two steps, one half step, three steps, one half step. To obtain this *ideal* melody, you must therefore always arrange the seven notes that form that melody in the ideal succession of steps and half steps, no matter what note is tonic.

This arrangement will be possible with the help of two special signs, the sharp (#) and flat (b) which, when placed in front of a note, modify the pitch. The # raises the pitch one half step; the b lowers it a half step.

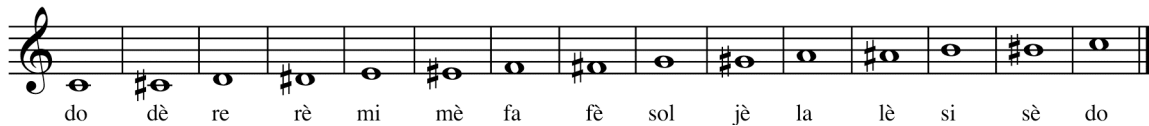
^{*} Dalcroze uses the rather poetic term “*note appellative*,” or “*calling note*.” I’ve opted for the more common term “*tendency tone*.” *trans.*

For example, the note  preceded by a #,  sounds one half step higher, and the same note preceded by a ♭ sounds a half step lower: 
 [p.14]

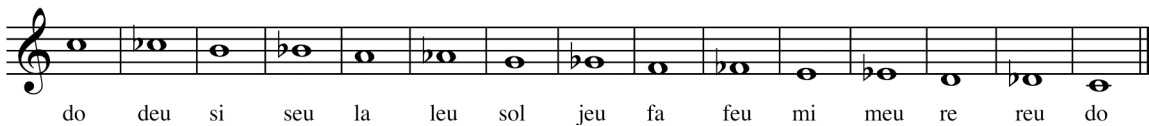
This is to say that there are *three types* of C (F, G, E, etc...): C “natural,” C# and C♭. In one scale, there are never two types of C (F, E, D, etc...). One type excludes all the others.

To avoid having to repeat the words *sharp* or *flat* after each note when reading melodies in flat or sharp keys:

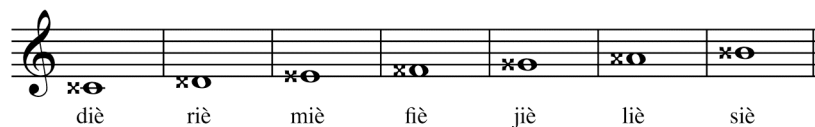
1. Students will substitute the vowel “è” (pronounced “eh”) to sharped notes. G# (Sol #) will be sung *jè*:



2. Students will substitute the vowel “eu” (pronounced as in “put”) to flatted notes. G♭ (Sol ♭) will be sung *jeu*:



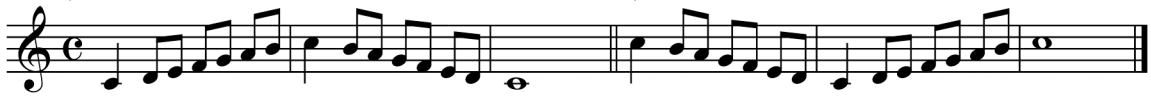

3. A note with a double sharp will be sung with the vowel “iè,” pronounced “ee-eh.”





4. A note with a double flat will have the vowel “ieu,” pronounced “ee-uh.”



Exercises for the scale of C
 with application of the first rule of nuance
 (see *First Rule of Nuance*, p. [__])

1. a)  b) 

2. a)  b) 

[p.15]

3. In triplets

a)  b) 

4. In sixteenth notes

a)  b) 

5. In sextuplets

a)  b) 

6. In nonuplets

a)  
b)  

Rhythmic Formulas for the Study of Scales

Once a student knows certain scales well, it will be good for him to sing these with different rhythms. It will suffice to indicate the general rhythm and the student will continue it, climbing from C4 to D5 (or E5) and descending from D5 (or E5) to C4 or B4, until the tonic is reached on the strong beat of the rhythmic formula. [p.16]

For example, if the teacher indicates the following rhythm:



The student will sing the given scale (such as A \flat) in the following manner:



Examples of Rhythmic Formulas:

à 4/4

1. 2. 3. 4. 5.
6. 7. 8. 9.
10. 11. 12. 13.
14. 15. 16. 17. 18.
19. 20. 21. 22.
23. 24. 25. 26.
27. 28. 29. 30.
31. 32. 33.

[p.17]

34. 35. 36.

37. 38.

39. 40. etc.

1. 2. 3. 4.

$\text{a } 3/4$

5. 6. 7.

8. 9. 10.

11. 12. 13.

14. 15. 16. 17.

18. 19. 20.

21. 22. 23.

24. 25. 26.

27. 28. 29.

30. 31. 32.

This image shows a page of handwritten musical notation, page 18, containing 30 numbered measures. The notation is written in treble clef with a key signature of one sharp (F#). The measures are organized into two systems of ten measures each. The first system (measures 1-10) features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. The second system (measures 11-20) continues with similar rhythmic complexity, including some sixteenth-note runs. The third system (measures 21-30) is characterized by more frequent sixteenth-note patterns, creating a busier texture. The handwriting is clear and consistent throughout the page.

[p.19]

Musical score for piano, page 19, featuring 30 numbered measures of music in treble clef. The score is divided into two sections: measures 8-30 and measures 1-6. The first section (measures 8-30) is in a common time signature (C) and consists of ten lines of music. The second section (measures 1-6) is in 9/8 time and consists of two lines of music. The notation includes various rhythmic values such as eighth, sixteenth, and thirty-second notes, as well as rests and slurs. The piece concludes with a double bar line at the end of measure 30.

Musical score for page 20, measures 7-34. The score is written on ten staves of music, each containing three measures. The measures are numbered 7 through 34. The notation includes various rhythmic values, including eighth and sixteenth notes, and rests. The music is written in a single melodic line on a treble clef staff.

7. 8. 9.

10. 11. 12.

13. 14. 15.

16. 17. 18.

19. 20.

21. 22. 23.

24. 25.

26. 27.

28. 29. 30.

31. 32.

33. 34.

Musical score for page 21, measures 35-60. The score is written on a single staff in treble clef. The measures are numbered 35 through 60. The notation includes various rhythmic patterns, including eighth and sixteenth notes, and rests. Measures 35-37 show a sequence of eighth notes. Measures 38-41 show a sequence of sixteenth notes. Measures 42-44 show a sequence of eighth notes with slurs. Measures 45-48 show a sequence of eighth notes with slurs. Measures 49-51 show a sequence of eighth notes with slurs. Measures 52-54 show a sequence of sixteenth notes with slurs. Measures 55-56 show a sequence of eighth notes with slurs. Measures 57-58 show a sequence of eighth notes with slurs. Measures 59-60 show a sequence of eighth notes with slurs.