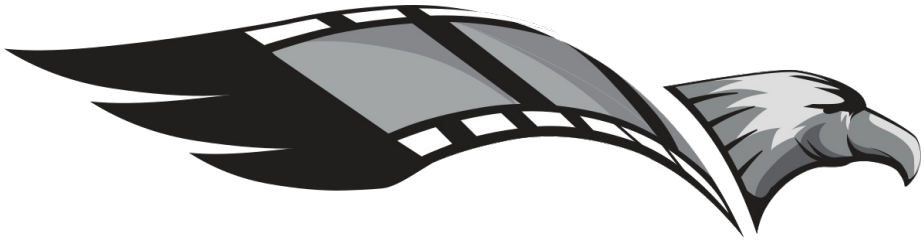


THOMAS CHASE JONES & FRANK HERRLINGER

Basic Course

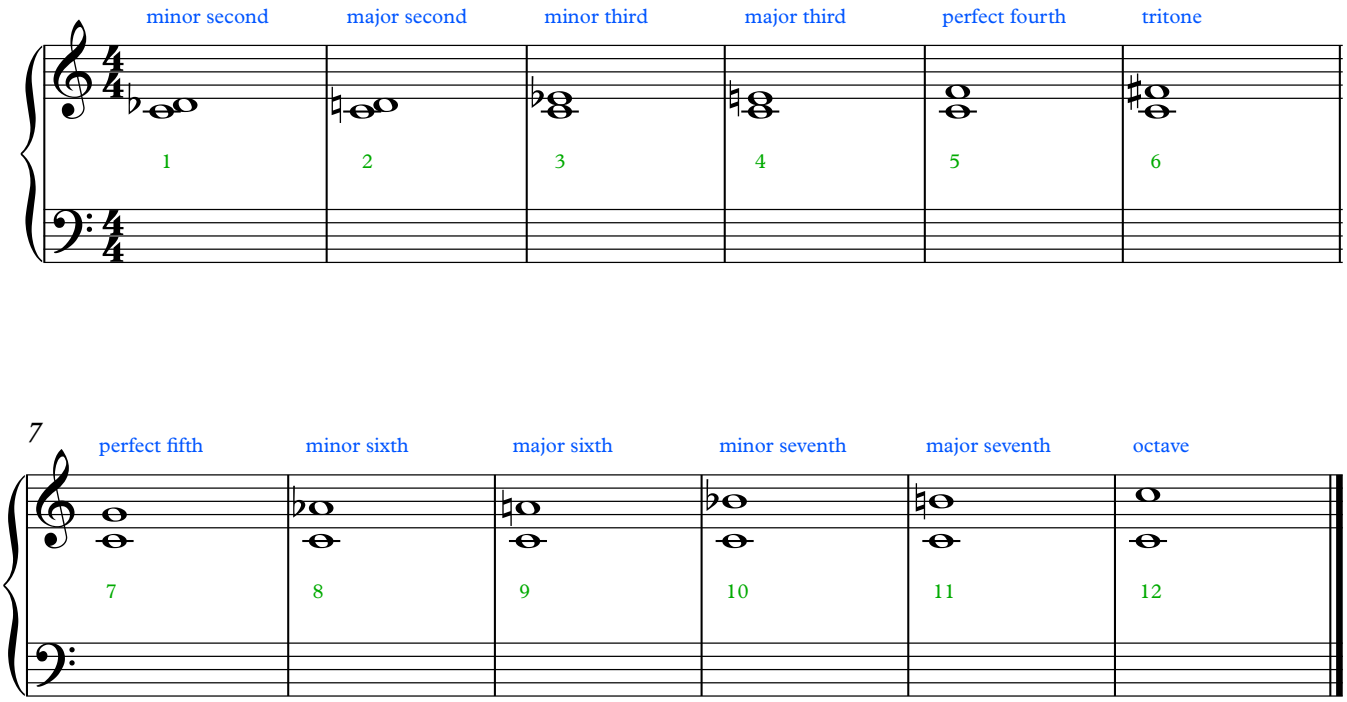
Intervals

Intervals

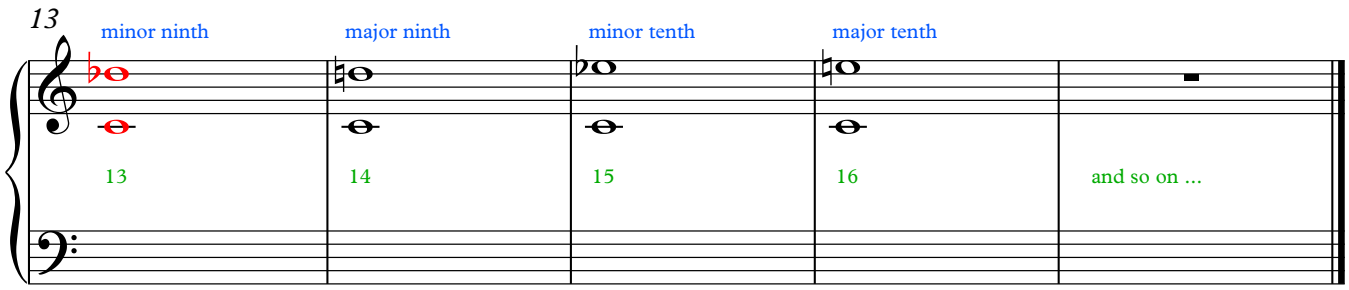
(vertically)

In Music Interval Theory, we count the distance in chromatic steps between two notes to determine the interval. For reference, we've included the Diatonic names above all intervals in blue. The green numbers show the distance in semi-tones between the notes.

Ex. 1a: Intervals inside the octave



Ex. 1b: Intervals outside the octave

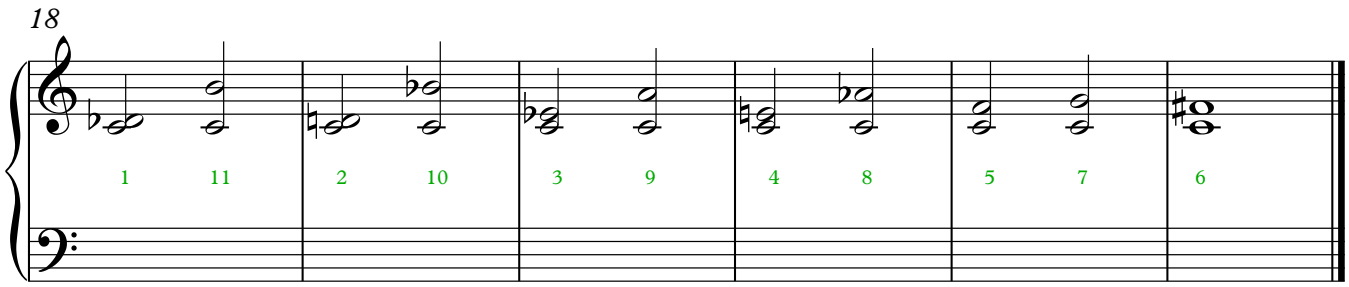


Please note that a 13-interval is special. This interval does not appear in the Overtone Series which is a natural physical phenomenon (Please refer to our ebook "The Overtone Series" for more information about that).

Let's have a closer look at the intervals inside the octave. Every interval has its own complementary partner (called complementary interval in the Diatonic System). Usually, you take the lower note and put it an octave up or you take the upper note and put it an octave down. That is how you get to related intervals in general!

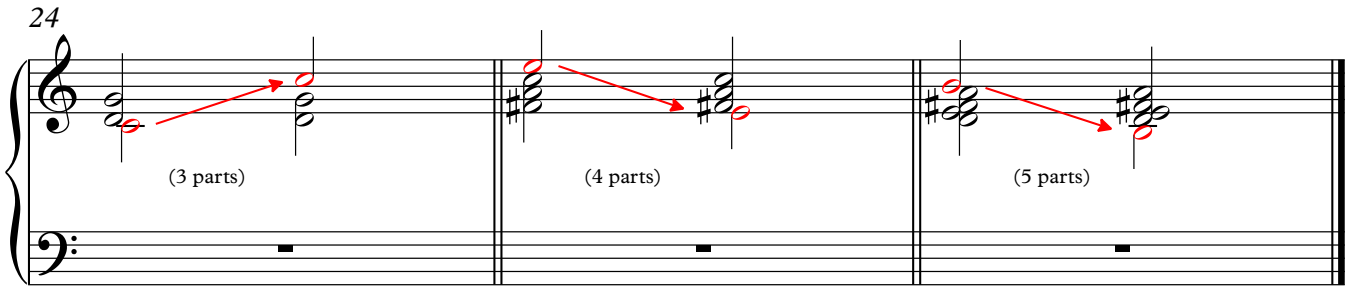
In addition to that general guideline, the related intervals when using 2 parts always add up to 12!

Ex. 1c: Relation via Position Change (PC)



This concept of using intervals that add up to 12 is part of what we call "Position Change" (PC). However, this concept of PC is not limited to 'complementary intervals' as it can also be applied to vertical structures that consist of more than 2 parts like 3p, 4p, or even 5p. In a more general sense, it means: "What is on top?" ...

Ex. 1d: Demonstration of PC with more than 2 parts

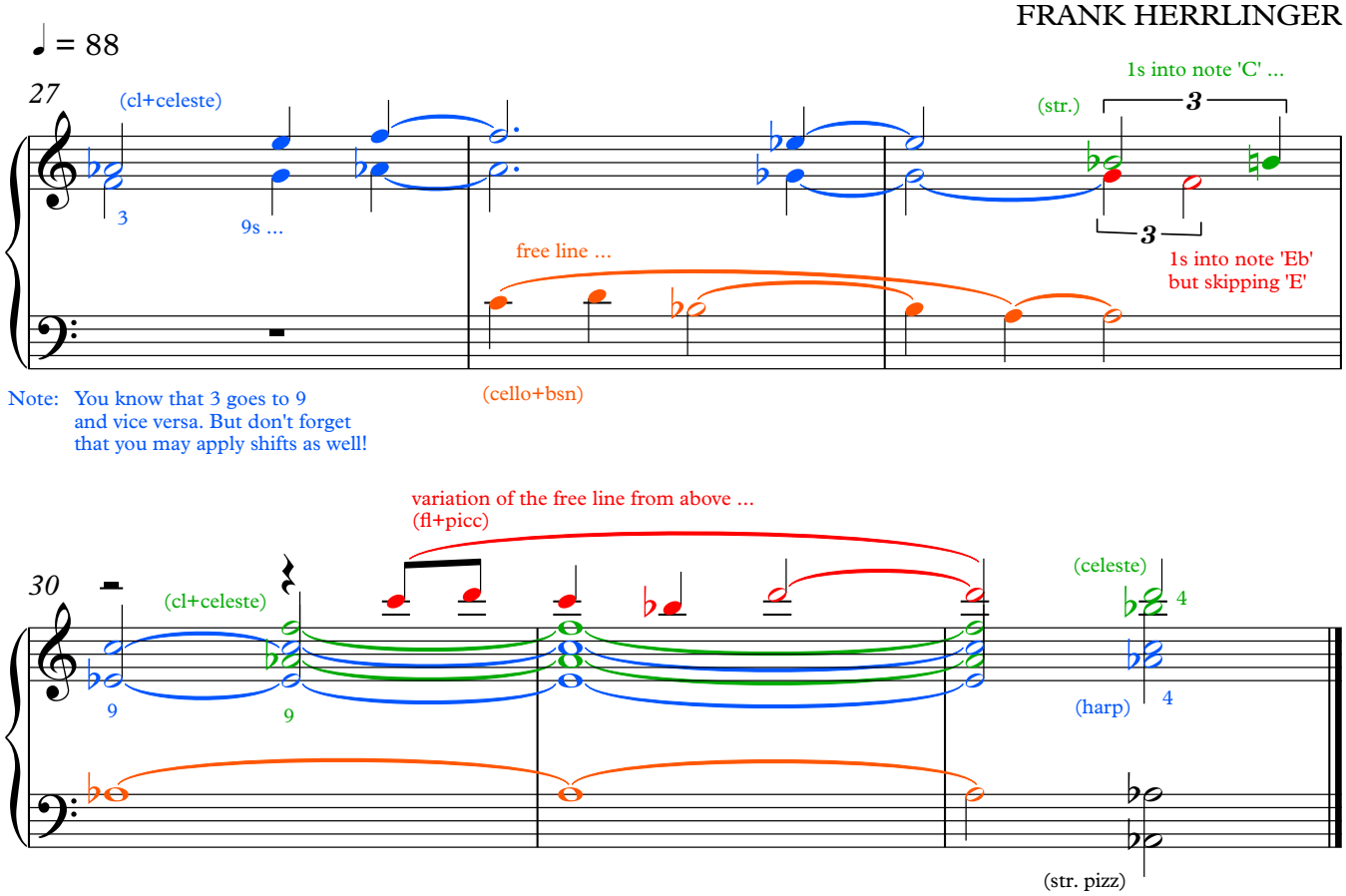


The concept of PC is quite simple but you might wonder why it is important and why you should be able to apply it to your writing. Because ... **it gives you control**!

Below you see examples in which PC comes in very handy to keep up movement, but also clarity and transparency. Remember that PC can also be used in conjunction with shifts. This is a very powerful way to break out of a key or tonal center!

"Off to Slumberland"
(Developed Sketch)

FRANK HERRLINGER

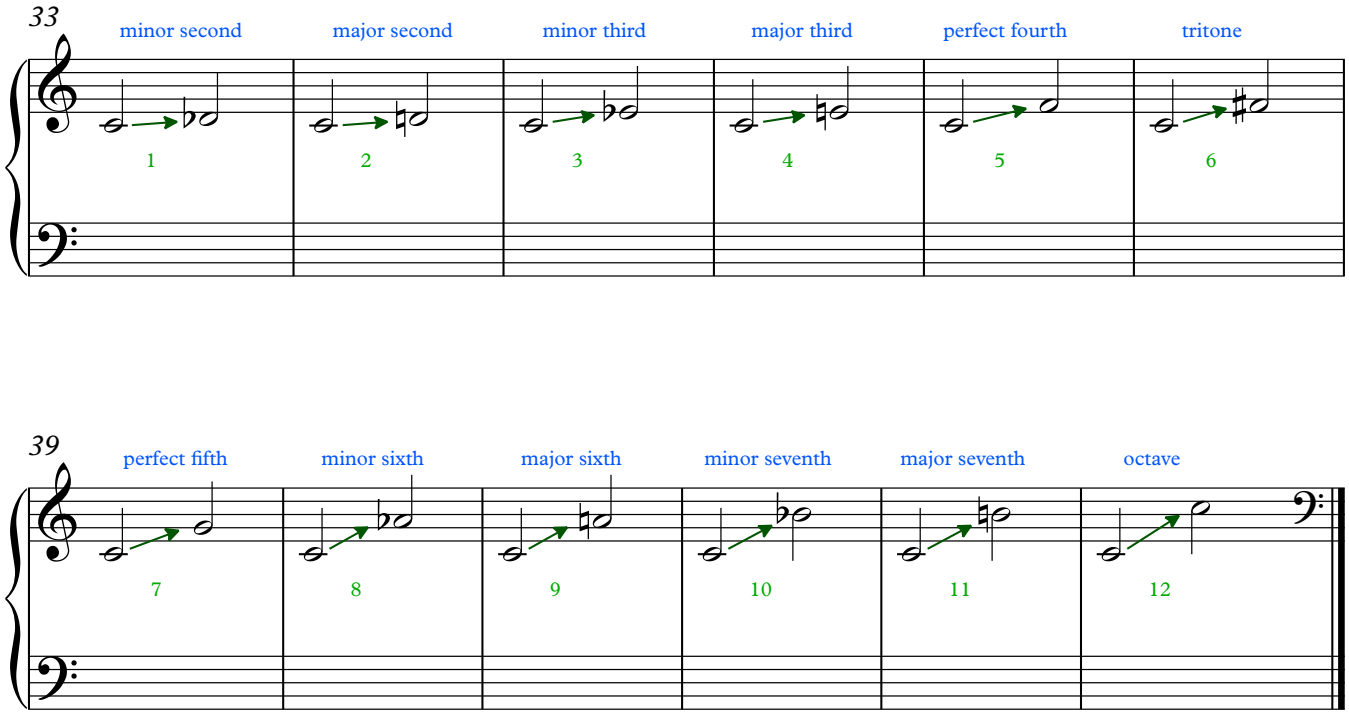


This is how a 'developed sketch' might appear. After we've gathered some basic ideas, we can organize those ideas and write down notes for orchestration.

Intervals
(horizontally)

In Music Interval Theory, we count the distance in chromatic steps between two notes to determine the interval. For reference, we've included the Diatonic names above all intervals in blue. The green numbers show the distance in semi-tones between the notes.

Ex. 2: Intervals inside the octave played horizontally



When intervals are used horizontally they become part of a line or a melody. Theoretically, all intervals could be used melodically but you'll see that intervals higher than one octave are not really practical in a line.

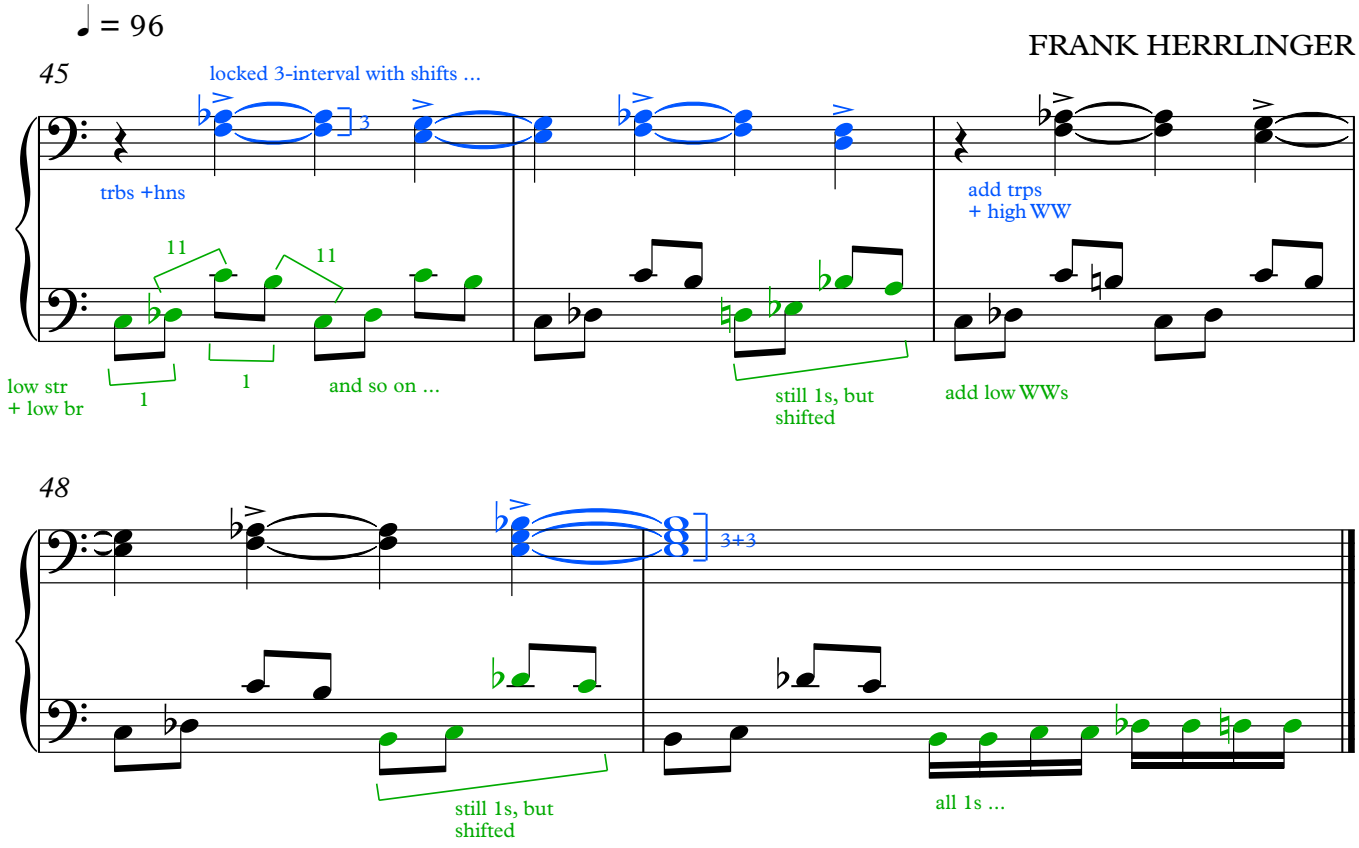
As a general rule: Strong melodies can be reproduced with our human voice (singing, humming, whistling, etc.) and it is very difficult to intonate intervals higher than one octave. This excludes arpeggios on open-harmony chord structures which are not considered strong lines.

Have a look at some of your favorite scores and probably you won't find many intervals in lines (if at all) which are greater than 12. Simply because it doesn't sound good!

See the demonstration below. Although it might evoke the idea that it was written in a key, it is based completely on intervals only. One of the big advantages of small intervals (like 1 or 2) is that their complementary partner gets pretty wide (like 11 or 10). We can use this space in between two notes to fill in other parts! This preserves transparency and clarity!

The upper line uses a locked interval (3) with shifts only and moves in between the other part shown in green. The green part has been written first and it is based completely on PC using the interval 1 (and 11), together with some shifts in order to add some interest to the ostinato.

"Don't Let Them Pass"
(Developed Sketch)



Hopefully, this gives you an idea about powerful PCs in combination with intervals.