

## CHAPTER SIX

### WRITING A CANON

A CANON is a piece written in strict imitation all the way through, meaning that one part begins (upper or lower part), while the other part rests. The second part comes in and plays the same music as the first part, either at the octave or at some other interval of transposition. The first part is called the Leader; the second part is called the Follower. The Follower continues to play the same notes as the Leader. When the approach to the final cadence takes place, the strict imitation is broken, and free counterpoint is used to make a convincing close.

There is a specific method for composing canons which is quite simple. First, determine how long you wish the Leader to be. Leaders may be anywhere from very short to very long. The average length of a Leader is one measure of music. As soon as the length of the Leader has been decided upon, write it and STOP. Immediately copy the Leader's notes thus far into the Follower. We should begin with a canon at the octave, so copy the Follower one (or two) octaves away from the Leader. When you have done this, write a good counterpoint to the Follower in the Leader (one measure only, of course). STOP and copy this music into the Follower's part. Continue this "leap frog" process during the whole course of the canon until you approach the final cadence. Break the strict imitation and write a good cadence in free counterpoint in both parts.

Now look at the examples that follow. Each step of the process of writing a canon at the octave is carried out for your enlightenment. In this demonstration, the Leader is one measure long (the most usual length). The most difficult aspect of writing a canon at the octave is to achieve a variety of melodic and harmonic shapes. Try to avoid the tendency to repeat previous patterns. Try also (and this is quite challenging) to bring in some altered chords such as secondary dominants, secondary leading tone chords, etc. Nor is there anything to prohibit you from setting up a modulation to a closely related key using the appropriate accidentals. [Any accidentals in the Leader should also be placed in the Follower, which will prolong your stay in whatever closely related key you move to.] Once you have familiarized yourself with the processes of composing a canon at the octave, the next step is to write a canon at the interval of a fifth above (or perhaps a fourth below) the first note of the Leader. This may be a compound fifth or compound fourth. What is important here is that the two parts don't cross over one

another, so choose whatever interval will keep the two parts sufficiently far enough apart from one another that they don't cross. If you write a canon for two voices that are in the same range, crossing of parts is quite permissible, but we are not now concerned with this variant.

Canons at the fifth (or any interval other than the octave or unison) offer greater opportunities for harmonic variety and are therefore frequently easier for the student to manage. But here now is the step-by-step canon at the octave. This is followed immediately by a demonstration of a canon at the fifth above.

1 Write a Leader and stop

2 Copy Leader into Follower and stop

2 Write a cpt to Follower and stop

Key of C

3 Copy Leader into Follower and stop

3 Write a cpt to Follower and stop

Carry on this method consistently until you approach the end of your canon, which continues below →

4 5

6 7 8

Free counterpoint

1

2

Follower starts  
P5 above

Leader

Copy Leader into Follower and stop

Key of F

Write Leader and stop

Detailed description: This block shows the first two measures of a musical exercise in 4/4 time, key of F major. Measure 1 is a whole rest in the treble clef and a quarter-note G4 in the bass clef. Measure 2 contains a quarter-note G4 in the treble and a quarter-note G4 in the bass. A diagonal line connects the G4 in measure 1 to the G4 in measure 2. Labels include '1' and '2' above the staves, 'Follower starts P5 above' and 'Leader' with arrows pointing to the notes, 'Copy Leader into Follower and stop' above measure 2, and 'Key of F' and 'Write Leader and stop' in a box below.

2

Write a cptpt to the Follower and stop

Detailed description: This block shows measures 1 and 2 of exercise 2. Measure 1 has a quarter-note G4 in the treble and a quarter-note G4 in the bass. Measure 2 has a quarter-note G4 in the treble and a quarter-note G4 in the bass. A diagonal line connects the G4 in measure 1 to the G4 in measure 2. The label '2' is above the first staff, and 'Write a cptpt to the Follower and stop' is below the first staff.

3

Copy the Leader a 5th up

Then add a cptpt to the above Follower and stop. Continue the process →

Detailed description: This block shows measures 1 and 2 of exercise 3. Measure 1 has a quarter-note G4 in the treble and a quarter-note G4 in the bass. Measure 2 has a quarter-note D5 in the treble and a quarter-note G4 in the bass. A diagonal line connects the G4 in measure 1 to the D5 in measure 2. The label '3' is above the first staff, 'Copy the Leader a 5th up' is above the second staff, and 'Then add a cptpt to the above Follower and stop. Continue the process →' is below the second staff.

4

5

Detailed description: This block shows measures 1 and 2 of exercise 4. Measure 1 has a quarter-note G4 in the treble and a quarter-note G4 in the bass. Measure 2 has a quarter-note G4 in the treble and a quarter-note G4 in the bass. A diagonal line connects the G4 in measure 1 to the G4 in measure 2. The label '4' is above the first staff and '5' is above the second staff.

6

7

8

Free counterpoint

Detailed description: This block shows measures 1, 2, and 3 of exercise 6. Measure 1 has a quarter-note G4 in the treble and a quarter-note G4 in the bass. Measure 2 has a quarter-note G4 in the treble and a quarter-note G4 in the bass. Measure 3 has a quarter-note G4 in the treble and a quarter-note G4 in the bass. A diagonal line connects the G4 in measure 1 to the G4 in measure 2. The label '6' is above the first staff, '7' is above the second staff, and '8' is above the third staff. The label 'Free counterpoint' is below the second staff.

OTHER KINDS OF CANONS. The kinds of canons discussed until now are probably the most frequently found. Canons in similar motion may be made at any diatonic interval above or below the first note of the Leader. In Bach's towering masterpiece for keyboard, the *Goldberg Variations*, every third variation is a canon, proceeding firstly with a canon at the unison and moving up by step with each successive canon: canon at the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, etc., until the final canon is a canon at the 9<sup>th</sup>.

Canons in CONTRARY MOTION are among the other options available in canon construction. They may be found at any interval between the first note of the Leader and the first note of the Follower. The Follower imitates the Leader interval for interval (GENERAL interval, not necessarily specific), but always moving in the OPPOSITE direction from the Leader. In such canons, harmonic variety is easily obtainable, including altered chords.

A canon in AUGMENTATION involves the Follower in LONGER note values than the Leader, almost always TWICE the value. The Follower moves progressively ahead of the Leader, until eventually, if it is a long canon, one has difficulty perceiving that there is any imitation going on at all! In terms of process, nothing new needs to be said; use the same technique as described earlier.

A canon in DIMINUTION does just the opposite of a canon in augmentation. The Follower is written in SHORTER note values than the Leader. As such, the Follower eventually catches up with the Leader. In order to delay the catching-up process, the leader should be quite long, so that several measures may elapse before the catch-up point is reached. Normally, composers break the canon and bring the piece to a close before the Follower has the chance to reach (or even overtake) the Leader.

Combinations of all of the above-mentioned canons are also possible: canons in contrary motion and augmentation or diminution, for instance. Other types of canon are the SPIRAL canon and the CRAB canon. A SPIRAL canon is a continuous canon which returns to the opening material but at a key that is one step higher than the original key. Transpositions continue until the original key is reached. These are extremely rare and no more than a composer's technical exercise, usually. CRAB canons seem quite complicated, but their construction is relatively simple. What happens is that what appears as a passage in two-part counterpoint is actually one line of music heard against its own retrograde (itself played backwards). The technique is to

write a passage in two-part counterpoint up to a chosen halfway point. Beyond that halfway point the parts exchange places and play themselves backwards. The difficulty in writing this type of canon is to manage the effectiveness of the retrograde portion of the work so that the harmony and melody still seem to make musical logic. Fairly simple harmony, such as I-V-I-V-I-V-I, for example, will sound well in either direction.

Here follow examples of the canons discussed above (with the exception of a Spiral canon).

CANON AT THE 5TH BELOW IN CONTRARY MOTION

Interval of a 5th

Key of G

Free counterpoint

CANON AT THE OCTAVE IN AUGMENTATION

Key of dm

Free counterpoint

Detailed description: This musical score is for a canon at the octave in augmentation. It consists of two systems of music, each with a treble and bass staff. The first system contains measures 1 through 4. Measure 1 is the leader, and measures 2-4 are the follower, which is an octave higher and in augmentation. A box labeled 'Key of dm' is located below the first system. The second system contains measures 5 through 9. Measure 5 is the leader, and measures 6-9 are the follower. A bracket labeled 'Free counterpoint' spans measures 7 and 8.

CANON AT THE OCTAVE IN DIMINUTION

Break canon before catch-up point

Free counterpoint

Follower moves twice as fast as Leader

Detailed description: This musical score is for a canon at the octave in diminution. It consists of two systems of music, each with a treble and bass staff. The first system contains measures 1 through 4. Measure 1 is the leader, and measures 2-4 are the follower, which is an octave higher and in diminution. A text box labeled 'Follower moves twice as fast as Leader' is located to the right of the first system. The second system contains measures 5 through 9. Measure 5 is the leader, and measures 6-9 are the follower. A bracket labeled 'Free counterpoint' spans measures 7 and 8. A text box labeled 'Break canon before catch-up point' is located above the second system.

CRAB CANON

Musical notation for measures 1, 2, and 3 of the Crab Canon. The score is in G major (one sharp) and 4/4 time. Measure 1 shows the first half of the canon. Measure 2 shows the second half. Measure 3 shows the first half of the canon again, indicating the start of the crab canon.

Key of G

Musical notation for measures 4, 5, and 6 of the Crab Canon. Measure 4 is the first half of the canon. Measure 5 is the second half. Measure 6 is the first half of the canon. Annotations include: 'Halfway point' with a vertical dashed line between measures 4 and 5; 'Parts exchange here' with an upward arrow at the halfway point; and 'The continuation is the first half played backwards' with a horizontal arrow pointing right from the halfway point.

Musical notation for measures 7 and 8 of the Crab Canon. Measure 7 is the first half of the canon. Measure 8 is the second half of the canon, which is the first half of the canon played backwards.