

## Tonal answer

Malcolm Sailor

In **tonal answer**, we alter the answer in order to emphasize the alternation of the all-important scale degrees  $\hat{1}$  and  $\hat{5}$ .

When tonal answer alters the initial note or notes of the answer, it can also make it possible to easily elide the subject and answer together. Composers do not always take advantage of this fact. But it makes writing fugues and other imitative pieces quite a bit easier, and so in this course, we will focus on this technique, which we will call **eliding tonal answer**.

## Tonal answer

The gist of tonal answer is **the exchange of scale degrees  $\hat{1}$  with  $\hat{5}$  and vice versa**.

For example, in the following Fugue, the opening descending leap  $\hat{1}-\hat{5}$ , a descending fourth, is answered  $\hat{5}-\hat{1}$ , a descending fifth.

The image shows a musical score for a fugue in B-flat minor. The top staff is labeled 'Subject' and the bottom staff is labeled 'Answer'. The Subject begins with a descending fourth leap from G4 to D4. The Answer begins with a descending fifth leap from D4 to G3. The key signature has three flats (B-flat, E-flat, A-flat) and the time signature is common time (C).

**Figure 1:** Bach, fugue in B-flat minor, WTC Book 1

The main reason for making this alteration seems to be to emphasize the most important notes of the scale. This helps establish the tonality at the outset of the piece.

Sometimes the alteration is more complex than this simple example, and can involve scale degrees other than  $\hat{1}$  and  $\hat{5}$ . In fact, there don't seem to be any rigid rules for exactly how to write a tonal answer. Theorists who try to give exact rules tend to get lost in a morass of complex detail. Ultimately, it seems to depend on the intuition of the composer.

## Eliding tonal answer

In this course, we will focus on a subset of tonal answers that we will call “eliding tonal answers.”

Notice that, in figure 1 above, the changed note is in the middle of the theme. Thus, the beginning and ending of the subject and answer are the same, taking account of the transposition.

Figure 2 below is different. Here, the changed note is the very first note of the theme. (There is a lot going on in this example but you only really need to take account of the first and last notes of the theme, which I have circled.) Now, whereas the theme begins on  $\hat{5}$  and ends on  $\hat{3}$ , the answer begins on  $\hat{1}$  and ends on  $\hat{7}$ . (Here, I am reckoning all the scale degrees in the tonic key.)

This alteration allows the subject to elide smoothly with the answer and vice versa, because

- the last note of the subject,  $\hat{3}$ , goes with the first note of the answer,  $\hat{1}$ —both imply tonic harmony.
- the last note of the answer,  $\hat{7}$ , goes with the first note of the subject,  $\hat{5}$ —both imply dominant harmony.

(Note also that both of these combinations are invertible, consisting of the root and third of a chord.)

The image shows two staves of musical notation in F-sharp major (three sharps). The top staff contains the 'Subject' and 'Answer' phrases. The subject begins with a circled note labeled  $\hat{5}$  and ends with a circled note labeled  $\hat{3}$ . The answer begins with a circled note labeled  $\hat{1}$  and ends with a circled note labeled  $\hat{7}$ . A brace connects the end of the subject to the beginning of the answer, indicating a splice. The bottom staff shows a continuation of the subject, starting with a circled note labeled  $\hat{5}$  and ending with a circled note labeled  $\hat{3}$ . The notation includes various musical symbols such as notes, rests, and accidentals.

**Figure 2:** Bach, fugue in F-sharp major, WTC book 1

In this example, because the theme begins with a rest, the last note of the subject doesn’t actually sound at the same time as the first note of the answer. The important thing is that both occur during the same harmony.

Notice that in figure 2 the “splice”—the point where the music is “cut” so

that the answer differs from the subject—is **pushed back as far as possible, to immediately following the very first note**. This is typical.

But it is also possible for the splice to come a little later, as in the next example, where it follows the mordent figure that opens the theme.

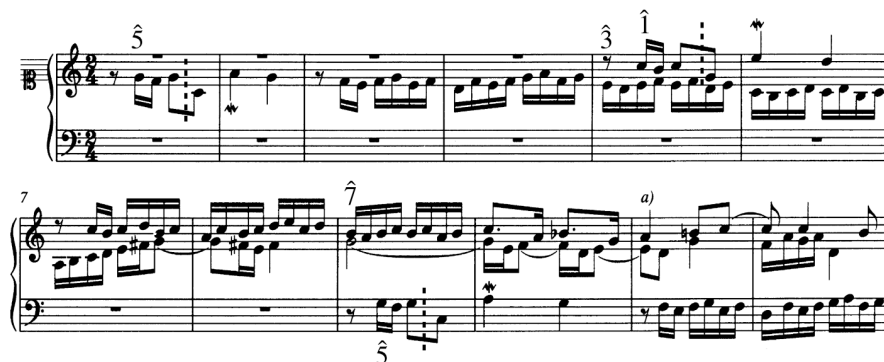


Figure 3: Bach, fugue in C major, WTC book 2

## Eliding tonal answer idioms

For the purpose of this course, **we are going to focus on the idiom** seen in both figure 2 and figure 3:

- $\hat{5}-\hat{3} \leftrightarrow \hat{1}-\hat{7}$

(I used a double arrow because either  $\hat{5}-\hat{3}$  or  $\hat{1}-\hat{7}$  can be the “subject” version of the theme. But  $\hat{5}-\hat{3}$  seems to be more common—Bach (at least) uses it exclusively in the Well-Tempered Clavier.)

Above, I have given the schema in terms of “global” scale degrees—i.e., scale degrees relative to the overall tonic of the piece. We can also think in terms of “local” scale degrees, or scale degrees relative to the key of the moment. I indicate these scale degrees by prefixing them with a roman numeral. For example,  $I:\hat{1}$  is the first scale degree of the tonic key, and  $V:\hat{3}$  is the third scale degree of the dominant key (which in global scale degrees, is  $\hat{7}$ ).

**In local scale degrees, the above idiom becomes**

- $V:\hat{1}-I:\hat{3} \leftrightarrow I:\hat{1}-V:\hat{3}$

Notice that **the local scale degrees are the same in either case, it is just the key that has changed**.

Another possible eliding tonal answer idiom (although we will not look at it in as much detail) is

- $\hat{1}-\hat{5} \leftrightarrow \hat{5}-\hat{1}$

or

- $I:\hat{1}-V:\hat{1} \leftrightarrow V:\hat{5}-I:\hat{1}$

Some fugues by Bach that use this latter idiom include:

- C-sharp major, WTC 1
- F minor, WTC 1
- G-sharp minor, WTC 1

### Eliding tonal answer harmony

It's important to note that, **when the subject begins with  $\hat{5}$  in the eliding tonal answer idiom, this note will be harmonized with *dominant* harmony**, even though it is the beginning of the subject in the tonic key. However, since fugue begins with the subject unaccompanied, the listener will not actually *hear* the piece as having begun with dominant harmony.

Thus we have the following harmonic schema for eliding tonal answers:

- If the subject begins with
  - tonic harmony, the answer will begin with **dominant harmony**
  - dominant harmony, the answer will begin with **tonic harmony**
- If the subject ends with
  - tonic harmony, the subject will end with **dominant harmony**
  - dominant harmony, the subject will end with **tonic harmony**

The following diagram attempts to summarize the above discussion:

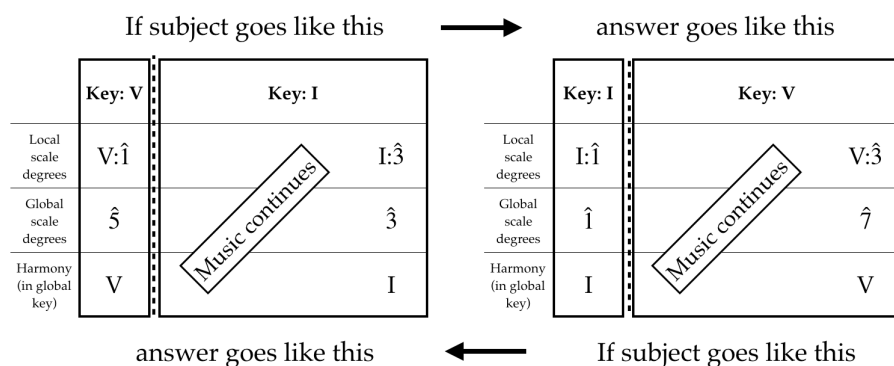


Figure 4