AMERICAN GUILD OF ORGANISTS

COMMITTEE FOR PROFESSIONAL CERTIFICATION

WEBINAR ON FUGUE (PART 1 OF 2)

MONDAY, MARCH 20, 2023 at 7PM EST

OUTLINE OF THIS WEBINAR

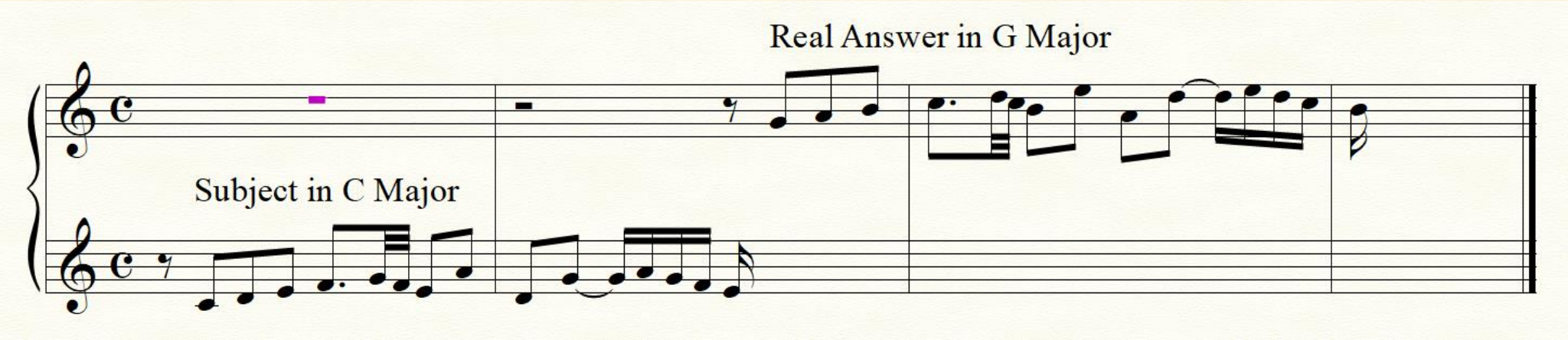
1) Subject and answer
2) Real answer and tonal answer
3) Countersubject
4) Fugal exposition
5) Sample questions from past exams

Section 1: Subject and Answer

- **Subject:** The melodic line that is stated alone at the beginning of the fugue and is imitated by all remaining voices.

- **Answer:** The subject stated in the dominant key.

Example: Bach, Fugue in C Major, *Well-Tempered Clavier*, Book I, BWV 846



Section 2: Real vs. Tonal Answer

- **Real Answer:** An exact transposition of the subject in the dominant key.

  Example: Bach, Fugue in C Major, WTC I on the previous slide

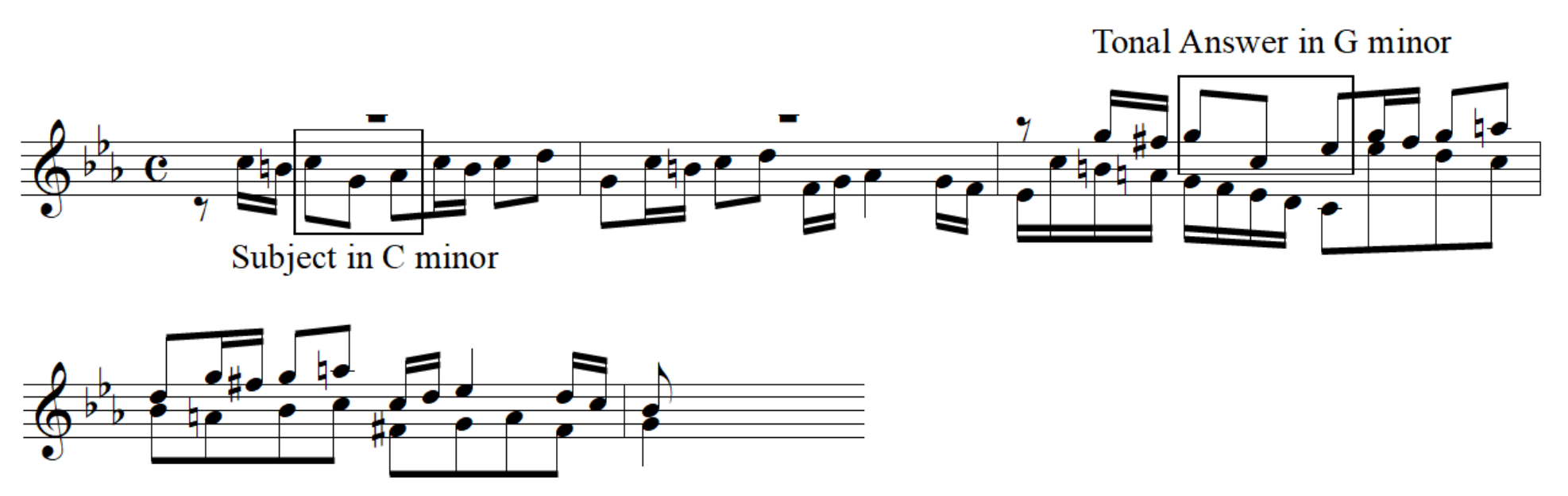
- **Tonal Answer:** Not an exact transposition of the subject. Some melodic intervals are altered because of the tonic-dominant tonal adjustment.

  Example: Bach, Fugue in C Minor, WTC I, BWV 847 on the next slide

Example: Bach, Fugue in C Minor, WTC I, BWV 847

The altered melodic intervals are enclosed in boxes.

Note that the tonic-dominant leap in the first box is answered by the dominant-tonic leap in the second box. Reason for the swap: An exact transposition would produce a G5-D5 leap that would conflict with the underlying harmony, the C minor chord.



When to Write a Tonal Answer?

1. A tonic-dominant leap that appears early in the subject is usually answered by a dominant-tonic leap.

   Example: Bach, Fugue in C Minor, WTC I, BWV 847 on the previous slide

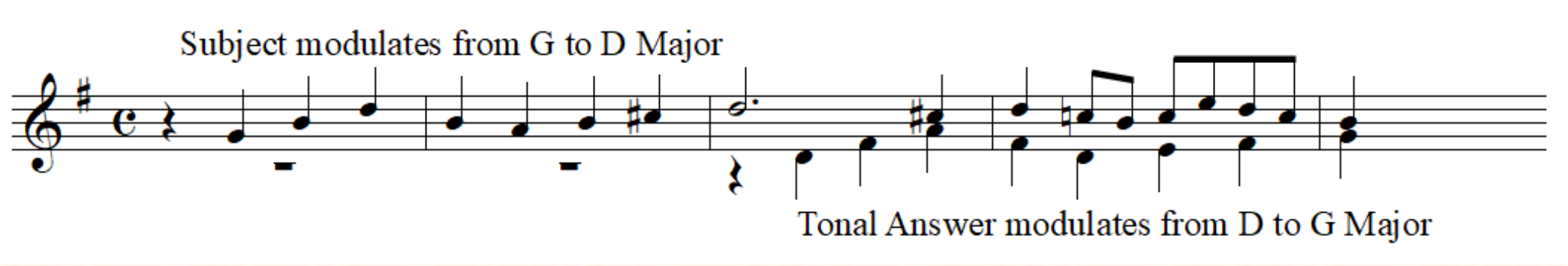
2. When the subject modulates from the tonic to dominant, the answer shows the reverse.

   Example: Bach, Herr Jesu Christ, dich zu uns wend, BWV 749 on the next slide

Example: Bach, Herr Jesu Christ, dich zu uns wend, BWV 749

Overall, the subject modulates from G major to D major, the tonal answer does the opposite.

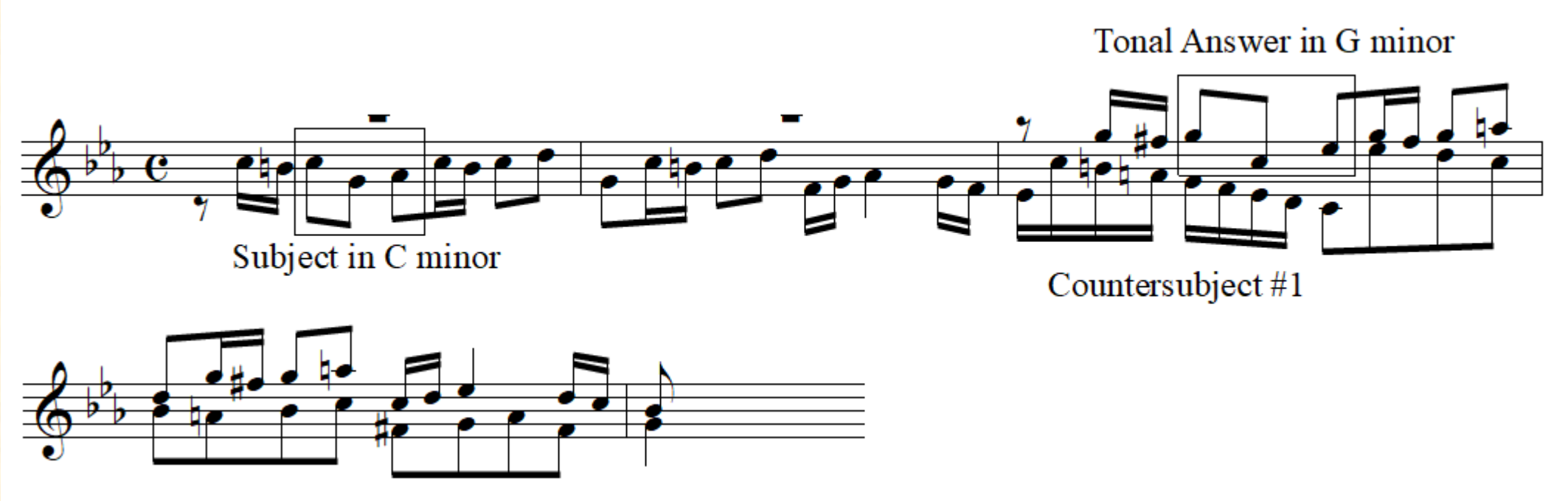
Notice that the arpeggiated G major chord in m. 1 is not altered in the answer in m. 3. (A similar example is the “Little” Fugue in G Minor, BWV 578.)



Section 3: Countersubject

- **Countersubject:** A recurring counterpoint that accompanies the subject/answer.

Example: Bach, Fugue in C Minor, WTC I, BWV 847



How to Write a Successful Countersubject?

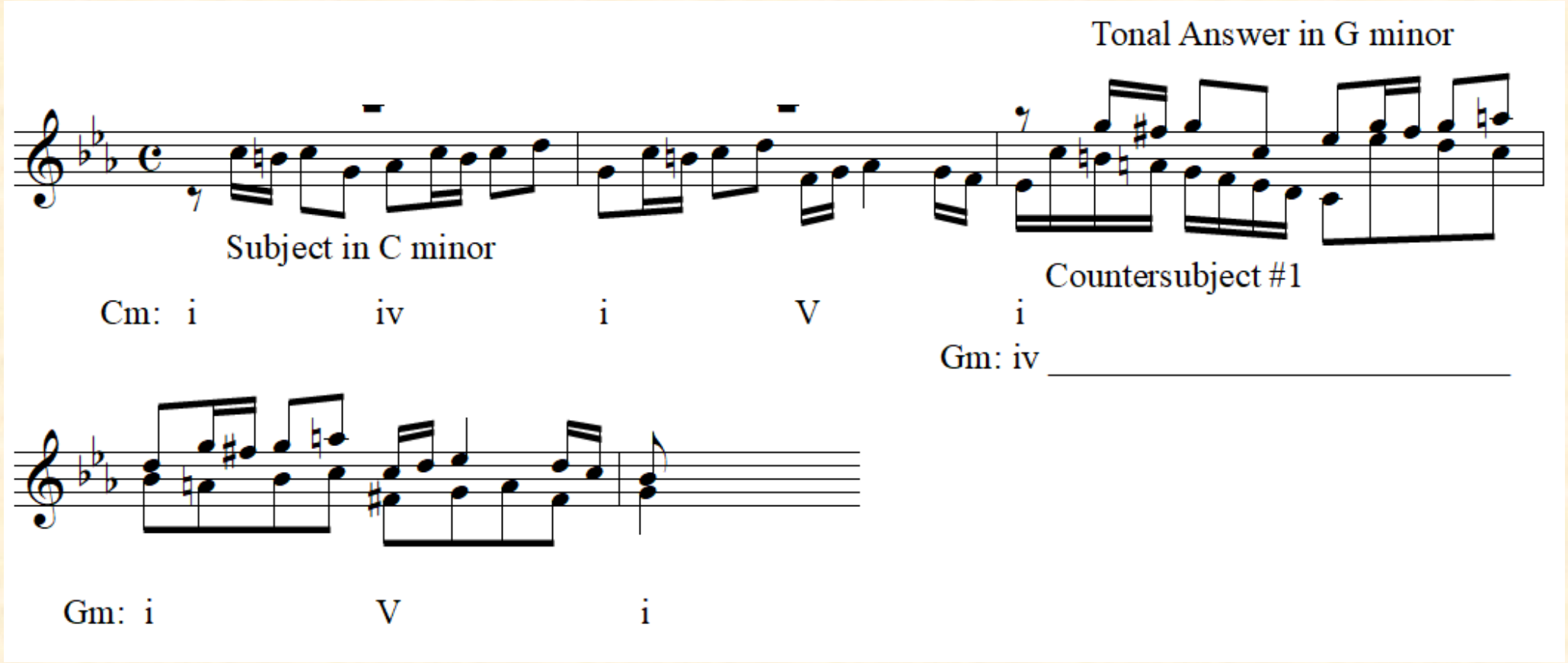
1. **Examine the harmonic implication of the subject/answer.** Compose a countersubject that supports or clarifies the implied harmonies.

Example: Bach, Fugue in C Minor, WTC I, BWV 847 (again) on the next slide

The roman-numeral analysis shows the basic harmonic trajectory, not a detailed chord-by-chord analysis:

- The subject suggests i-iv-i-V-i in C minor.
- The tonal answer suggests iv-i-V-i in G minor. Not i-iv-i-V-i because the tonal answer comes right after the conclusion of the subject, the last chord of which is the C minor triad.

Example: Bach, Fugue in C Minor, WTC I, BWV 847 – consider the harmonic implication



How to Write a Successful Countersubject?

2. **The countersubject must be invertible at the octave** because it may appear above or below the subject/answer.

Interval size:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Inversion at the octave:	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**

The subject and countersubject should be kept within an octave apart as much as possible.

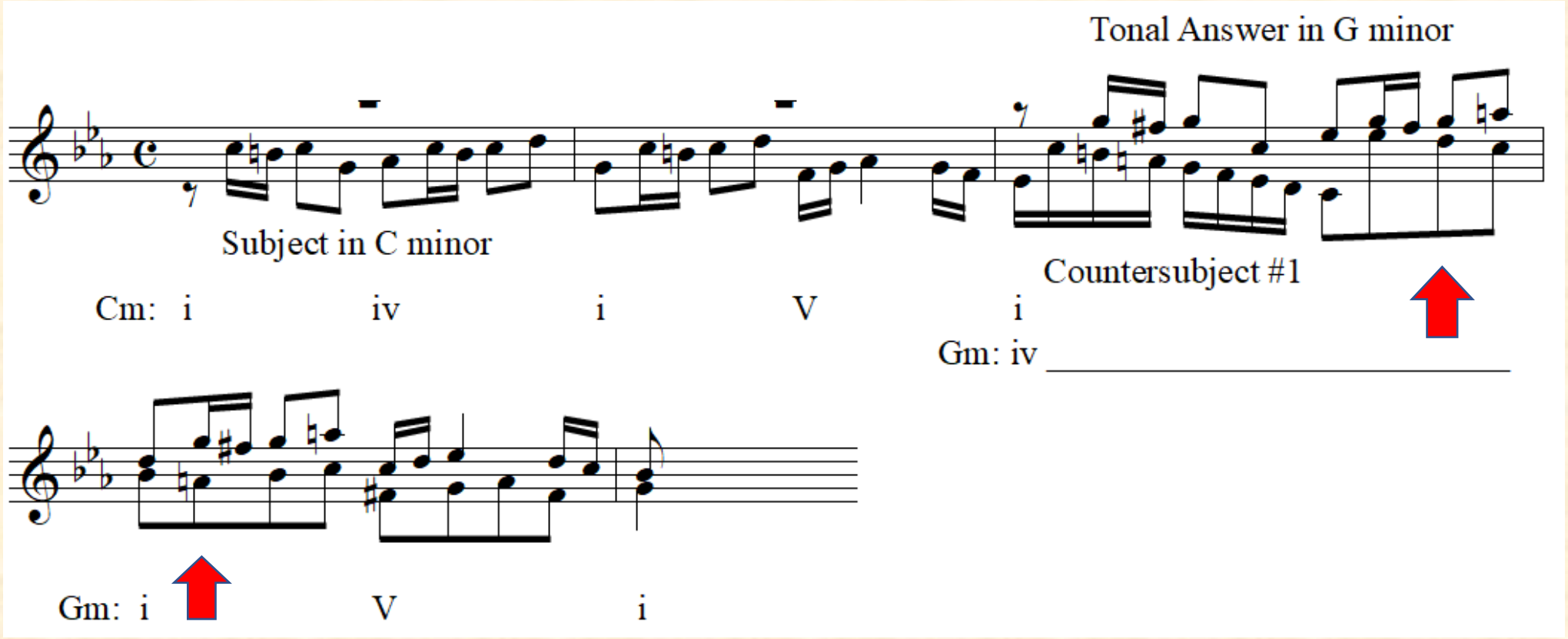
At the inversion at the octave:

- Imperfect consonances remain as imperfect consonances (3^{rd}, 6^{th}).
- Dissonances remain as dissonances (2^{nd}, 7^{th}).
- Perfect unison becomes perfect octave and vice versa.
- **Perfect 5^{th} becomes the dissonant perfect 4^{th}.**

The perfect 5^{th} interval must be used with care, particularly on strong beats. Also, parallel 4ths would become parallel 5ths.

Example: Bach, Fugue in C Minor, WTC I, BWV 847 – consider the intervals between the tonal answer and countersubject

(explanation on the next slide)

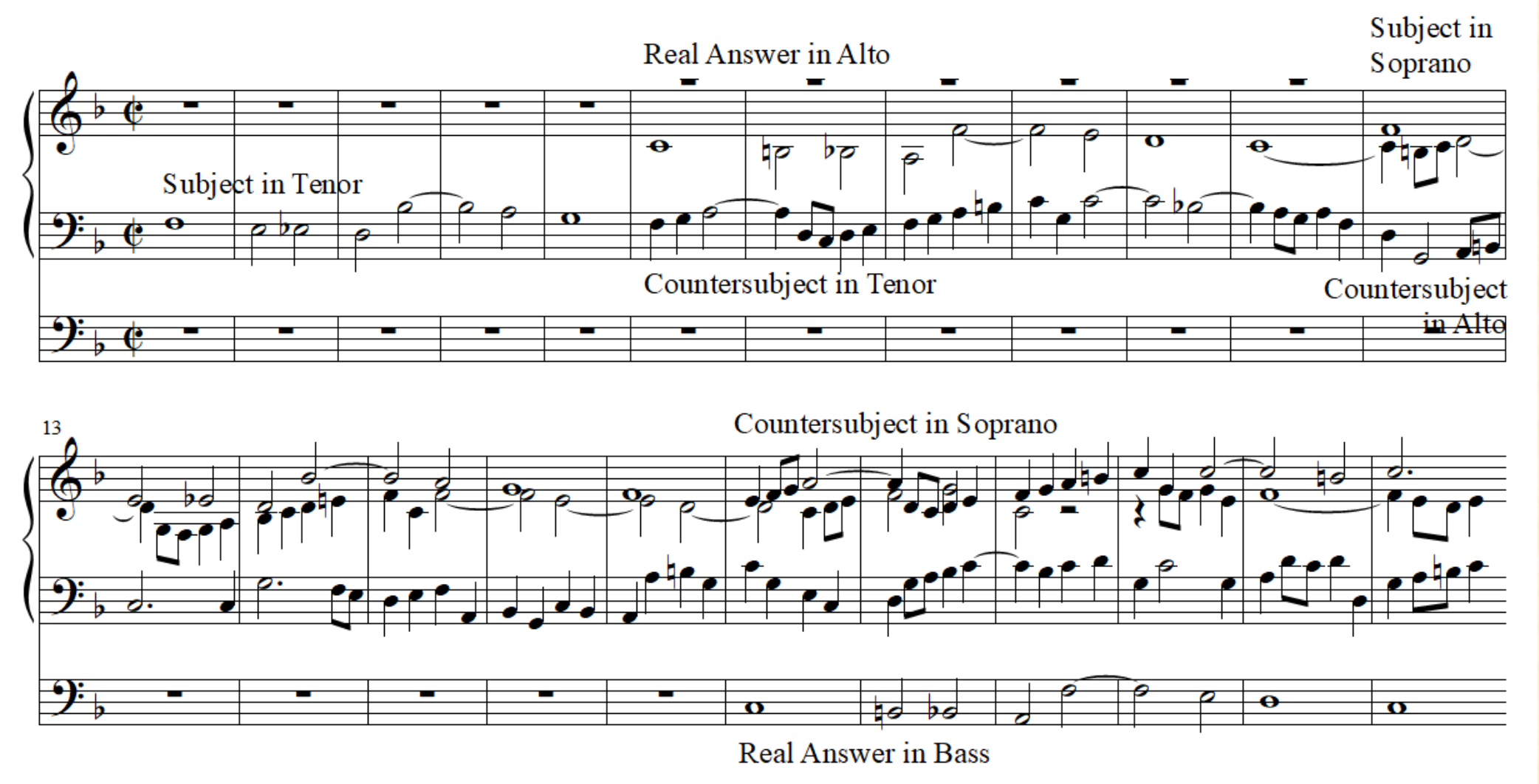


- In this example, the intervals between the subject and countersubject are mostly imperfect consonances (3rds, 6ths).
- The two voices exceed the distance of an octave only once, in m. 3, beat 3.
- In m. 3, the red arrow points at the perfect 4^{th} interval between the tonal answer and countersubject. It would become a 5^{th} at inversion. This interval is fine because the note D is a passing tone.
- In m. 4, the red arrow points at the dissonant 7^{th}. The G is an incomplete neighbor to the F#. There are actually parallel 6ths between the tonal answer and countersubject.

How to Write a Successful Countersubject?

3. **Contrasts in melodic contour and rhythm between the subject and countersubject are necessary.**
    - Vary the melodic motion between the two voices – similar motion, oblique motion, contrary motion, parallel 3rds and 6ths.
    - Vary the rhythm – when one line is rhythmically active, make the other line less active.
    - This is not like hymn harmonization. The subject and countersubject must sound like independent melodic lines.

Example: Bach, Fugue in F Major, BWV 540 – consider the rhythmic and melodic contrasts between the subject and countersubject



Section 4: Fugal Exposition

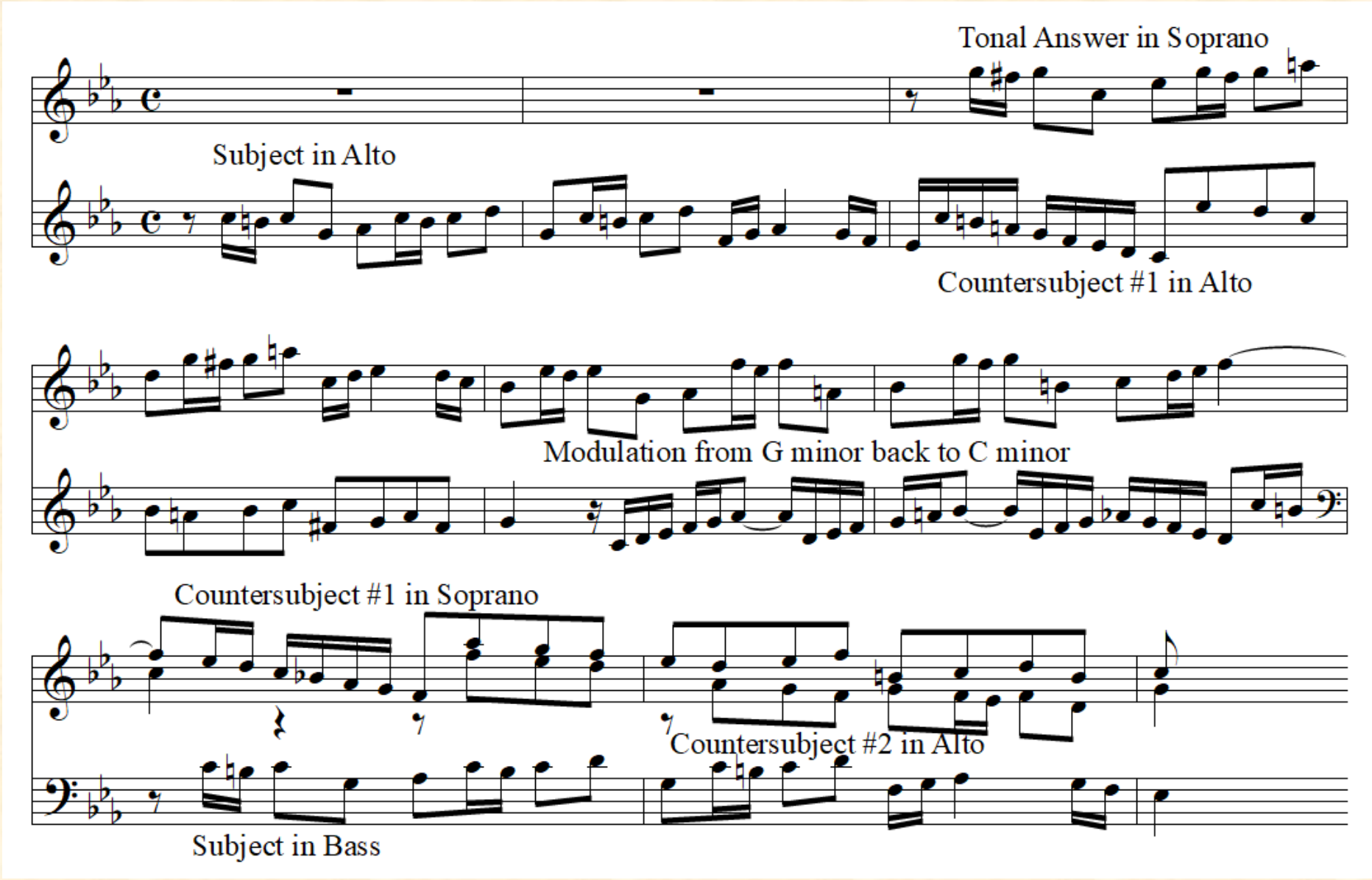
- **Fugal Exposition:** The voices enter one at a time, with the subject and answer alternating. Furthermore, the subject and answer may be accompanied by one or more recurring countersubject(s).

- **Order of Entries:** It is the most common to start from an inner voice, then proceed outward.

- **Modulation back to the Tonic Key:** For a non-modulating subject, the answer would begin and end in the dominant key. A modulation back to the tonic key would be necessary before the third voice can enter with the subject in the tonic key.

Example: Bach, Fugue in C Minor, WTC I, BWV 847 – layout of the fugal exposition (the score is on the next slide)

	mm. 1-3	mm. 3-5	mm. 5-7	mm. 7-9
Soprano	--	TA in Gm	Modulation Gm to Cm	CS1
Alto	Subj in Cm	CS1		CS2
Bass	--	--	--	Subj in Cm

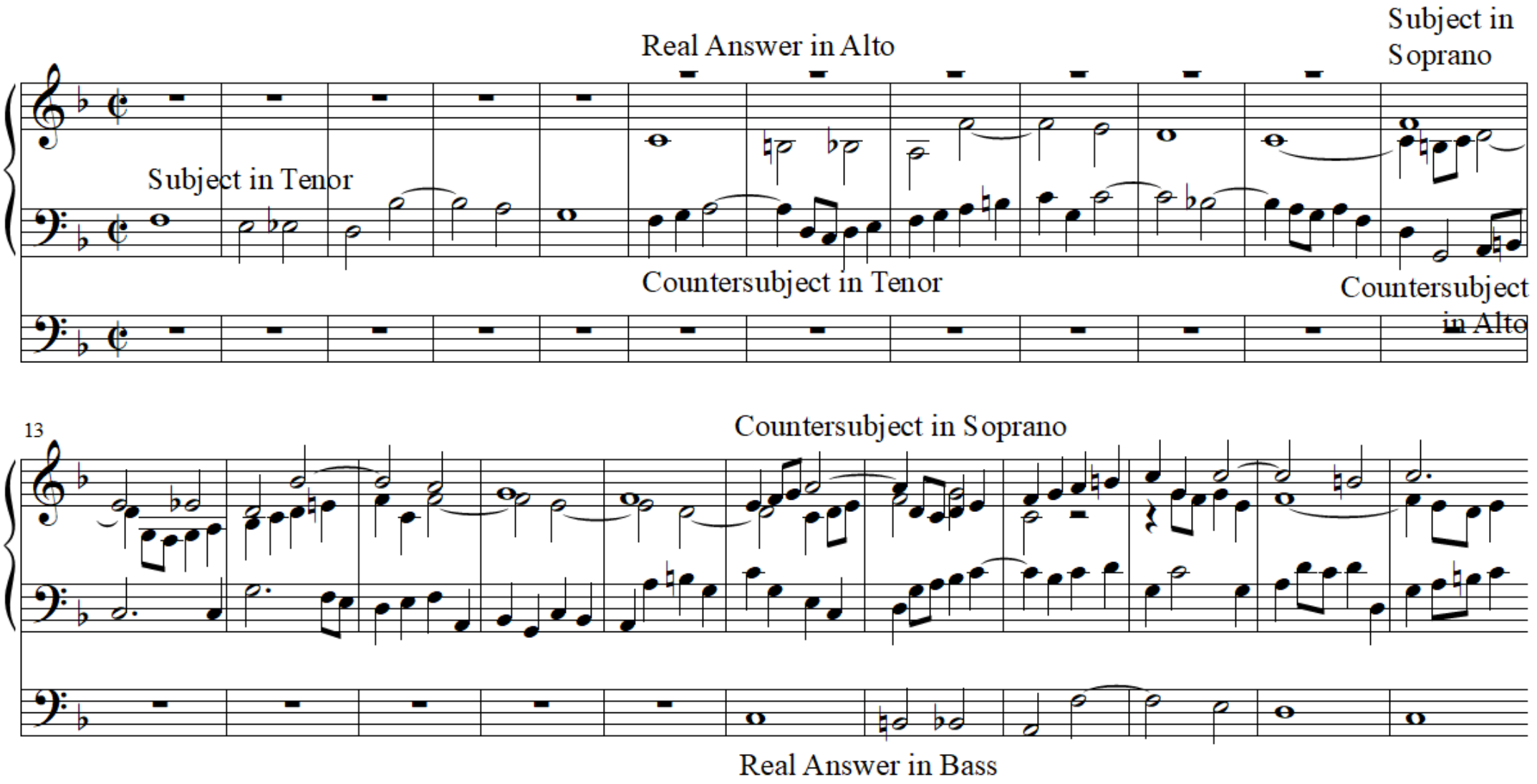

Tonal Answer in Soprano
Subject in Alto
Countersubject #1 in Alto
Modulation from G minor back to C minor
Countersubject #1 in Soprano
Countersubject #2 in Alto
Subject in Bass

Example: Bach, Fugue in F Major, BWV 540 – layout of the fugal exposition (the score is on the next slide)

The two real answers end differently. In mm. 10-11, the alto's real answer does not conclude in C major. The modulation back to F major is worked into the last two notes of the answer.

The real answer in the bass concludes in C major at mm. 22-23.

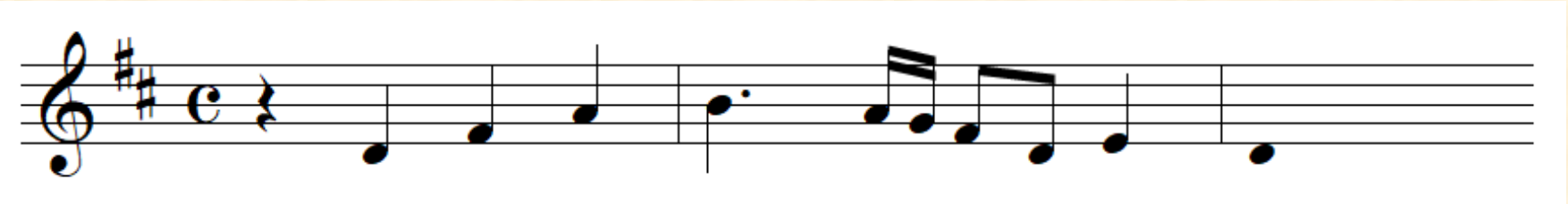
	mm. 1-6	mm. 6-11	mm. 12-17	mm. 18-23
Soprano	--	--	Subj in FM	CS
Alto	--	RA in CM	CS	Free Ctpt
Tenor	Subj in FM	CS	Free Ctpt	Free Ctpt
Bass	--	--	--	RA in CM


Subject in Soprano
Real Answer in Alto
Subject in Tenor
Countersubject in Tenor
Countersubject in Alto
13
Countersubject in Soprano
Real Answer in Bass

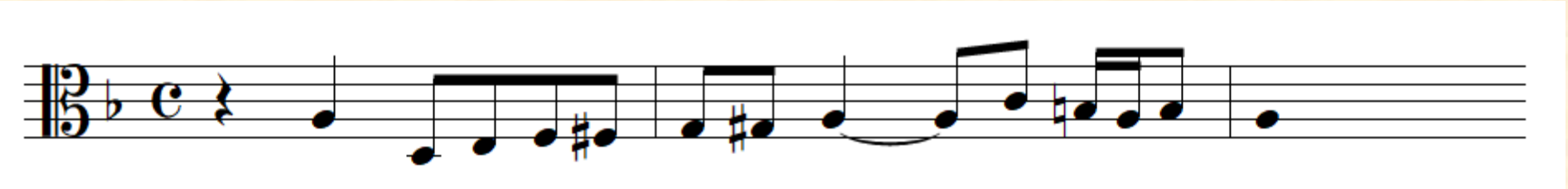
Section 5: Sample Question

- On the AAGO exam, candidates are required to compose a fugal exposition for THREE voices. The subject is given and a recurring countersubject is required.
- On the FAGO exam, the fugal exposition is for FOUR voices, scored for a string quartet. A recurring countersubject is required. (The main challenge here is the instrumentation. The fugal writing is not that different from what is required on the AAGO exam.)
- The fugue questions often ask for a modulatory episode and the bringing back of the fugue subject in a closely-related key, or in inversion, stretto… We will consider these in the webinar on March 27.

This is the fugue subject from the 2022 AAGO exam:



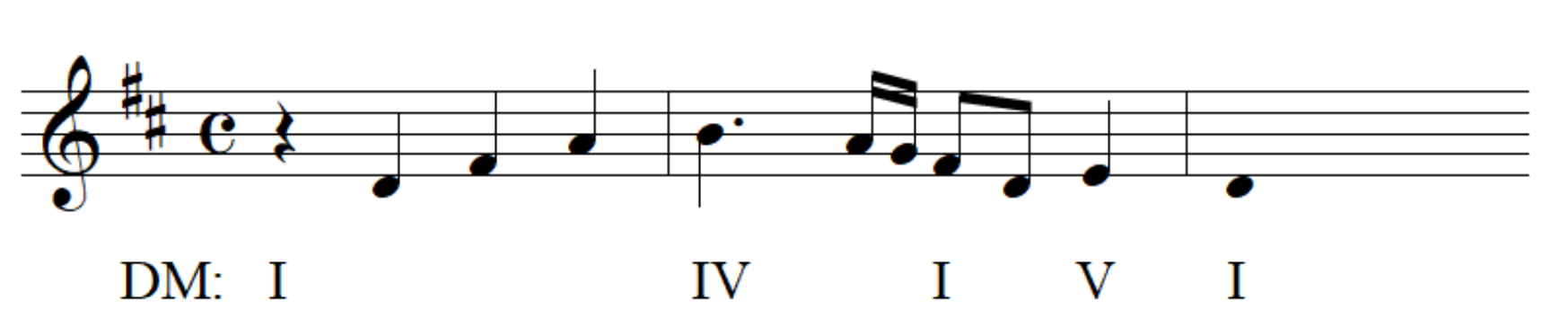
This is the fugue subject from the 2022 FAGO exam:



Questions to think about:

1) Real or tonal answer?
2) What chords are implied in each subject?

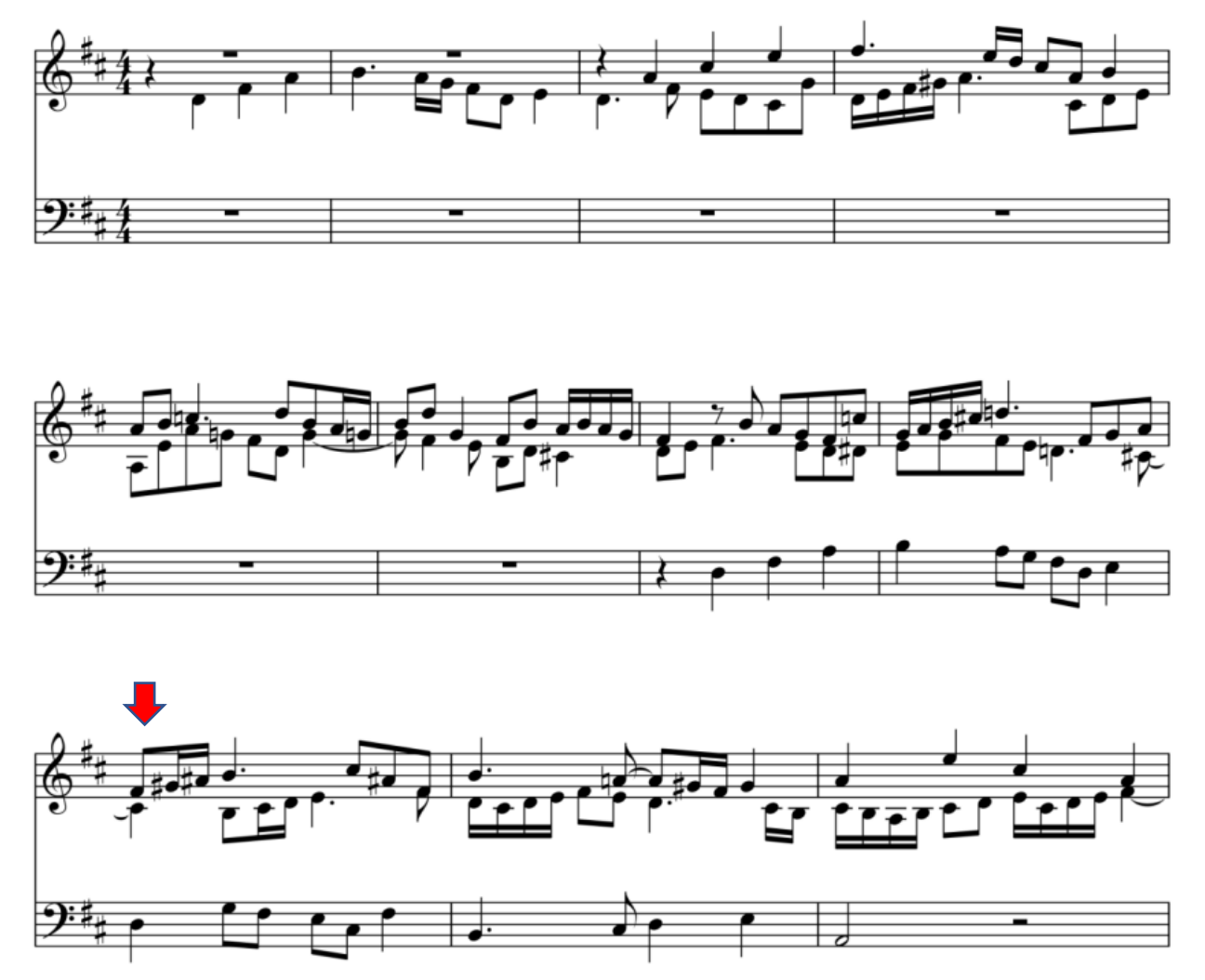
A possible interpretation of the harmonies in the 2022 AAGO fugue subject:



A REAL ANSWER is likely because:

- The subject does not modulate from the tonic to dominant.
- The subject does not feature any tonic-dominant or dominant-tonic leap.

From the 2022 solution booklet (posted on the AGO HQ Certification webpage):

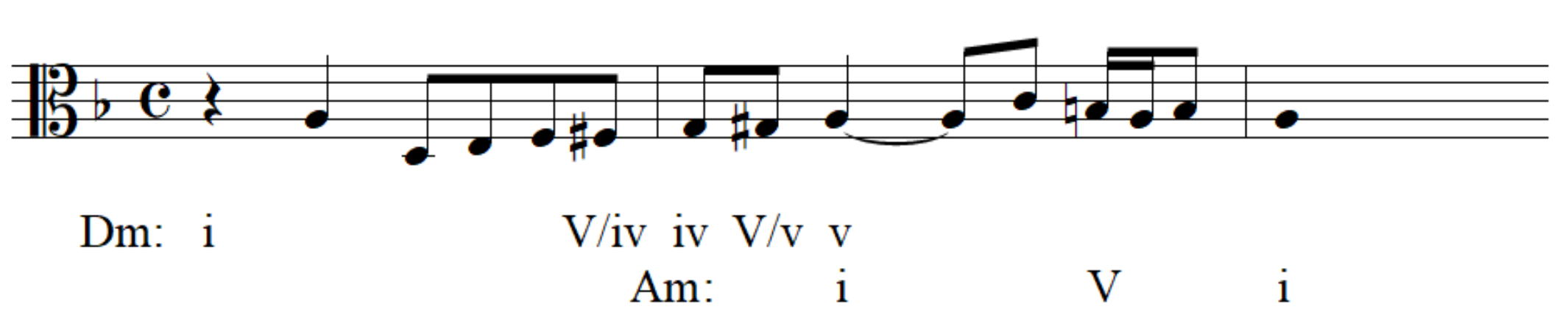


Observe the following in mm. 3-4:

- The real answer and the countersubject make imperfect consonances on most beats.
- Rhythmic contrasts between the two voices.
- A lot of contrary motion and some parallel 6ths between the two voices.
- The harmonic progression is clear and logical.

The exposition ends at the red arrow.

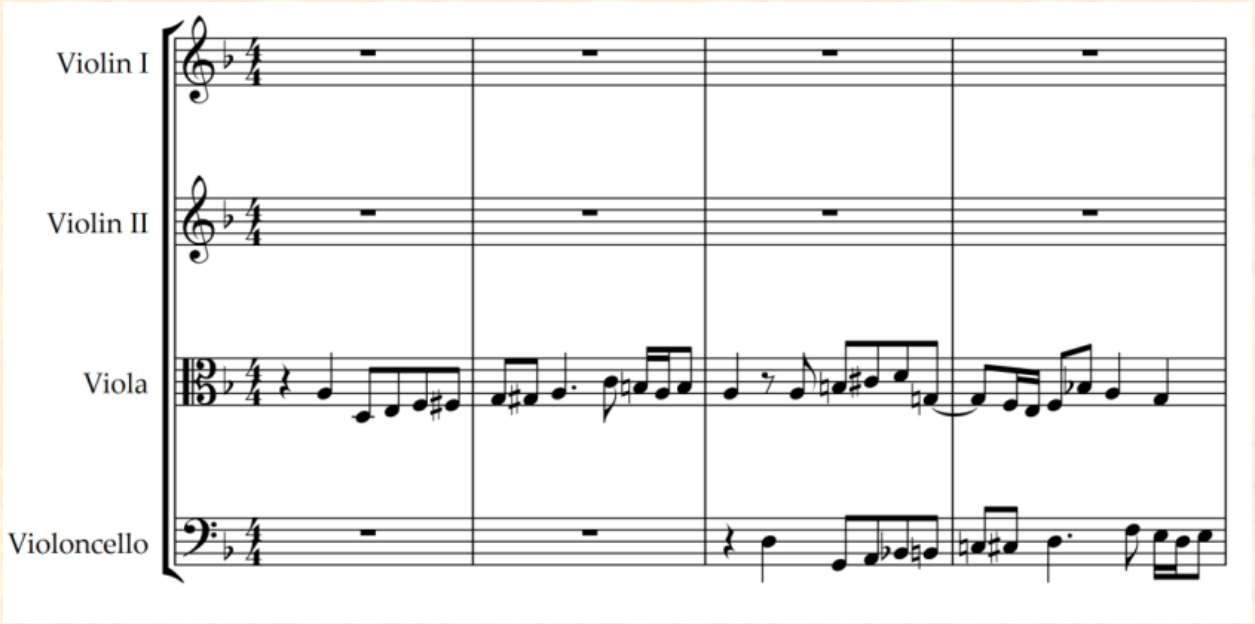
A possible interpretation of the harmonies in the 2022 FAGO fugue subject:

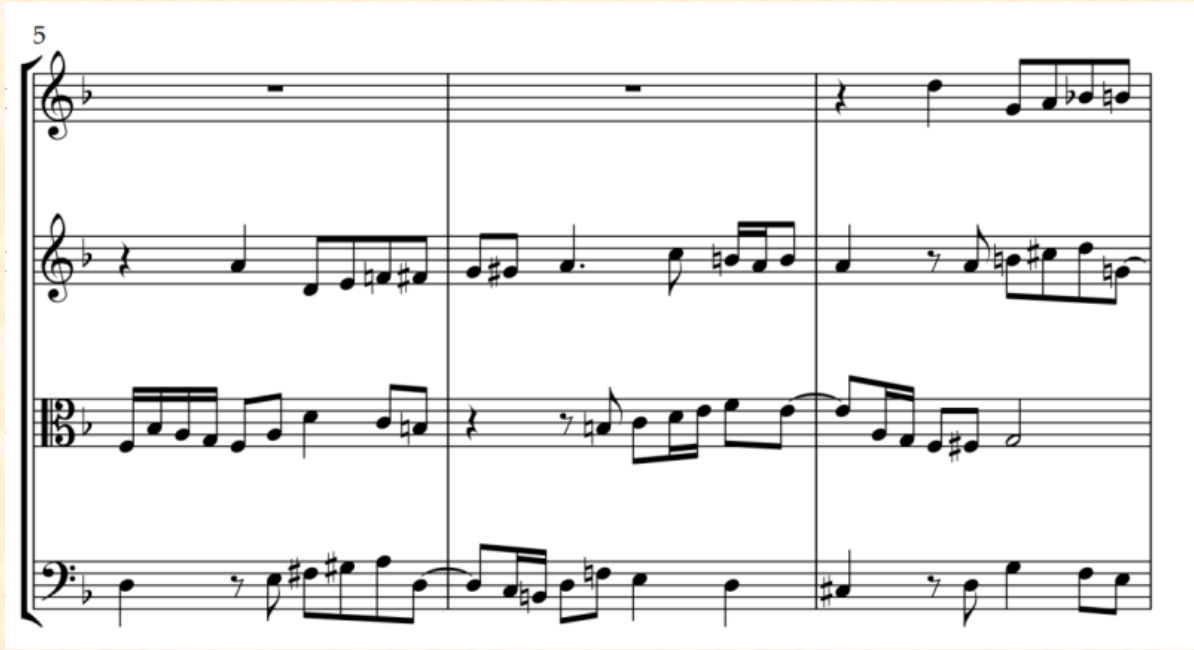


The solution booklet suggests a REAL ANSWER:

- The subject begins and ends on the note A. Harmonically, it begins in D minor, then G minor is tonicized and a modulation to A minor follows.
- The advantage of writing a real answer down a 5th is that the answer can begin and end on the note D. Additionally, the key of C is tonicized before the modulation back to D minor occurs.

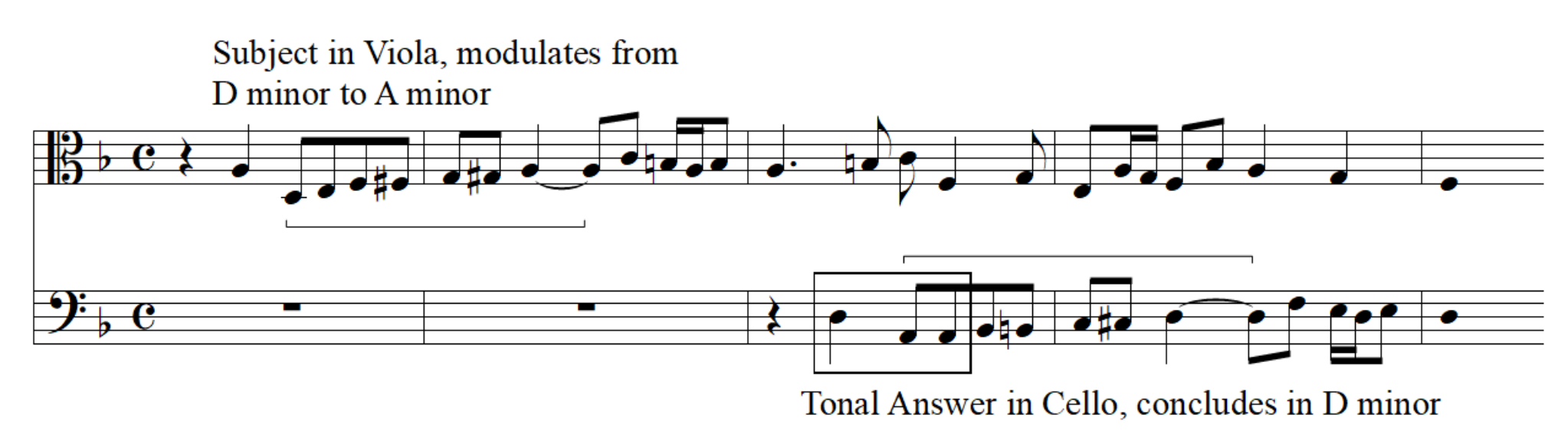
From the 2022 solution booklet (posted on the AGO HQ Certification webpage):





This exposition ends at m. 9. Due to space limitation, mm. 8-9 are not included on this slide; however, a sample solution can be viewed on pp. 18-19 of this booklet.

Another possible solution for the D-minor fugue subject:



Note that:

- The dominant-tonic leap becomes a tonic-dominant leap in the answer. (The tonal adjustment is enclosed in a box.)
- The subject shows a chromatic ascent from D to A. This becomes the chromatic ascent from A to D in the answer. (The ascents are indicated by the square brackets.)
- The countersubject is modified to reflect the changes in the answer.

Recommended Readings:

- Walter Hilse, “The Fugal Answer,” in *The American Organist,* April 2006.

  Click here to see the article.

- Walter Hilse, “Regular Countersubjects in Fugue,” in *The American Organist*, March 2008.

  Click here to see the article.

- Robert Gauldin, A Practical Approach to 18th Century Counterpoint, revised edition. Illinois: Waveland Press, 2013.