

# STUDY MATERIALS FOR MUSIC THEORY COMPREHENSIVE EXAM

Created May 2018

Note: Please consult with your Supervisor and/or with the Music Theory Area Chair to ensure you are using current study materials.

## I. SAMPLE TOPICS

*The following is a list of research topics drawn from recent comprehensive exams in music theory. They have been lightly edited for consistency and to facilitate alphabetization (i.e., your exam topics should not be in this index-style format).*

*Akzenttheorie*, development of in the eighteenth and nineteenth centuries  
Bach, J. S., fugal technique of  
Bartok, pitch symmetry in the music of  
Brahms, analytical approaches to instrumental music of  
Chromaticism, late-nineteenth century  
Compositional theory, eighteenth century  
Consonance and dissonance in ancient Greek music, theories of  
Contrapuntal theories, early-twentieth century  
Diatonic set theory  
Digital music theory and corpus analysis  
Early atonality in the Second Viennese School, 1900–1915  
Early music, pitch structures in  
Electroacoustic music, analytical approaches to  
Empirical aesthetics  
*Formenlehre*, old and new  
French Impressionism, harmonic language of  
French Modernism in the twentieth century  
French spectralism: Musical Form and Process  
Fugue, nineteenth-century views of  
German *Lied*, nineteenth century  
Genre theory  
Grisey, Gérard, concepts of pitch and time  
Harmony and tonality, nineteenth- and early-twentieth-century theories of  
Isorhythmic motet in the *Ars Nova*  
Keyboard improvisation in seventeenth-century music  
Keyboard temperaments, 1523–1779  
Mahler's symphonies, analysis of  
Melodic expectation, theories of  
Minimalism and postminimalism  
Modal theory and Renaissance music, modern views on  
Music and emotion  
Musical expectation and phenomenology  
Neo-Riemannian theory, analytical applications of  
Neo-Riemannian theory, perspectives on extended tonality  
Opera, 1600–1700  
Opera, 1700–1750  
Opera, early-eighteenth-century Italian  
Partimento and Improvisation Pedagogy in the seventeenth and eighteenth centuries

Polyphony, genesis and development in the Middle Ages in Europe (ca. 800–1200)  
Popular music, analysis of  
Recorded sound, methods for analyzing  
Renaissance music, hypermetric organization in  
Rhythm and meter, twentieth-century theories of  
Rock harmony  
Schenkerian theory, advantages and limitations of  
(Socio)Musicology: Text vs. Context  
Sonata form in the Viennese Symphony, 1775–1900  
Technological mediation in contemporary music, interdisciplinary approaches to the study of  
Tetrachord as music-theoretical nucleus before 1100 A.D.  
Timing in musical performance, analysis of  
Tonality, the emergence of  
Total serialism, 1950–60, theory and analysis of  
Transformational theory, David Lewin's contributions to

## II. SAMPLE ESSAY PROMPTS

*For all essay questions: Responses should refer as much as possible to specific primary sources, secondary literature, and musical works.*

### Brahms, analytical approaches to instrumental music of

Describe the extent to which Brahms's practice in his sonata movements follows or contradicts the practices of the classical period as they have been theorised by Caplin (1998) OR Hepokoski and Darcy (2006).

### Chromaticism in the late-nineteenth century

In *The New Grove Wagner*, Dahlhaus states: “[If] the essential element in the association of chords is semitonal connection and not root progression . . . then ‘alteration’ is strictly an inadequate term, as it seems to imply that chromaticism is secondary and derivative. Rather, chromaticism has achieved a degree of independence from its origins in alteration” (p. 119).

Discuss Dahlhaus’s quote within the context of recent analytical approaches to chromaticism.

### Compositional theory in the eighteenth century

Compare and contrast the different approaches to teaching composition in the eighteenth century until around 1780. What were the main methods? What were the disputes? Discuss specific sources.

### Contrapuntal theories in the early-twentieth century

Schoenberg and Stravinsky, particularly in the 1920s, both claimed to be continuing the contrapuntal tradition of Bach. Examine these claims in the context of early twentieth-century contrapuntal theories.

### Early Music, pitch structures in

Write “A Brief History of the Semitone from the Middle Ages to the Renaissance”. Was the semitone considered an essential, primary musical material, or is it derived from more basic elements? Consider whether “semi-” means “half;” if not, what accounts for different sizes of semitone according to different theorists? How does the semitone function in the contrapuntal “closest approach”? In a “directed progression”?

### Empirical aesthetics

What are the similarities and differences of the main approaches to music-induced pleasure? How is each supported by evidence from empirical studies of listeners and from music analyses? In what ways might a listener-oriented approach to music aesthetics advance music theory?

### French Modernism in the twentieth century

In what ways is Pierre Boulez’s music indebted to the music of Claude Debussy? Discuss both aesthetic and technical influences. Make sure to address specific compositional techniques.

### Formenlehre, old and new

In reference to the “old” *Formenlehre*, discuss and explain what theoretical limitations of those traditional approaches motivated recent theorists to propose a “new” *Formenlehre*. Along the way, compare the theories of Caplin and Hepokoski/Darcy with respect to their fundamental assumptions and basic theoretical approaches. Discuss these theories both in relation to each other and to earlier theories of form.

### German Lied, nineteenth century

Describe the changes in compositional approach to the German art song in the nineteenth century. Consider issues such as prosody (rhythm of the text) and the relationship between form and text. Your response should reference at least three examples from the music literature.

### Melodic expectation, theories of

Where do music-theoretical approaches to melodic expectation and perceptual-psychological approaches overlap, and where do they depart? Describe the advantages and disadvantages of both perspectives.

### Modal theory in Renaissance music, modern views on

Some modern-day writers dispense with the authentic-plagal distinction when dealing with polyphony. Discuss. What is the relevance of this distinction in music based on psalm and lection tones?

### Music and emotion

What are the main tenets of music-theoretic and psychological theories of emotion in relation to music? What are the advantages and disadvantages of each? How are emotion-induction processes associated with structural and performance-related properties of music?

### Musical expectation and phenomenology

What are the similarities and differences of the main music-theoretic treatments of musical expectations? How is each supported by evidence from empirical studies of listeners and from music analyses?

### Opera, 1600–1700

Discuss aria, arioso, and recitative in seventeenth-century opera and how they relate to different text types, different characters, and different situations.

### Opera, 1700–1750

Describe patterns of patronage in opera in the period 1700–1750. How were differences in patronage between France and Italy decisive in molding key generic features in each of these operatic traditions?

### Polyphony, genesis and development in the Middle Ages in Europe (ca. 800–1200) AND keyboard improvisation in seventeenth-century music (NB: This essay prompt combines two topics.)

What is the relation of improvised counterpoint to written polyphony in the Middle Ages and in the seventeenth century?

### Popular music, analysis of

One of the central debates in the analysis of popular music has revolved around the question of pertinence: are analytical techniques developed for Western art music appropriate for the analysis of popular music? Describe the arguments of the proponents for the unmodified application of traditional techniques as well as the criticisms of those who have advocated caution, and evaluate the claims made by both sides, making reference to specific analytical techniques and their applications.

### Recorded sound, methods for analyzing

Discuss methods of measuring localization and spaciousness in recorded music. What are the main challenges in measuring these attributes of auditory space across different formats from mono, stereo, 5.1, to 9.1, and 2.2 channel 3-D audio recordings? (If you are not familiar with multichannel formats, limit your discussion to mono and stereo.) How are localization and spaciousness used in communicating the structure and form of music, and the staging of performance?

### Rhythm and meter, twentieth-century theories of

Summarize and compare the theories of rhythm and meter posited by Cooper and Meyer, Lerdahl and Jackendoff, Hasty, and Krebs. Explain how each of these theories models the relationship between rhythm, meter, and grouping structure. How are Hasty's and Krebs's theories different from the two earlier models? What is Hasty's critique of the earlier works?

### Rhythm and meter, twentieth-century theories of

How have music theorists attempted to incorporate rhythmic elements and considerations of musical form into the framework of Schenkerian analysis, and what are the relevant problems?

### Schenkerian theory, advantages and limitations of AND Neo-Riemannian theory, analytical applications of (NB: This essay prompt combines two topics.)

How might neo-Riemannian theory function as an alternative to Schenkerian theory? Your response should address both the advantages and limitations of using neo-Riemannian theory to analyze tonal music.

### Sonata form in the Viennese Symphony, 1775–1900

In his article "Bruckner's Symphonies and Sonata Deformation Theory," Julian Horton writes: "Deformation is only meaningful inasmuch as we can recognize a standard, either in theory or practice, against which it is measured" (Horton 2005, 7). To what extent can we speak of a "normative model" for sonata form?

### Tonality, the emergence of

Gregory Barnett argues that the emergence of modern tonality was not a gradual process of evolution out of the modal system; rather, the two systems existed side-by-side for a good deal of the seventeenth century. Is this position supported or contradicted by other scholars who have worked on the eventual shift from Renaissance modality to eighteenth-century tonality? Consider this question from the perspective of music-theoretical treatises and actual compositional practice.

Total serialism, 1950–60, theory and analysis of

In the discussion and critiques of integral serial music of the 1950s, the question of whether serial music is a “language” occasionally arises. What are the arguments and conclusions?

### III. SAMPLE SCORE ID

Note that sample responses for these scores are provided in bullet-point form. Your responses on your exam should be given in prose form (complete sentences).

#### Score #1

25

con dol - c'in - gan - ni, E  
sen - toil cor con dol - c'in - gan - ni, E tra - mu - tar -  
- c'in - gan - ni, E tra - mu - tar - s'in fo -  
- toil cor con dol - c'in - gan - ni, E tra -

30

tra - mu - tar - s'in fo - co'l fred - do ghiac - cio.  
s'in fo - co'l fred - do ghiac - cio. On - d'io mi go - do e  
- co'l fred - do ghiac - cio. On - d'io.  
- mu - tar - s'in fo - co'l fred - do ghiac - cio. On - d'io mi go - do e

35

On - d'io mi go - do e tac - cio, Sol che can - tan - do  
tac - cio, On - d'io mi go - do e tac - cio, Sol che can - tan - do  
mi go - do e tac - cio, e tac - cio, Sol che can - tan - do  
tac - cio, Sol che can - tan - do

40

vo lie - - to e con - ten - to: Mil - le piac - cer non va -  
vo lie - to e con - ten - to: Mil - le piac - cer non va -  
vo lie - to e con - ten - to: Mil - le piac - cer non  
vo lie - - to e con - ten - to: Mil - le piac - cer non va -

45

- glion un tor - men - to,  
- glion un tor - men - to, Mil - le piac - cer non va - glion un  
va - glion un tor - men - to, Mil - le piac - cer non va - glion un tor -  
- glion un tor - men - to, Mil - le piac - cer non va - glion un tor - men -

### Sample Response for Score #1

- Text: all 4 parts same Italian text, (madrigal?), eleven-syllable lines (Petrarch?).
- Texture: much overlapping, some imitation, only two tutti phrase endings: at *taccio* (“to be silent” = word painting) followed by *Sol* (“alone” on one note alone = word painting) and cadence at end of poetic line on “tormento.”
- Voice-leading: stretto fuga between T + A on “e tramutar” but motives are not exactly repeated; non-imitative pair at “Mille piacer” inverted in A+T at 12<sup>th</sup>.
- Harmony: cool minor 9<sup>th</sup> dissonance on “un tormento” = word-painting. few cadences: to Bb m. 30(?), G m. 35(?), Bb m. 39. Probably G-Dorian.
- Rhythm: very independent, fits text accents well.

Definitely post-Josquin, mid-16<sup>th</sup>-c. madrigal maybe Willaert (he likes to vary the motive more than later guys) or Rore.

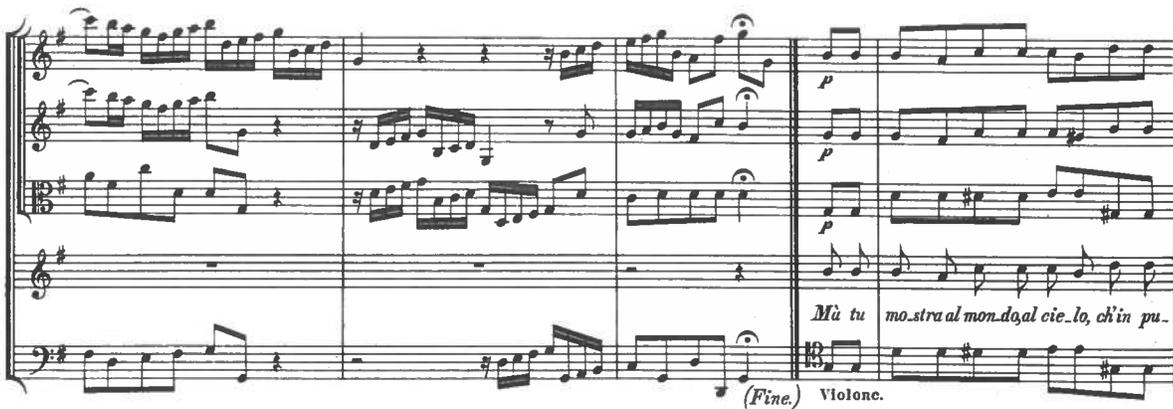
Score #2



il tuo san.gue, ed il tuo ze-lo, per la fi.glia e per a - stre - a gran con - tra - sto or



fan - no in te.



Mù tu mo - stra al mon - do, al cie - lo, ch' in pu -

(Fine.) Violonc.

H. W. ss.

## Sample Response for Score #2

- Text: Italian (madrigal?)
- Texture: soloist plus very active instrumental parts (standard 4-part strings), bass moves in eighths very regularly. Some unison passages in strings make striking contrast.
- Voice-leading: compound melody in strings characteristic of high Baroque.
- Harmony: mostly quarter-note harmonic rhythm, even though bass repeats eighths. Big cadence at end of text at “in te” coincides with big entry of upper strings, marks some structural place. Other big cadence also to G at double bar.
- Rhythm: sixteenths grouped very regularly, lots of repeated eighth notes.
- Form: Double bar and the word “Fine” suggests da capo aria. B section begins piano and seems to modulate. Entry of strings on high B marks beginning of final ritornello.

Early 18<sup>th</sup>-c. Italian opera. But wait: letters “H.W.” at bottom of page—didn’t Handel write Italian operas?

Score #3

10

rai: "Ro bin, doz a mis. per du voz ai;  
 Spon si le ctus lu me ri di e, Lux ple na ri

25

A grant do lor de vos me de par ti  
 e, Nu bem lu es tri sti ci e,

30

rai!" Les li m'as sis, Si l'a co lai; Es ba  
 Se re num con sci en ti e. Hanc ho mo

35

hi e la tro vai Pour l'amour Ro bin,  
 por tet, Hac se con for tet, Cru cem o por tet

Fol. 75 v<sup>o</sup> 40

qui de li S'est par tis: S'en es toit en grant es mal.  
 Si uis [lu cis] ue re Gau di a sus ti ne re.

1) Mo, mes. 39:

### Sample Response for Score #3

- Text: two upper parts in different languages, French and Latin, bottom voice untexted (chant tenor?)
- Texture: three parts close together, no imitation
- Voice-leading: some parallel fifths
- Phrasing: continuous, only one tutti silence
- Harmony: many empty perfect consonances
- Rhythm: basically only two note values, same pattern, regular tenor groups, triple = modal rhythm

Everything points to 13th or 14<sup>th</sup> century, but modal rhythm and so few note values clinches it at 13<sup>th</sup> c. polytextual motet.

Score #4

11 12 13 14 15

25

tus et lae - - tus, No - cte som-nus tra - hi - - tur qui-e - -

et lae - tus, No - cte som-nus tra-hi - tur qui-e - -

16 17 18 19 20

30

tus; Pax do - cu - it vir - gi - nem or - na - re

tus; Pax do - cu - it vir - gi - nem or - na - re

II,1

21 22 23 24 25

35

Au - ro co - mam crines- que

Au-ro co-mam crines-que no-da - re;

6 7 8 9 10

26 27 28 29 30

40

no - da - re; Pa - ce ri - vi psal-len- tes et a - - ves

Pa - ce ri - vi psal-len- tes et a - - ves

Pa - ce ri - vi psal-len- tes et a - - ves

11 12 13 14 15

Faultx bourdon

31 32 33 34 35

45

Pa - tent lae - ti col - les - que su - a - - - ves Pa - ce

Pa - tent lae-ti col - les - que su - a - - - ves Pa-ce di -

III,1

2 3 4 5

#### Sample Response for Score #4

- Text: upper parts Latin, none in bottom part (Cantus Firmus tenor?) not anything I recognize from the mass, so probably a motet.
- Texture: long tenor notes, active upper parts. Sudden “faulx bourdon” (parallel 6/3 chords) section (15<sup>th</sup>-c?) with no tenor. No imitation (some rhythmic imitation)
- Voice-leading: under-third cadence (“Landini”) at m. 37, 40, and 45. Lots of parallel thirds, no parallel perfect intervals.
- Harmony: no flat in top voice! 15<sup>th</sup> c.? lots of imperfect consonances. Cadences to G (2) and D (2) so probably G-Dorian.
- Rhythm: 6/4 and 3/2 very fluid syncopated melismas some declamatory homorhythm.
- Form: I notice some numbers under m. 41 that look like *color* and *talea*—must be an isorhythmic motet!

Reminds me of Machaut or Dufay, but harmony is definitely Dufay-ish.

Score #5

The musical score consists of seven systems, each with a treble and bass staff. The key signature has two flats (B-flat and E-flat), and the time signature is 3/4. The score includes various musical notations such as notes, rests, and ornaments, along with performance instructions like dynamics (*mf*, *sf*, *p*, *f*, *cres.*) and fingering numbers (1-5). The piece is in a key with two flats and a 3/4 time signature.

2-808-10

## Sample Response for Score #5

- **Instrumentation**

Clearly a keyboard instrument: the presence of dynamic markings indicates the piano (though since this is clearly a later edition with fingerings added, the dynamics could also be an editorial addition).

- **Key**

Alternating between F minor, F major, then moving towards F minor again (cautionary key signature for next page).

- **Form and cadences**

F minor section: seems to start mid-phrase, with emphatic arpeggiation of the precadential  $\flat$ II in mm3–5 of the excerpt, and ending with a PAC.

F major section: rounded binary form (||: 4+6 :||: 4+6 :||)

A: four-measure antecedent beginning with chromatically rising thirds and ending on a HC, then a consequent stretched to six measures, modulating to V (C) with a PAC.

B: four measures, starting in C with the same parallel third motive as A, then modulating back to I (F) for a HC

A': six measures in the tonic F major, starting as a variant of A and ending with a PAC. The second measure of this phrase imitates the ascending chromatic thirds with a chromatic descent in the same rhythm.

End of page: cautionary key signature indicates a return to F minor

- **Genre**

The alternation between F major and minor rules out many common classical-era forms which visit a greater variety of keys with less emphasis on the parallel major/minor relation. The rounded binary form of the F major A section suggests some kind of variation form (with the F major as a *maggiore* variation)—though the shape of the F minor phrase here seems quite different than the end of the F major one, making a direct variation unlikely. Another possibility is the double variation, which alternates variations on separate major and minor themes: this could be the first presentation of the F major theme or (given the fairly complex texture) one of the variations. If this is a theme-and-variations or double variations movement, it could be either a stand alone piano piece or a movement of a piano sonata.

- **Composer and date**

The phrase structures, motivic economy, and strong drive to cadences makes this highly typical of the Viennese classical style of Haydn, Mozart, and Beethoven. Septuplets are relatively rare in Mozart's music, making Haydn or Beethoven more likely, and placing this in the later classical period (1790–1810). The double variations form is particularly associated with Haydn, making him the most likely composer. I would identify this as a double variation movement from a piano sonata by Haydn, around 1790–1800.

- **Piece identification** (note that an exact identification is not necessary as long as the comments are observant and well argued)

Joseph Haydn, Andante with Variations in F minor, Hob. XVII/6 (1793)

Score #6

27

Musical score for measures 27-30. The system includes a vocal line and a piano accompaniment. The vocal line starts with a fermata over a whole note, followed by a melodic phrase. The piano accompaniment features a rhythmic pattern of eighth notes. Dynamics include *fp* (fortissimo piano) and accents.

Schon wird von des Stro - mes Wo - gen

30

Musical score for measures 30-33. The system includes a vocal line and a piano accompaniment. The vocal line continues the melodic phrase. The piano accompaniment maintains the rhythmic pattern. Dynamics include *fp* and accents.

rasch der Na - chen fort - ge - zo - gen,

33

Musical score for measures 33-36. The system includes a vocal line and a piano accompaniment. The vocal line features a melodic phrase with a *cresc.* (crescendo) marking. The piano accompaniment includes a triplet in the right hand. Dynamics include *cresc.* and accents.

doch den trä - nen - dunk - len Blick zieht die

## Sample Response for Score #6

- **Instrumentation**

Piano, voice (probably soprano or tenor), and horn in E (sounding a minor sixth lower than written). While the *obbligato* instrument is unlabeled, the rarity of other transposing instruments in E and the relatively slow-moving, conjunct lines make the horn the most likely choice. The horn often parallels the voice a third below, and has a recurring refrain (5–4–3–2) at the end of phrases.

- **Key**

The key of the entire lied (based on the key signature) is most likely E major. Locally, this section is in E minor (the parallel minor), with most of the passage unfolding over a B pedal dominant pedal point.

- **Harmony**

I identify m27 as a  $V^7/V$  resolving to V, followed by a long dominant prolongation that last for the rest of the page. There is a repeated 6/4–5/3 motion over the B pedal in the bass, and m34 emphasizes the G major chord ( $\flat$ III of E minor), a chromatic third relation which continues (in the last beat of the page) to V of the tonic E (though with a held-over G natural which suggests that the final cadential dominant may be yet to come).

- **Genre, composer, and date**

The German text and the expressive poetic imagery (“tränedunklen Blick”) suggests a *Lied* of the Romantic period. Broadly speaking, this genre was practiced by many composers, ranging from Beethoven to Mahler and Strauss, but the relatively simple harmonic and rhythmic language suggests the early part of the romantic period: Beethoven, Schubert, and possibly Schumann at the latest (approximately 1810–40). *Lieder* with obbligato instruments are rare for all three of these composers.

Though I can’t definitely rule out Beethoven or Schumann, I identify this as a song for soprano or tenor voice and obbligato horn by Franz Schubert, written sometime in the last ten years of his life (1818–28). The flowing triplet accompaniment texture is reminiscent of other Schubert songs like “Wohin” or “Halt” from *Die schöne Müllerin*, and chromatic third relations are very common in Schubert’s songs.

- **Piece identification** (note that an exact identification is not necessary as long as the comments are observant and well argued)

Franz Schubert, “Auf dem Strom,” D. 943 (1828)

Score #7

First system of the musical score. It consists of a vocal line and a piano accompaniment. The vocal line has the lyrics: - cen - dre du fir - ma - mient que l'as - - - tre i-. The piano accompaniment features a treble and bass clef with various chords and melodic lines. A dynamic marking *Più.* is present in the bass clef, and an asterisk *\** is placed below the piano part.

Second system of the musical score. The vocal line continues with the lyrics: - ri - - - - se. The piano accompaniment includes a dynamic marking *sempre pp* in the right hand.

Third system of the musical score. The vocal line has the lyrics: C'est - l'heu - - re ex -. The piano accompaniment features a dynamic marking *dolcissimo* above the vocal line.

Fourth system of the musical score. The vocal line has the lyrics: - qui - - - - se. The piano accompaniment includes a dynamic marking *ppp* in the left hand.

## Sample Response for Score #7

- **Instrumentation**

Voice (most likely soprano or tenor) and piano

- **Key**

F# major

- **Harmony**

Highly chromatic but still tonal harmony: the excerpt begins with a dominant seventh chord built on E# (scale degree 7 of F#) and continuing by a surprising root movement of an augmented second (E# to D, enharmonically a minor third) to D major, ♭VI of F#. It's possible to see these chords representing some kind of substitute dominant-tonic motion, with the leading tone E# resolving to F#. After the D major ♭VI in measure 2 of the excerpt, the harmony continues to move on the “flat side” of the tonic key, visiting E major (♭VII) and G major (♭III) before continuing to the dominant at the end of m6. A full V–I (including the leading tone) appears only in measures 6–7 on this page, though there are incomplete V<sup>7</sup> chords (no third) at the end of m11 and m12. In measures 8 and 10, the D chord (♭VI) that sounded earlier returns, now with an added seventh C: this is of course an enharmonically respelled German augmented sixth chord in F#, but functions here like a quasi-plagal confirmation of the tonic, resolving directly to I by semitone voice-leading.

- **Genre**

A French *mélodie* for voice and piano. The chromatic harmony suggests the late 19<sup>th</sup> or early 20<sup>th</sup> century: Saint-Saëns, Fauré, or the relatively early works of Debussy or Ravel (the musical language is more tonally rooted and less modernist than either of these composers' mature impressionist style). Even without the linguistic hint of the text, the triads and seventh chords on unusual scale degrees, third relations, and chromatic voice leading are characteristic of late 19<sup>th</sup>-century French music. I would identify this as a *mélodie* by Fauré, written around the turn of the century (1890–1910).

- **Piece identification** (note that an exact identification is not necessary as long as the comments are observant and well argued): Gabriel Fauré, “La lune blanche luit dans les bois” from *La Bonne Chanson* (1892–94)

## II Surge, aquilo

**Tenore Solo**  
46  $\text{♩} = 92$  47 *mf* 48 49  
Sur - ge, a - qui - lo; ..... et ve - - ni, ve - ni, aus - teri..

**Flauto**  
*mf*

**Corno Inglese**  
*p dolce*

**Arpa**  
*mf*

**3 Contrabassi Soli**  
Suoni reali  
I *(loco) mf*  
II *(loco) mf*  
III *(loco) mf*

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**Ten.**  
50 51 52 53  
..... per - fla, ..... per - fla hor - tum meum, ..... et flu - ant.....

**Fl.**  
Flattert. *stacc.*

**C. I.**

**Arpa**  
suoni reali  
Cl B $\flat$

---

**Ten.**  
54 55 56 57  
..... a - ro - ma - ta il - li - us.

**Fl.**  
Filtr.

**C. I.**

**Arpa**  
*sempre loco*  
Ab

## Sample Response for Score #8

- **Instrumentation**

Tenor solo with flute, english horn, harp, plus (briefly) 3 double basses. The large complement of basses marked “soli” suggests that this is a subset of a larger orchestra or chamber orchestra, not just a chamber ensemble.

- **Genre**

As movement II of a multi-movement work, this suggests some kind of twentieth-century cantata or oratorio. The text in Latin, suggesting a source from scripture or the Catholic liturgy—though this doesn’t appear to be one of the standard mass or requiem texts. Perhaps a psalm setting?

- **Musical language and analysis**

The work is clearly based on a twelve-tone row: the tenor presents the first fully ordered row (which I will designate as P8) in measures 47 to 49: **P8:** A $\flat$  G F D F $\sharp$  E E $\flat$  D $\flat$  B $\flat$  C B A

In the preceding measure (m46), the harp/basses play R8, in three four-note chords:

**R8:** A C $\flat$  C B $\flat$ , C $\sharp$  E $\flat$  E F $\sharp$ , and D F G A $\flat$

The tenor continues with a partial R8 (starting m50) and then a complete R8 (starting m52).

Meanwhile, there is a melodic row in the english horn (m48), moving to flute and harp. We can tell that this is a transposing score since if not, the english horn would not form a full row with the flute and harp: **RI10:** A G F $\sharp$  A $\flat$  F E $\flat$  D C E D $\flat$  B B $\flat$

Another melodic row follows (flute, starting m51): **R11:** C D E $\flat$  D $\flat$  F $\flat$  G $\flat$  G A F A $\flat$  B $\flat$  B  
... then another R8, starting in the harp in m53 then moving to the flute.

- **Composer and date**

The work is clearly twelve tone, but does not seem typical of the Second Viennese School: Many of the typical twelve-tone features of Berg (expressionist-style melodies/harmonies), Webern (derived rows, symmetry and canon), and Schoenberg (“Brahmsian” phrasing, combinatoriality) are NOT present here.

Notable style characteristics include: many repeated notes within a row, very metrically flexible melodies, a very colourful instrumentation, and a relatively spare texture. All signs point to a twelve-tone composer active outside Germany/Austria: for example, Dallapiccola, (early) Nono, Boulez, Pousseur, or a North American composer like Roger Sessions or Gilles Tremblay. A particularly good candidate is Stravinsky, who wrote with the twelve-tone technique from about 1950 to 1971: this music matches all the style characteristics noted above, plus he was increasingly interested in Catholicism late in life (a tie to the Latin text). I identify this as a twelve-tone cantata by Stravinsky, written between 1950 and 1960 (later works tend to use hexachordal arrays instead of full rows).

- **Piece identification** (note that an exact identification is not necessary as long as the comments are observant and well argued): Igor Stravinsky, *Canticum Sacrum*, ii. “Surge, Aquilo” (1955)

Score #9

22

VI. 1<sup>o</sup> solo

VI. 2<sup>o</sup> solo

Cemb.

VI. I

VI. II

Vle.

Vc.

Cb.

15

div.

*ff*

VI. 1<sup>o</sup> solo

VI. 2<sup>o</sup> solo

Cemb.

*mp*

## Sample Response for Score #9

- **Instrumentation**

The divisi in the strings imply an orchestra or chamber orchestra, with soloistic roles for two violins and a harpsichord (*cembalo*). It's not clear from this short excerpt whether the ensemble also includes winds and brass.

- **Style, musical language**

The excerpt includes a strikingly diverse range of materials, some with tonal connotations and some entirely atonal. These include:

- 3 before 15, ascending E major scale (vn1) combined with a descending E $\flat$  major or C minor scale (vn2), in a simple repeating rhythmic pattern (eighth-sixteenth-sixteenth)—this is a contour inversion, though not quite an exact pitch mirroring. Together, the two scales fill out all 12 chromatic pitch classes.
- 3 before 15, in the harpsichord: a succession of triads, not tonally related but sometimes linked by neo-Riemannian operations (hexatonic). Examples include f $\sharp$   $\rightarrow$  b $\flat$  (PL) and F  $\rightarrow$  c $\sharp$  (PLP).
- After the scales in the solo violins (2 before 15), there are what seem like incomplete twelve-tone rows, in exact inversion around E $\flat$ 5.
- The A-B $\flat$  minor second dyad (doubled across 5 octaves) at 15 is played by all the ensemble strings in divisi.
- 1 after 15, complete twelve-tone rows in both violins (though not the same row), both based on the 0123 set class. The harpsichord similarly plays pitch material based on three adjacent 0123 sets, completing the chromatic aggregate.
- The principle of aggregate completion is also important 5 after 15, where the harpsichord plays all three possible diminished seventh chords (0369), and the solo violins return to the rhythm of their earlier scales (here with interlocking 014 and 034 sets), again completing the aggregate.
- In addition to the quasi-baroque inclusion of the harpsichord, there are some four-note motives based on the B-A-C-H contour: (-1, +3, -1): for example, in retrograde (B-C-A-B $\flat$ ) in vn1, 1 after 15.

- **Genre, composer, date**

The work is clearly polystylistic, mixing tonal materials and textures with atonal and twelve-tone ones. Baroque references are a major part of the musical references made here, from the instrumentation (harpsichord, string orchestra) to the B-A-C-H motive. Polystylistic composition begins in the 1960s with works like Berio's *Sinfonia*, and is particularly important in the next two decades. Major polystylistic composers include Schnittke, Rochberg, Del Tredici, Gubaidulina, Henze, and Zimmermann. Given the B-A-C-H reference (important in Gubaidulina's *Offertorium*), I would identify this as a piece by Gubaidulina from the years 1960–1980 for chamber orchestra and soloists.

- **Piece identification** (note that an exact identification is not necessary as long as the comments are observant and well argued): Alfred Schnittke, Concerto Grosso No. 1 , II. Toccata (1977)

## Audio Example #1

<https://www.youtube.com/watch?v=g3JyQnYPkZk>

*NB: Visiting this link will reveal the title and composer, so avoid looking if you wish to practice guessing.*

### Sample Response for Audio Example #1

- style = swing jazz: dance music
- era = late 1930s through 1940s
- orchestration = big-band instrumental: saxophones, trumpets, trombones, piano, guitar, bass, drums
- form = strophic: simple repeated harmonic pattern (12-bar blues)  
piano introduction (8 bars; boogie-woogie vamp plus drums) followed by strophes or “choruses”  
featuring a solo instrument: piano, piano with wider register and thicker texture, (key change) tenor saxophone with muted trumpets accompanying, trombone with saxes accompanying, tenor saxophone with muted trumpets accompanying, trumpet with saxes accompanying, piano (sparse chords), call-and-response between saxes and brass (3x)
- riff-based composition: song is constructed from short melodic and rhythmic motives deriving from improvisation

## Audio Example #2

<https://www.youtube.com/watch?v=pNItGIZvAx0>

*NB: Visiting this link will reveal the title and composer, so avoid looking if you wish to practice guessing.*

### Sample Response for Audio Example #2

- style = Motown (blend of R&B with soul, gospel, doo-wop and pop music)
- era = 1960s to early 1970s
- orchestration = lead and backing female vocals, horn section (saxes, trumpets, trombones), guitars, vibraphone, bass, drums, tambourine
- form = verse-chorus: intro (= instrumental chorus and verse), chorus, verse 1, chorus, brief re-introduction, brief vocal link or postchorus, verse 2, chorus, drum break, outro chorus repeats and fades
- instrumental introduction features prominent horn riff and backing vocal “oohs”
- chorus features backing vocals singing title lyric; verse features solo vocal with changing lyrics
- horns, especially baritone saxophone, are prominent throughout