

# **Stylistic Composition**

## **2017-18**

Seminar 5 – 14 February 2018  
*Orchestration and Assignment 4*

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Assignment 3: String Quartet in the style of Ravel

# Assignment 3

Compose a slow section of music for string quartet, in the style of Maurice Ravel.

The assignment should be between 16 – 20 bars long, but ought not conform to four-bar phrasing. Include several different sections, with a balance of sustained material and quicker movement.

It is up to you to create stylistically-appropriate melodic and harmonic structures based upon principles garnered from relevant musical examples.

The assignment should be typeset using notational software. It should be uploaded to Grade Centre by 11:59 pm on **Monday 5 March 2018**. Your submission should contain two files: a pdf of the score and the file from your notation software (e.g. a Sibelius/Finale/Musescore/Lilypond file).

You should aim to submit a draft of this assignment in class on **Wednesday 28 February 2018** for formative feedback. If you have any queries regarding this assignment, contact [David.Pocknee@hud.ac.uk](mailto:David.Pocknee@hud.ac.uk).

# How to Harmonize a Melody

## Harmonizing and Orchestrating a Melody

1. Write an accompaniment to this Ravel melody from "Introduction et Allegro"

A musical score for piano accompaniment. The top staff is a single treble clef in 3/4 time, containing a melody with eighth-note triplets and quarter notes. The bottom staff is a grand staff (treble and bass clefs) in 3/4 time, currently empty for accompaniment. The melody consists of six measures: the first two have eighth-note triplets, the next two have quarter notes, and the last two have a half note and a quarter rest.

2. Now Orchestrate for the String Quartet

A musical score for string quartet orchestration. It consists of four staves: Violin I (treble clef), Violin II (treble clef), Viola (alto clef), and Violoncello (bass clef). All staves are in 3/4 time and are currently empty for orchestration. The staves are grouped by a brace on the left.

# How to Harmonize a Melody

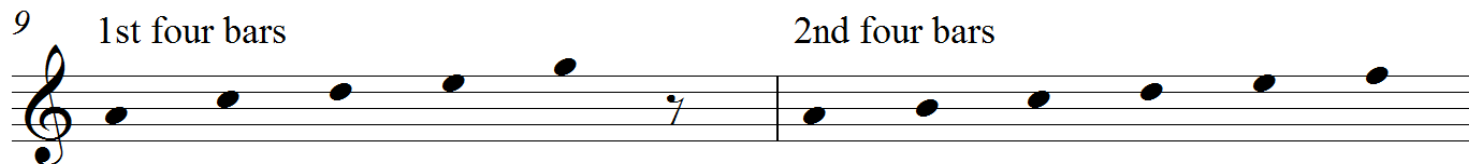
**Step 1.** Identify what scale or mode the melody is using. Perhaps different parts of the melody are constructed from different types of scale or mode.

Below: The melody from the second movement of Ravel's String Quartet.

<https://youtu.be/ieRQyyPowH0?t=7m42s>

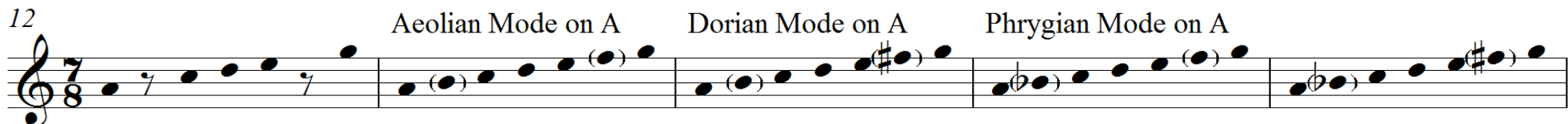


In this extract there are two scales, one for each of the two halves of the melody.



**Step 2.** Work out if the scale or the mode could fit into another larger mode or scale. Ravel's melodies often only consist of a small number of pitches. The first four bars use a pentatonic scale – this is typical for Ravel's works. However, his harmonies are very rarely pentatonic. The pentatonic scale can fit into several existing modes as the B and F are missing and could be either sharp, flat or natural.

Possible modes compatible with first four bars



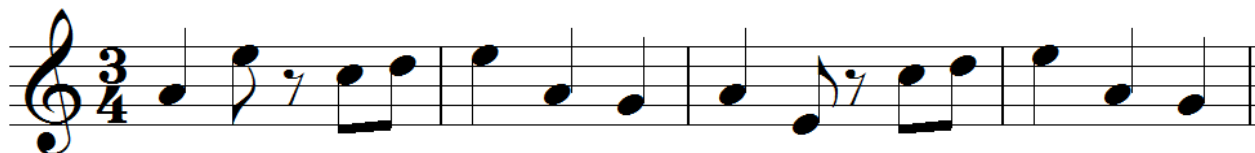
# How to Harmonize a Melody

**Step 3.** Choose a scale or mode to create the harmony in this section.

In this example I'll choose this mode:



**Step 4.** Harmonize the melody with 7<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> chords. Remember that as the higher extensions of the chords tend to be in the top of chord, the melody notes are more likely to be these than members of the main triad.



# String Instrument Techniques

## Left Hand Techniques

Harmonics

Double Stops

## Right Hand Techniques

Bow Position

- Sul Tasto (over the fingerboard) (*sur la touche*)
- Sul Ponticello (near the bridge)
- Ordinario (ordinary position) (*jeu ord.*)

Tremolo

- Single string tremolo
- 2-string tremolo

Pizzicato

Arpeggios

# Ravel Characteristics

## General

Lots of small sections

2 – 7 bars

Consecutive sections often use a different scale or mode

Use of distant key signatures (e.g. Am => Gb Major)

Changes between 2/4, 3/4, and 5/4 time signatures

Use of extremes of instrumental register

Use of scales or modes different from those used in the harmony

# Ravel Characteristics

## Melody

Not four bar phrases

Long or short

Short: Claude Debussy - *Syrinx* for solo flute

Long: Flute Solo from Maurice Ravel - *Daphnis Et Chloé* (Orchestral Suite No. 2 bars 178 – 181)

Melodies made from small motives stuck together

Melodies placed in different instruments, not always Violin I

Created from different modes or scales

Pentatonic

Octatonic

Whole-Tone

Church Modes

The modes or scales in the melody are not always directly related to the harmony

Melodies are often made from only a few notes and use a small scale (like a pentatonic scale) that can fit within larger modes or scales.

When melodies return they are often unchanged, except for transposition



# Ravel Characteristics

## Harmony

Parallel harmony often used

see Claude Debussy - *Piano Preludes, Book I, X (...La cathédrale engloutie)*

Use of extended harmonies:

7ths, 9ths, 11ths, 13ths

used to colour chords

## Harmonic Ambiguity

Often it is not clear how to analyze/classify a particular chord

Sometimes tonal chord sequences serve as the basis for the chords

Tritone substitution

Tritone Dominant

# Ravel Characteristics

## Timbre

String techniques used:

Sul Tasto / “sur la touche” - bowing over the fingerboard

Sul Ponticello – bowing near the bridge

Double Stops

often in fifths

Arpeggios

Tremolo

single string tremolo

2-string tremolo

## Instrumentation

Splitting up of melody between different instruments

Violin 1 does not always have the main melody

Chord voicing is often not in the conventional order (i.e. Violin I, Violin II, Viola, Cello)

Melody is sometimes doubled an octave or two octaves below

# Violin Fingerings and Natural Harmonics

**VIOLIN**

**Natural Harmonics**

Diagram illustrating violin fingerings and natural harmonics across positions 1st to 7th.

The diagram shows the violin body with four strings (G, D, A, E) and a fingerboard. Fingerings are indicated by black dots on the strings. Natural harmonics are indicated by open circles on the strings, with corresponding musical notation on the right.

**1st position**

**2nd position**

**3rd position**

**4th position**

**5th position**

**6th position**

**7th position**

Harmonic notes (from left to right):

- g# (4), a (5), b (7), c# (9), e (12), g# (16), b (19), e (24)
- c# (4), d (5), e (7), f# (9), a (12), c# (16), e (19), a (24)
- f# (4), g (5), a (7), b (9), d (12), f# (16), a (19), d (24)
- b (4), c (5), d (7), e (9), g (12), b (16), d (19), g (24)

Harmonic notation (from left to right):

- g# (4), a (5), b (7), c# (9), e (12), g# (16), b (19), e (24)
- c# (4), d (5), e (7), f# (9), a (12), c# (16), e (19), a (24)
- f# (4), g (5), a (7), b (9), d (12), f# (16), a (19), d (24)
- b (4), c (5), d (7), e (9), g (12), b (16), d (19), g (24)

# Viola Fingerings and Natural Harmonics

1

**VIOLA**

**Natural Harmonics**

1st position      2nd position      3rd position      4th position      5th position      6th position      7th position

# Violoncello Fingerings and Natural Harmonics

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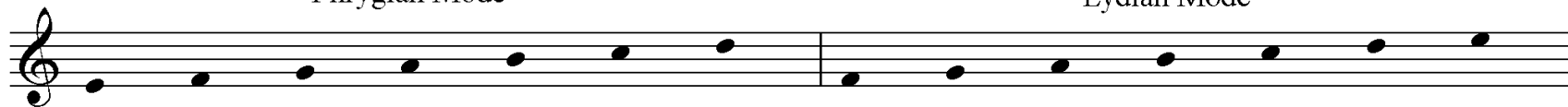
Ionian Mode

Dorian Mode



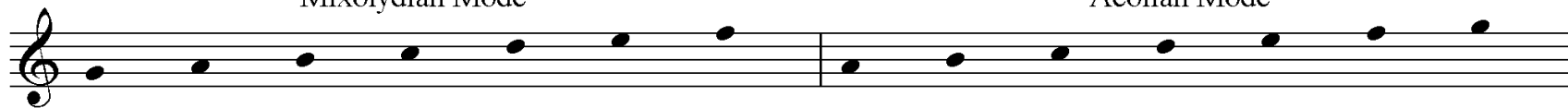
Phrygian Mode

Lydian Mode

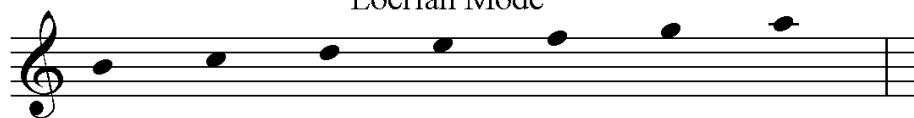


Mixolydian Mode

Aeolian Mode

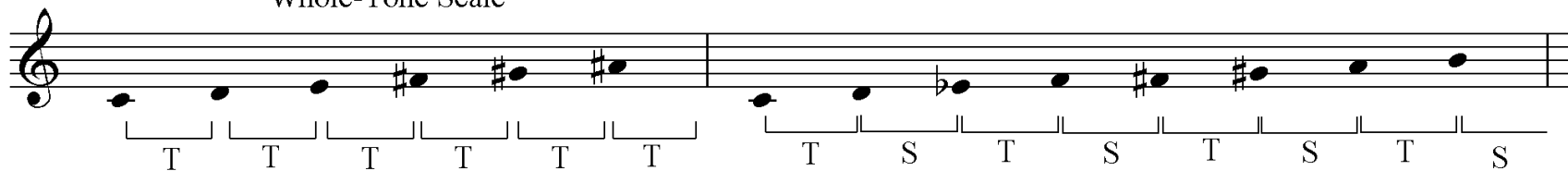


Locrian Mode



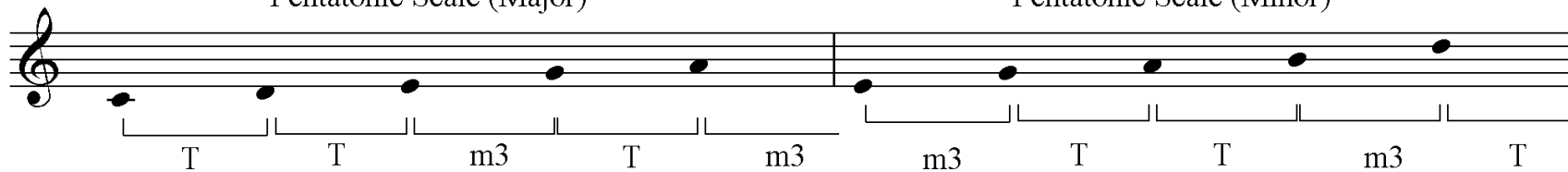
Whole-Tone Scale

Octatonic Scale



Pentatonic Scale (Major)

Pentatonic Scale (Minor)



# Church Modes

All Modes At All Transpositions

Ionian Mode	Dorian Mode	Phrygian Mode	Lydian Mode	Mixolydian Mode	Aeolian Mode	Locrian Mode

All possible whole-tone scales

A single musical staff in treble clef showing all 12 possible whole-tone scales. The scales are arranged in two groups of six, separated by a double bar line. The first group starts on C, and the second group starts on C#.

All Pentatonic scales

TT3T3

T3T3T

3T3TT

T3TT3

3TT3T

A large musical staff system consisting of 12 staves, each containing a pentatonic scale. The scales are organized into five columns based on their interval patterns: TT3T3, T3T3T, 3T3TT, T3TT3, and 3TT3T. Each column contains two scales, one starting on C and one starting on C#.

All Possible Octatonic Scales

A single musical staff in treble clef showing all 24 possible octatonic scales. The scales are arranged in three groups of eight, separated by double bar lines. The first group starts on C, the second on C#, and the third on C##.