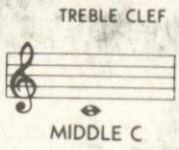
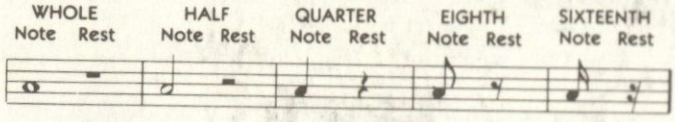
MUSIC NOTATION GUIDE

CLEF



Guitar music sounds an octave lower than notated.

NOTES AND RESTS



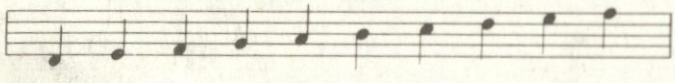
A dot added to a note or rest increases its value by 1/2.

SYMBOLS

	tenuto	Hold full value
		Accent
	marcato	Louder accent
sfz	*sforzando*	Sudden accent
	staccato	Detached
	fermata	Hold, pause
	crescendo	Gradually louder
	decrescendo *diminuendo*	Gradually softer
rit.	Ritardando	Gradually slower
accel.	Accelerando	Gradually faster
8va	All 'ottava	One octave higher than written
tr	Trill	Rapid alternation between primary note and the note above
	Grace Note	Very short ornamental note. (Note: Grace notes are always stemmed up.)
//	Break	Short pause

STEMS AND BEAMS

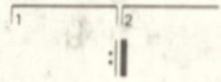
Notes **below** the third line are written with stems **up**. Notes **on** or **above** the third line are written with stems **down**.

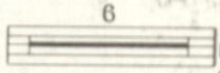


Stem direction of beamed notes or chords is determined by the note farthest from the third line.

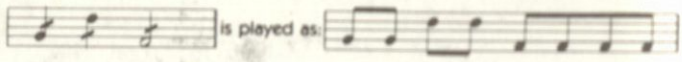
REPEAT TERMS AND SIGNS

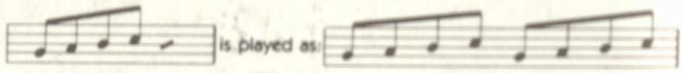
D.C. al FINE	Return to the beginning and play to Fine.
D.S. al FINE	Return to 𝄋 and play to Fine.
D.C. al CODA	Return to the beginning, play to ⊕ and skip to the Coda.
D.S. al CODA	Return to 𝄋, play to ⊕ and skip to the Coda.
𝄆	Return to the beginning or nearest 𝄇 and repeat.

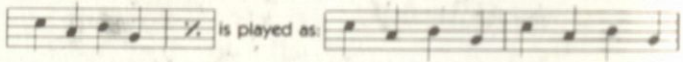

Play through 1 𝄆 the first time, then skip to 2 on the repeat.

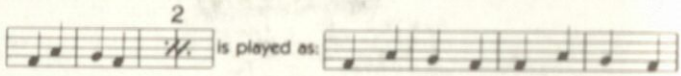


Extended rest (6 measures in this example).

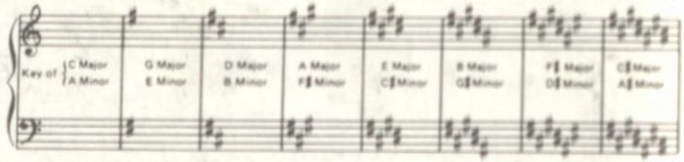








KEY SIGNATURES



ORDER OF SHARPS: F - C - G - D - A - E - B

ORDER OF FLATS: B - E - A - D - G - C - F

Music Theory I: Lecture 1:

1.16.24

3 types of scales: chromatic – all HS, use all 12 notes
pentatonic: W W H W H
diatonic – 5 WS, 2 HS, 7 notes
major – 1 2 3 5 6 ^
minor – 1 2 ♭3 4 5 ♭6 ^
major → W W H W W W H
minor → W H W W H W W

2 kinds of HS: chromatic → same letter
diatonic → different letter

diatonic: G A♭
chromatic: G G♯
A♭ & G♯ are enharmonic

1 2 3 4 5 6 7 8 — scale degree no.

A maj: do re mi fa so la ti do — movable do solfège

tonic mediant dominant leading tone — scale degree names
Supertonic subdominant submediant
"sus" ← tonic → "super"

4 5 6 7 1 2 3 4 5
subdominant, leading tone, mediant, dominant
submediant

Major Keys (15):

tonic + WWHWWWH
Fat Cats Go Down Alleys Eating Birds

G D A E B F♯ C♯
F B♭ E♭ A♭ D♭ G♭ C♭

Circle of 5ths

C maj
G 1♯
D 2♯
A 3♯
E 4♯
B 5♯
F♯ 6♯
C♯ 7♯
F♭ 7♭
C♭ 6♭
G♭ 5♭
D♭ 4♭
A♭ 3♭
E♭ 2♭
B♭ 1♭
F 0♭

name of key = C♭ maj

HL00210019 BEAD Go Call Fred

♭ steps down, ♯ maj

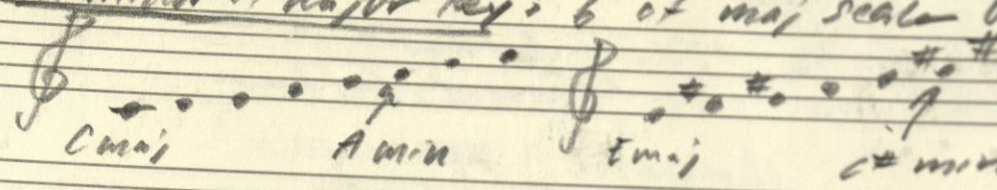
Minor keys:

Major keys ⇄ minor keys

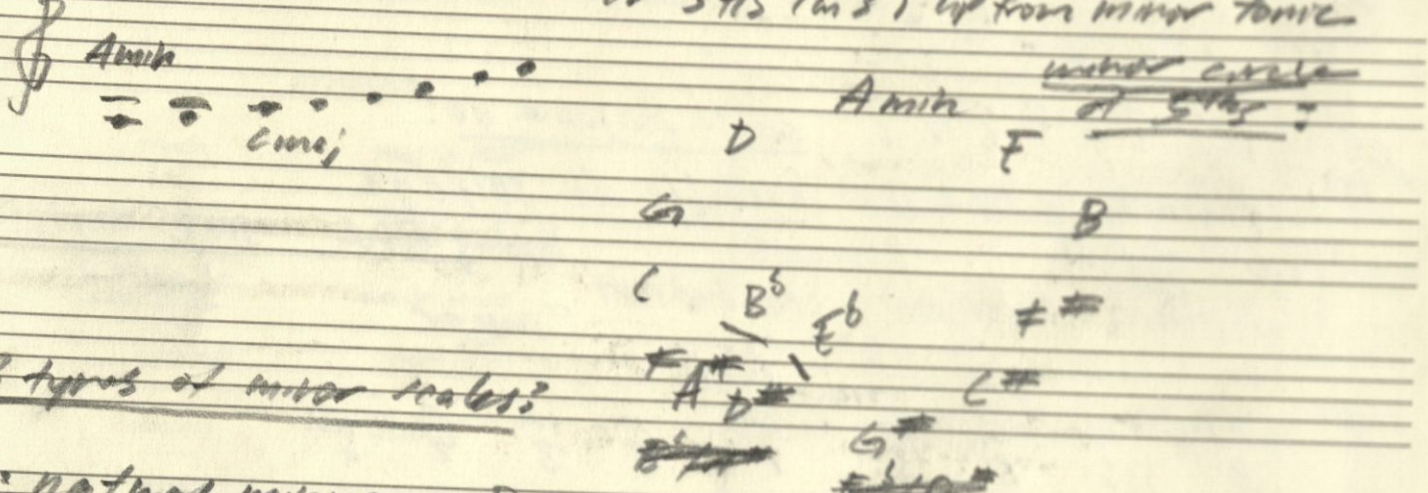
relative → different tonic, same key signature

parallel → same tonic, different key signature

Rel minor of major key: $\hat{6}$ of maj scale OR m3 below tonic (3HS)



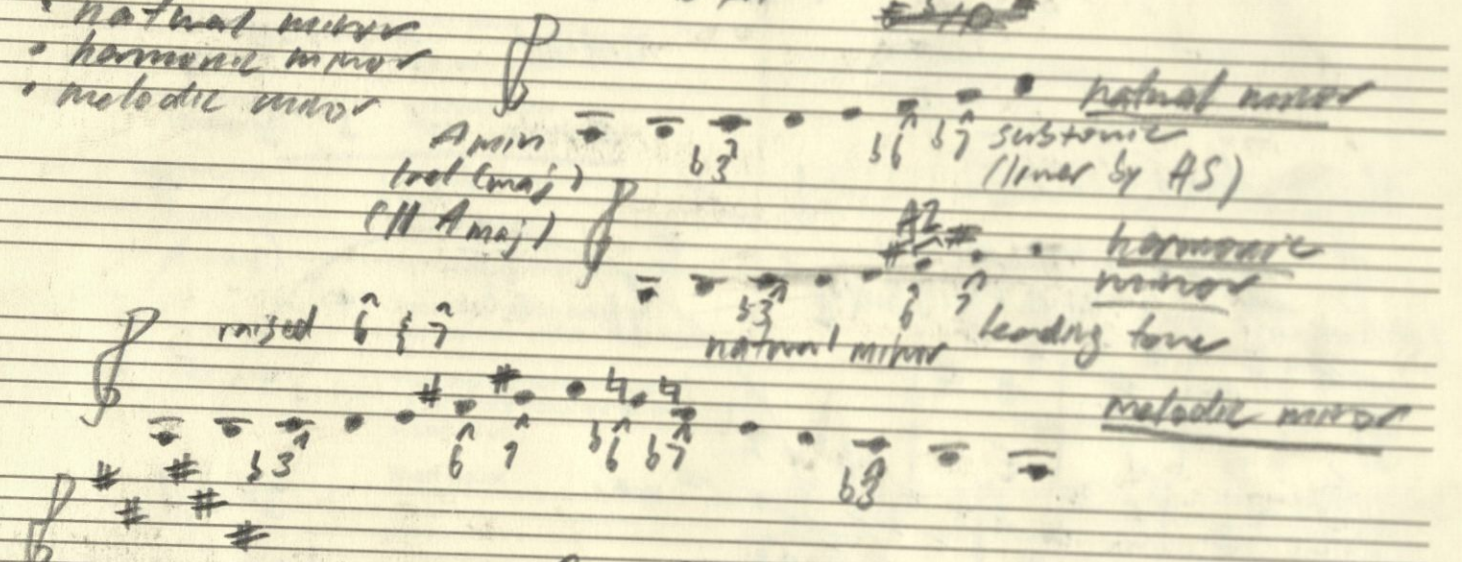
Relative maj of minor key: $\flat\hat{3}$ of minor ($\hat{3}$ of minor)
or 3HS (m3) up from minor tonic

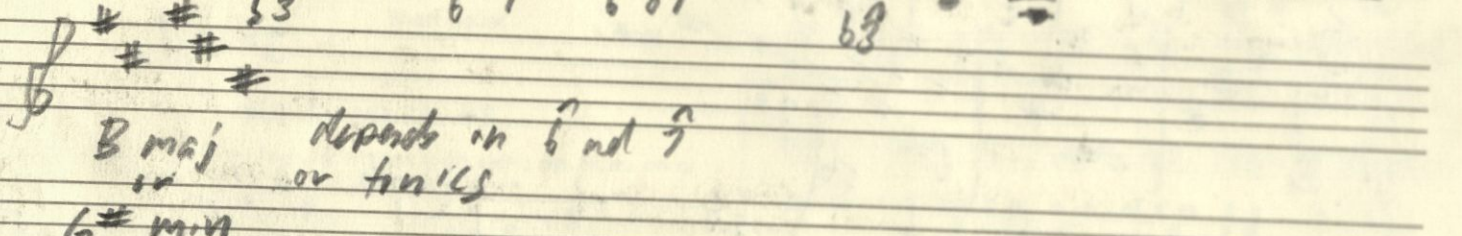


minor circle of 5ths:

3 types of minor scales:

- natural minor
- harmonic minor
- melodic minor

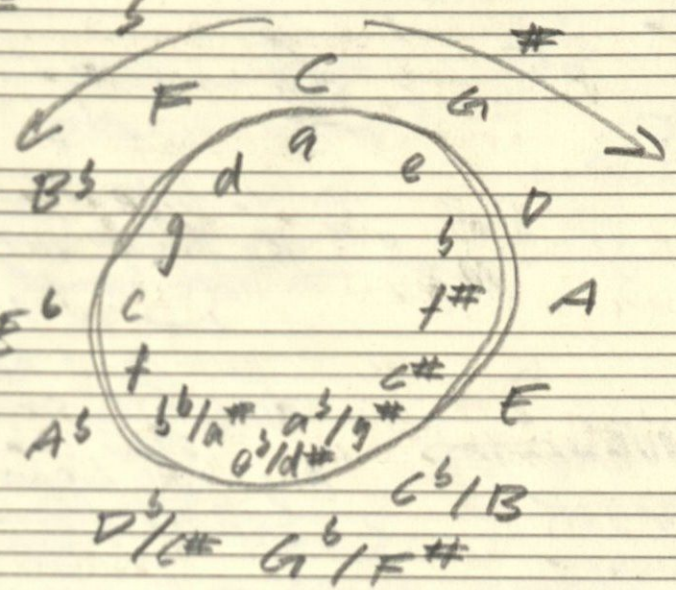




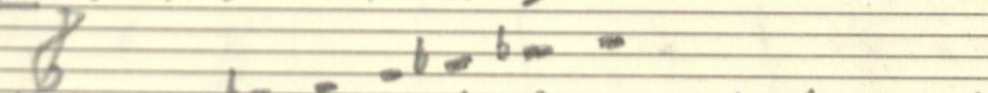
Lecture 2:

1.18.24

Circle of Fifths:



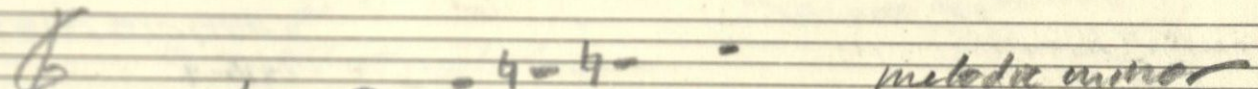
Keys: (minor context)



1 2 ♭3 4 5 ♭6 ♭7 1 natural minor

tonic | mediant | dominant | subtonic

supertonic | subdominant | submediant



melodic minor

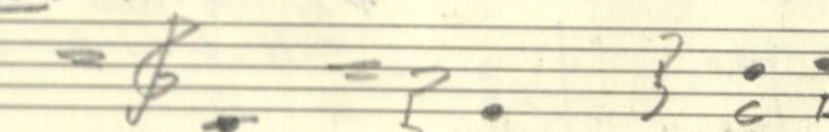
♯6 ♯7 leading tone

raised submediant

♭6 = submediant ♭7 = subtonic

♯ = raised submediant ♯7 = leading tone

C-clef: movable clef



C D G start on V

Scales: chromatic

diatonic

pentatonic

major modes

minor modes

6 modes

"church" modes

* only white keys

C D E F G A B

W W H W W W H

Ionian (C)

dorian (D)

phrygian (E)

lydian (F)

mixolydian (G)

aeolian (A)

locrian (B)

Intervals: quality distance

"# of lines and spaces between the notes inclusive"

qualities: A → E

P5

M3 m3

M major
m minor
P perfect
d diminished
A augmented

m2

1. take lower note as 1
2. figure out what upper note would be in MAJ key of 1

min: 1 HS smaller
dim: 1 HS smaller than min
2 HS smaller than MAJ
aug: 1 HS bigger than MAJ
2 HS bigger than min

bigger ↑ 1 HS ↑ AUGMENTED
1 HS ↓ MAJOR
smaller ↓ 1 HS ↓ minor
1 HS ↓ diminished

M3 m7 M3

Perfect Intervals: only 4 options

P8
P1
P5

not major or minor

P1: unison
AUGMENTED 1 HS
PERFECT
1 HS ↓ diminished

melodic intervals

P5 P5 P4

d5 A5 d4

* always use lower note, even for descending

d5 P5 m7 m7

harmonic interval ascending ascending descending descending

Enharmonic Intervals: double sharp

P8 A7

enharmonic intervals

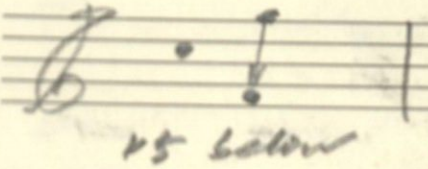
* likes to resolve outwards

A4/d5: tritone "devil's note"

Interval Inversion:

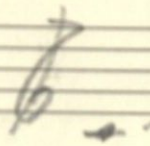
m2 ⇌ M7
M2 ⇌ m7
m3 ⇌ M6
M3 ⇌ m6
P4 ⇌ P5

distance = 9
quality changes:
m ↔ M
P ↔ P
d ↔ A



Compound Intervals: (>8ve)
add 7 to simple interval

11 4
12 5
13 6



Consonances: P
3
5 (major/minor/P)
6
8
P4 - melodic

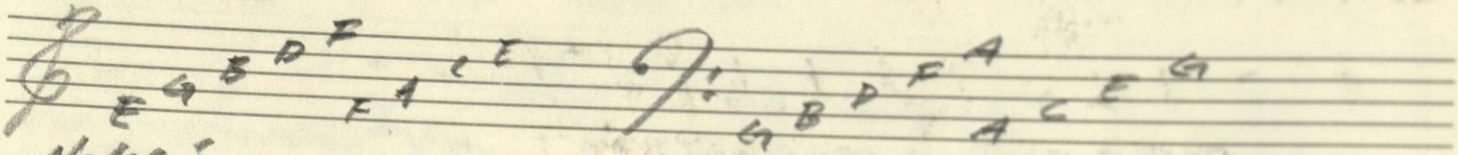
imperfect: 3, 6
perfect: P1, P5, P8, (P4)

dissonances: 2
7
Aug
dim
P4 - harmonic

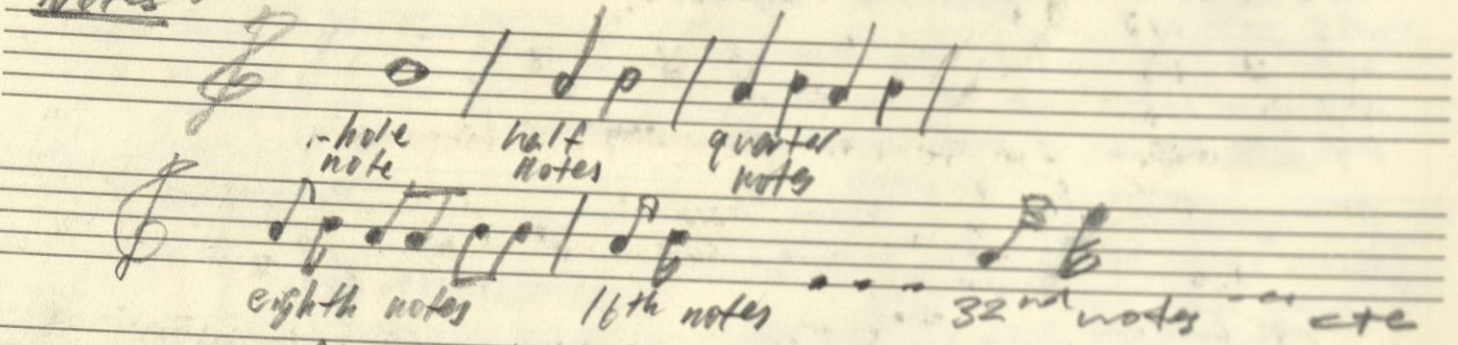
Music Fundamentals:

1.23.24

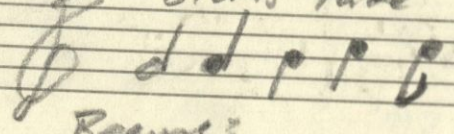
Lecture 3:



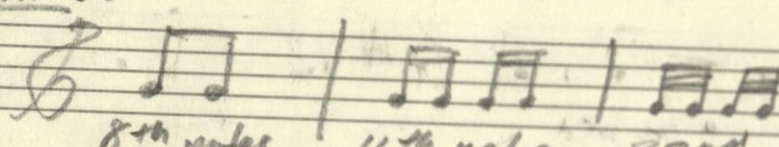
Notes:



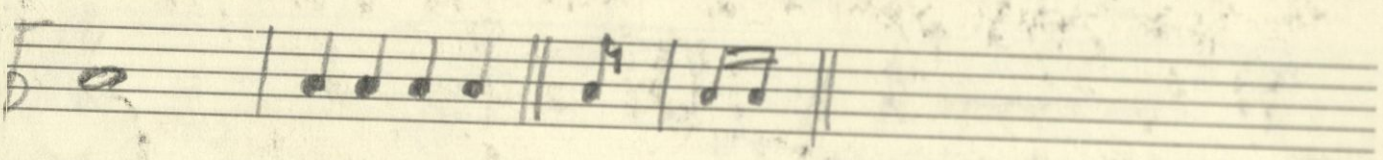
- no flags on hollow notes
- no filled in notes without a stem
- notes take up entire space
- stems take up 2-2.5 spaces

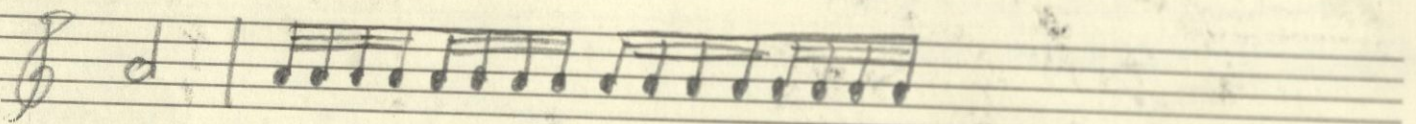


Beams:

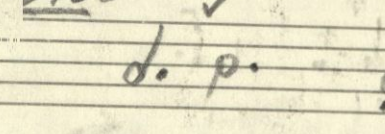


- beam notes in direction of 2nd note
  or in direction of majority of notes
  (if >2 notes)

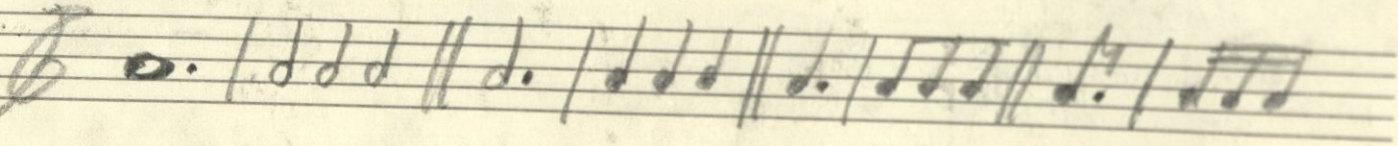




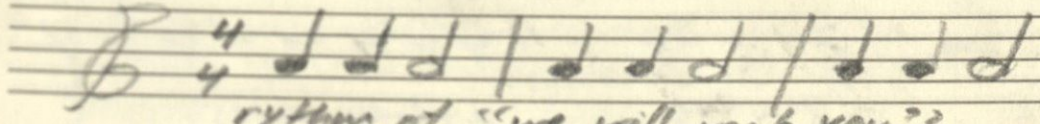
dots: ✓ ✗ articulations

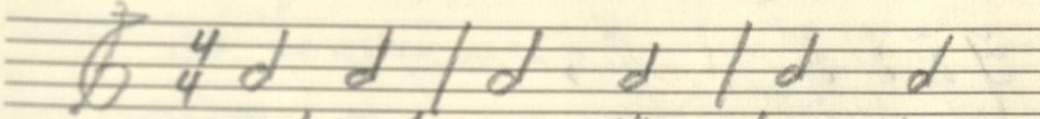


- dots add 50% more note

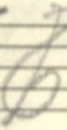


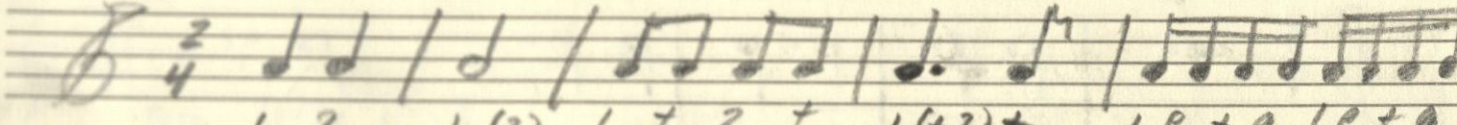
Rhythm: notes written on page
Meter: pulse given from tempo and time signature

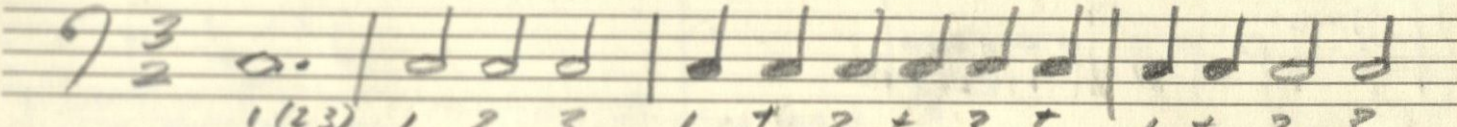

rhythm of "we will rock you"

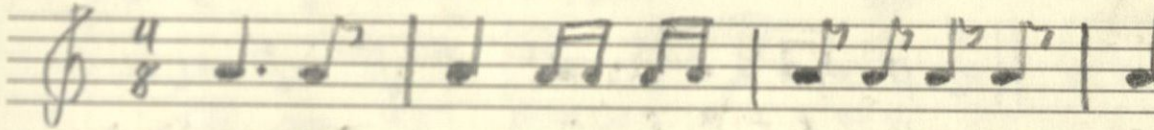

meter of "we will rock you"

Time Signature:

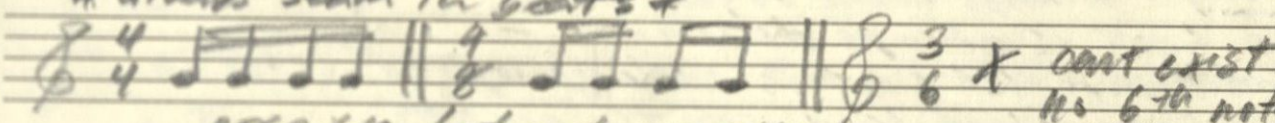

2 → number of beats per measure
4 → what kind of note gets the beat



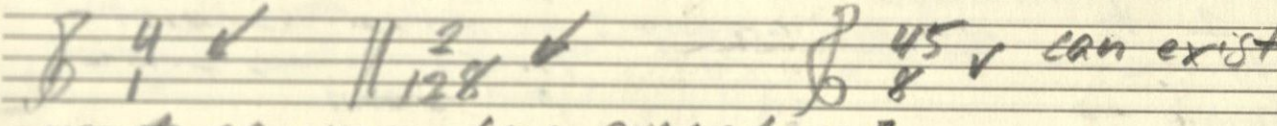




* always beam in beats +

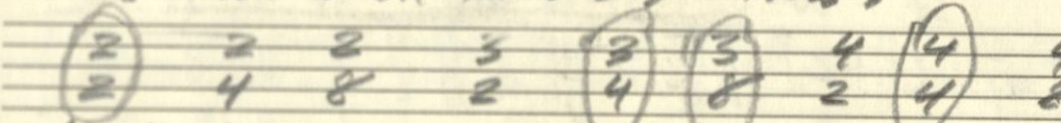

possible but not common!

6 ✗ can't exist. No 6th notes!


128 ✓

45/8 ✓ can exist

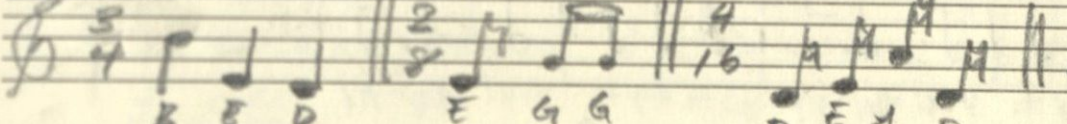
most common time signatures:

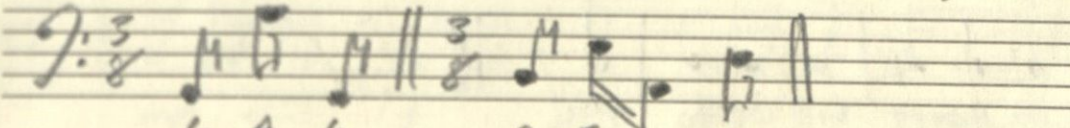


shortcuts:

C = 4/4 ¢ = 2/2

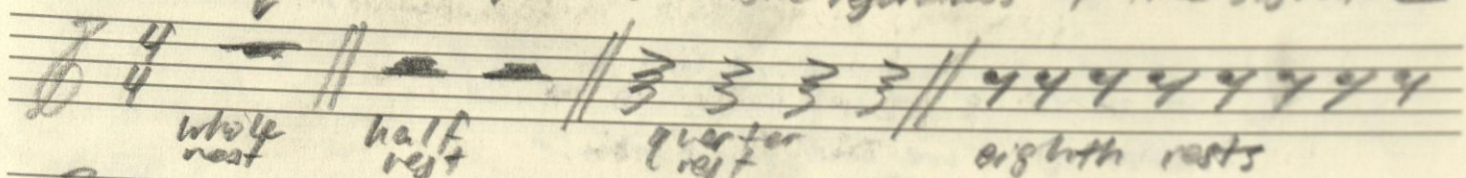
common time cut time

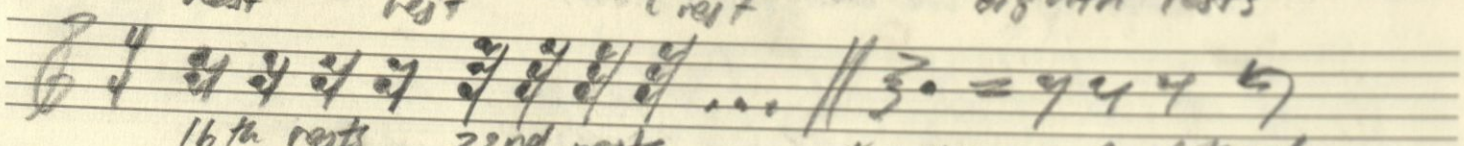




Rests:

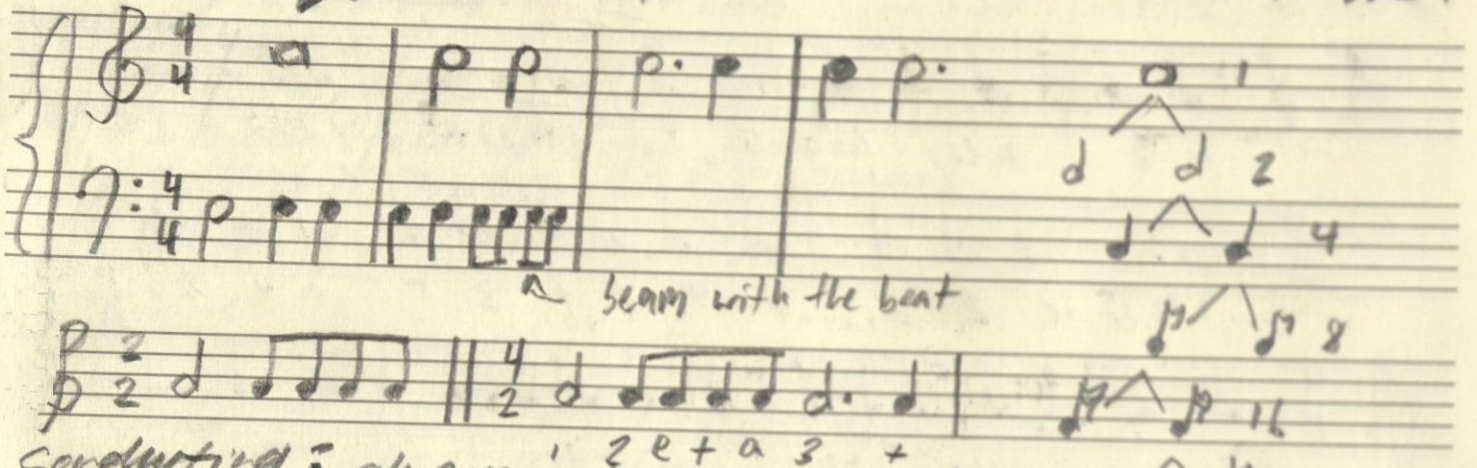
* takes up entire measure regardless of time signature



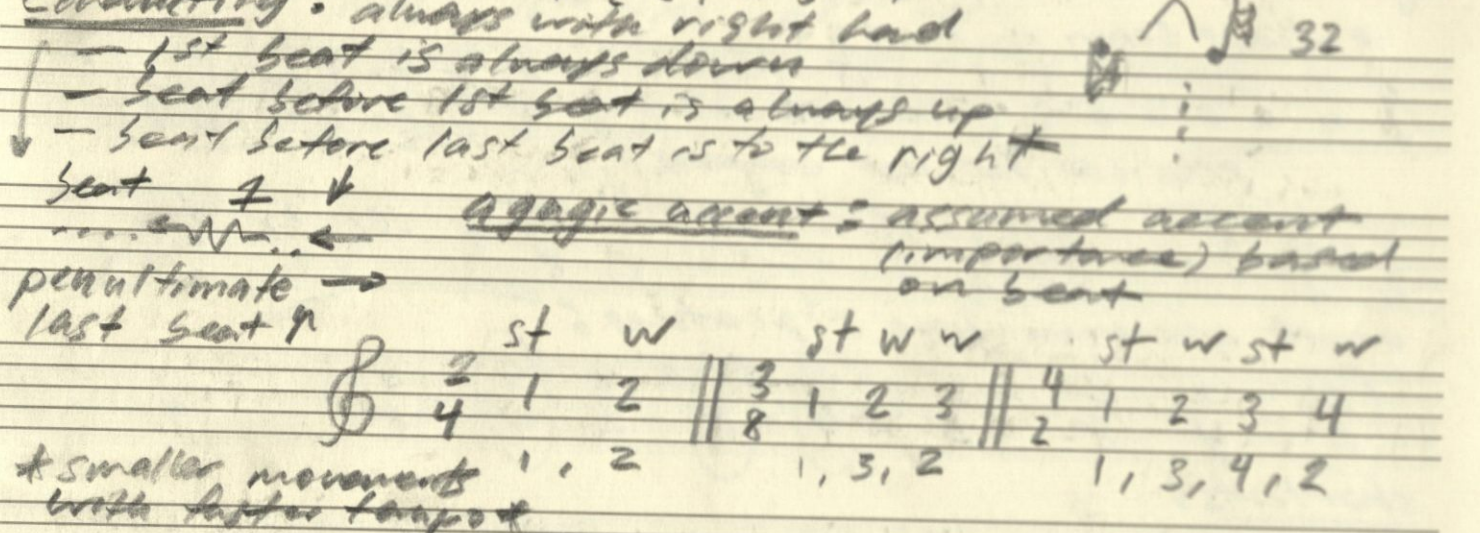


Lecture 4: grand staff

10.25.24

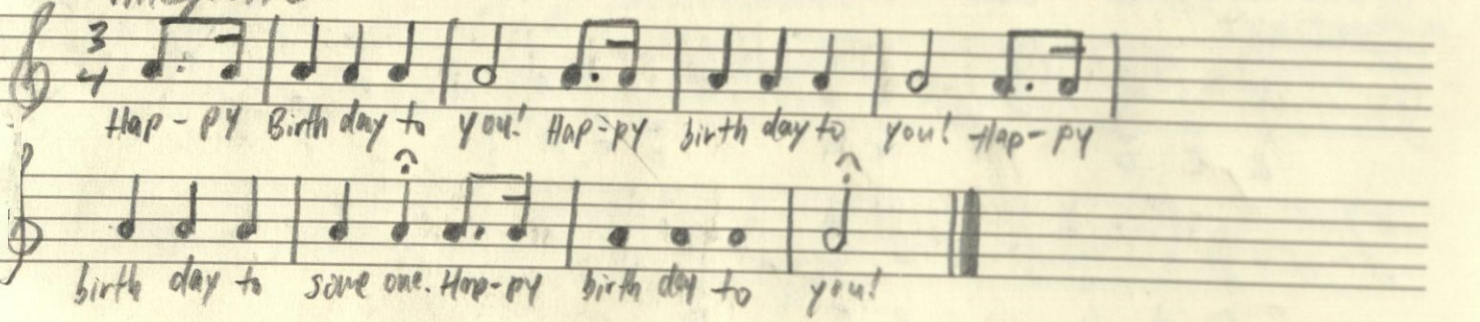


Conducting: always with right hand
- 1st beat is always down
- beat before 1st beat is always up
- beat before last beat is to the right *



* smaller movements with faster tempo *

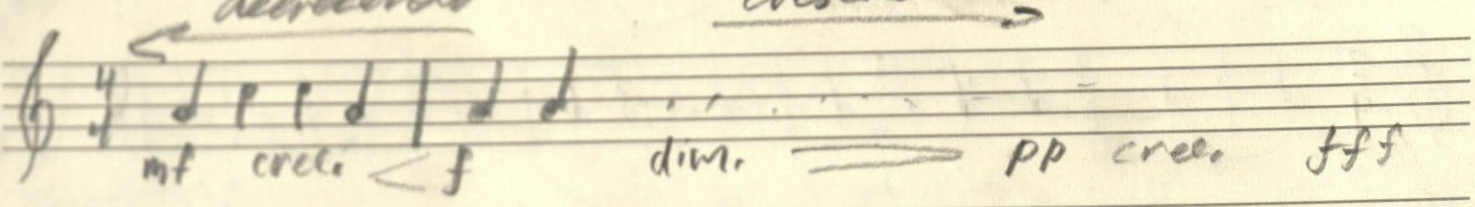
Ex. Allegretto



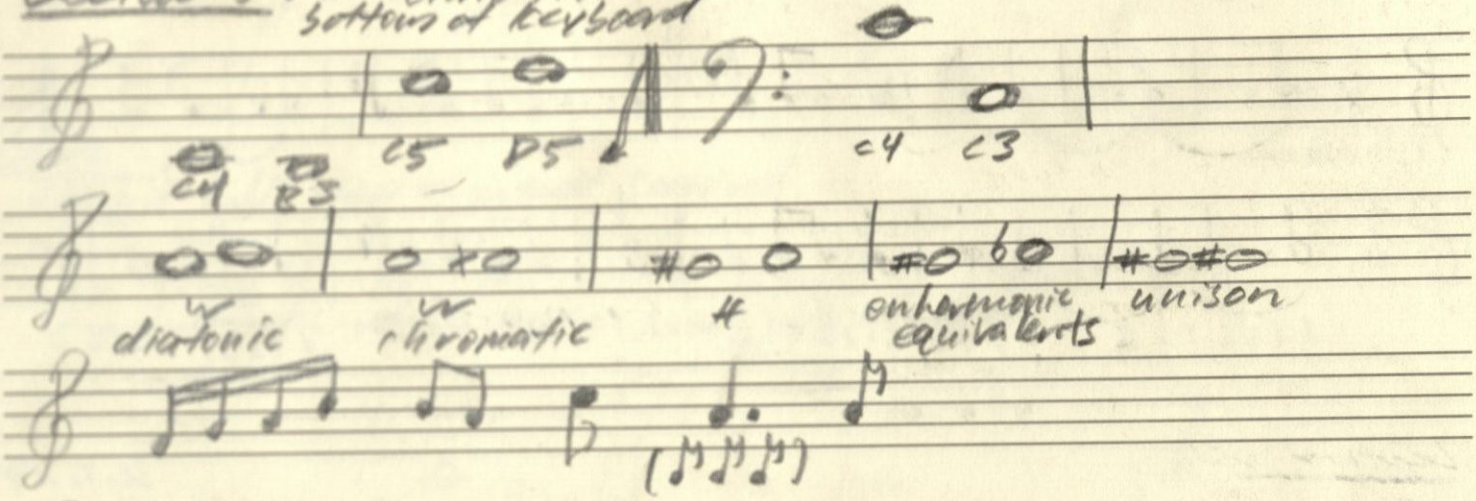
Tempo: in Italian
slow – grave, largo, adagio
medium – andante, moderato, allegretto
fast – presto, allegro, vivace
getting faster – accelerando (accel.)
getting slower – ritardando (rit.)

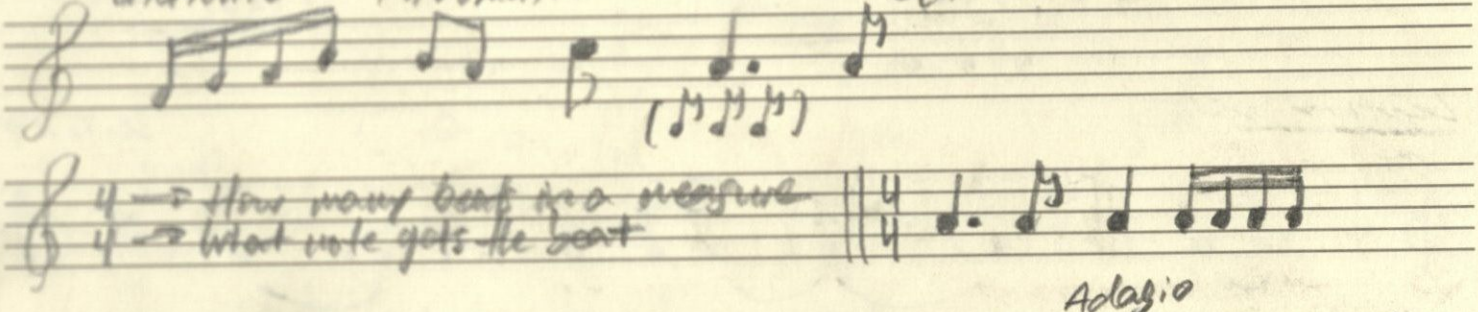
Dynamics:

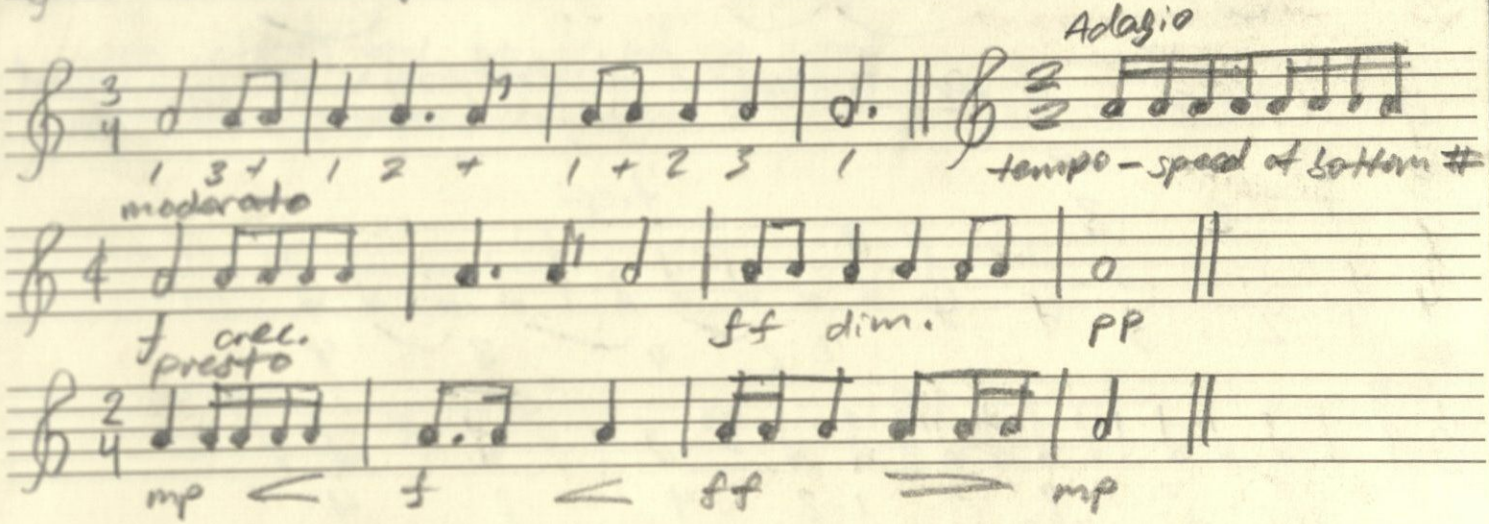
ppp pp p mp mf f ff fff
pianissimo piano mezzo piano mezzo forte forte fortissimo



Lecture 5: 8va octave from bottom of keyboard 1:30:24





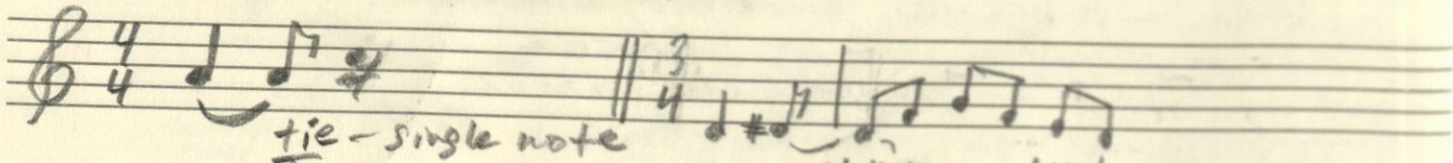


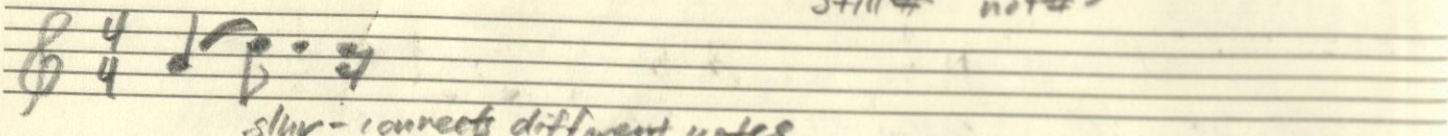
HL00210019

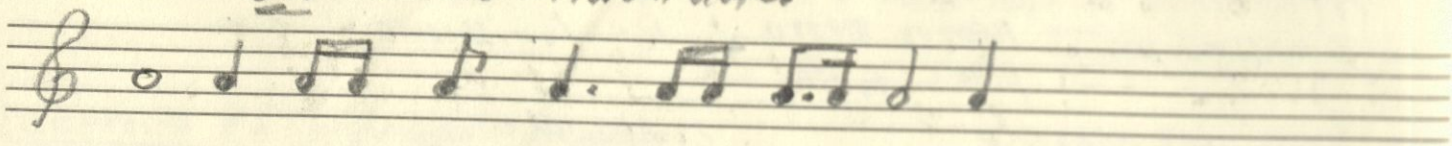
< > – local cresc., dim. – structural

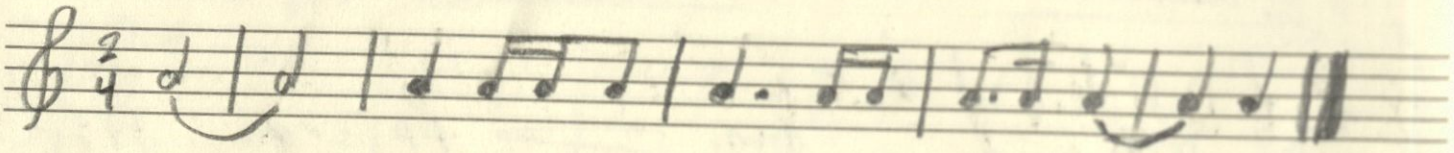
More Rhythms:

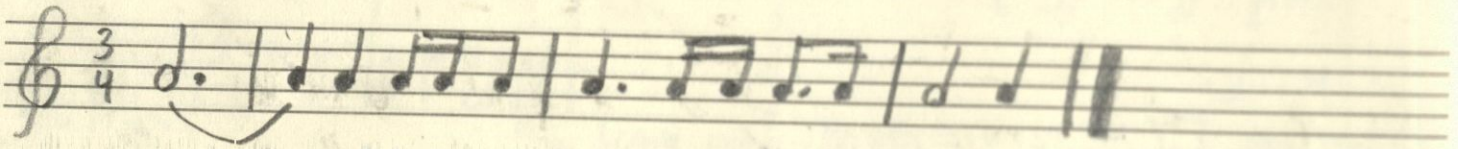
* same rules as Stem direction

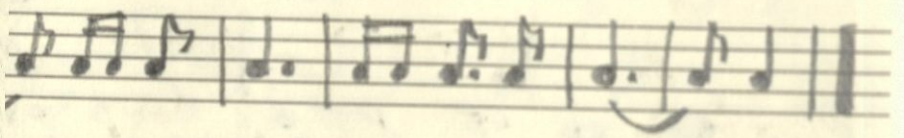


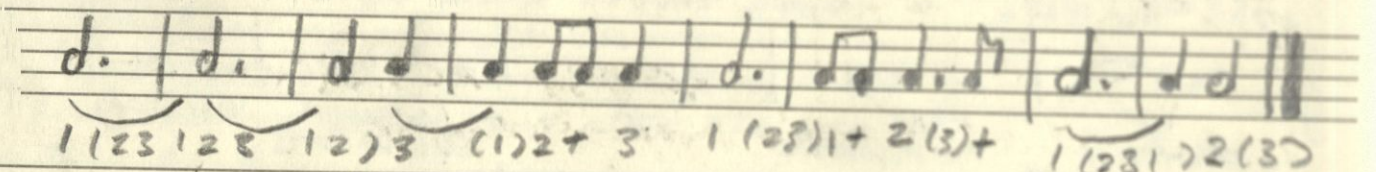






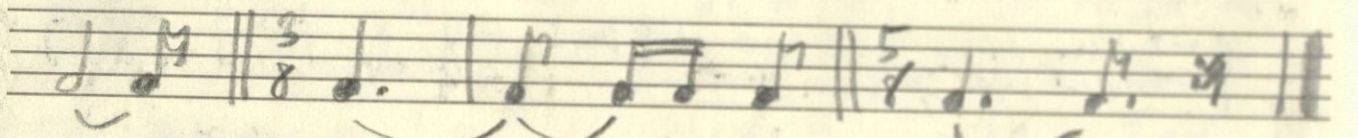


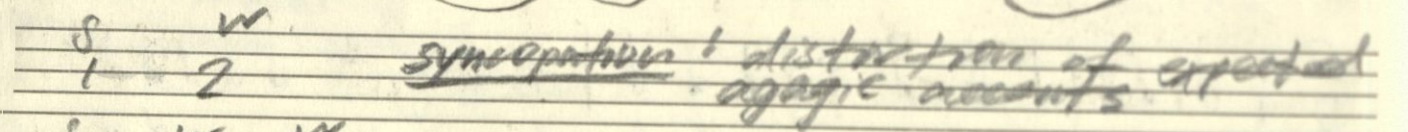


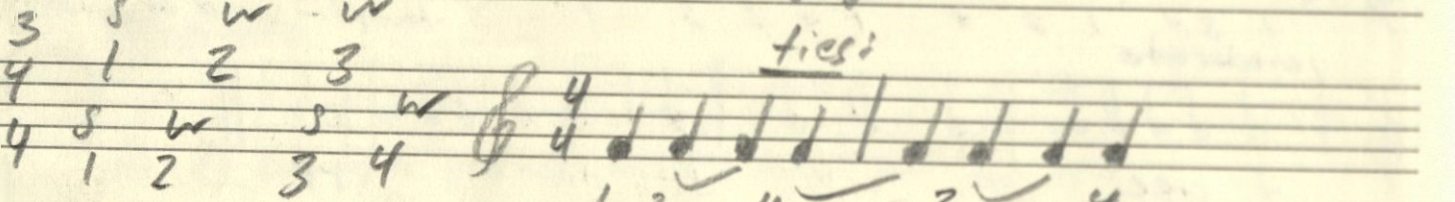


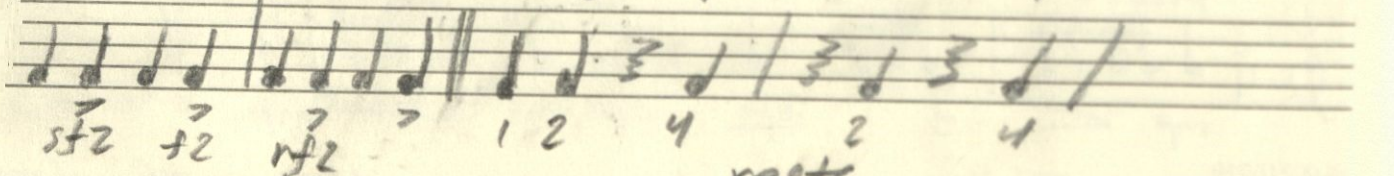
Lecture 6.

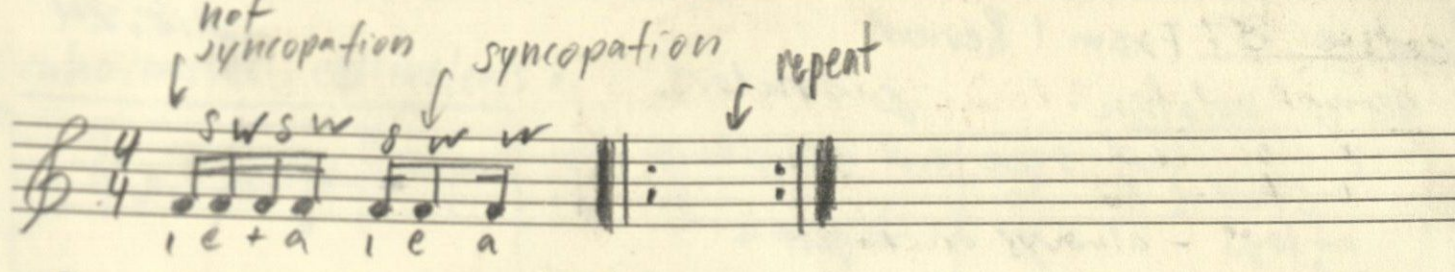
2.1.24

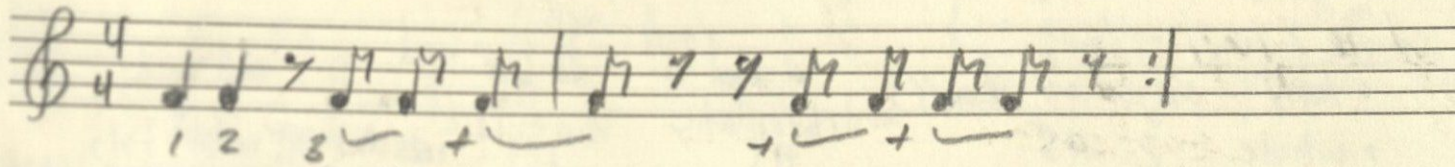




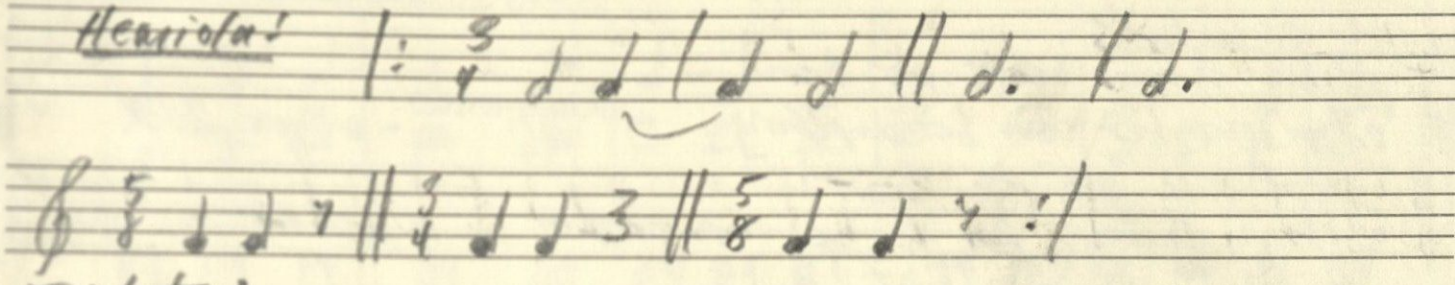




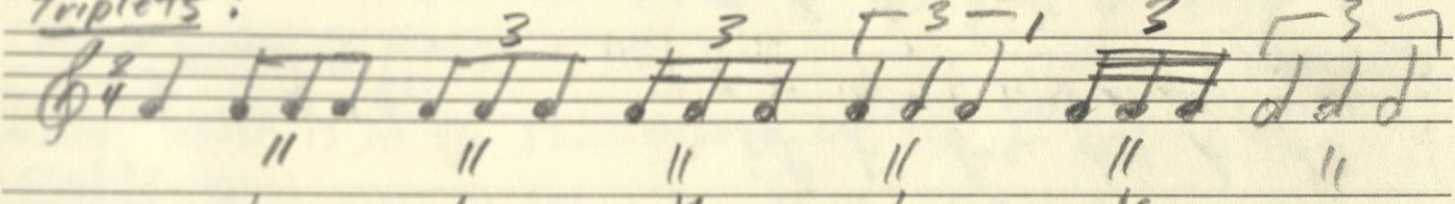




Heartola:

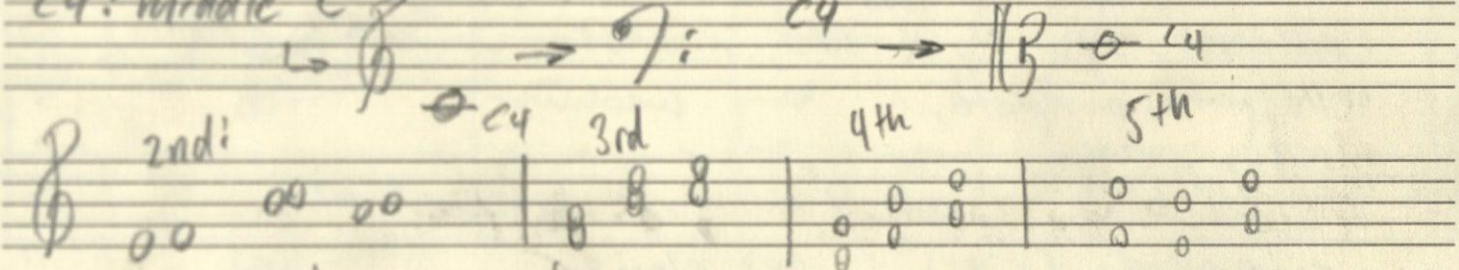


Triplets:



2.6.24

Lecture 2:
diatonic half step = minor second
whole step = major second
* if letters are not adjecent it is not a second*
a chromatic whole step - same letter names
C4: middle C

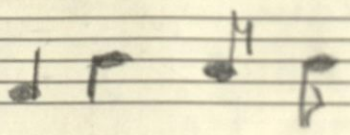


- even intervals have one line and one space
- odd intervals are either both on a space or both on a line

Lecture 8: Exam 1 Review 2.8.24

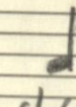
general notation: circular

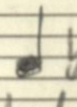
- notehead size and shape
- stems
- flags - always on right



whole / half steps:

- half - adjacent keys
- whole - 2 HS





- minor 2nd

diatonic WS - major 2nd

time signatures:

T - how many beats per bar

- top number can be anything

B - what note gets the beat

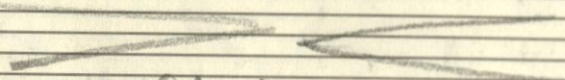
- bottom number has to be represented by a note

2	3	4	2	3	4	2	3	4
2	2	2	4	4	4	8	8	8

dynamics:

- how loud or soft music is

pp p mp mf f ff



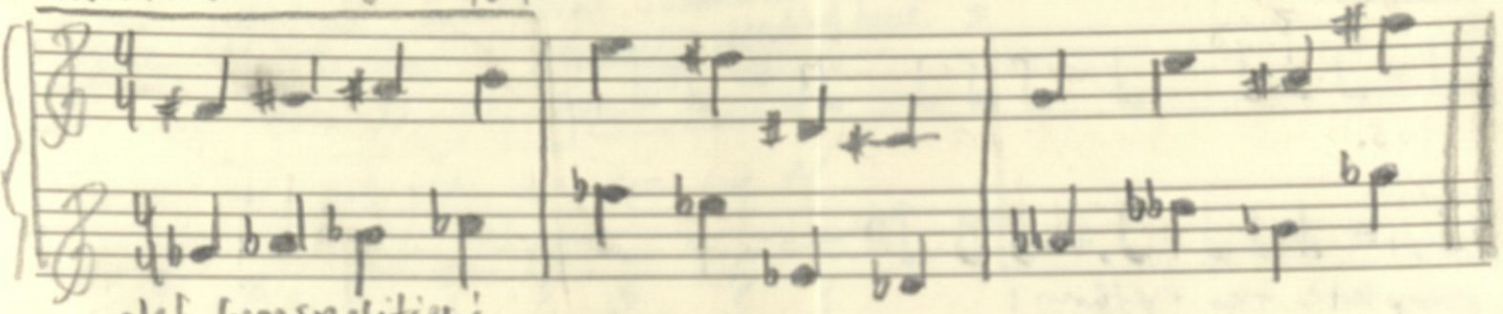
diminuendo (dim.) crescendo (cres.)

tempo:

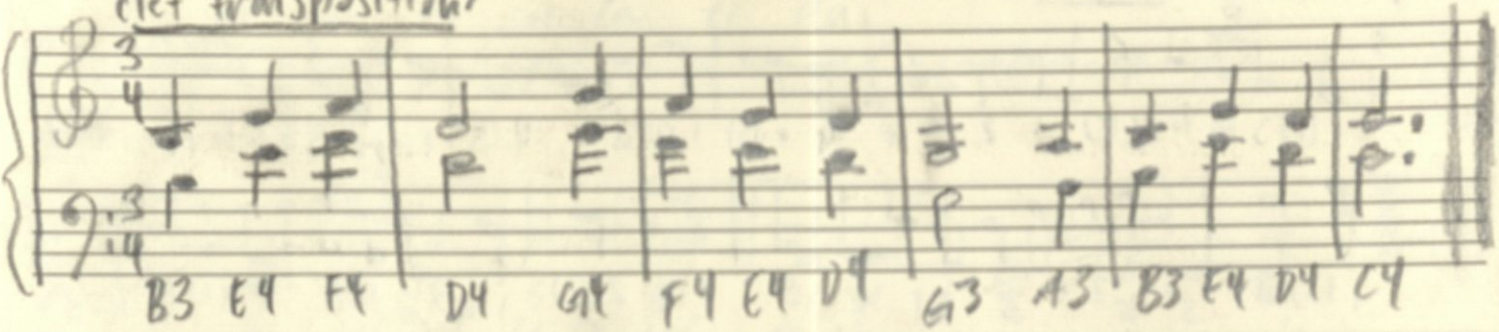
- how fast or slow the beat is
  - refers to speed of bottom number
  - written in Italian
- allegro, vivace, presto, prestissimo = fast
- allegretto, andante, = medium
- largo, grave = slow
- accelerando (accel.) - get faster
- ritardando (rit.) - get slower

enharmonics - same pitch written differently

enharmonic equivalents:

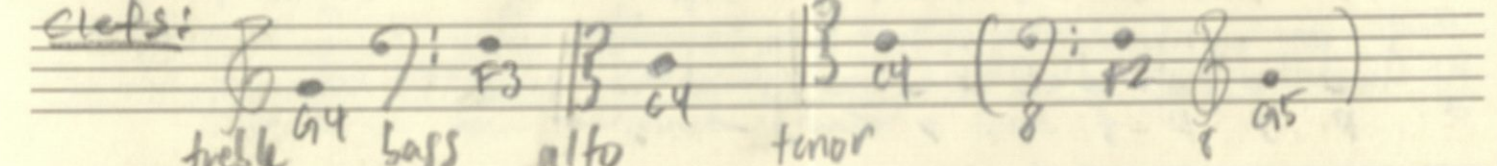


clef transposition:

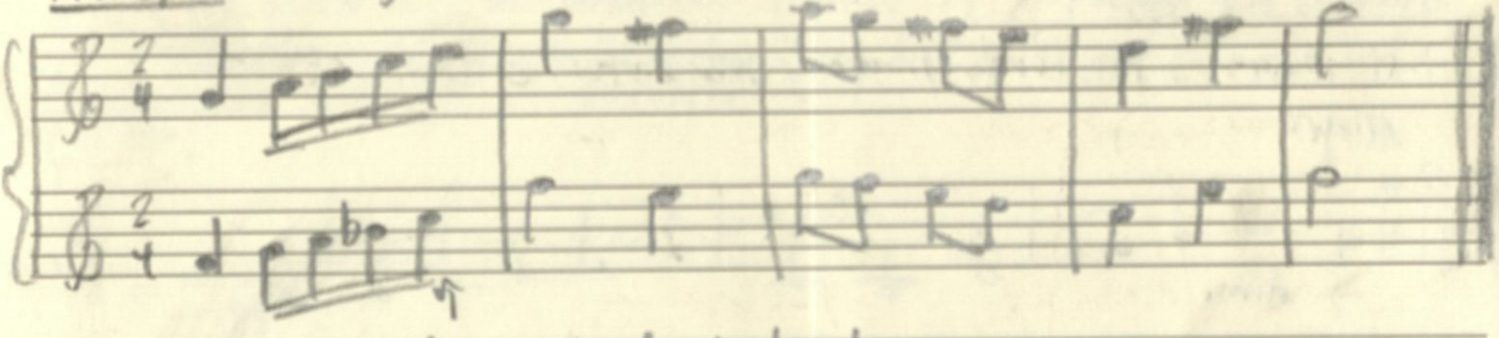


- octave numbers change on C
- middle C is C4
- any letter is in the same octave as the C below it

clefs:

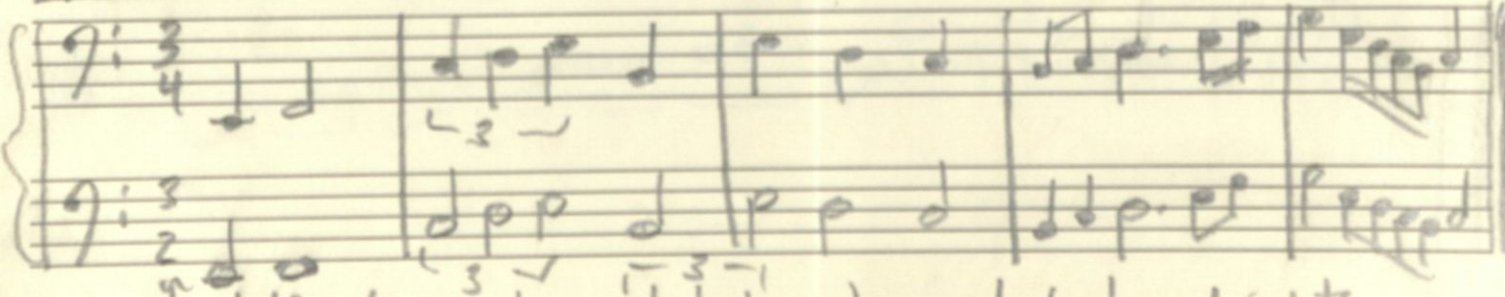


Transpose a Major 2nd Lower!

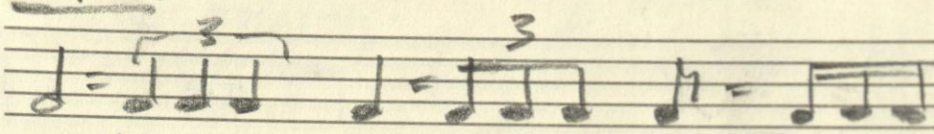


- if grouping is equal go with the last note
- stem direction

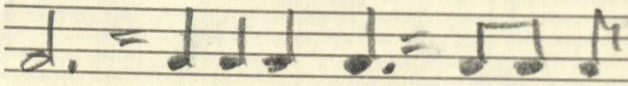
Equivalent Time Signature! (sounds the same)



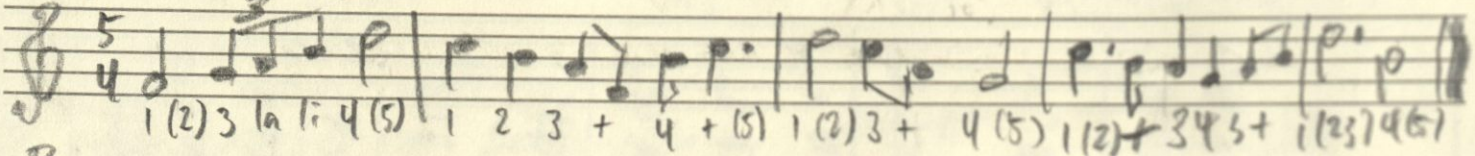
Triplets:

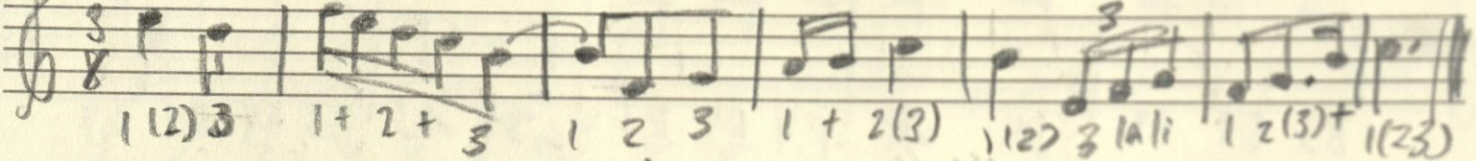


vs.



complete the rhythm!

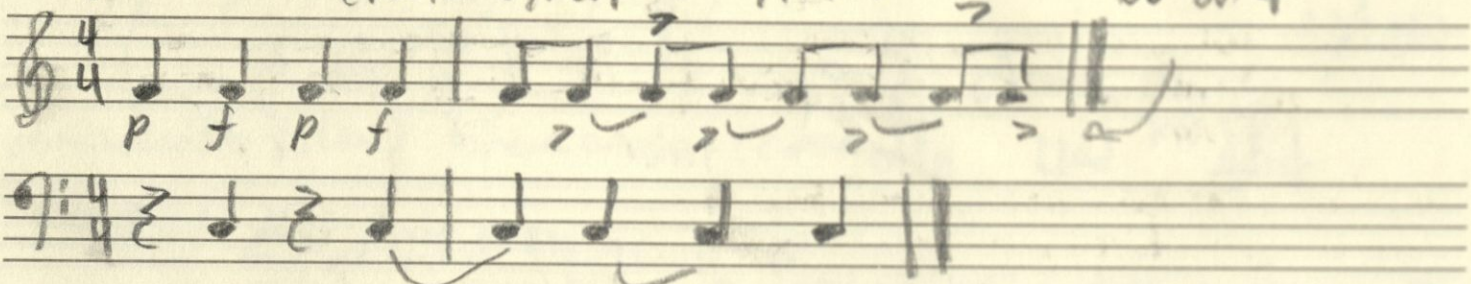




Syncopation: undermine the natural agogic stress

4 1 2 3 4 ← natural agogic stress

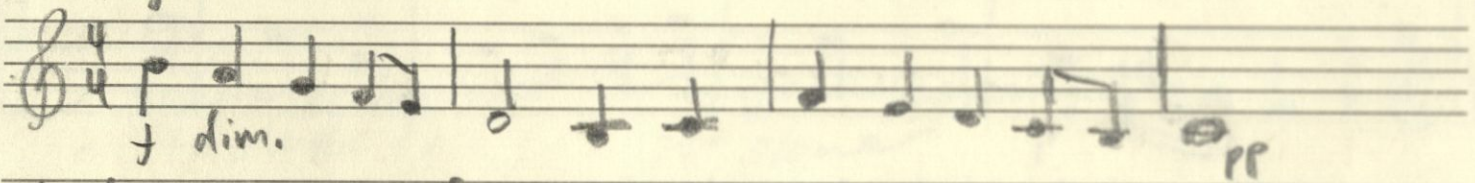
4 S w S w create syncopated rhythm! ↙ accents on w or +



Dynamics and Tempo!

~~fast passage, begins loud, gradually gets softer, ends quiet~~

Allegro



Analyze given music:

- tempo, dynamics, syncopation, clefs, rhythm markings, parts

↑ why? accents, trs, ect.

Accadentals:

- left of the note
- carry throughout the bar

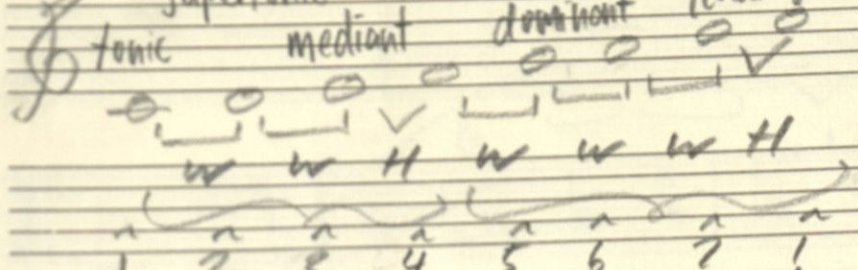
♭ ♮ ♯

2.15.24

Major Scales:

C maj:

supertonic subdominant submediant tonic
tonic mediant dominant leading tone



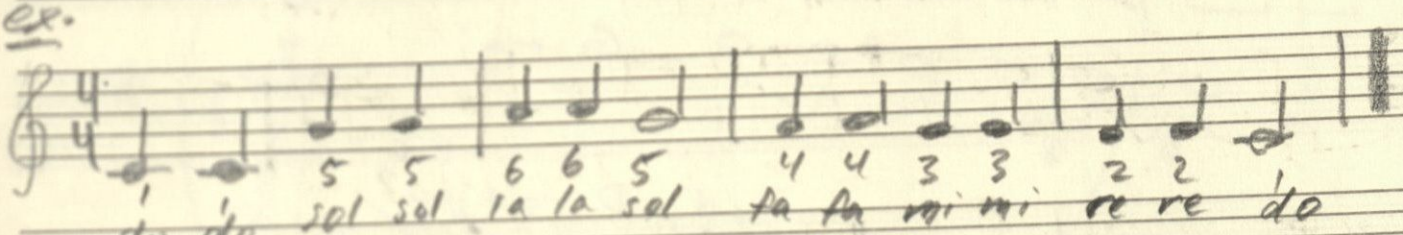
W W H W W W H

1 2 3 4 5 6 7 1

do re mi fa sol la ti do

"moveable do sol-fedge" — do is always $\hat{1}$

ex.



do do sol sol la la sol fa fa mi mi re re do

5 5 6 6 5 4 4 3 3 2 2 1

Scale Degree Numbers:

$\hat{1}$ tonic — right on the tonic

$\hat{2}$ supertonic — a 3rd above tonic

$\hat{3}$ mediant — a 5th below tonic

$\hat{4}$ subdominant — a 5th above tonic

$\hat{5}$ dominant — a 3rd above tonic

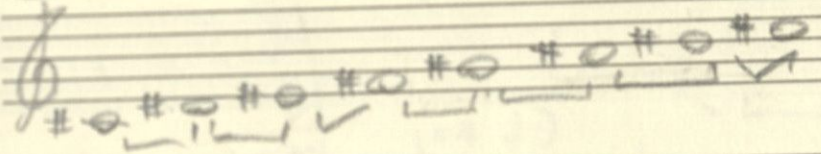
$\hat{6}$ submediant — ~~always wants~~

$\hat{7}$ leading tone

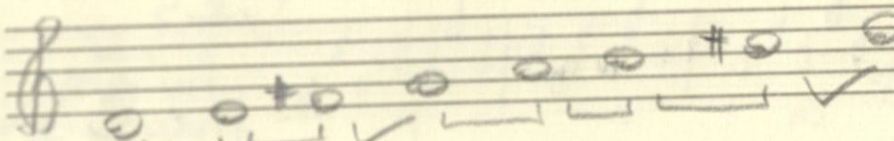
$\hat{8}$

major key does not mean happy
minor key does not mean sad
major and minor keys are determined mainly by their tonics
12 chromatic notes in an octave, each has their own
major key built off of WWHWWWH

C# maj:

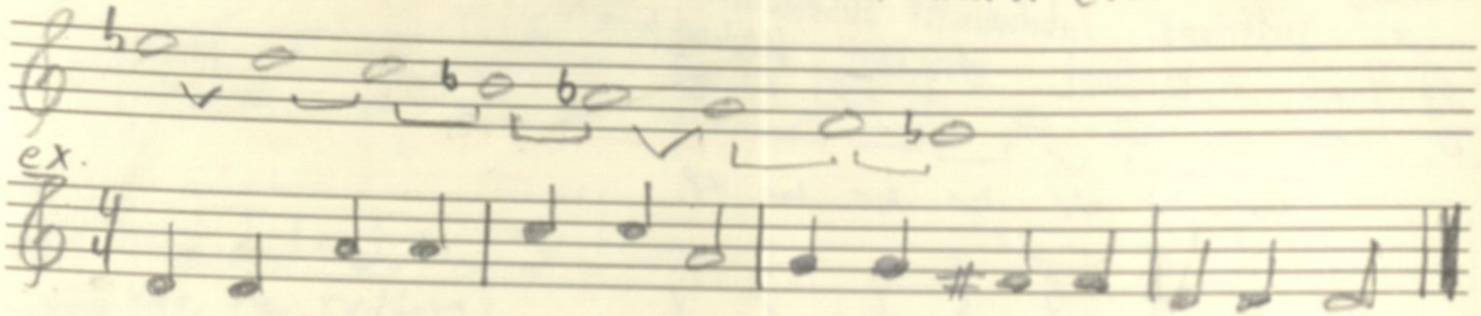


D maj:

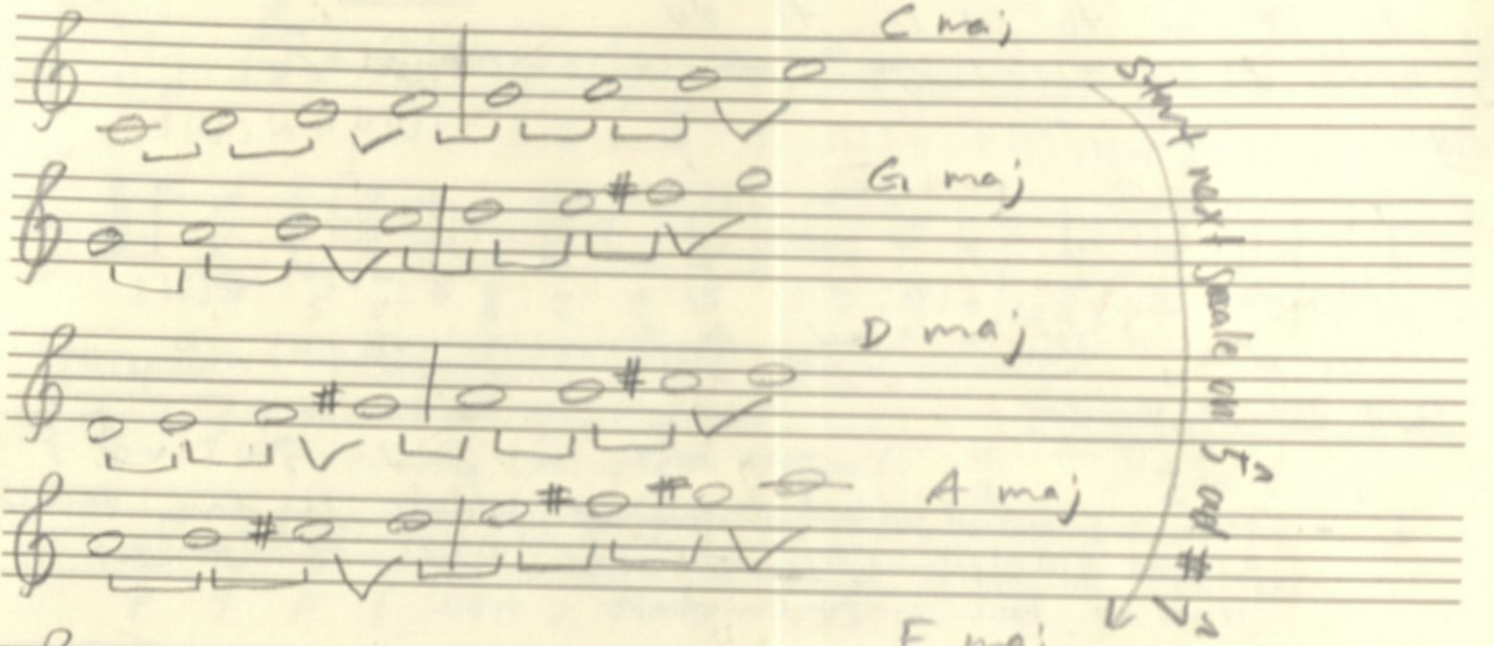


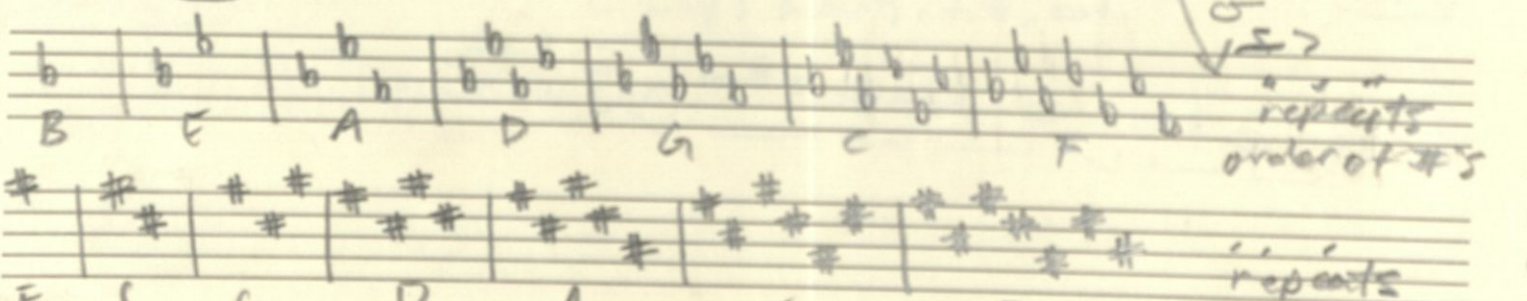
Eb maj descending: HwwwHwww

W - major 2nd
H - minor 2nd



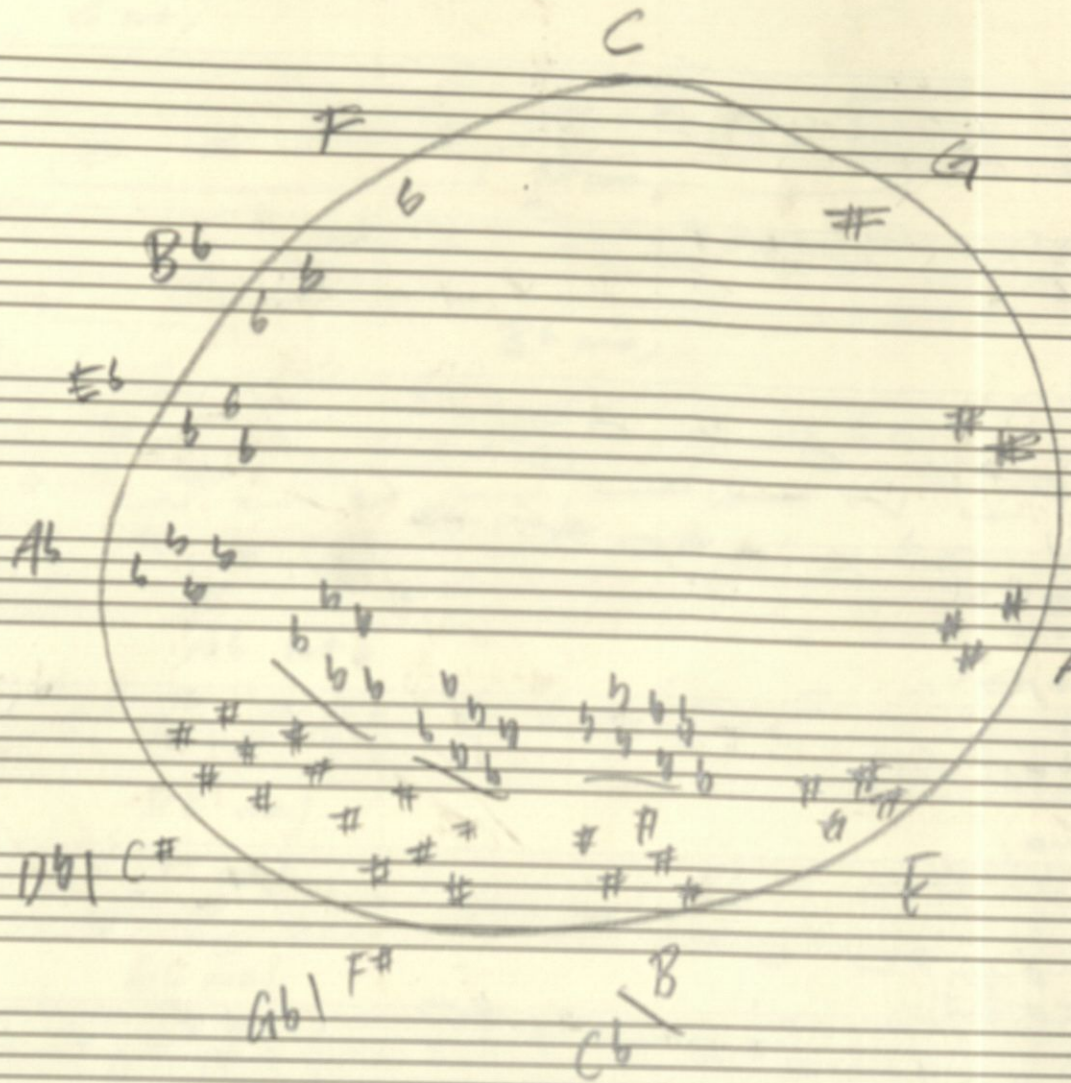
ex.

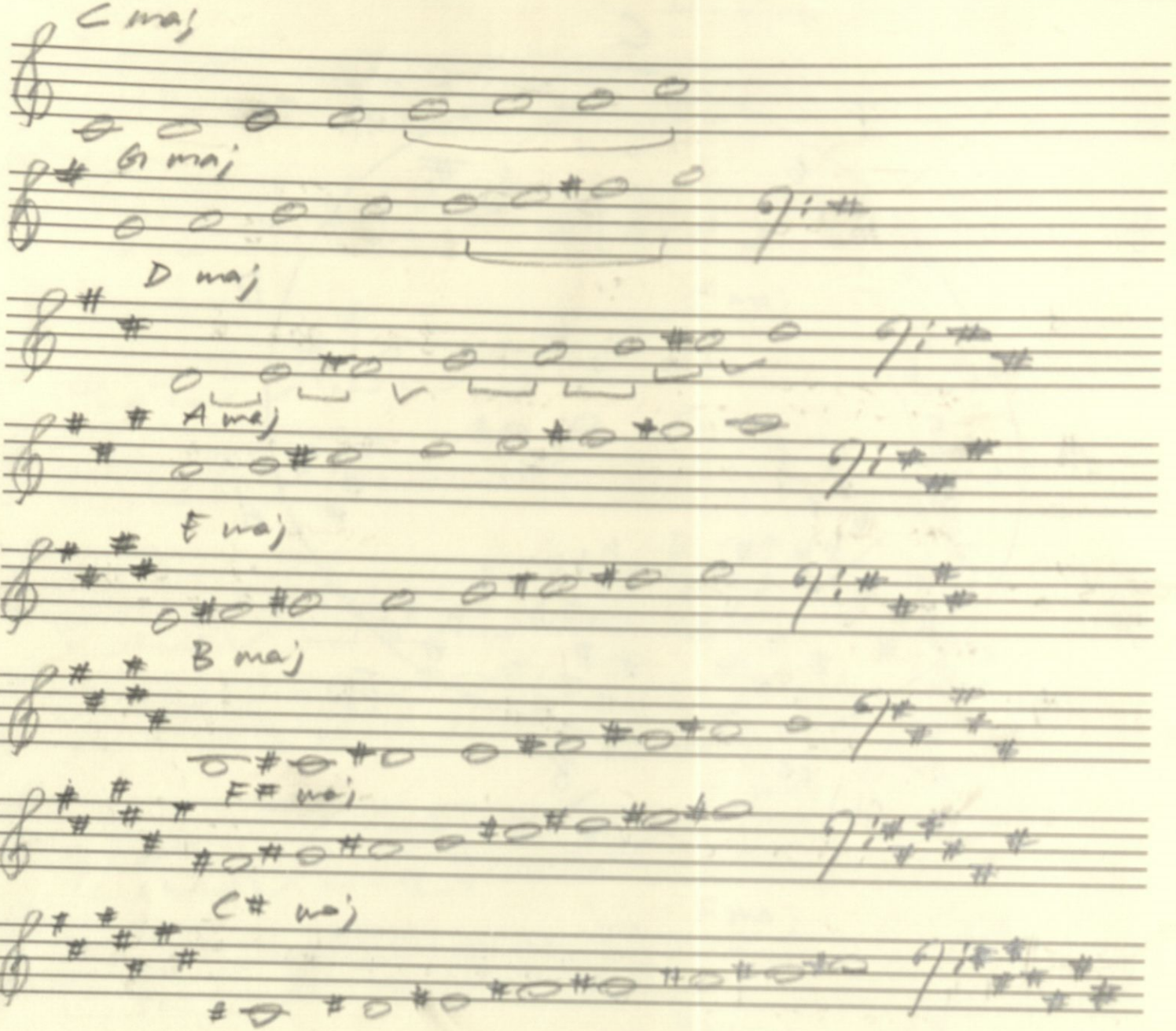




Lecture Notes:

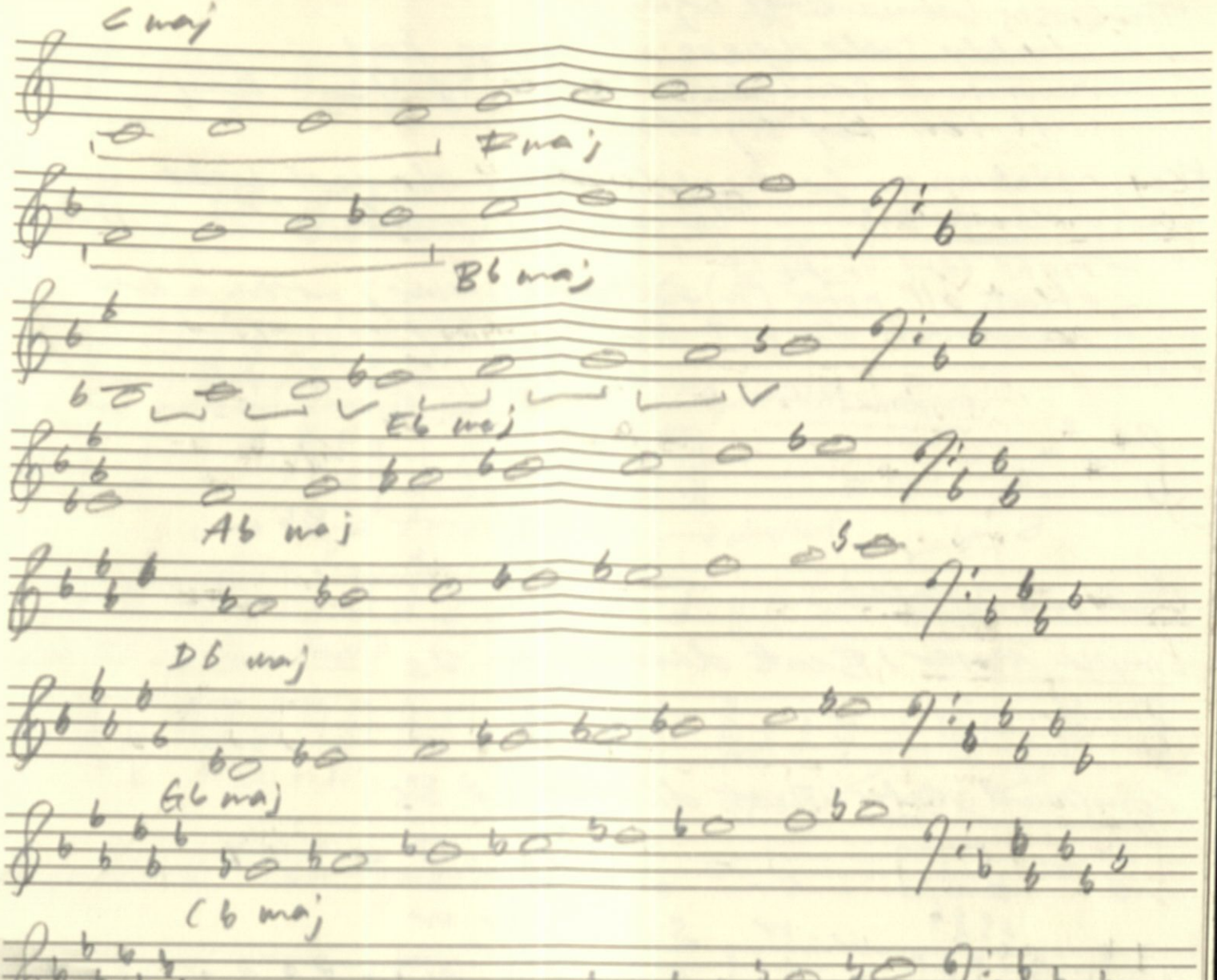
2.20.24





Sharp order: F#, C#, G#, D#, A#, E#, B#
- in ascending fifths

* Go up a fifth, # the leading tone
* Tonic of a key signature is a minor second (diatonic) (1/2) above its last # in its key signature
* last sharp is leading tone



flat order: B♭, E♭, A♭, D♭, G♭, C♭, F♭
o in descending fifths

* Go down a fifth, add ♭ the subdominant

*2nd to last ♭ in key signature is tonic of key

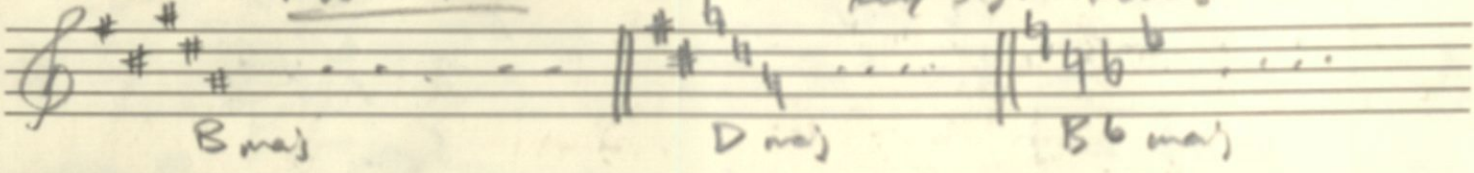
2.22.24

Lecture Notes:

Transposing between key signatures:
- identify scale degrees of source key
- rewrite in same scale degree of new key with new key signature

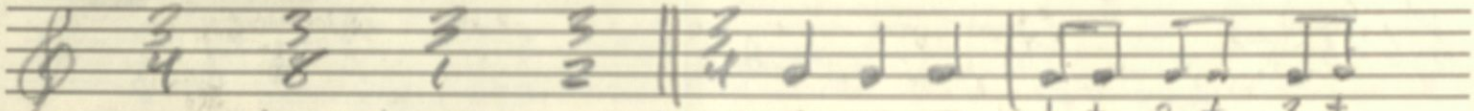
Key signatures can be "artificially" changed with accidentals; to called a modulation.
- right next to note
- effects all notes (in the same octave) within a bar
- accidentals do not stack w/ key signatures

modulation - can be done w/ accidentals or key signatures

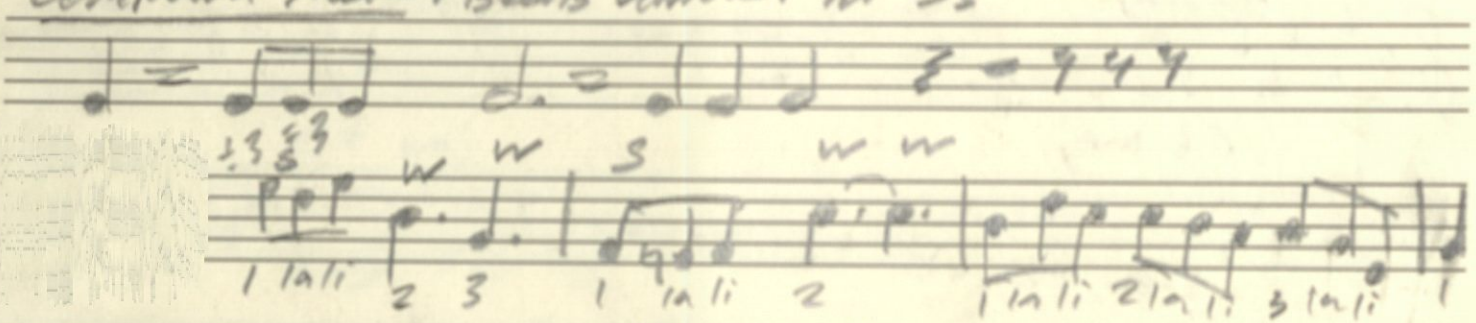


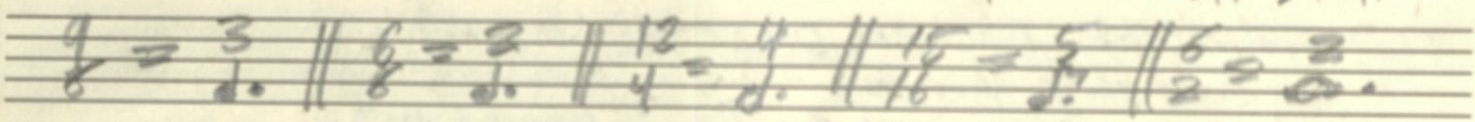
~~Lecture Notes:~~ 2.27.24

Simple Meter: Beats divided in 2s

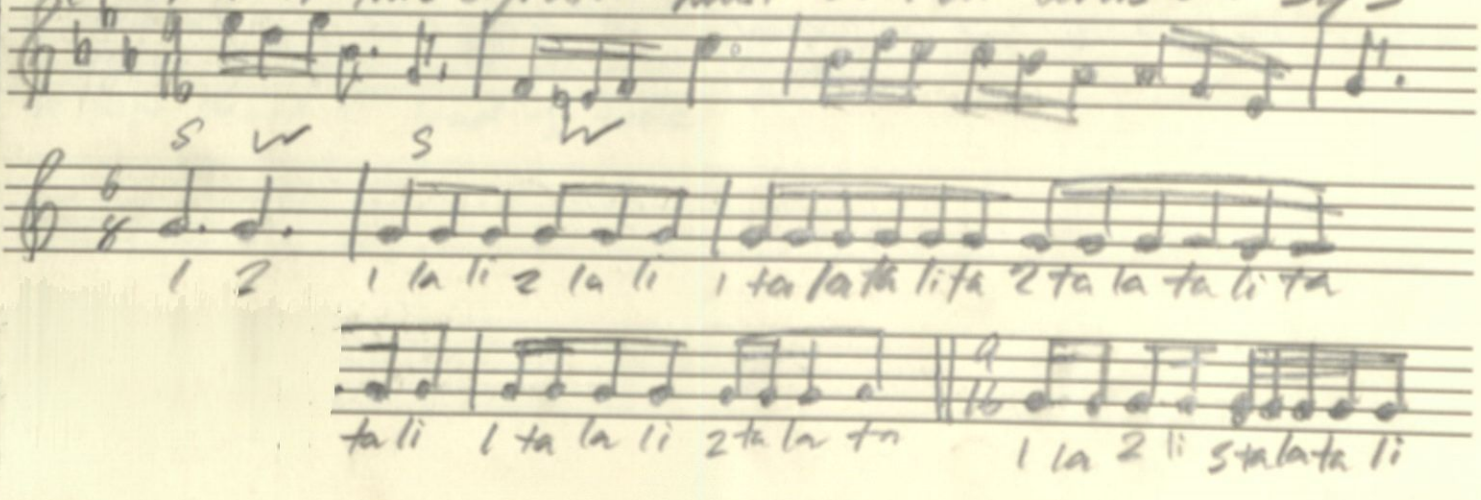


Compound Meter: Beats divided in 3s





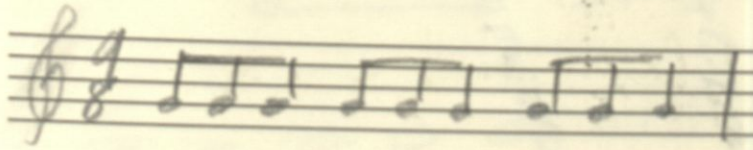
If top # of time signature must be even divisible by 3

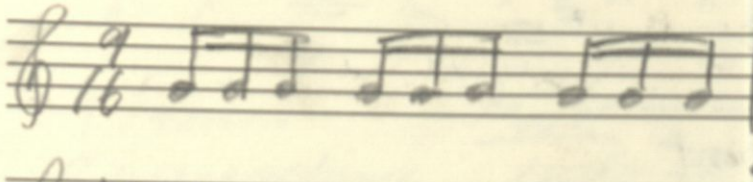


Lecture Notes!

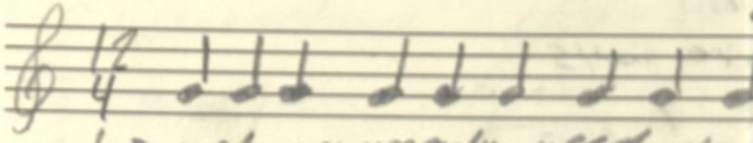
SMW
132

2.29.24

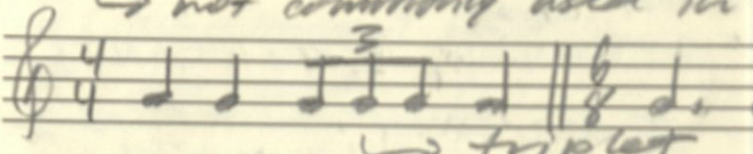




SMMW
1342

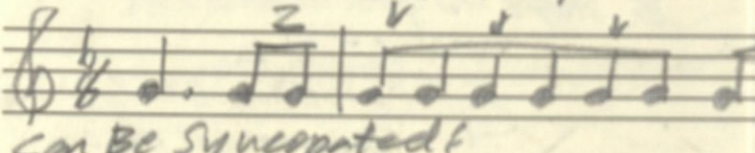


↳ not commonly used in compound meter



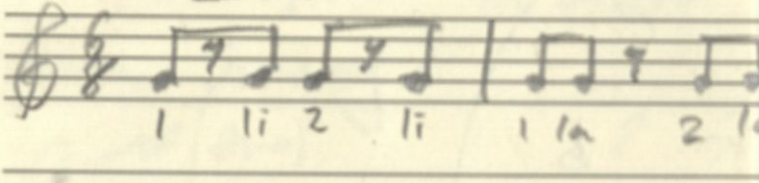
↳ triplet

→ duplet



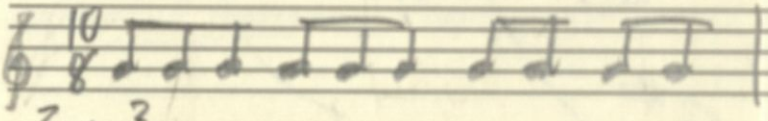
→ duplet

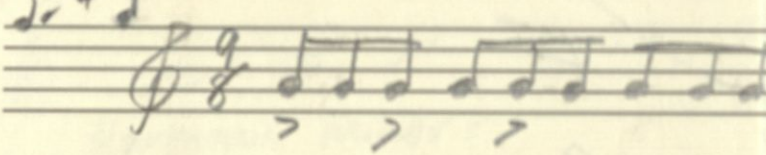
can be Syncopated!



1 li 2 li 1 la 2 la 1 la li 1a li

Asymmetric Time Signatures





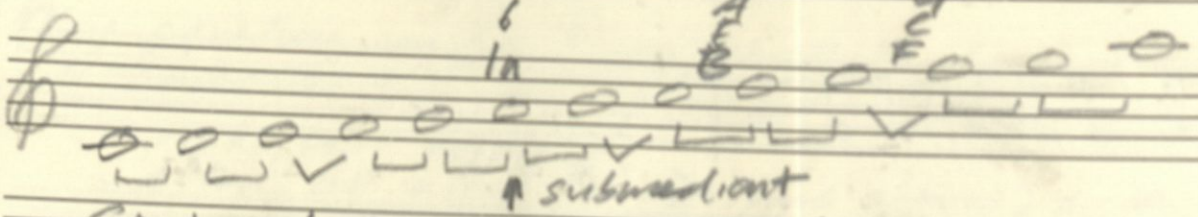
Lecture Notes:

5.5.24

Major: W W H W W W H

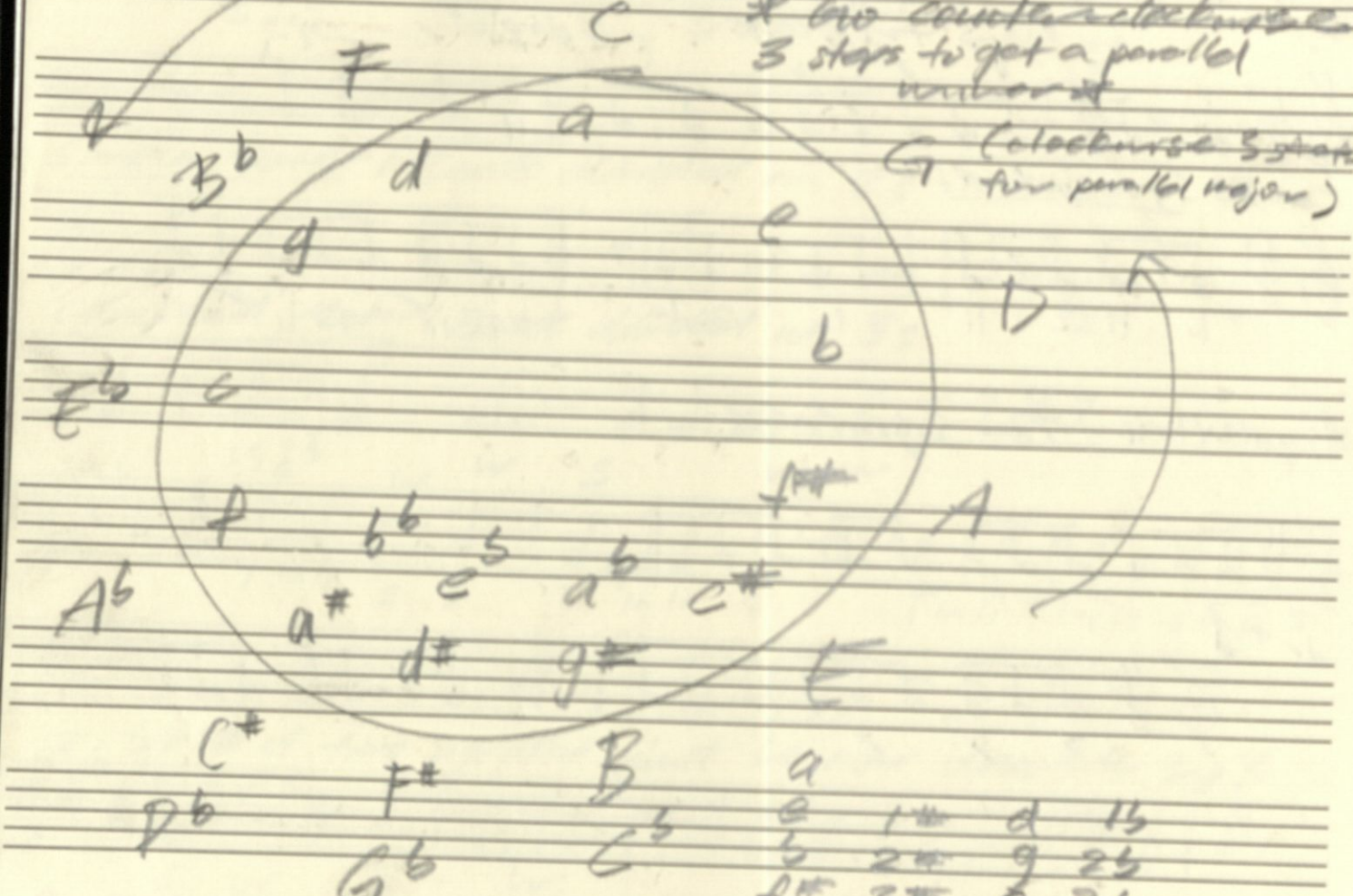
Minor: W H W W H W W

#	b
F	B
C	E
G	A
D	D
A	G
E	C
B	F



Cmaj and a_{min} are relative keys
— share the same key signature
— amin is relative minor of Cmaj
— Cmaj is relative major of a_{min}

IMPORTANT!
* two counterclockwise
3 steps to get a parallel minor*
(clockwise 3 steps for parallel major)



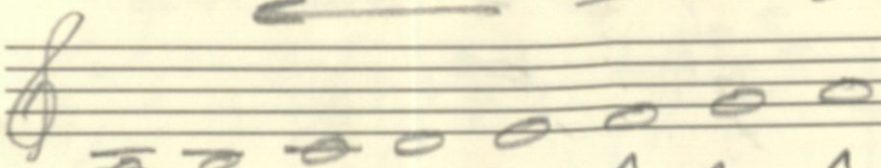
a			
e	1♯	d	1♭
b	2♯	g	2♭
f♯	3♯	c	3♭
c♯	4♯	f	4♭
g♯	5♯	b♭	5♭
d♯	6♯	e♭	6♭
a♯	7♯	a♭	7♭

Parallel keys share a tonic

minor 2nd — 1 HS
major 2nd — 2 HS
augmented 2nd — 3 HS

* cannot have x or bb in key signatures *
not every key has a parallel minor

Sub ← Super →



$\hat{1}$ $\hat{2}$ $\hat{3}$ $\hat{4}$ $\hat{5}$ $\hat{6}$ $\hat{7}$ $\hat{1}$

$\hat{1}$: tonic

$\hat{2}$: supertonic

$\hat{3}$: mediant

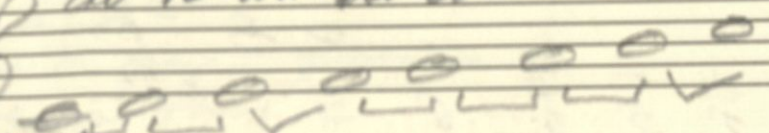
$\hat{4}$: subdominant

$\hat{5}$: dominant

$\hat{6}$: submediant

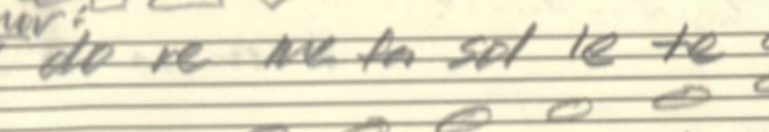
$\hat{7}$: ~~leading tone~~, subtone

Major:



do re mi fa sol la ti do

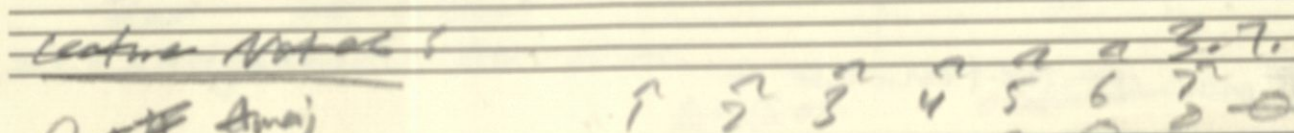
Minor:



do re me fa sol le te do

in major in minor

~~Leading Notes~~:



A maj

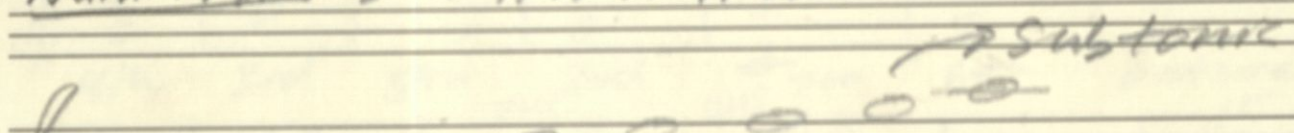
1 2 3 4 5 6 7 1

3, 7, 2, 4

f# min

1 2 3 4 5 6 7 1

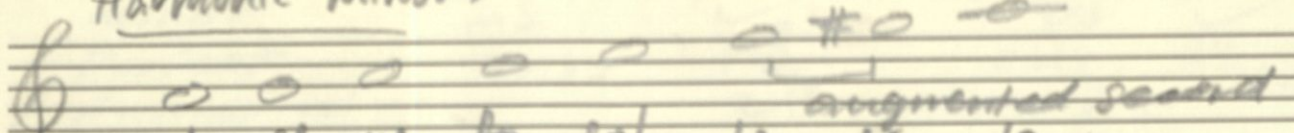
~~Natural Minor~~:



subtonic

leading tone

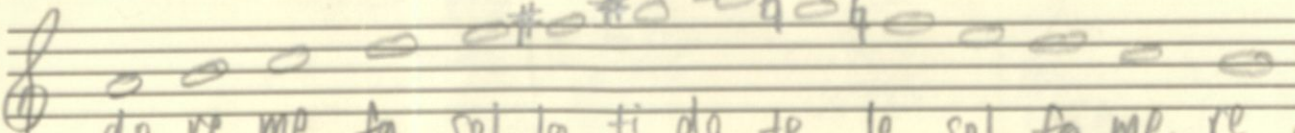
Harmonic minor:



augmented second

do re me fa sol le ti do

~~melodic Minor~~:

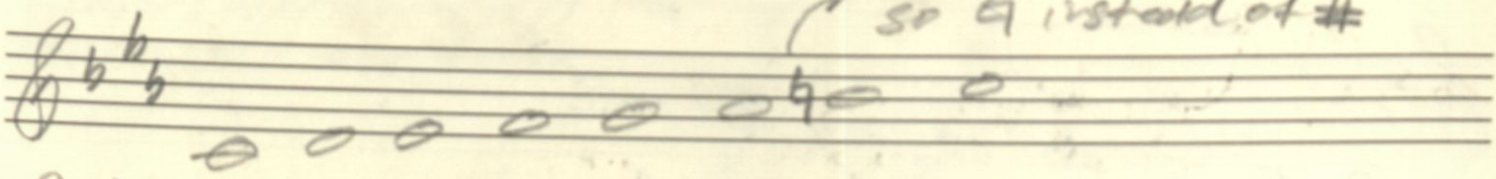


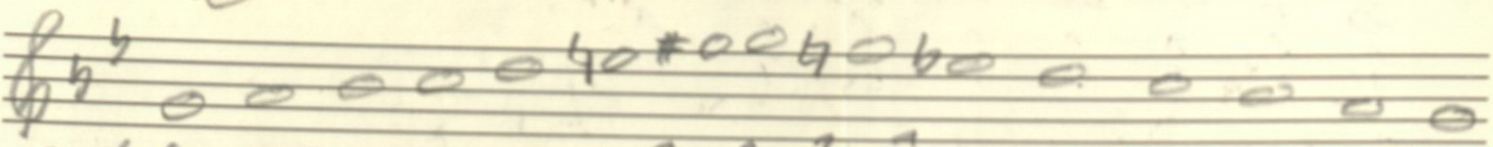
do re me fa sol la ti do te le sol fa me re do

HL00210019

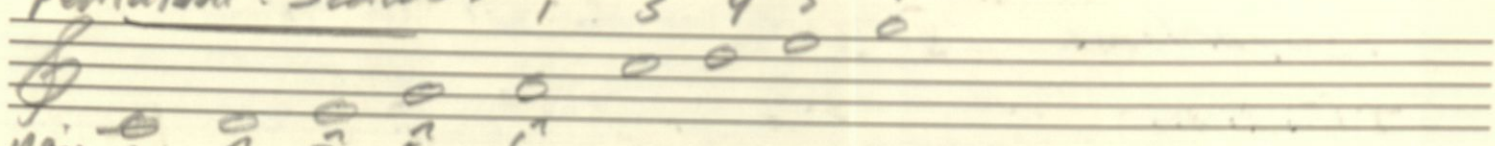
*always in accidentals, even with float key signatures

raised by HS, so ♮ instead of #



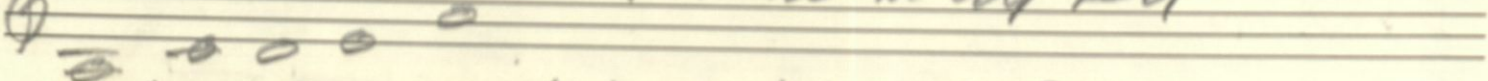


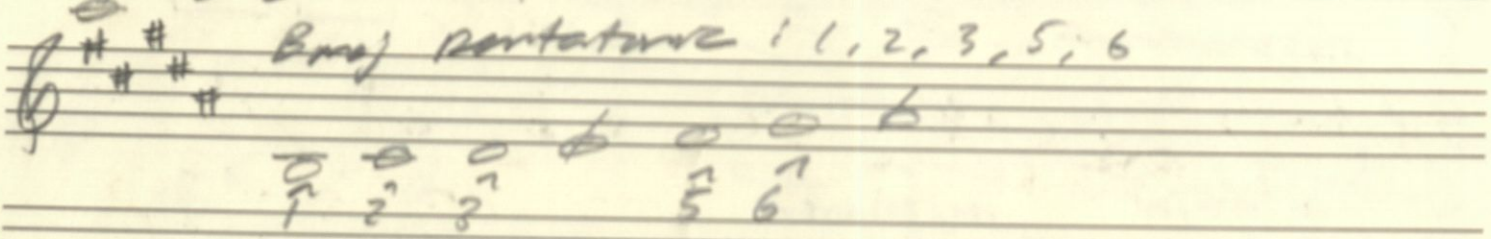
Pentatonic Scales: 1 3 4 5 7



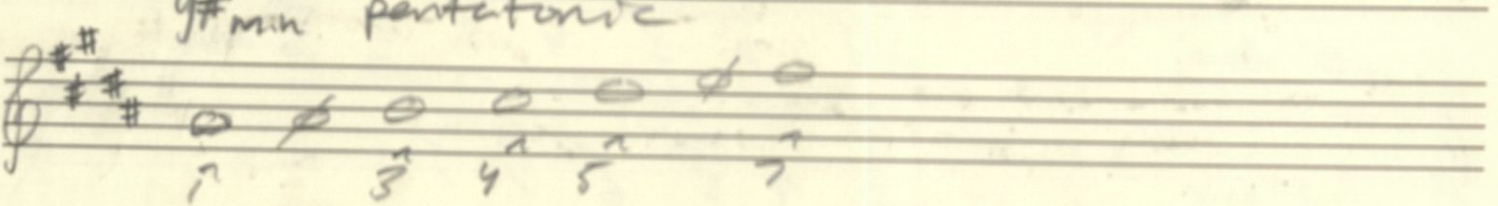
Maj: 1 2 3 5 6

♯ can be in any key





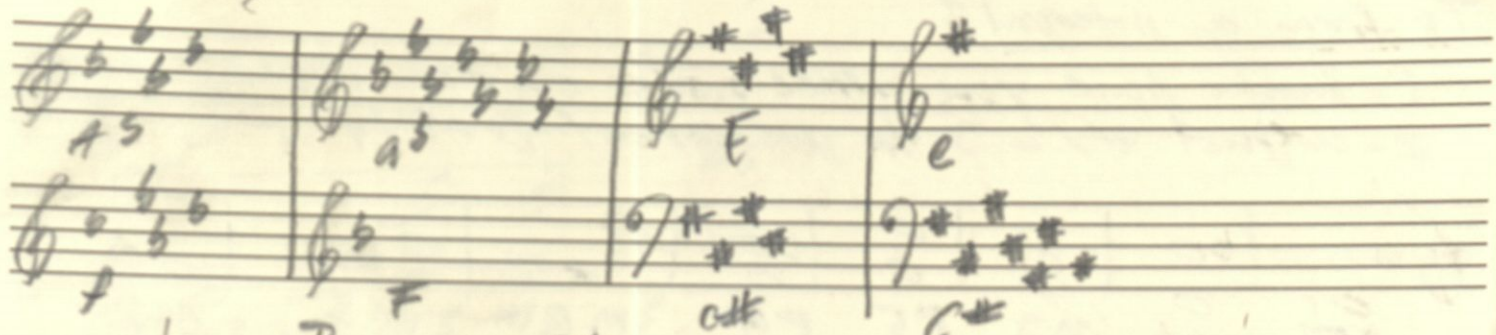
Bmaj pentatonic: 1, 2, 3, 5, 6



G♯min pentatonic

Lecture Notes: → add 36's

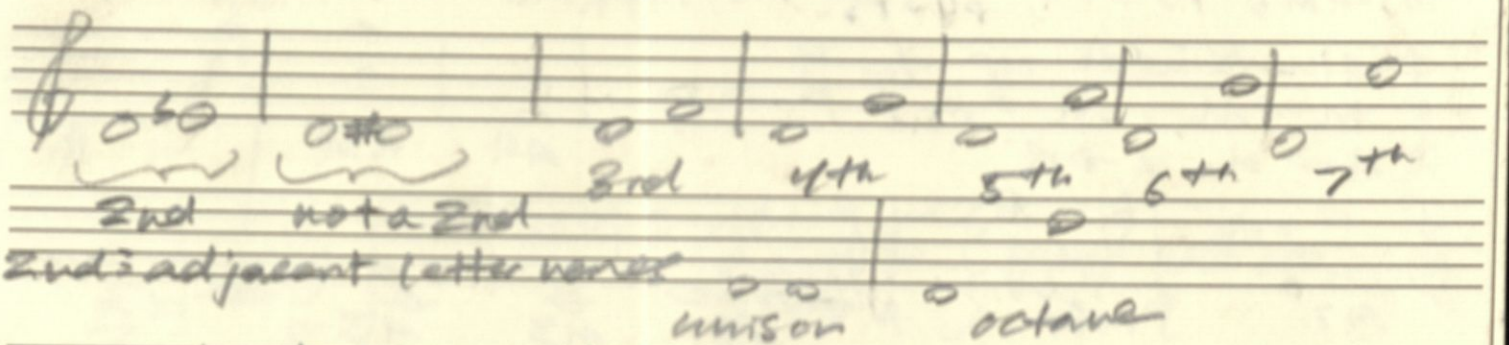
5.19.24



→ remove 36's

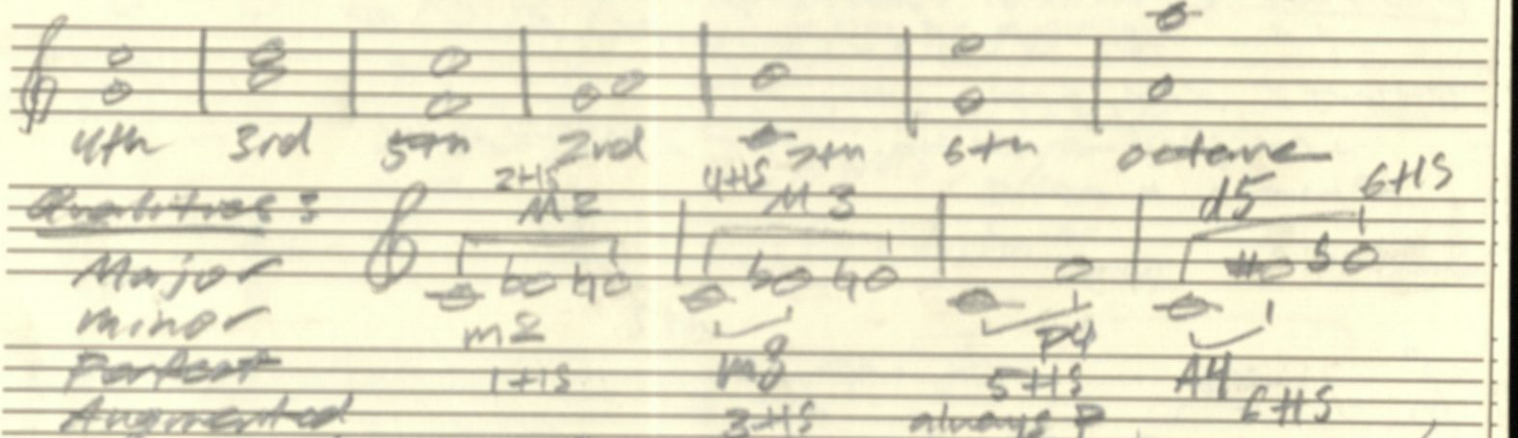
relative keys: share a key signature
parallel keys: share a tonic

~~Intervals:~~



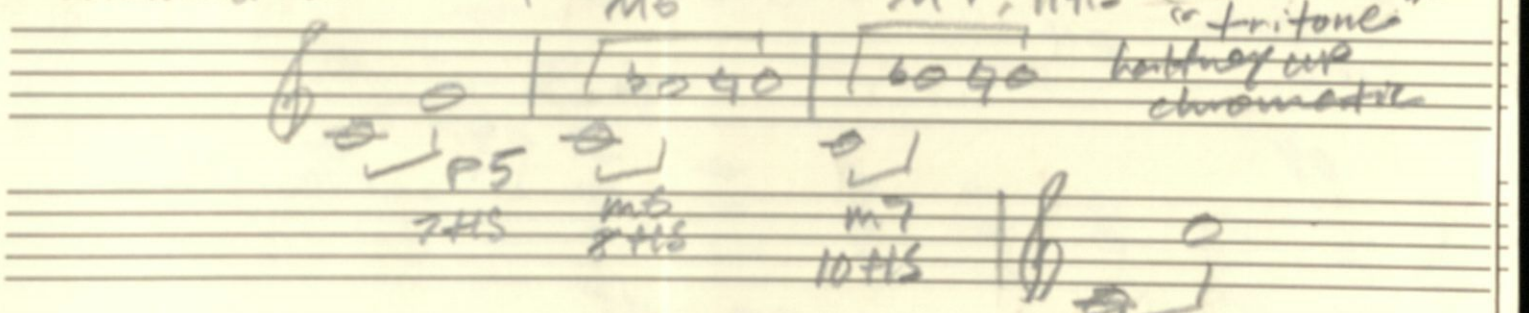
2nd's adjacent letter names

even intervals: line and space
odd intervals: both on line or space



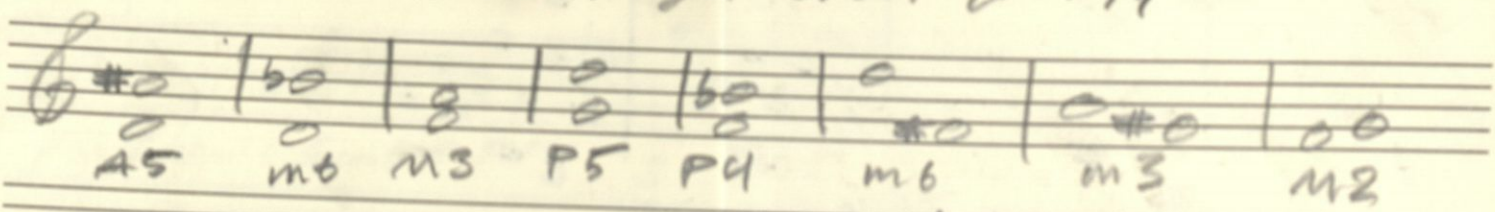
~~Qualities:~~

Major
minor
Perfect
Augmented
diminished



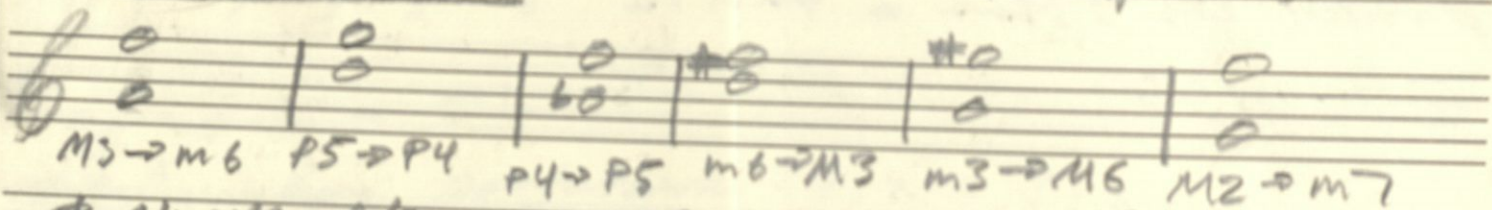
To form an intervals

~~1. To make sure you place notes on the right letters~~
2. adjust #/b's to get correct quality

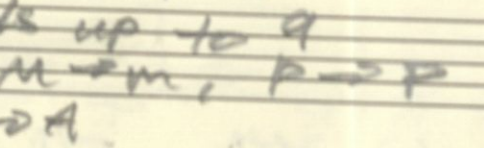


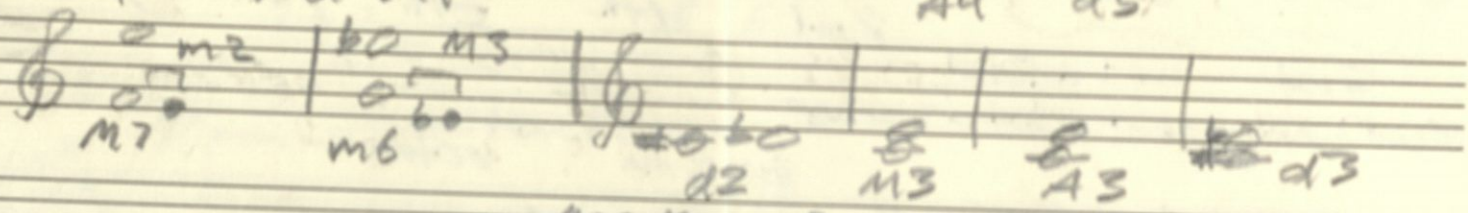
or top / down

~~Inverted Intervals~~: move bottom note up an 8ve



* Always adds up to 9
* m → M, M → m, P → P
* A → d, d → A





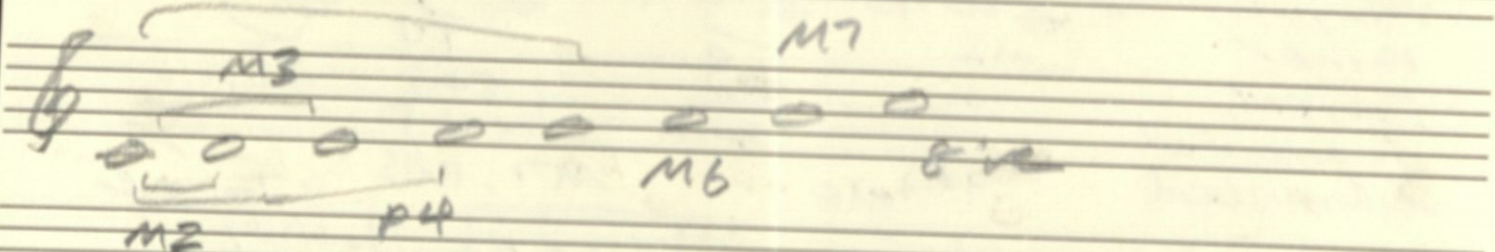
smaller than m2 by 1 HS

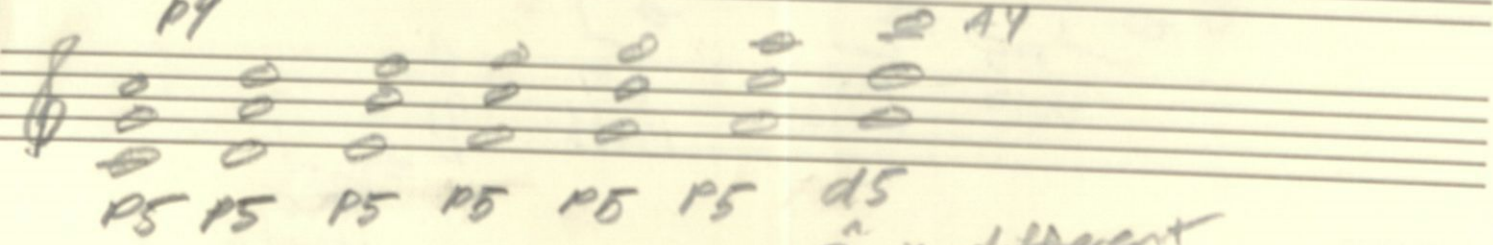
larger than M3 by 1 HS

Perfect: 4th, 5th, 8ve, unison
+/- HS → A/d directly from P

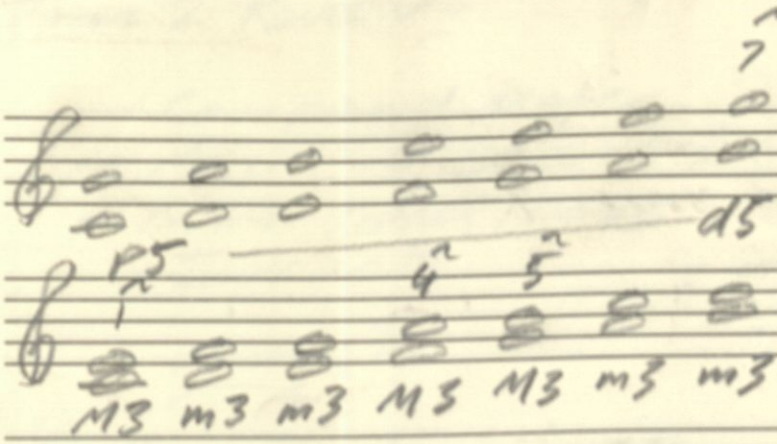
Others: 2nd, 3rd, 6th, 7th
+/- 1 HS → M/m, +/- 2 HS → A/d
* more modes

Scales: P5





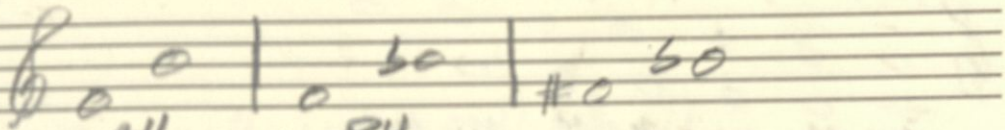
↑ is different



Lecture Notes: 5.21.24

quality size

m2
P4
d5
M6
A2



M, m	P
2	0
3	4
6	5
7	8

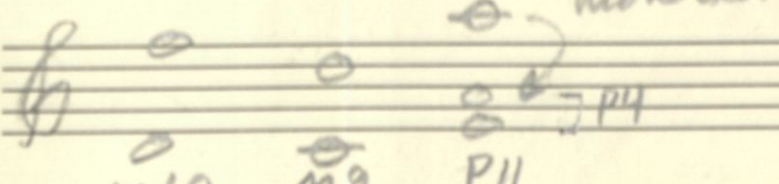
inversions: M ⇔ m, P ⇔ P, d ⇔ A } must add up to 9

Interval #'s

U – 0	P5 – 7
m2 – 1	m6 – 8
M2 – 2	M6 – 9
m3 – 3	m7 – 10
M3 – 4	M7 – 11
P4 – 5	8 – 12
A4/d5 – 6	

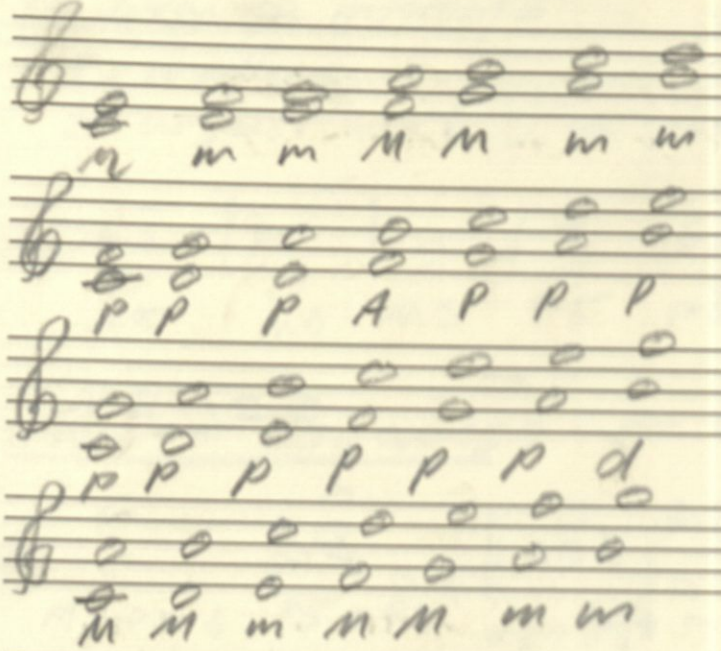
Consonance/Dissonance:
consonant intervals:
U, 3, P, 6, 8
dissonant intervals:
2, A4/d5, 7
↳ tritone

Compound Intervals: larger than 8va

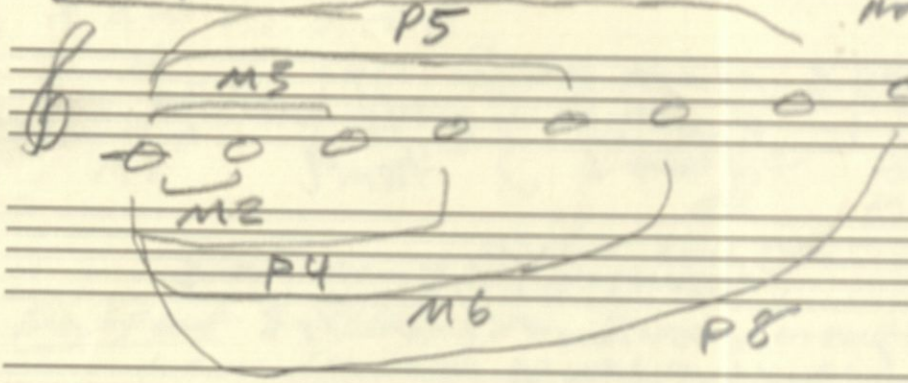


m10 M9

Patterns = in Cmaj



in Any Key: M7 take bottom note of interval as tonic

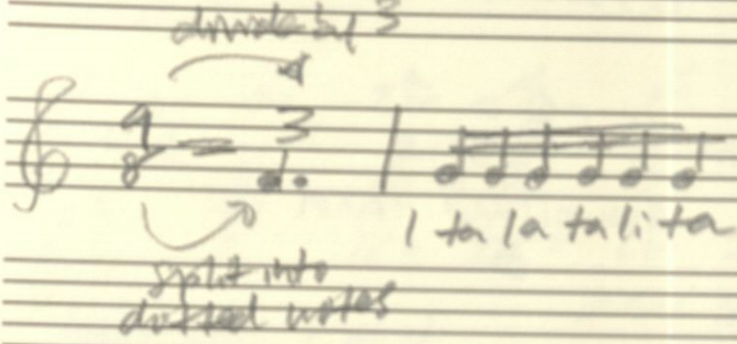


M can also have dot or AA

Exam 2 Review: 3.26.24

- ~~Compound meter~~
- ~~Major scales/keys~~
- ~~Minor scales/keys~~
- ~~Intervals~~

} and last exam (cumulative)



* last note of a passage usually ends on the tonic
* minor ($\hat{6}$ and $\hat{7}$ are usually raised (can have more accidentals overall))

relative keys: share key signature
~~parallel keys~~: share a tonic

	#	b
~~1.~~	~~F~~	~~B~~
2.	C	E
3.	G	A
~~4.~~	~~D~~	~~D~~
~~5.~~	~~A~~	~~G~~
6.	E	C
~~7.~~	~~B~~	~~F~~

Leading Notes = Chords 4.2.24

Most Common — Triads:

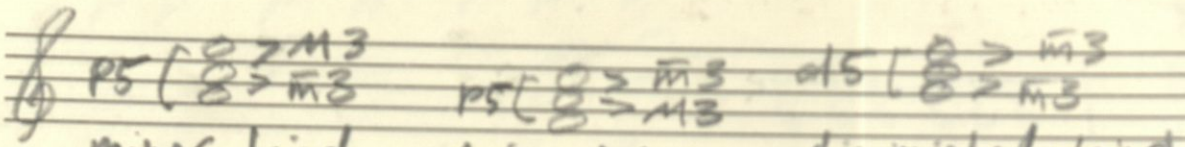
M3 + 5th = P5

3rd

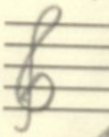
M3 = root = lowest note of the stack of 3rds

bass = lowest note

something the same note, sometimes different

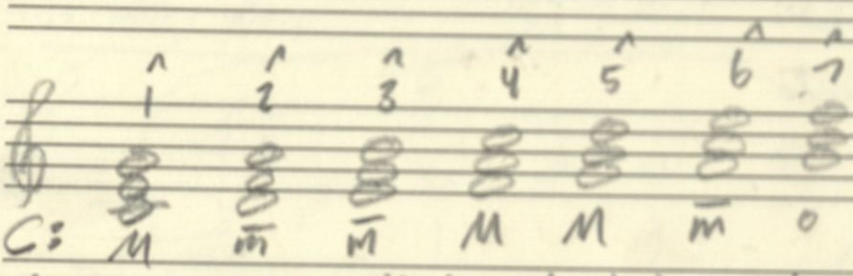


minor triad Major triad diminished triad



Augmented triad

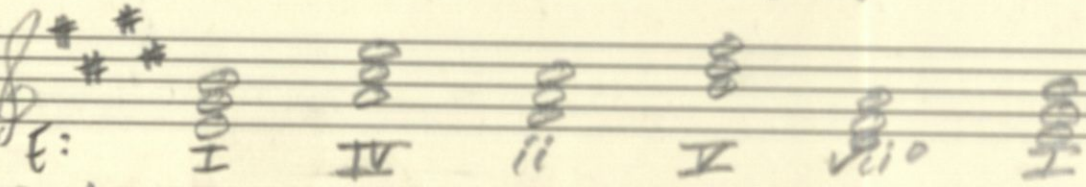
+

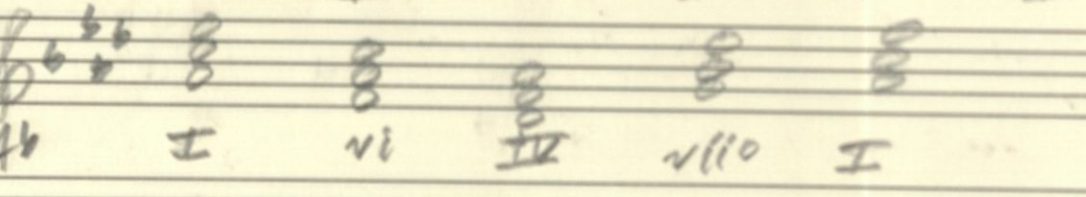


tonic supertonic mediant subdominant dominant submediant leading tone

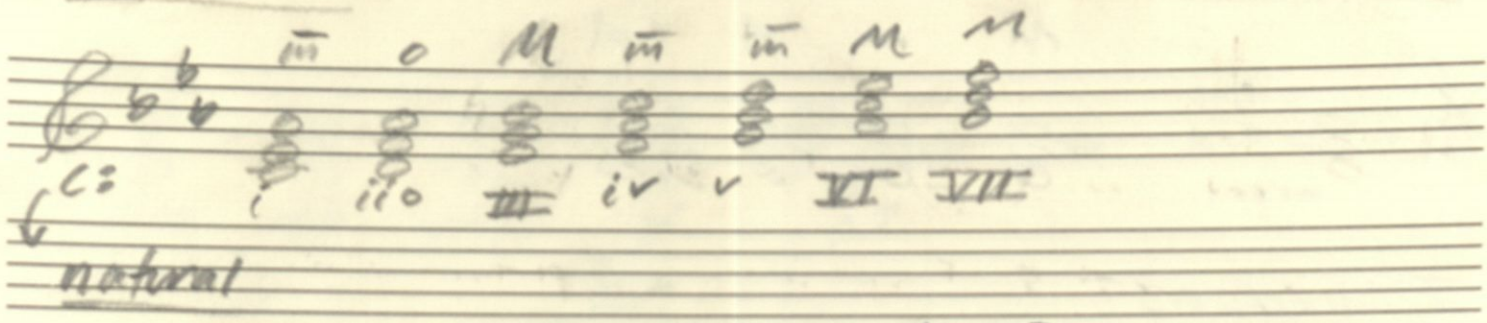
I ii iii IV V vi vii°

Major Triads: unaltered from key signature

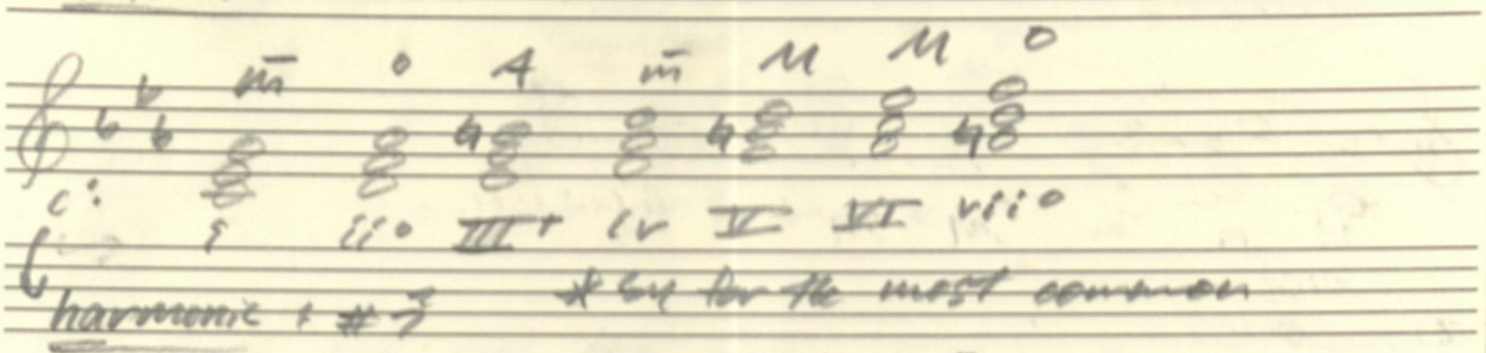




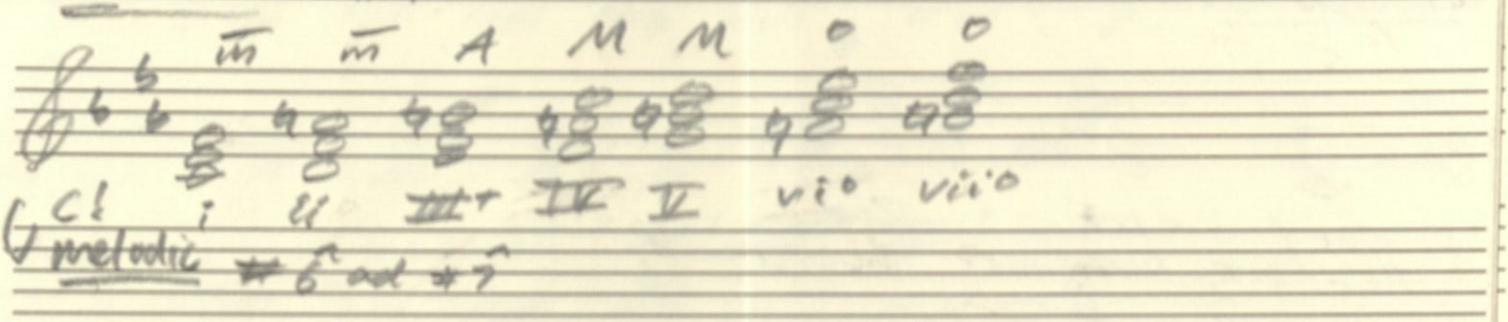
Minor Triads: harder because notes altered



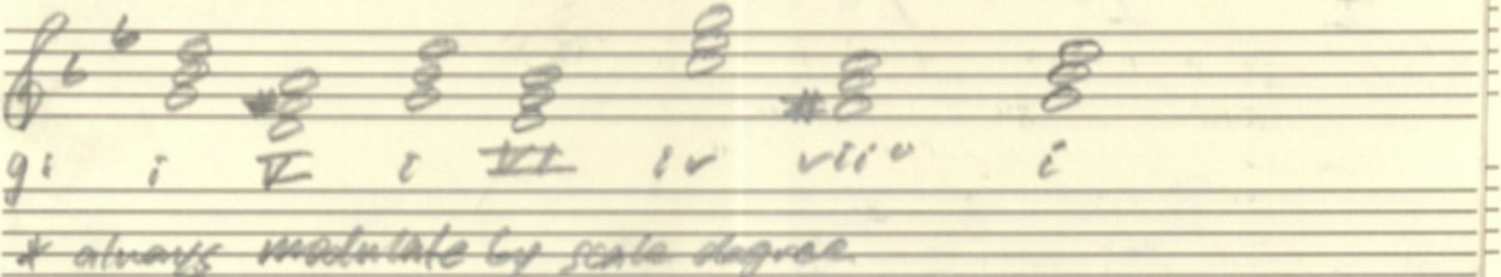
natural



harmonic + #7 *6/4 for the most common

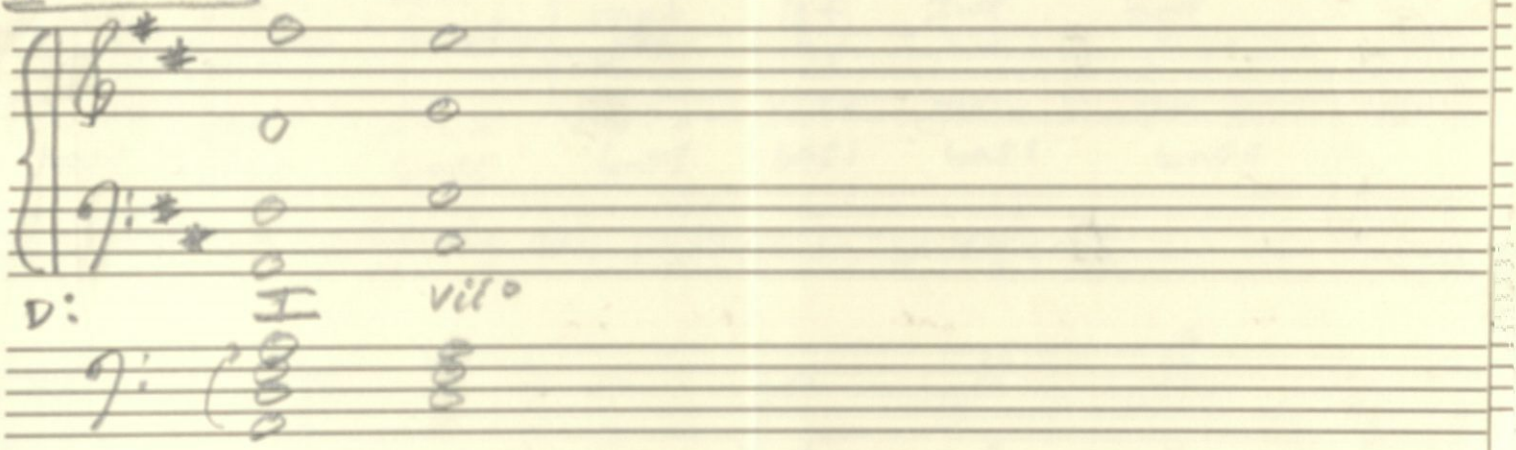


melodic #6 and #7



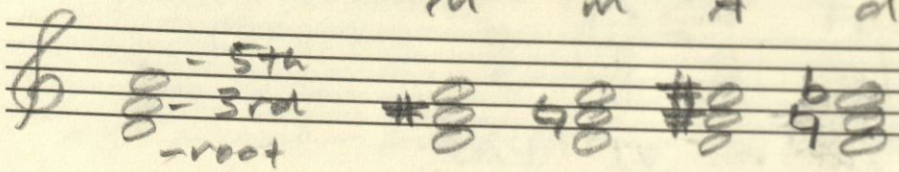
* always modulate by scale degree

Root vs Base:

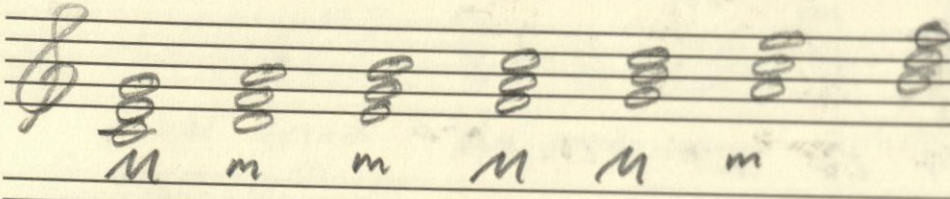


Lecture Notes: 4.4.24

M m A d

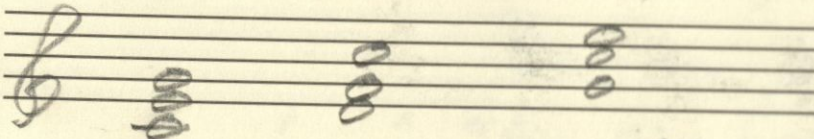


Identifiers:



M m m M M m

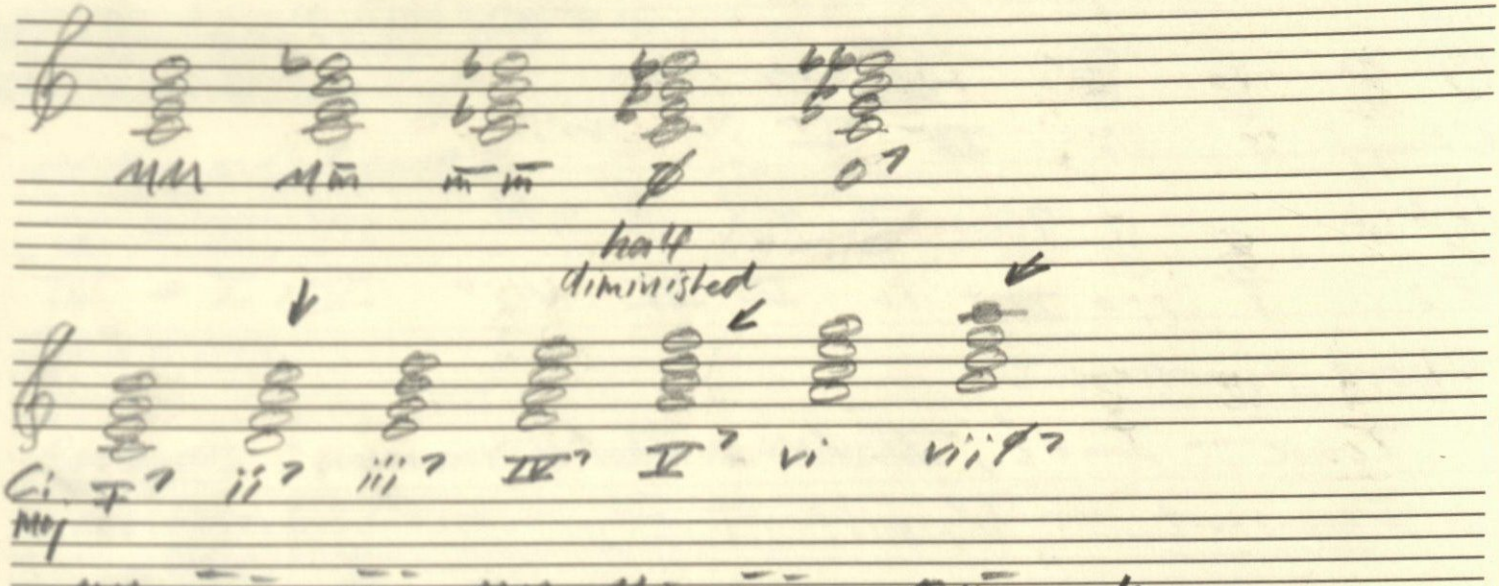
Inversions:



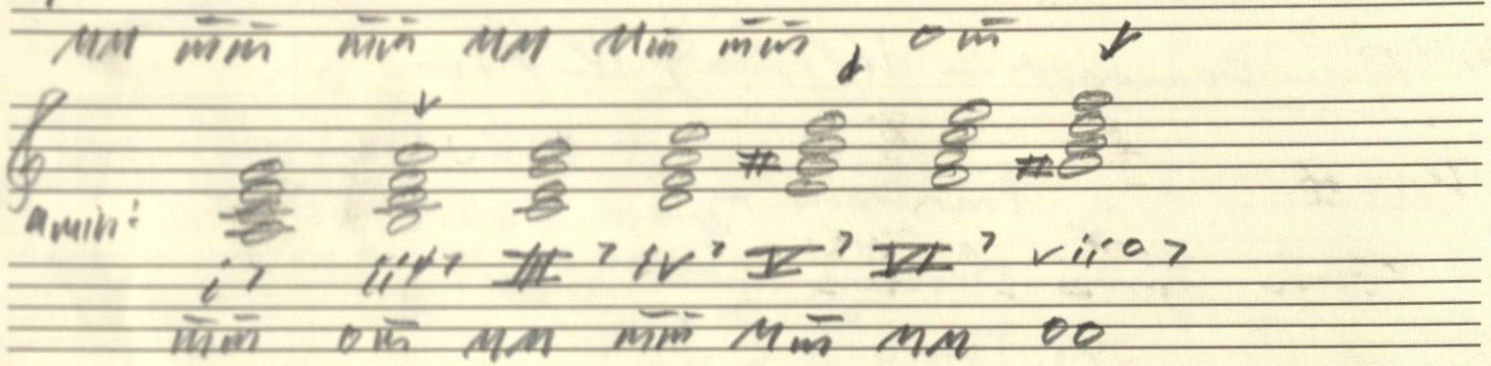
root position — 1st inversion — 2nd inversion

I I^6 I^6_4

Lecture Notes: 7th chords

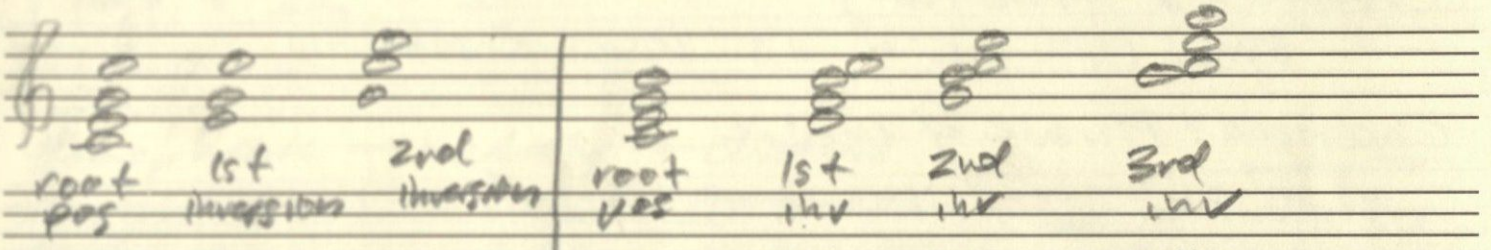


C: I7 ii7 iii7 IV7 V7 vi viiø7

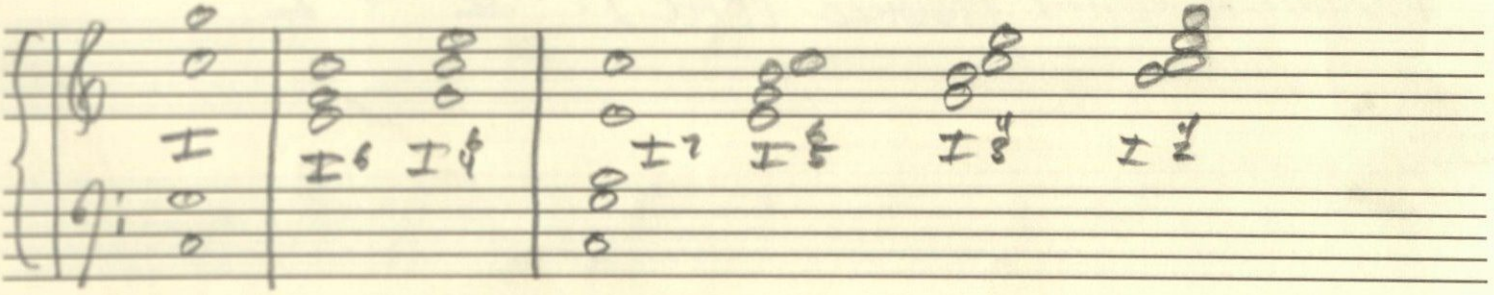


Amin: i7 iiø7 III7 iv7 V7 VI7 viiº7

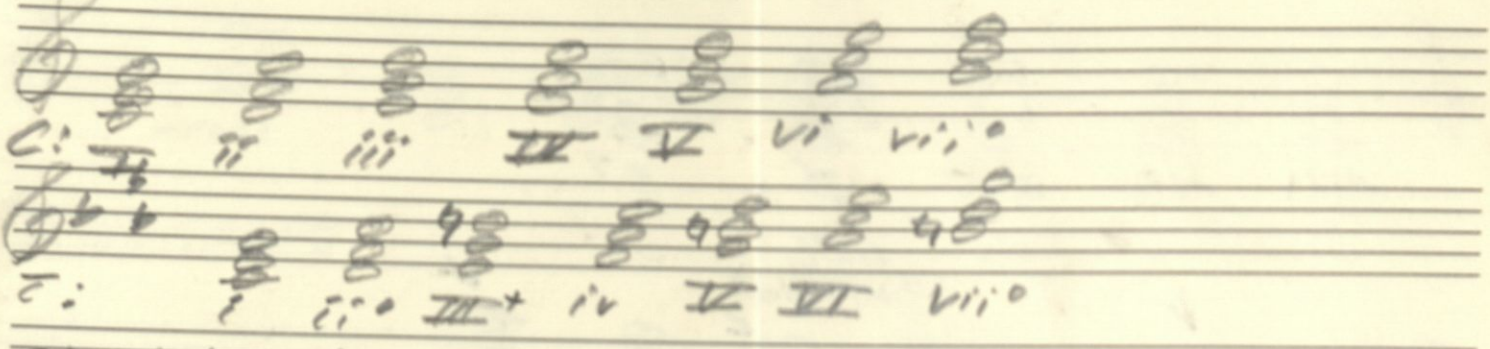
Inversions:



* spacing of notes do not matter in inversions



Lecture Notes: 4.11.24



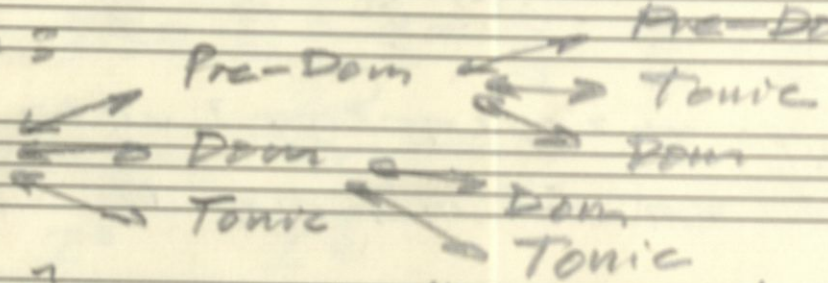
Chord Functions:

Tonic — I / i, IV / vi, III / iii

Dominant — V, vii° (VII)

Pre-Dominant — ii / ii°, IV / iv

Functions:



~~1 (2), 5, 7~~ are most often 7th chords

~~Inversions and different chords do not~~ change to functions

— EXCEPT I^6_4 is Pre-Dom

Cadences: Phrase of music

Authentic: V / vii° → I / I^6

Half: → V

Deceptive: V / vii° → vi / iii

Plagal: IV → I

Perfect Authentic Cadence (PAC): V → I

Lecture Notes:

9.16.24

(I) Tonic — I, i, vi, VI, iii, III(+)

(II) Dominant — V, vii°

(III) Pre-Dominant — I⁶, ii, ii°, IV, iv

Without a Category:

I → V, IV

IV → I, V

V → I

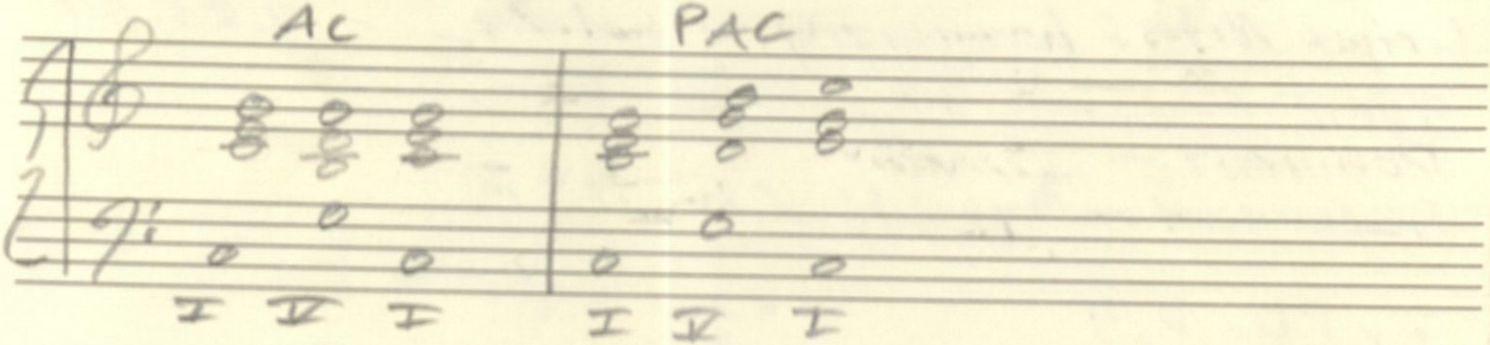
Common:

I → IV → V → I

Cadences: moment of rest in music

Authentic: Dom → I

- PAC: V → I



Half: ? → Dom

Deceptive: Dom → tonic that is not I

Plagal: IV → I

Homophonic — melody + chords

Monophonic — single melody

Polyphonic — different melodies simultaneously

Lecture Notes: 4.18.24

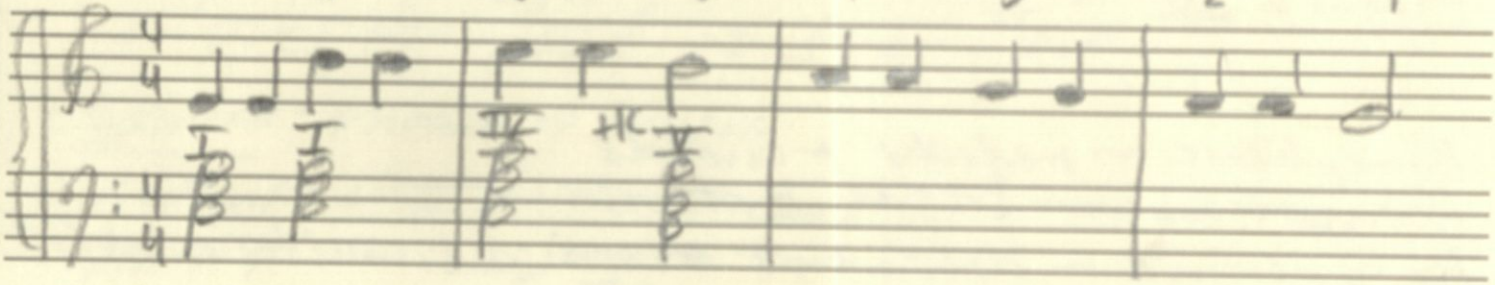
passing notes: notes going in same direction
neighbor notes: flanking notes in either direction (embellishments) △ ▽

~~* both connect two chords~~

Lecture Notes: harmonizing a melody 4.23.24

~~Tonic — I, iii, vi / i, III, VI~~
~~Dominant — V, vii°~~
~~Predominant — IV, ii / iv, ii° iv~~

T, PD, D, T
~~I IV V I~~
~~I, vi, IV I, iii, IV vi, IV, ii IV, ii, viii iii, I, vi ii, vii, I~~
1 5 6 5 4 3 2 1



Cadences
A: Dom → I
PAC: V → I
D: Dom → Tonic (not I)

Lecture Notes 3 writing melody for harmonies 4.25.24