

# Bulgarian Harmony I

## Meeting 2



# Scales: The Established Scholarly Approach

Pentatonic Collections

Diatonic Collections

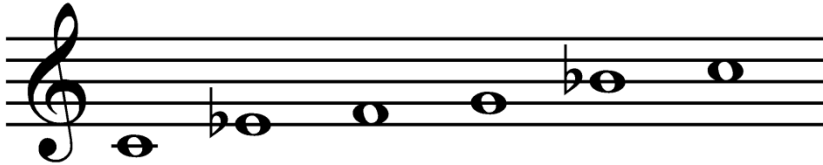
Chromatic Collections

Enharmonic Collections

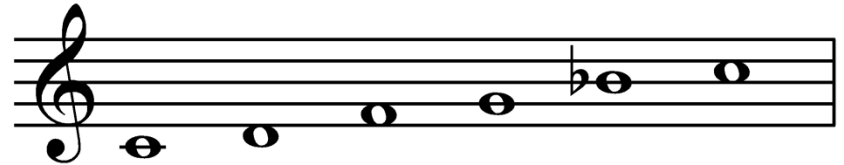
# Pentatonic Scales

## Anhemitonic Pentatonics

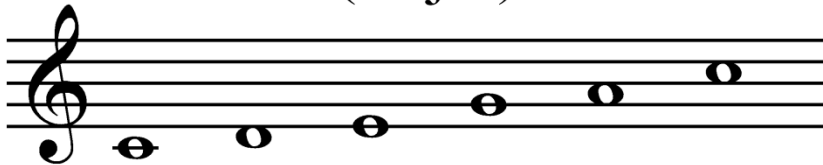
Pentatonic I (minor)



Pentatonic III



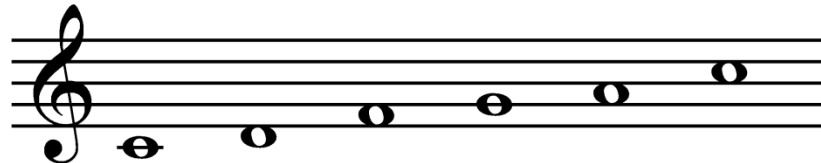
Pentatonic II (major)



Pentatonic IV (minor)



Pentatonic V



Example 1. Anhemitonic Pentatonics

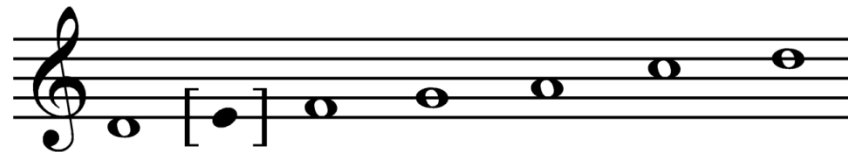
# Transitional Pentatonic Scales



Pu-sto-no lu - do i mla -do, ish-ti mi, mai-cho, ar- ma- gan.  
Ish- ti mi, mai-cho, ar -ma - gan, cher-ni si o - chi da mu dam.

9

Da-li da gi dam chi kak da gi dam ga ma mai- ka glio-da ot tam.



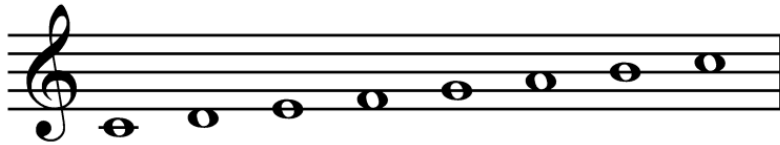
Example 2. Transitional Minor Pentatonic from D

## *The Easiest Way to Construct*

95% of the Pentatonic – Based Bulgarian Folk Songs Are in Minor Pentatonic, Type I  
Minor Pentatonic, Type I – construct Natural Minor (Aeolian) without scale degrees 2 and 6

# Diatonic Modes

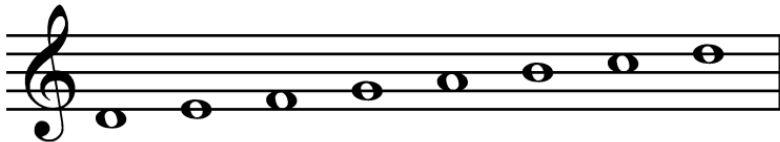
Ionian



Lydian



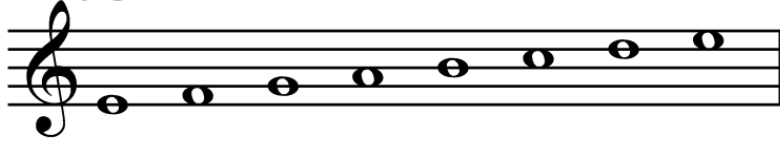
Dorian



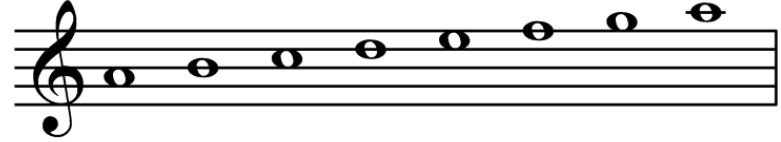
Mixolydian



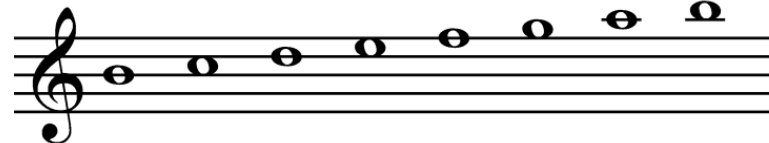
Phrygian



Aeolian



Locrian



Example 3. Diatonic Modes after Glarean

## *The Easiest Way to Construct Diatonic Modes*

### Major Category

Ionian- Natural major

Lydian - Natural major with #4

Mixolydian - Natural major with b7

### Minor Category

Aeolian – Natural Minor

Phrygian – Natural Minor with b2

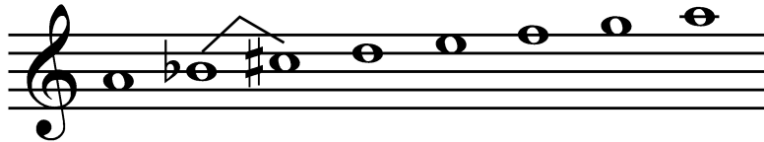
Dorian – Natural Minor with #6

Locrian - Natural Minor with b2 and b5 (not used in practice)

# Chromatic Scales

## (Non-Microtonal Makams)

Makam Hicaz



Makam Karcigar



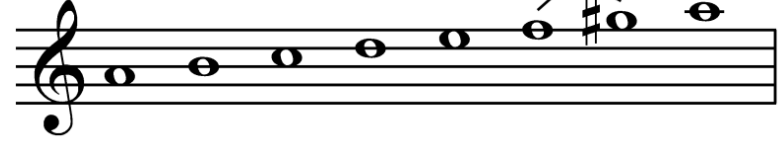
Makam Mustear



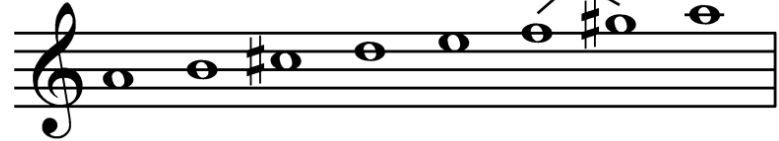
Makam Huzzam



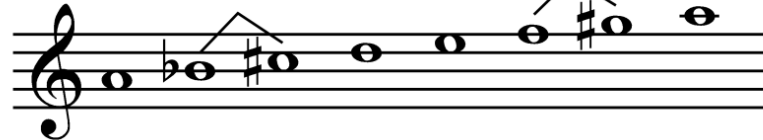
Makam Sultani Yegah



Makam Suzinak



Makam Hicazkar



Example 4. Chromatic Scales (Non-Microtonal Makams)  
According to the Classification of Stoyan Dzhudzhev

## *The Easiest Way to Construct*

Focus on 3 Makams: Hicaz, Mustear, Karcigar

Hicaz – 5th mode of Harmonic Minor or Harmonic Minor starting on scale degree 5.

Mustear – Dorian with #4

Karcigar – Natural Minor with Hicaz starting from scale degree 4.

You can also think of this makam as a plagal version of Hicaz.

Hicazkar - two Hicaz (Chromatic) tetrachords separated by a whole step  
(not typical for the Slavic population of Bulgaria)

Sultani Yegah – The same scale as Harmonic Minor.

For simplicity, we will call it Harmonic Minor

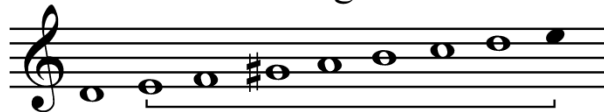


# Transposing Makams

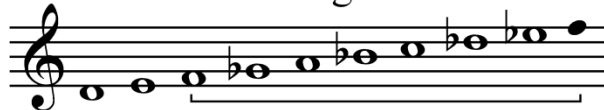
Hicaz from scale degree  $\hat{1}$



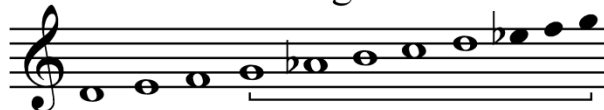
Hicaz from scale degree  $\hat{2}$



Hicaz from scale degree  $\hat{3}$



Hicaz from scale degree  $\hat{4}$



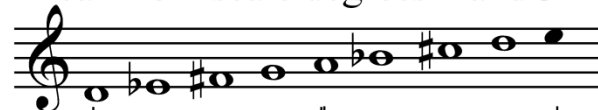
Hicaz from scale degree  $\hat{5}$  ( $\hat{3\#}$ )



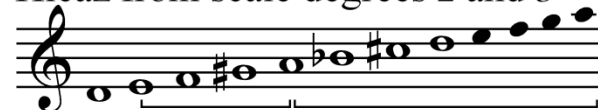
Hicaz from scale degree  $\hat{5}$



Hicaz from scale degrees  $\hat{1}$  and  $\hat{5}$



Hicaz from scale degrees  $\hat{2}$  and  $\hat{5}$

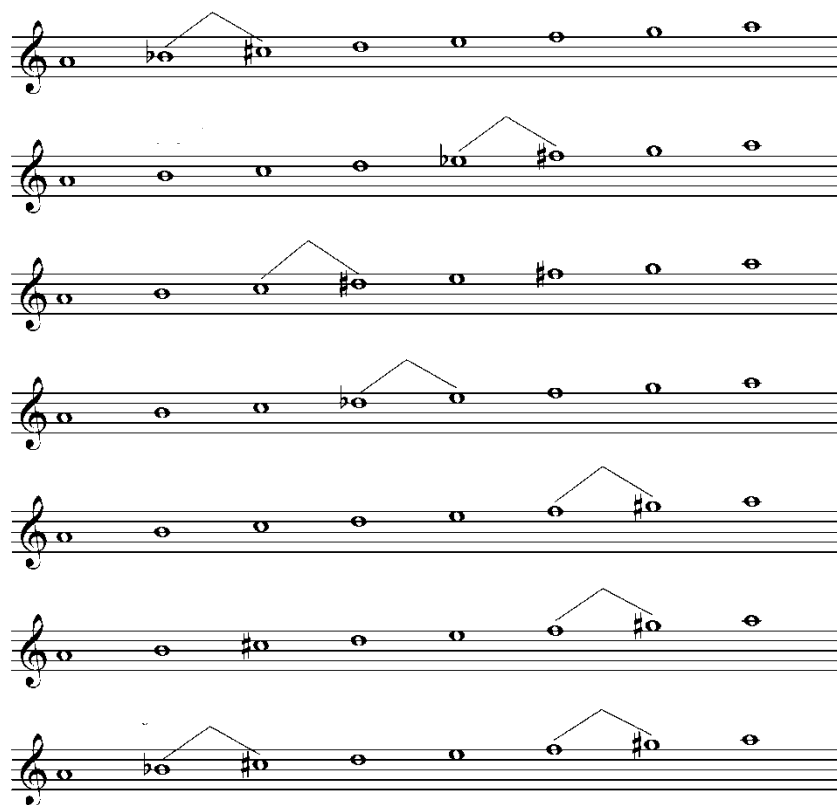


Hicaz from scale degree 1	=	Makam Hicaz
Hicaz from scale degree 2	=	Makam Mustear
Hicaz from scale degree 3	=	Makam Huzzam
Hicaz from scale degree 4	=	Makam Karcigar
Hicaz from scale degree 5 (in major)	=	Makam Suzinak
Hicaz from scale degree 5 (in minor)	=	Makam Sultani Yegah
Hicaz from scale degrees 1 and 5	=	Makam Hicazkar

Example 5. Bulgarian Makams Related by Transposition

# Chromatic Scales (Makams)

## Bulgarian Non-Microtonal Makams



Seven musical staves in treble clef, each showing a chromatic scale. The scales are: Hicaz (B-flat, C, D, E, F, G, A), Karcigar (B-flat, C, D, E, F, G, A), Mustear (B-flat, C, D, E, F, G, A), Huzam (B-flat, C, D, E, F, G, A), Sultaniyegah (B-flat, C, D, E, F, G, A), Suz-nak (B-flat, C, D, E, F, G, A), and Hicazkar (B-flat, C, D, E, F, G, A). Each scale is marked with a bracket indicating the interval between the first and second notes.

Hicaz

Karcigar

Mustear

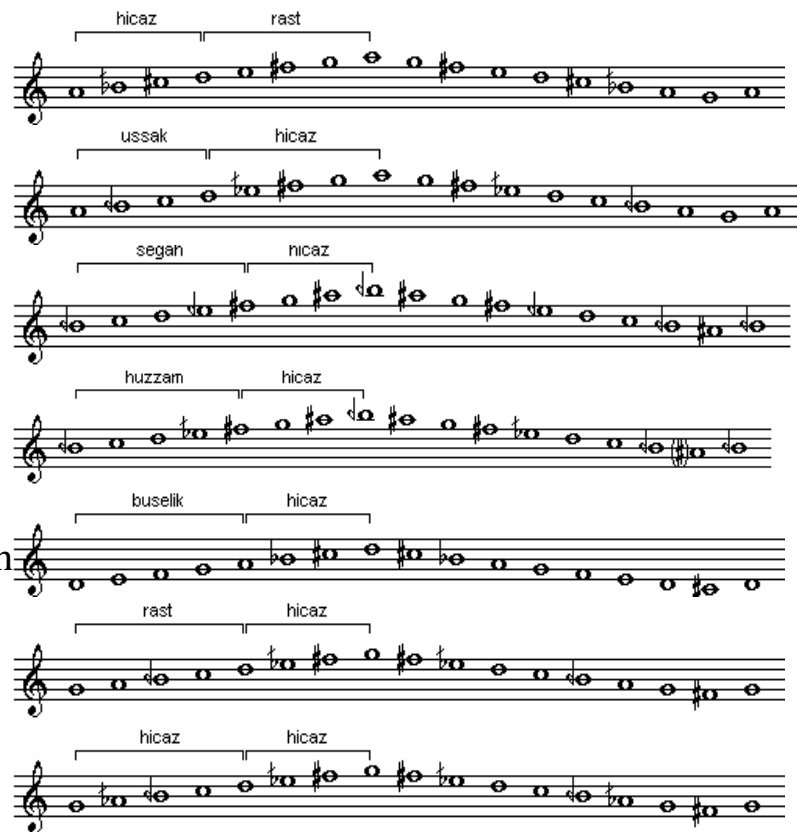
Huzam

Sultaniyegah

Suz-nak

Hicazkar

## Turkish Microtonal Makams



Seven musical staves in treble clef, each showing a chromatic scale. The scales are: hicaz (B-flat, C, D, E, F, G, A), rast (B-flat, C, D, E, F, G, A), ussak (B-flat, C, D, E, F, G, A), hicaz (B-flat, C, D, E, F, G, A), segah (B-flat, C, D, E, F, G, A), hicaz (B-flat, C, D, E, F, G, A), huzzam (B-flat, C, D, E, F, G, A), hicaz (B-flat, C, D, E, F, G, A), buselik (B-flat, C, D, E, F, G, A), hicaz (B-flat, C, D, E, F, G, A), rast (B-flat, C, D, E, F, G, A), hicaz (B-flat, C, D, E, F, G, A), hicaz (B-flat, C, D, E, F, G, A), and hicaz (B-flat, C, D, E, F, G, A). Each scale is marked with a bracket indicating the interval between the first and second notes.

hicaz

rast

ussak

hicaz

segah

hicaz

huzzam

hicaz

buselik

hicaz

rast

hicaz

hicaz

hicaz

Example 6. Bulgarian Makams Compared to Turkish Makams

# The “Missing” Makam



Example 7. Second Mode of Makam Hicaz

Microtonal Makams  
(Enharmonic Collections)

Other Microtonal Collections

# Vocal in Instrumental Polyphony in Bulgarian Folk Music



# Vocal and Instrumental Polyphony

## Steady Drones

The category of steady drones subdivides into five main types:

1. Drone on the same pitch as the finalis (CD, Track 1)
2. Drone a fourth below the finalis (CD, Track 2)
3. Drones on the same pitch as the finalis and a fourth below (CD, Track 3)
4. Drone a fifth below the finalis (CD, Track 4)
5. Drones on the same pitch as the finalis and a fifth below

## Variable Drones

1. Drone on scale degree 1 (finalis) interchanged with the subtonic 7 (CD, Track 5)
2. Variable drone in minor between scale degrees 3 and 1, where 1 is the finalis (CD, Track 6)
3. Variable drone 4 - 1, which implies two possible tonics

## Three Part Singing (CD, Track 7)

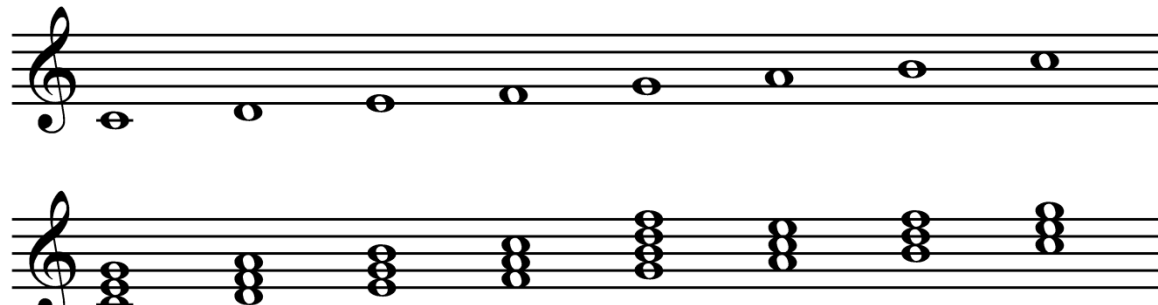
# Chord Derivation and Harmonic Vocabularies in Bulgarian Folk Music



# CHORD DERIVATION AND CHORDAL VOCABULARIES FOR MAJOR SCALES

(only scales found in harmonized repertoire)

# Chord Derivation: Ionian Mode



The image shows two staves of music. The top staff displays the Ionian mode scale (C major) in treble clef, consisting of eight half notes: C, D, E, F, G, A, B, and C. The bottom staff displays the corresponding chords for each scale degree in treble clef, with the root of each chord on the bottom line (C4). The chords are: I (C major), ii (D minor), iii (E minor), IV (F major), V<sub>7</sub> (G7), vi (A minor), vii<sup>o</sup> (B diminished), and I (C major). Below each chord, there are two labels: a Roman numeral and a letter indicating the chord's quality (T for Triad, S for Seventh, D for Diminished).

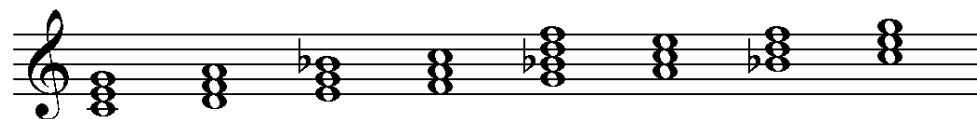
Scale Degree	Chord	Quality
I	I	T
ii	ii	S
iii	iii	
IV	IV	S
V <sub>7</sub>	V <sub>7</sub>	D
vi	vi	
vii <sup>o</sup>	vii <sup>o</sup>	D
I	I	T

Preferred cadences:	ii-V-I or IV-V-I
Preferred tonicization:	vi (relative minor)
Standard progressions:	IV-V-I
Finalis:	$\hat{1}$ or $\hat{3}$

Example 21. Chordal Vocabulary in Ionian Mode



# Chord Derivation: Mixolydian (Northeastern Bulgaria)



I    ii    iii°    IV    v<sub>7</sub>    vi    VII    I  
T    S            S    D            D    T

Preferred cadences:	v-I, VII-v-I, VII-I, or IV-v-I
Preferred tonicization:	vii, iv, and IV
Standard progressions:	I-IV-VII-I
Finalis:	<sup>^</sup> 1

Example 22. Mixolydian Mode

# Chord Derivation: Makam Hicaz

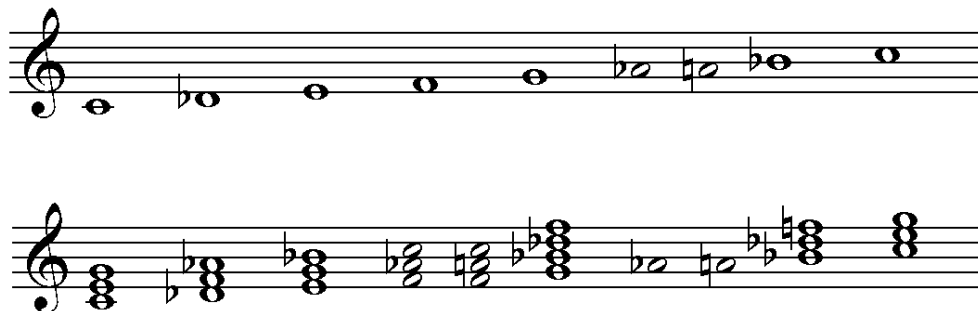


I    II    iii°    iv    IV    v<sup>7</sup> (VI)    vii    I  
T    S            S    S    D            D    T

Preferred cadences:	vii-I, v <sup>7</sup> -I
Preferred tonicization:	vii, iv, and IV
Standard progressions:	I-iv-vii (v <sup>7</sup> ) -I
Finalis:	î (or 3̂)

Example 23. Chordal Vocabulary in Makam Hicaz

## Makam Hicaz

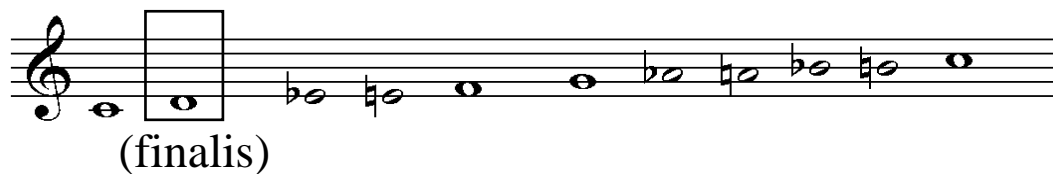


Hicaz:            I      II    iii<sup>°</sup>   iv IV   v<sup>°</sup><sub>7</sub> (VI)   vii   I  
 Harm Minor:   V      VI   vii<sup>°</sup>   i (I)   ii<sup>°</sup><sub>7</sub> (III)   iv   V

	Hicaz	Harm Minor
Preferred cadences:	vii-I, v <sup>°</sup> <sub>7</sub> -I	iv-V, ii <sup>°</sup> <sub>7</sub> -V
Preferred tonicization:	vii, iv, and IV	iv, i, and I
Standard progressions:	I-iv-vii (v <sup>°</sup> <sub>7</sub> ) -I	V-i-iv (ii <sup>°</sup> <sub>7</sub> ) -V
Finalis:	î (or 3̂)	5̂ (or 7̂)

Example 24. Chordal Vocabulary in Makam Hicaz Compared to Harmonic Minor

## Shope Major (Western Bulgaria)

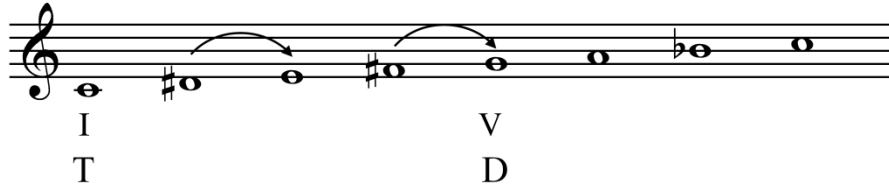


I (V)V/V      IV iv V<sub>7</sub>      VII      I  
 T                      S          D                                  T

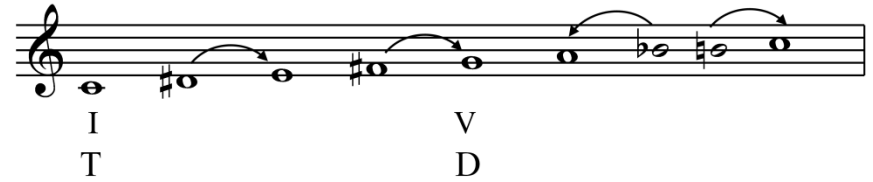
Preferred cadences:	V/V <sub>7</sub> -V
Preferred tonicization:	IV
Standard progressions:	I-IV-V/V <sub>7</sub> -V or I-iv-V/V <sub>7</sub> -V
Finalis:	$\hat{2}$ (or $\hat{7}$ )

Example 25. Chordal Vocabulary in Shope Major

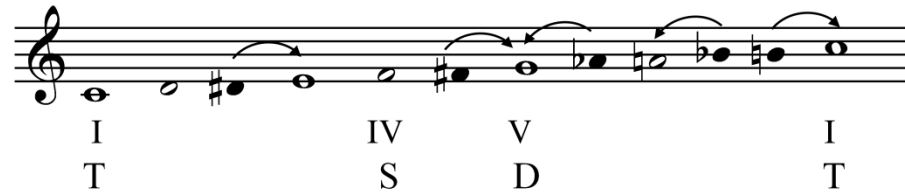
# Major Polymodes



Preferred cadences:	V-I
Preferred tonicization:	none
Standard progressions:	I-IV-V-I
Finalis:	$\hat{1}$



Preferred cadences:	V-I
Preferred tonicization:	none
Standard progressions:	I-IV-vii <sup>o</sup> /V-V <sub>7</sub> -I
Finalis:	$\hat{1}$

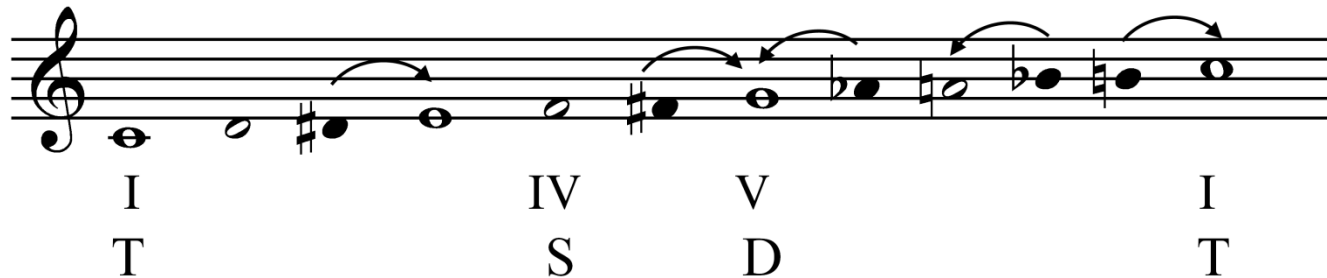


Preferred cadences:	V-I, IV-V-I
Preferred tonicization:	none
Standard progressions:	IV-V-I
Finalis:	$\hat{1}$ or $\hat{5}$

Example 26. Chordal Vocabulary in Major Polymodes

# Scales and Modes for Improvisation in Bulgarian Folk Music

## The Role of the Drones



Preferred cadences:	V-I, IV-V-I
Preferred tonicization:	none
Standard progressions:	IV-V-I
Finalis:	$\hat{1}$ or $\hat{5}$

Example 27. Polymode for Improvisation in Major

## Scales for Improvisation in Major

<b>Major</b> I-IV-V-I progression	Mixolydian Mode" 4pf "Mode of Makam Hicaz Aeolian Mode from Scale Degree <b>4</b> Mixolydian Mode from Scale Degree <b>4</b> (Aeolian Mode from Scale Degree <b>5</b> ) Makam Mustear from Scale Degree <b>4</b> (Makam Hicaz from Scale Degree <b>5</b> ) Aeolian Mode Chromatic Scale
<b>Makam Hicaz</b> I-vii-I progression	Makam Hicaz Makam Hicazcar Ionian from the <b>4</b> -the Scale Degree Chromatic Scale

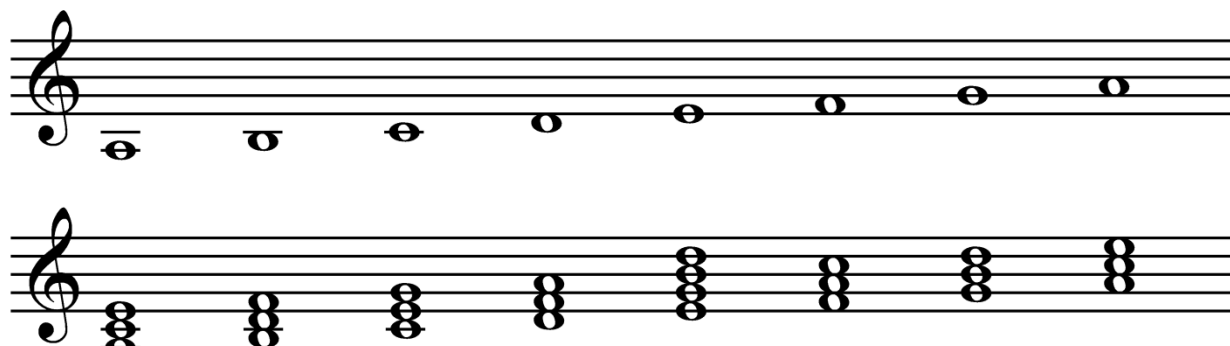
Table 1. Scales for Improvisation in Major

# CHORD DERIVATION AND CHORDAL VOCABULARIES FOR MINOR SCALES

(only scales found in harmonized repertoire)



# Chord Derivation: Aeolian



The image shows two staves of music. The top staff displays the Aeolian mode scale in G major (F# minor), consisting of the notes G, A, B, C, D, E, F, and G. The bottom staff shows the corresponding chords for each note: i (G), ii° (A), III (B), iv (C), v7 (D), VI (E), VII (F), and i (G). Below each chord symbol is a letter indicating its quality: T for Tonic (i), S for Supertonic (ii° and iv), D for Dominant (v7, VI, and VII), and T for Tonic (i).

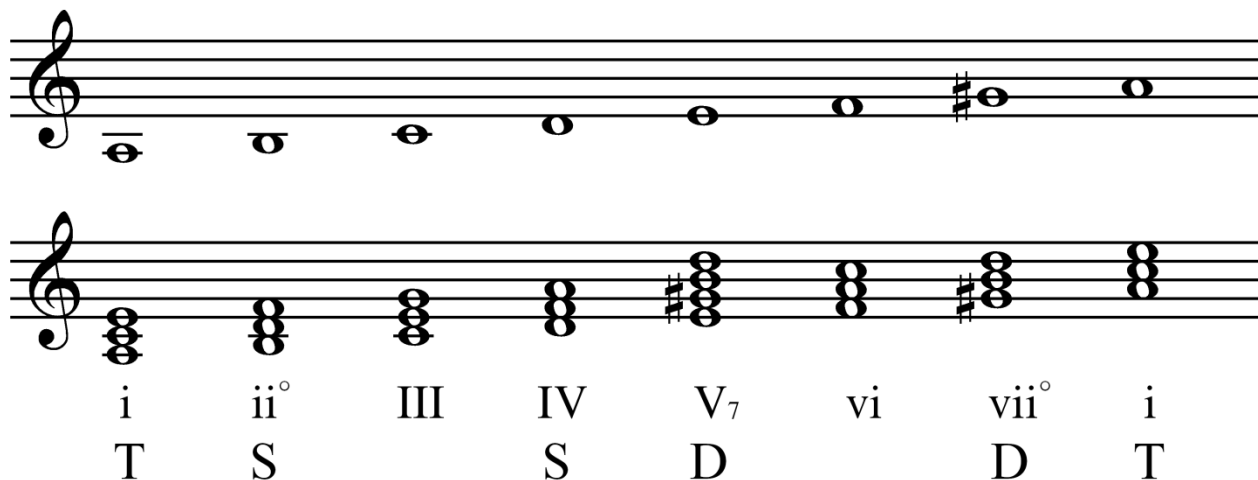
i    ii°    III    iv    v<sub>7</sub>    VI    VII    i

T    S       S    D       D       T

Preferred cadences:	iv-i, IV-iv-i, v-i
Preferred tonicization:	III and VII
Standard progressions:	i-VI-iv-i
Finalis:	$\hat{1}$

Example 28. Chordal Vocabulary in Aeolian

## Chord Derivation: Harmonic Minor



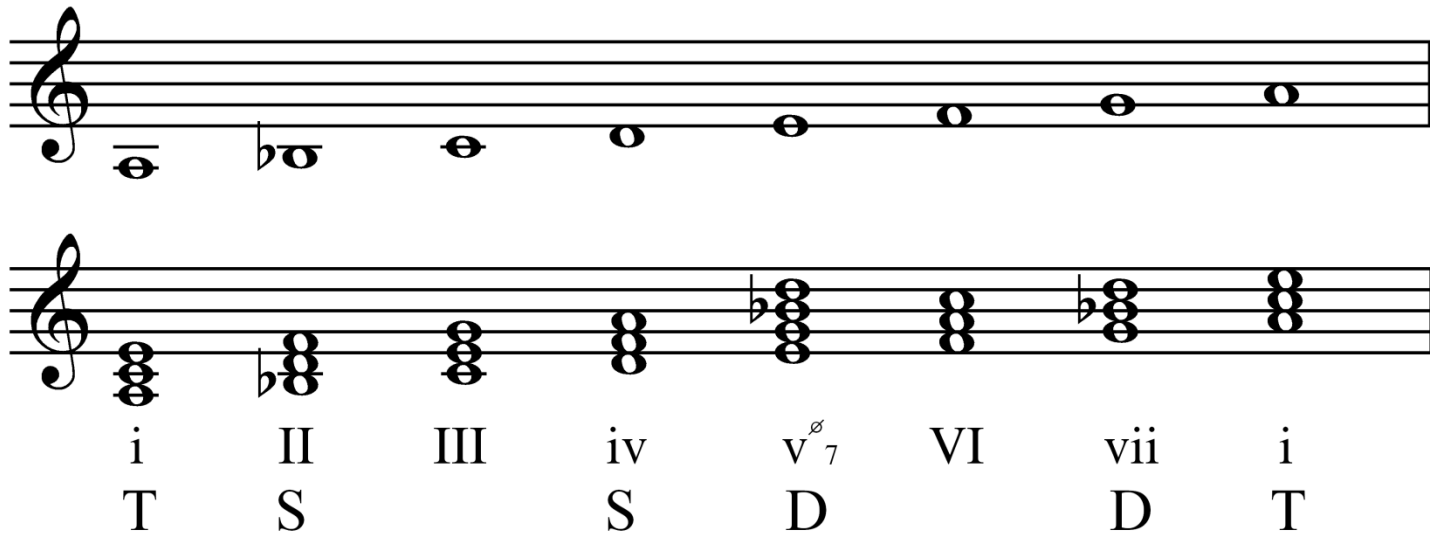
The image displays the Harmonic Minor scale and its corresponding chords on a treble clef staff. The scale is written as a single melodic line with eighth notes. Below the staff, the chords are shown as block chords, each labeled with a Roman numeral and a letter indicating its structure (T for Triad, S for Dyad, D for Dyad with a seventh).

Chord	Structure
i	T
ii°	S
III	
IV	S
V <sub>7</sub>	D
vi	
vii°	D
i	T

Preferred cadences:	V-i, iv-V-i
Preferred tonicization:	III and VII
Standard progressions:	i-iv-V-i
Finalis:	$\hat{1}$

Example 29. Chordal Vocabulary in Harmonic Minor

## Chord Derivation: Phrygian



The image displays two musical staves in treble clef. The top staff shows the Phrygian mode scale starting on D4: D4 (half note), E♭4 (half note), F4 (half note), G4 (half note), A4 (half note), B4 (half note), C5 (half note), and D5 (half note). The bottom staff shows the corresponding chords for each scale degree, represented by three-note triads: i (D4-F4-A4), II (E♭4-G4-B4), III (F4-A4-C5), iv (G4-B4-D5), V<sup>ø</sup><sub>7</sub> (A4-C5-E♭5), VI (B4-D5-F5), vii (C5-E♭5-G5), and i (D5-F5-A5). Below each triad are two-letter chord quality abbreviations: T, S, S, S, D, D, D, and T.

Scale Degree	Chord	Quality
i	D4-F4-A4	T
II	E♭4-G4-B4	S
III	F4-A4-C5	S
iv	G4-B4-D5	S
V <sup>ø</sup> <sub>7</sub>	A4-C5-E♭5	D
VI	B4-D5-F5	D
vii	C5-E♭5-G5	D
i	D5-F5-A5	T

Example 30. Chordal Vocabulary in Phrygian

There Is no Standardization in Phrygian (still in-progress...)

# Chord Derivation: Aeolian-Phrygian Polymode

i    II    ii°    III    iv    v<sup>7</sup>   v<sup>7</sup>   VI    vii   VII   i  
 T    S    S       S    D    D       D    D    T

Preferred cadences:	iv-i, IV-iv-i, v-i, vii-i
Preferred tonicization:	III and VII
Standard progressions:	i-V/III-III-iv-i
Finalis:	$\hat{1}$

Example 31. Chordal Vocabulary in Aeolian-Phrygian Polymode with Variable Scale Degree 2

# Chord Derivation: Aeolian-Phrygian and a Partial Makam Karcigar Polymode

i      ii   iii   III   iv   IV      v<sup>ø</sup>   VI      VII      i

T          S                  S   S          D                  D          T

Preferred cadences:	iv-i, IV-iv-i, v-i
Preferred tonicization:	III, VII, IV (Hicaz)
Standard progressions:	i-V/III-III-iv-i
Finalis:	$\hat{1}$

Example 32. Chordal Vocabulary in Aeolian-Phrygian -Karcigar Polymode with Variable Scale Degrees 2 and 5

Makam Karcigar

# Chord Derivation: Aeolian-Phrygian and Makam Karcigar Polymode

i            ii    iii    III    iv    IV            v<sup>7</sup>    VI            VII            i  
 T            S                    S    S            D                    D            T

Preferred cadences:	iv-i, IV-iv-i, v-i
Preferred tonicization:	III, VII, IV (Hicaz)
Standard progressions:	i-V/III-III-iv-i
Finalis:	î

Example 33. Chordal Vocabulary in Aeolian-Phrygian-Karcigar Polymode with Variable Scale Degrees 2, 5, and 6

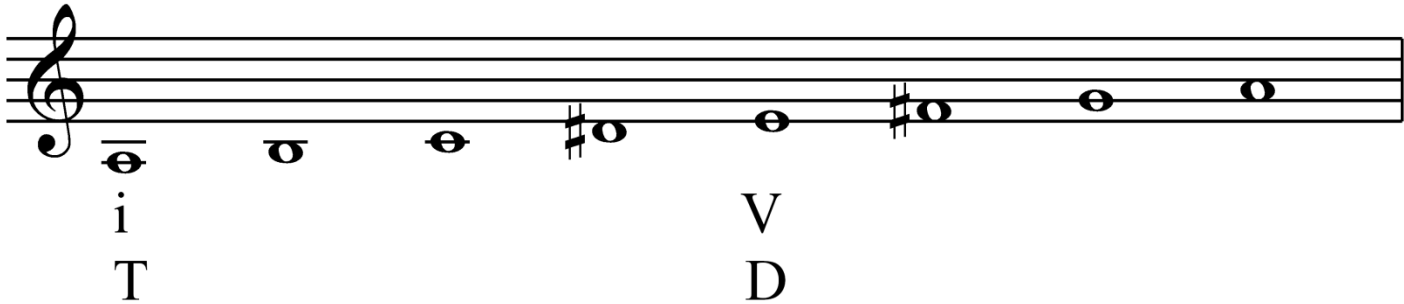
# Chord Derivation: Minor Pentatonic (Anhemitonic and Transitional)



Preferred cadences:	iv-i, VI-iv-i
Preferred tonicization:	III, VII
Standard progressions:	i-V/III-III-iv-i
Finalis:	$\hat{1}$

Example 34. Chordal Vocabulary in Minor Pentatonic

## Chord Derivation: Makam Mustear



Preferred cadences:	V-i
Preferred tonicization:	none
Standard progressions:	i-V-i
Finalis:	$\hat{1}$

Example 35. Chordal Vocabulary in Makam Mustear



# Scales for Improvisation in Minor

<b>Minor</b> i-V-i progression	Makam Mustear Biharmonic Minor (Makam Mustear Combined with Harmonia Minor)
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Table 2. Scales for Improvisation in Minor



# Traditional Bulgarian Polyphony as Predecessor of Harmony

Steady Drones

Variable Drones

Finalis in Bulgarian Music

Where is *Do* in Bulgarian Folk Music?

## Three Possible Tonal Centers: Triads Built Upwards, Downwards, and by Unfolding Thirds

Tonic on Scale Degree 1

Tonic on Scale Degree 4 or a 5th below the Finalis

Tonic on Scale Degree 6

Tonal Centers “Up for Grabs

## Regional Preferences for Tonal Centers

The Rule of the Loudest

# “Whose Is This Song:” From a Harmonic Perspective

