BÉLA BARTÓK’S AXIS SYSTEM

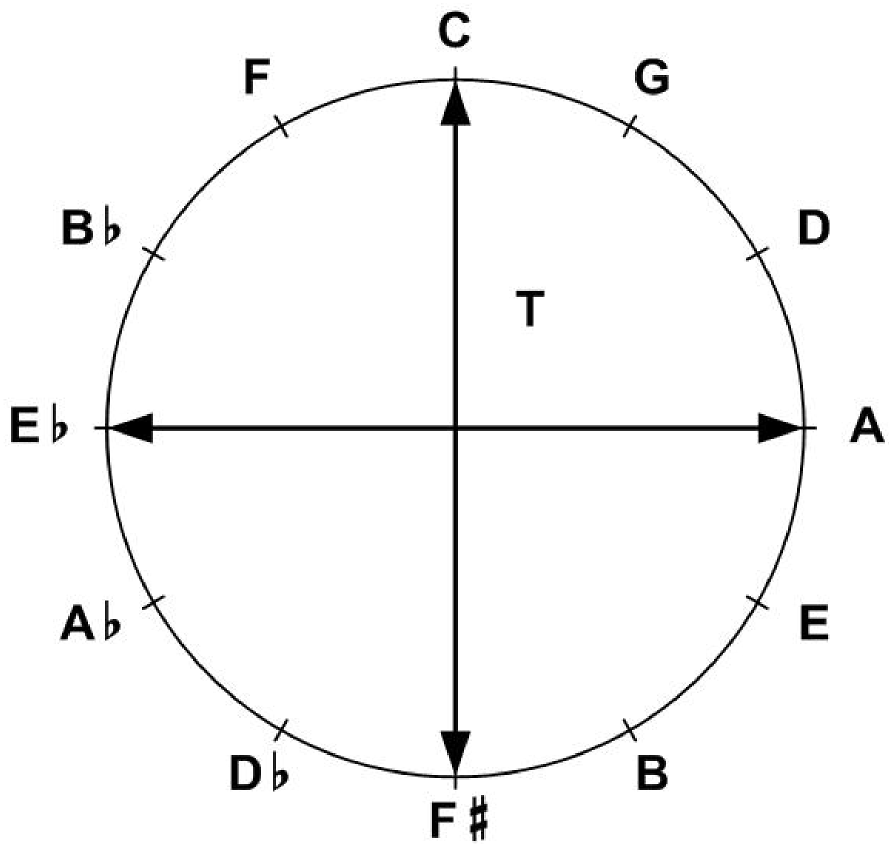
APPLICATIONS OF THE HARMONIC WHEEL

INTRODUCTION

- Béla Bartók's axis system was first published by Ernö Lendvai, one of his disciples, after performing an exhaustive analysis of his work.
- In short, it says that, if we are in the C Major key, the chords having the Tonic harmonic function are the following:
  - C and Cm
  - Their relative chords: Am and E♭, and also A and E♭m
  - The relatives of these last chords: F♯m and G♭ (or F♯)

TONIC AXES IN C MAJOR

- We can represent these 8 chords in a cycle of fifths:

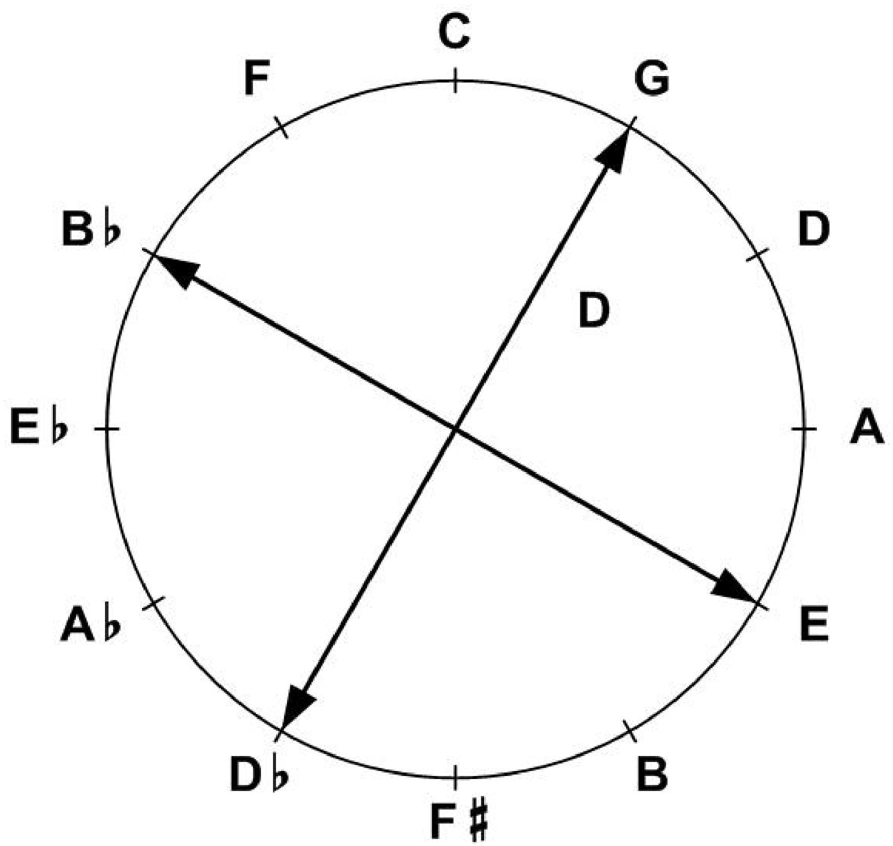


THE OTHER AXES IN C MAJOR

- The same reasoning can be applied to the chords with Dominant function, which will be:
  - G and Gm
  - Their relative chords: Em and B♭, and also E and B♭m
  - The relatives of these last chords: C♯m and D♭(or C♯)
- Similarly, the chords with Subdominant function will be:
  - F and Fm
  - Their relative chords: Dm and A♭, and also D and A♭m
  - The relatives of these last chords: Bm and C♭(or B)

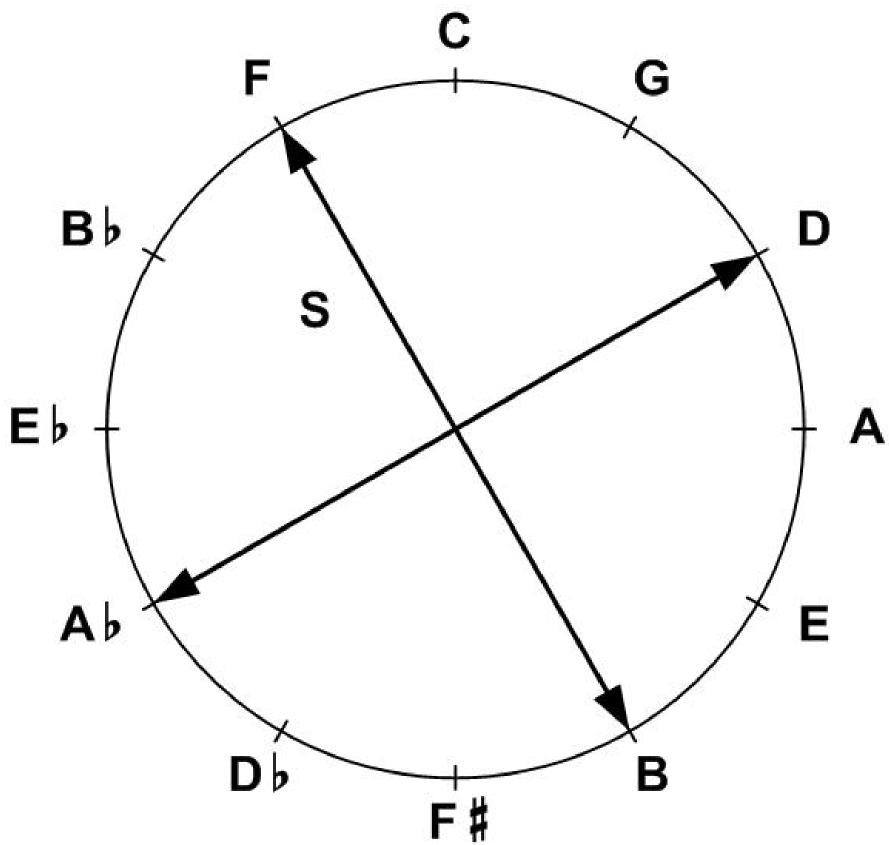
DOMINANT AXES IN C MAJOR

- The 8 Dominant chords in a cycle of fifths:



SUBDOMINANT AXES IN C MAJOR

- The 8 Subdominant chords in a cycle of fifths:

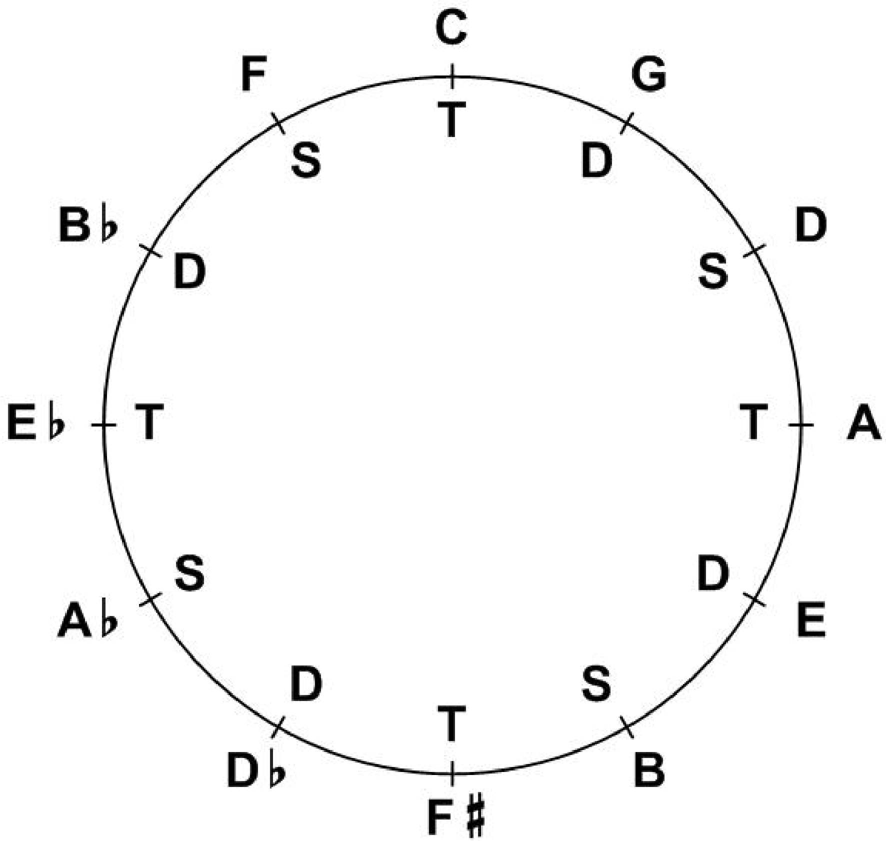


HARMONIC FUNCTIONS

- Therefore, in each key we can clasify the 24 Major and minor chords into 3 groups of 8 chords:
  - 8 chords with Tonic function (Group T)
  - 8 chords with Dominant function (Group D)
  - 8 chords with Subdominant function (Group S)
- Thus, we have a sequence of S – T – D functions that repeats itself in a cyclic way, as can be seen in the next figure.

HARMONIC FUNCTIONS

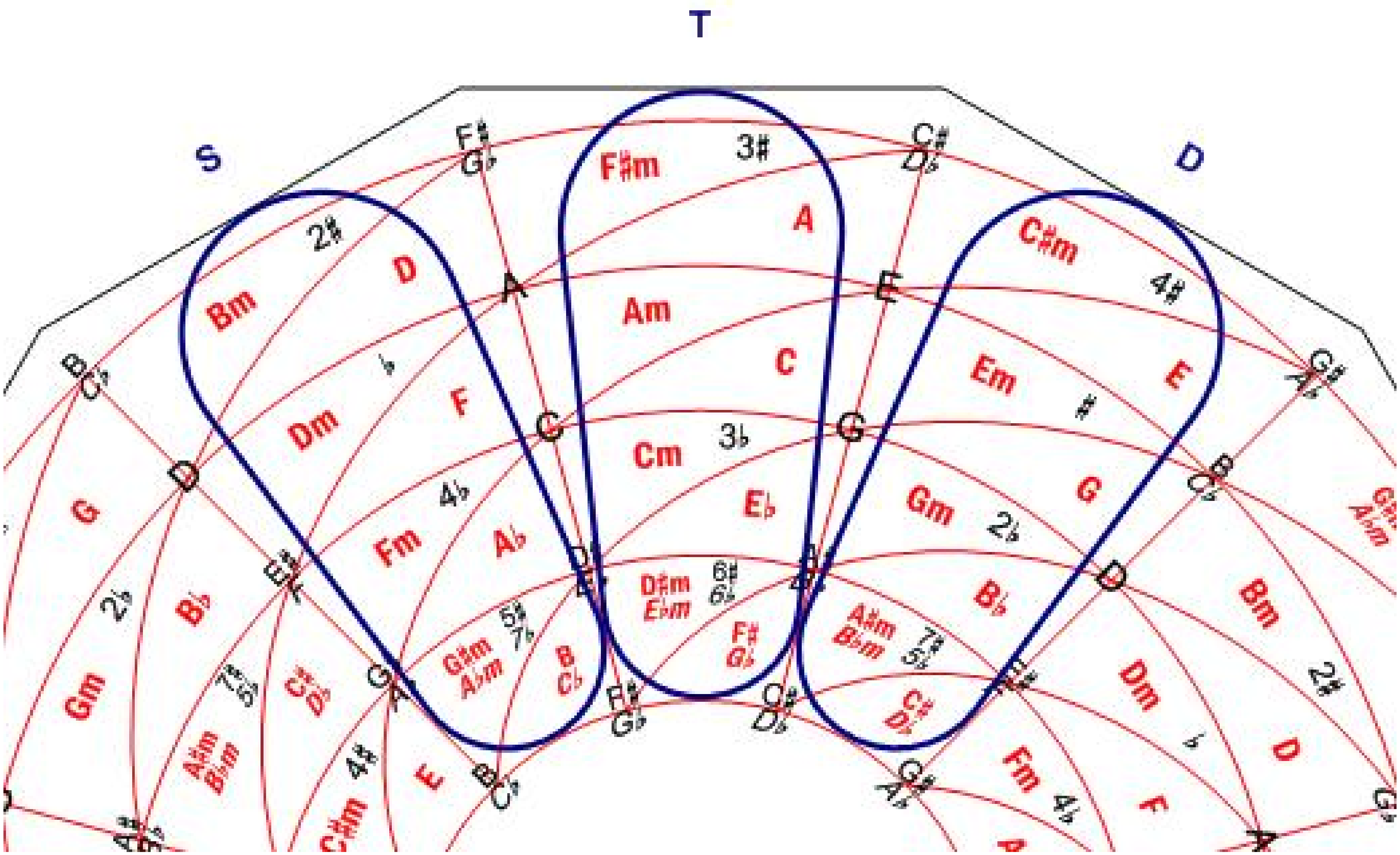
- Harmonic functions in C Mayor:



HARMONIC FUNCTIONS

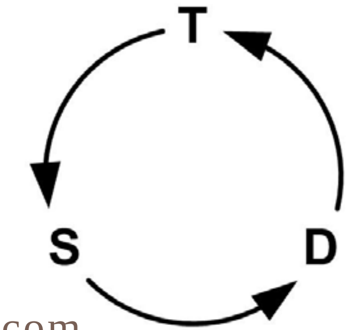
- On this representation, the 8 chords making up a group are placed 90° apart, that is, they are separated as much as possible.
- However, since they have the same harmonic function, there should exist an alternative representation where these chords appear grouped, that is, next to each other.
- Precisely, this is what occurs on the Harmonic Wheel, where each of these groups takes up a circular sector, as can be seen:

HARMONIC FUNCTIONS



HARMONIC FUNCTIONS

- Finally, let us observe that group D is to the right of group T, as well as group T is to the right of group S. This means that group T acts as the Dominant of group S.
- But group S is to the right of group D (see next figure), so group S acts as the Dominant of group D, thus completing the Dominant relationships:



HARMONIC FUNCTIONS