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 Eb, and also A and Ebm
  - The relatives of these last chords: F#m and Gb (or F#)
We can represent these 8 chords in a cycle of fifths:
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:
The 8 Subdominant chords in a cycle of fifths:
Therefore, in each key we can classify 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 in C Major:
On this representation, the 8 chords making up a group are placed $90^\circ$ 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:
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