

THE HEXACHORD AND HEPTACHORD MODAL SYSTEMS IN T. CIORTEA'S PIANO COMPOSITIONS

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Abstract: In his piano music, the composer Tudor Ciortea used different types of modes, extracted from the Romanian folk music or from the music of other cultures. Some of these modes have up to seven intonation elements, a feature which, according to T. Ciortea, represents the Romanian national musical spirit.

Key words: Ciortea, hexachord, heptachord, modes, piano.

The piano works represent an important part of Tudor Ciortea's compositions; they consist of 42 piano works, grouped into suites like *Suita pentru pian pe teme populare târnăvene*, *Suită pentru pian* (on folk themes from the Banat collected by S. Drăgoi), *Patru cântece maramureşene pentru pian* or into cycles like six piano sketches *De-ale copiilor*, *Trei piese* (*Elegie*, *Capriciu*, *Poveste*) or self independent plays like *Cântec de joc* and *Cântec* (based on input collected by Bela Bartok in Bihor), *Colind* (collected by S. Drăgoi in Banat), *Toconelile* (children's song in Gorj), *Preludiu*, *Rondoletto*, *Toccatina*, *Romanţă* or the symphonic play *Variațiuni pentru pian și orchestră pe o temă populară*. Three sonatas for piano and a sonatina are added to the plays mentioned above.

The composer Tudor Ciortea resorts to the modes specific to the Romanian folklore in a great part of his piano work, as they are a resource to capitalize the folk inspiration for piano, moreover, in other plays, the composer uses the particular expression of the modes due to the sonorous charm they give to the musical discourse.


The hexachords used in the plays are both major and minor. In case of this modal formation one can notice the cadences on various sounds as well as the mobile steps which appear against a harmonic background. In case of the example mentioned in *Cântec* (collected by B. Bartók in Bihor), measure 1-7, the cadence requires two sonorous centers (G and C) due to the formation of two chord layers:

a) m. 18 - 20 Cântec (Bihor)
VI 1 2 3 4 5

b) m. 1 - 8 Colind (Banat)
1 2 3 4 5 6

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c) **Variatiuni pentru pian si orchestră pe o temă populară**
m. 10-14 Variatiunea I, oboe



V VI VII 1* 2 3


*Cadence on the second step of the mode

d) **Cântec de joc (Bihor)**



VI 1 2 3 4 5 6

e) m. 1 - 7 **Cântec (Bihor)**



1* 2 3 4 5 6

V VI 1 2 3 4

E.g. 1

The composer develops heptachord formations [1] of the Dorian type with fixed and mobile steps (E.g. 2 – a: *Cântec* from *Suita pe teme bănăţene*) and of the Aeolian type (with the seventh step mobile) from hexachords by the appearance of a new sound in the harmonic background (E.g. 2 – b):

a) m. 1-9 **Suita pe teme bănăţene - Cântec**
(b)



1 2 3 4 5 6*

* Cadence on the fifth step (m. 20).

b) m.1-8 **Suita pe teme târnăvene - Joc de nuntă (Perina)**



VII 1 2 3 4 5 6

E.g. 2

The hexatonic scale is used in the piano tonal layers – the hexatonic modal system play *Elegie* (measures 6-14 from *Trei piese pentru pian*) in a structure of three harmonic- tonal layers – the hexatonic modal system with the double third (F, F #) / the hexatonic mode in transposition 1/minor chord on E b:

m.6-14 **Trei piese pentru pian - Elegie**



E.g. 3

The hexatonic mode is also used in other works like *Joc (Voiniceşte)* in *Suita pe teme târnăvene* or *Rondoletto*:

a) m. 17-20 **Suita pe teme târnăvene - Joc (Voiniceste)**

b) m. 2-14 **Un rondoletto**

E.g. 4

In *Bocet* (*Suita pe teme bănățene*), this mode appears with a changing note which does not interfere with its structural profile (the sound C appears only in measure 8 as a changing note):

m. 7 **Suita pe teme bănățene - Bocet**

E.g. 5

The following examples will present the heptachord modes used under varied types, diatonic, with fixed or mobile steps, like the Ionian mode (a) the Ionian mode with acoustic 1 agreement (b), the Ionian mode with acoustic 2 agreement (c), the Ionian mode with acoustic 5 agreement (d) and others like the Dorian mode, the Dorian mode with Istrian agreement or the chromatic mode [2] 1a agreement, the Dorian mode with Aeolian agreement, the Phrygian mode, the Lydian mode, the Mixolydian mode, the Mixolydian mode with Doric agreement, the Aeolian mode, the Aeolian mode with acoustic agreements 2, the Aeolian mode with Doric agreement, the Aeolian mode with Istrian agreement, the Locrian mode, acoustic mode 1, acoustic mode 2:

a) **Suita pe teme târnăvene - Baladă**

b) m. 1-16; 29-36 **Suita pe teme târnăvene - Joc (Voiniceste)**
m. 58-65 (b)

c) m. 19-24 **Sonata pentru pian nr.1, p.I**

d) **Suita pe teme târnăveni - Cântec la clacă de tors**

E.g. 6

In case *d*, mentioned above, (*Cântec la clacă de tors*), the mode consists of two tetrachord submodes, which in fact coincide with the tetrachords of the heptachord mode (in E.g. 6: *it is sharp in the score; we consider it B flat because it shows the mobility of the modal third; **it appears only at the end as a Mixolydian characteristic).

The composer also uses chromatic heptachord modes, out of which some also have mobile steps, like in the following example – the chromatic 1*a* (a), structure *b* (b) and structure *d* (c) or the agreements of the structures *a* and *b* (e):

a) m.13-14 **Sonata pentru pian nr.1, p.I**

b) m. 38 - 39 **Joc țigănesc**

c) m. 60 - 62 **Joc țigănesc**

d) m. 41 **Joc țigănesc**

E.g. 7

An octachord mode is also found, which is the result of the combination of the tetratonics of the melodic conduct – to be noticed in the example no. 2 – and the harmonic background:

m. 1-18 **Joc bărbătesc**

E.g. 8

The acoustic modes (E.g. 9) are well displayed by the uses with or without modified steps – acoustic 1 (a) and acoustic 2, acoustic 1 with Doric agreement (b) and other modes with agreement – acoustic 1 with Lydian agreement, acoustic 1 with Mixolydian agreement – some of them with a cadence on various steps:

a) m.1-6 **Piano Sonatina, p.III**

b) m. 82-83 **Piano Sonata no.1, p.I**

E.g. 9

The acoustic 2 appears in the following chromatic $2a$ agreement (b) or with Aeolic cases without agreements (a), with agreement:

a) m.1-12 **Piano Sonatina, p.I**

b) m.13-14 **Piano Sonata no.1, p.I**

E. g. 10

The acoustics 5 and 6 appear in the plays in *Suita pe teme bănățene* and in *Piano Joc (Pe loc and Călniceana)* and *Colindă Sonata no. 1*:

m.4-5 **Piano Sonata no.1, p.I**

E.g. 11

Mode 2 is also used, with limited and in first transposition – b) [3]:
transposition (in second transposition – a,

a) m.3 **Suita pe teme bănățene - Bocet**

b) m. 6 **Suita pe teme bănățene - Bocet**

E.g. 12

In *Piano Sonata no. 1* the composer used with limited transposition in transposition the second and third transposition, while in 3, with marked inconsistencies which appear sporadically and create harmonic layers):
Piano Sonatas no. 2 and *no. 3* he used the first and the third transposition. This mode also has mobile steps (E.g. 13 - *mode 2

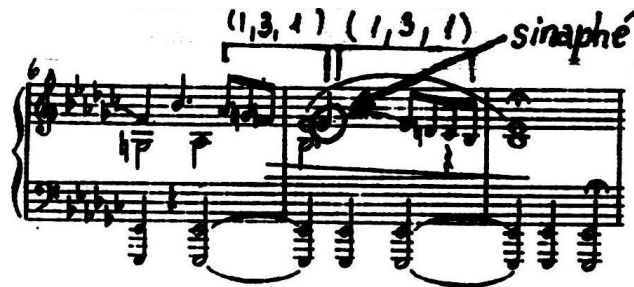
* m. 33 - 48 **Suita pe teme tărnavene - Joc (Fecioreasca)**

E.g. 13

In *Preludiu*, which reflects the composer's apprenticeship period, we can identify an application of the wheel principle (trohos) in the Byzantine music, as a system of modal construction and melody composition, based on chromatic tetrachords, by placing their modal centers on other pitches rather than on the initial one. The connection among the respective

centers is made by a common sound like the Greek *sinaphé*.

The following example shows the application of the principle according to the fourth wheel (tetrachord, 4 sound micro mode) against the chromatic mode 6 in the modal system of the Byzantine music:



E.g. 14

The plays called *Preludiu* and *Piano Sonata* no. 1 (part I, measure 84) are plays in which the composer resorts to the inverted chromatic formula, which is also an aspect of the mobility of steps, a

resonance of the Byzantine music, but especially of folklore. The following example shows this case by a gravitational stratification C/ F [4]:



E.g. 15

References

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