MUSICA THEORICA 201605 SCIENTIFIC ARTICLE Data do recebimento: 19/02/2016 Data da aprovação final: 07/04/2016

Compositional Aspects in the Fifth Book of *Ponteios* by Camargo Guarnieri

Aspectos Composicionais no Quinto Livro de "Ponteios" de Camargo Guarnieri

Antenor Ferreira Corrêa

Universidade de Brasília antenorferreira@yahoo.com.br

Abstract: In this article, I aim to analyze the ten *Ponteios* that integrate the *Fifth Book of Ponteios* composed by the Brazilian musician Camargo Guarnieri. I intend to reflect on some features observed in Guarnieri compositional technique, which gives coherence and unity to those *Ponteios* when considered individually and in the whole set of Fifth Book. In this sense, I will consider some procedures such as pitch-centricity, suspended tonality, and parsimony as a way to understand how Guarnieri operates a sort of tonal deconstruction. I expect to provide additional material to a group of analytical works dedicated to comprehend Guarnieri's compositional thought.

Keywords: pitch-centricity; parsimony; chromatic saturation; Camargo Guarnieri; *Ponteios* 41-50.

Resumo: Neste artigo são analisados os dez *Ponteios* integrantes *Quinto Caderno de Ponteios* de Camargo Guarnieri. Têm-se por objetivo estudar algumas características da linguagem composicional de Guarnieri que conferem coerência e unidade aos *Ponteios* quando tomados individualmente e na totalidade do Quinto Caderno. Deste modo, procedimentos como centralidade pós-tonal, tonalidade suspensa e parcimônia serão considerados de modo a compreender como Guarnieri opera a desconstrução do discurso tonal. Espera-se assim, contribuir para o rol de artigos investigativos dedicados ao entendimento do pensamento composicional de Camargo Guarnieri.

Palavras-chave: centralidade pós-tonal, parcimônia, saturação cromática, Camargo Guarnieri; *Ponteios* 41-50.



1 - Introduction

Throughout this text, I will claim that Guarnieri accomplishes the deconstruction of tonality by means of certain compositional procedures, such as chromatic saturation, stratification of polyphonic lines, use of non-functional triadic harmonies, elision of melodic phrases, and irregular rhythmic structuring. Such procedures are exemplified based on the Fifth Book of *Ponteios* for solo piano (*Ponteios* 41 to 50) composed in 1958 (*Ponteios* 41 and 42) and 1959 (*Ponteios* 43 to 50). In spite of aforementioned disaggregation of tonality, the ground over which the compositional process is founded remains essentially tonal. During the reflections here addressed, I will consider questions related to pitch-centricity, suspended tonality, and parsimony, once those procedures frequently could promote unfoldings to the field of musical analysis. Moreover, I will interrogate some generic understandings found in musicological works about Camargo Guarnieri, since most of these understandings do not hold up when submitted to an analytical scrutiny. I hope, thus, to contribute to a large set of investigative literature dedicated to shed light on Camargo Guarnieri compositional poetic.

2 - Post-tonal centricity

Arthur Berger, in 1963, raised some issues involved in the comprehension of Stravinsky music. Those problems occurred, mostly, because the lack of a theoretical corpus, which deals with the analysis of "twentieth-century music that is centric (i.e. organized in terms of tone center) but not tonally functional" (Berger 1963, p.11). The difficulties for pitch organization mentioned by Berger pointed to situations where some pitch class appear as tonic center (in reason of its repetition, for example), however the set of pitches involved in same context (like a scale, for instance) did not have a necessary syntactic relationship to that pitch-center. Similar sort of issues might be transferred to the analysis of *Ponteios* here under consideration. Figure 11 shows, as starting point to the discussion that follows, one example where C is stablished as pitch-center among the other notes of this portion due the prominence it acquires. This prominence is attained not only owing to reiteration of pitch C, but in reason of its perceptual emphasis. This perceptual emphasis is reached by means of the acoustic phenomenon of frequency detachment, i.e., in reason of distance between the note C (in fact, a pedal) and the other notes of the section that are in close range to each other. G

¹ I transcribed all musical examples presented in this article based on the edition published by the Brazilian Ricordi, 1978 (according to Silva, 2001, p.536), or 1970 (according Verhaalen 2001, p.146). Signals and symbols such as slurs, brackets, articulations, fingering, besides other graphic elements present in the original were intentionally omitted. This omission is intended to facilitate the visualization of aspects related to "pitch", the main subject matter of this article.



could also be interpreted as a pitch-center, since it is the core of the melodic phrase, being tonicized in bar no. 2 (F# - G). Moreover, *C-flat* appears in the group that performs the accompaniment to this melody, opposing so to speak to a center in *C*. Nevertheless, *C* maintains its audible prominence.



Figure 1: Guarnieri, *Ponteio 41*, measures 1 – 4. Prominence of pitch class *C*

In the case showed in the Figure 1, a specific pitch class acquires prominence into a context without chords per se. There are, however, situations in which chords do exist, but they do not have functional relationship to a particular pitch center. Figure 2 exemplifies this condition. This is, in fact, a common procedure found in many pieces of twentieth century repertoire. Even though, I indicated it here in order to subsidize further reflections. Albeit, there is a possibility to refer this excerpt from *Ponteio* 43 to the tonality of C-flat minor, many chords will be outside of its key, such as, F7 or D-flat augmented fifth. Likewise, this fragment could be interpreted as composed by two layers, one of them formed by the junction of the bass with the central staff, and another one by the upper staff. In this way, there are chords that complement each other (Cbm and Ebm, mm. 25 and 26), and other chords where the junction of both aggregates does not necessarily engenders a chord set perceived as such. That is the case of Db5+, which could not be considered as belonging to F7 because the note Eb. Equally, Gb chord in measure 28 does not belong to Fb, once its Bb crashes with Cb in the middle staff. Likewise, Bb7 in measure 29 (considering Ebb as enharmonic of D) opposes to the chord in the central staff. That means, besides doubtful regarding its usefulness, an attempt to provide a functional analysis to this piece turns out to produce more doubts than comprehensions.

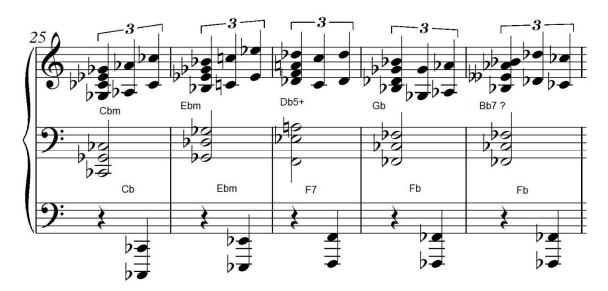


Figure 2: Guarnieri, Ponteio 43, measures 25–29. Chords without functional relationship

Precisely, because the difficulties (or aimlessness) in accomplish a functional or traditional analysis for similar works like the one showed in Figure 2, theorists have proposed other ways along with analytical tools to deal with similar compositional procedures. That is, those compositions where one can identify the use of a pitch-center, although this center is not constituted like an overall tonic function. From this kind of situation, some scholars proposed the concept of pitch-centricity as a way to describe this kind of compositional strategy. Louis Karchin manifests his understanding of that concept in this way: "Pitch centricity may be most simply defined as the use of one pitch to anchor those pitches surrounding it" (Karchin 1990, p.59). Definitions of this type, based on metaphors, does not help very much, once they leave a great part to subjective interpretations. For this reason, I will adopt in this article the suggestion made by Stanley Kleppinger, who attaches the existence of a pitch-centricity to its perceptual recognition. Kleppinger defines pitch-centricity as "the projection of one pitch class into perceptual prominence to a significantly greater extent than other pitch classes" (Kleppinger 2011, p.67). Certainly, the requirement of a perceptible centricity is open to criticism, because centricity could simply being used as structuring plan or as foundation to the composition. However, this might just be the alluded case of pointlessness of an attempt to provide a functional analysis to non-tonal chord-based pieces, since in post-tonal context it is unlikely the perception of chord sets in function of a single center.

Even though, there is such compositional procedure that makes use of a "centric" thinking exclusively to help the planning of the piece. In other words, in this sort of music, there is a center guiding the compositional process, although this center does not necessarily occurs during the entire piece. Arnold Schoenberg (1911) named this device as "suspended tonality", thus aiming to



indicate the existence of an implied tonal center, regardless of this center does not appear or is confirmed in the form of its triad. In this sense, the obligation of a perceptual recognition posit by Kleppinger to the concept of pitch-centricity would be, for saying, suspended.

Observing *Ponteio 41* it is possible to identify the tonal disaggregation claimed in the beginning of this text. In this case, deconstruction is operated from the idea of centricity, but in other moments, also using the suspension of that centricity. There are obvious cadence-like gestures projecting the pitch C as structural point, for instance, measures 9 and 10 (see Figure 3). Besides that, there is also the already mentioned pedal on C (commented in Figure 1), and the evident closure of the music on C headed by its dominant with flatted fifth (aspect that accomplishes the tonicization of C preceded by its upper leading tone: Db - C).

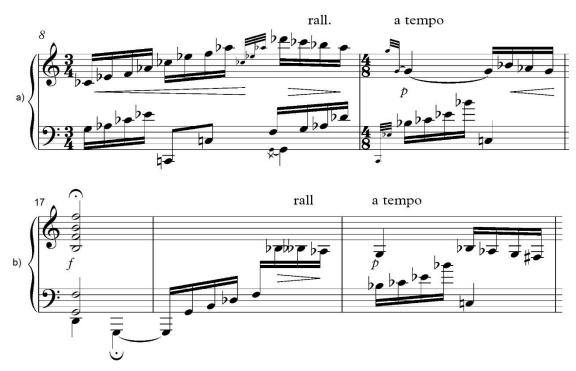


Figure 3: *Ponteio* 41. a) measures 8-9, b) measures 17-19. Cadences reasserting the center on C

Regarding the melody, *Ponteio 41* also allows being analysed within a tonal framework. The chromaticisms can easily be explained in reason of the melodic sequences, basically designed in two bar pattern, which moves downwards and engenders a upper chromatic line. Obviously, these phrases are prolonged and developed during the course of the piece, but the general structure permits a tonal analysis. As a way to exemplify the tonal thought underlying this work, I offer in the Figure 4 a suggestion of harmony to comping the original melody of *Ponteio 41*. Although this is the same melody composed by Guarnieri, for matter



of clearness, I transposed it one octave higher, and I took off some prolongations. My suggested harmony can be understood in G minor key, yet there are modulations in reason of descending phrase sequences. However, I kept all the chromatic movement in the inner voices of the chords. The slurs indicate the metrical pattern of melodic sequences, and the upper staff shows chromatic line implied into this melodic flow.

Aside the mentioned tonal gestures, *Ponteio 41* also presents moments where the composer moves away from these procedures. It is possible to observe this condition, for instance, in the group of notes that performs the accompaniment showed in Figure 5. One can see those sets of three pitch classes (set 3-4, 3-5, 3-3, excluded the repeated note from the group of four notes) opposes itself against the center in C, which by its turn, is affirmed by the pedal point. This conflict is created by means of chromatic saturation, which is contrary to perception of a harmonic field on C.

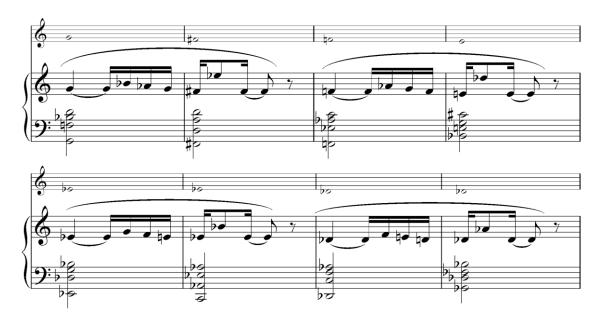


Figure 4: Suggestion of harmony for comping the initial melodic sequence of Ponteio 41

Adopting the concept of parsimony one can understand the criteria for choosing those pitch class sets. I am not taking that idea in strict reference to the transformations demanded in neo-Riemannian theory, but simply regarding the economy of movements among the sequences from one set to another. Figure 6 shows those three pitch-class sets used for the accompaniment in the seven initial measures of *Ponteio 41* referred in Figure 5. It is possible to note the successions occur mainly by half step and, occasionally, by step. In the Figure 6, enharmonic notes (written with double flat in the original) were rewrite with the intention of making easier the visualization of the constituent sets.

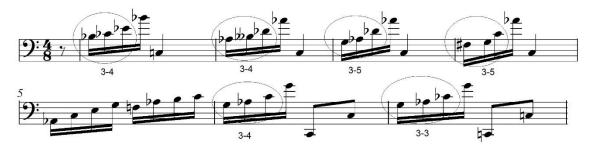


Figure 5: *Ponteio 41.* Measures 1-7 (left hand); Pitch class sets used in the accompaniment

Figure 6: *Ponteio* 41. Pitch class sets of the accompaniment showing parsimonious movements among pitches sequences of vertical groups

3 – Deconstruction of tonal perception via chromatic saturation

The parsimonious leading of the pitch-class sets is also found in other Guarnieri's *Ponteios*. This aspect renders a kind of constancy of his compositional process, which presents in the same piece periods where the sets are moved by step and half step alternated with parts where the sequences are driven by cycle of fifths. Figure 8 illustrates this aspect easily observed in *Ponteio* 42. The bass line moves by cycle of fifths from measure number 1 until 4. Following, the movement becomes chromatic until measure 11, and returns to cycle of fifths from measure 12 until the end. In the original edition, the piece was written only in two staves. Here, however, I have split right hand in two staves to make clear the visualization of inner voices involved. Figure 7 shows in chord symbols the chromatic movement of the sets composed by three pitches from central staff (sets 3-8, with the exception of first set Gb, C, A = 3-10. Enharmony was applied).

Figure 7: *Ponteio 42.* Measures 1-4. Sequence illustrating the chromatic leading among pitch-classes members of vertical sets. Below the line, it is shown bass movement by cycle of fifths



Even though the bass leading based on the cycle of fifths might induce a conventional tonal listening, the chromatic saturation in the upper voices acts against this perception. The brain, in this case, acts grouping together the notes by their proximity; an aspect already explained by Gestalt psychologists and verified, among others scholars, on Diana Deutsch scale illusion experiments². This feature of our brain in discriminating frequencies and grouping them according their proximity makes us to perceive *Ponteio 42* melodic line in the way showed in Figure 9, where one can see the chromatic descending line (indicated by brackets) in the border of this phrase.



Figure 8: Ponteio 42. Measures 1-12. Chromatic sequence juxtaposed to cycle of fifths

² This is a well known experiment, however, for the one who wish to delve on this subject, Deutsch website informs: "The Scale Illusion was discovered by Deutsch in 1973, first reported at a meeting of the *Acoustical Society of America* (1974)¹ and first published in the *Journal of the Acoustical Society of America* (1975)". Cf: http://deutsch.ucsd.edu/psychology/pages.php?i=203





Figure 9: *Ponteio* 42. A melodic line perceived in reason of grouping by proximity of component voices. Brackets indicating chromatic movement present in outermost regions

Taking both aspects together (bass leading through cycle of fifths and chromatic saturation in the melody), one can think of a tonal structure affirmed on the bass line that is emulated by chromatic saturation occurring in the upper voices, thus accomplishing what some musicologists have named as tonal ambivalence. Marion Verhaalen, for instance, claims, "in all Guarnieri Ponteios there is an ambivalence regarding tonal orientation, which widen the feeling of nostalgia so characteristic of many of these pieces" (Verhaalen 2001, p.133). In fact, if one understands ambivalence as coexistence of two antagonistic feelings or sensations, it is possible verify this aspect in the music exactly in the use made by Guarnieri of the opposition between a chromatic melody accompanied by a diatonic harmony (like the case of Ponteio 42). The other way round is also true, that is, the cases where a diatonic melody is accompanied by a chromatic bass line, like showed in Figures 1 and 5, Ponteio 41. On the other hand, I do not believe to be possible to associate chromaticism or tonal ambivalence along with nostalgia feeling. Even knowing it is a cultural issue, allowing, for this reason, the construction of symbolic meanings, I have observed several uses of chromaticism in which the feeling of nostalgia could not be surely asserted by the listeners. This is what happens, for example, in Ponteio 43 (see ahead), or in innumerous Brazilian popular music (see the collection of choros by the famous Brazilian musician Pixinguinha), and in the rhetorical figure named passus duriusculus. All these cases display chromatic lines along feelings not identified with nostalgia. In my opinion, the main musical aspect that distinguishes this character is the slow tempo. Still, accordingly to Verhaalen, "the tonal ambivalence is accomplished through several ways: 1. Even the most tonal pieces start at the tonic, and, as it result, there is an inherent smoothness since the beginning [...] 2. The melody can be the only single mean to help tonal orientation, which in this sense, becomes a bit faltering in reason of chromatic nuances" (Verhaalen 2001, p.133). Whilst I do not understand why the author pinpoints the obvious feature that a tonal music can start at tonic, I agree that in a few Ponteios the melody does act guiding the comprehension of tonal structure underlying the work, such as the case already commented about Ponteio 41. In Ponteio 42, for its turn, the perception of a centrality based on harmony is compromised, once there are no tonicizations to affirm a center. Melodically, the sensation of rest on a particular pitch-class is minimized, because the excess of chromaticism contribute to preclude this condition. In addition, the duration of the note that finalizes the phrase is too short, in reason of the many phrase elisions. In Figure 9, one can observe Bb finalizing both phrases, but because its short duration, the perception of that specific note as a center is weakened. The deconstruction of tonality is also accomplished through the use of harmonic and melodic sequences, which permit being stopped at any moment, once there is no implied direction in those movements. Still considering the case of *Ponteio 42*, the bass sequence through cycle of fifths produces dominant-like chords (with minor 7) in the initial measures. However, in the reexposition those harmonies are modified to major seven chords (measures 16-18 not shown in the figure), losing their dominant meaning. The cadence comes only in the two last measures (Ab7 – Db), making possible to think, retrospectively, the compositional design as centered on Db.

Those considerations regarding chromatic saturation of horizontal lines, leading through cycle of fifths alongside chromatic successions, and parsimonious leading of pitch-class sets might be unfolded to *Ponteios* 46, 48, 49 e 50. In *Ponteio* 50, however, the deconstruction of underlying tonal thought is still more forceful, once the complex polyphony based in fourths prevents the perception of an exclusive centrality.

4 - The modal usage

Camargo Guarnieri is known for his typical use of modal material. This is a common feature among Brazilian composers who subscribed nationalistic aesthetic. The modal usage is more or less evident in *Ponteios 43*, *45* and *46*, however, this procedure is also modified due to a chromatic saturation similar to the tonal cases already commented. *Ponteio 46* is a Rondo based on a childlike song (or kids circle song, accordingly to Verhaalen) where the Mixolydian mode centered in A is quite perceptible. Nevertheless, chromatic inflections (specially the addition of notes G#, C, and F) act weakening the mixolydian modal quality, which is occasionally deviated of its original form. Verhaalen claims, "this music was written in the tonality of A major" (2001, p.148). I stand for a modal interpretation of this piece, but centered on A. The Verhaalen understanding of a tonal based piece could be owe to the fact that Guarnieri varies between Mixolydian and Ionian modes. During this Rondo, Ionian is used in the second

presentation of Part A (measures 17-29)³. Nevertheless, this centrality on pitch A is not so categorical due the intensive use of pedal on note E, present in all measures of the work. Figure 10 shows *Ponteio 45* measures 1 to 7 and 17 to 29 where one can identify those mentioned aspects, that is, use of Mixolydian (measures 1 to 7) and Ionian (measures 17 to 29); pedal on E; beside chromatic inserts throughout the piece. In this sense, this work alternates between a more or less emphatic modalism, although the existence of a pitch centrality underlying the compositional thought is preserved.



Figure 10: *Ponteio 45*, measures 1-7 e 17-29. Mixolydian (cc. 1-7) and Ionian (17-29) modes; chromatic inserts in secondary voice; and a continuous pedal on E

When considering *Ponteio 46*, one can note a more perceptible modal usage, but chromatic inserts are more intense in comparison to *Ponteio 45*. There are some factors that could corroborate the interpretation of Bm as a center, for example: several statements of Bm triad throughout the piece, beside the fact that Bm is the final chord of the piece. However, the perception of a Lydian on D is

³ Interestingly, this switching between modes, apparently, confounds even the best performers. See, for example, the recording available in the following link, in which the pianist keeps the note G natural in the two expositions of Part A, thus preserving in this rondo the mixolydian quality centered on A: https://www.youtube.com/watch?v=nD_YHaDhTGU



_

strong, because G# is the characteristic note of this mode, and also very present during the music. Moreover, the phrases ending on D also reinforces the perception of D as a center (for instance, measure 10 of Figure 11, G clef).

Those aspects considered regarding modal use, likewise the materials up to now discussed, offer material to conclude that Guarnieri makes an intense use of chromatic sequences in order to disguises the underlying tonal structure.



Figure 11: Ponteio 46, measures 1-11. Lydian mode and chromatic inserts

In Ponteio 43, the tonal/modal thinking is deconstructed by manifold manners. Initially, there is a modal usage in the main melody that is accompanied by conventional tonal harmonies, hence constituting two layers. Those chords move away and return to the main harmonic field on C major. Moreover, in low region, a third layer reiterates a pedal on C during the nine initial measures of the piece. After, the pitch C serves as starting point to a diatonic downward sequence comprised of nine measures (not shown in Figure 13), which gives the onset to the development section of the piece. The scale formed by the notes of the two initial measures (letter b at Figure 13) received the name of Hungarian major scale by Vincent Persichetti (1961, p.35). However, if one understand D# as a local chromatic inflection of E, one can also think in a northeastern Brazilian mode (letter *c* in Figure 13), principally taking into account that the re-exposition of this material (from measure 38 on) occurs in *Baião* style⁴, which is a genre from north east part of Brazil built in an identical rhythmic pattern. The use of modal melody supported by a harmony content chords belonging to a C key is one of the devices employed by Guarnieri to weaken the tonal feeling in this work. The construction of internal chromatic lines helps the tonal disaggregation (Figure 13, letter a, shows the chromatic succession B, Bb, A, Ab, G occurring in the extreme notes of chords from central staff).

⁴ The use of this genre is not consensus among authors either. Marion Verhaalen asserts, "this is a study with full and resounding chords that, initially, seem to be groups of three against two, and in the re-exposition displays a Brazilian tango rhythm" (Verhaalen 2001, p.147). Belkiss Mendonça, in turn, says, "the rhythmic shift on bass retrieves the memory of a batuque" (Mendonça 2001, p.404). The same rhythmic pattern is used in *Ponteio* 49, about which Verhaalen writes: "the division of parts, similar to a toccata, has a samba groove" (Verhaalen 2001, p.149).



Considering the use of chromatic inserts among chords, it is possible to unveil an underlying tonal structure. Analyzing only the chords displayed in odd measures (Figure 13), it is obtained a diatonic sequence that allows an interpretation within the harmonic field of C. However, the chords displayed in even measures move away from this field. This sort of detachment is also accomplished by the melody, which introduces notes distant from a C major key. Still, taking only the notes from odd measures, a C major scale will result. Figure 12 shows the chords belonging to those diatonic and chromatic layers respectively implied in odd and even measures. Throughout the music, harmonic regions becomes more and more distant (see Figure 2, for example), what strengthen the tonal desegregation of a center on C. Notwithstanding this tonal deconstruction, C is the note that concludes the work, attesting the aforementioned ambivalence.

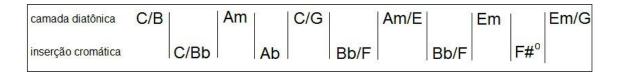


Figure 12: *Ponteio* 43, measures 1 – 9. Layers formed by even and odd bars



Figure 13: Guarnieri, *Ponteio 43*, measures 1 – 9. a) Internal melodic movement resulting from chord sequence b) Scale drawn from measures 1 e 2. c) Northeastern scale drawn from measures 1 e 2 disregarding D# chromatic inflection

5 – Final remarks

The idea subjacent this article involves understand the fifth book of *Ponteios* as a unity, instead ten disconnected small pieces. In some sense, this aim meets a precedent in the article by Daniel Tarquínio, who intended "understand and perceive the First Book of Ponteios as a system, which contains in itself organization, completeness, and proper characteristics" (Tarquinio 2006, p.38). Some aspects of the analysis here accomplished also match similarities with the work of Moraes et all (2013), especially regarding the use of chromaticism and layered structures. Those constancies in the work of Camargo Guarnieri have been interpreted under the concept of topics. The Brazilian pianist Ney Fialkow, for example, in reference to Guarnieri Ponteios asserts, "such expression of Brazilian temper is mainly reached through the use of topics and other typical music gestures, which run through all the collection [of Ponteios] and point to a diversity of elements coming from choro, modinha, tango, samba and toada paulista, beside possible influences from jazz and Argentinian music" (Fialkow apud Matschulat 2011, p.29). Those common features pinpointed by different scholars aid to comprehend Guarnieri compositional poetic, whose prolific production, equally displays a diversity of techniques and compositional strategies that affords an interpretation in function of common denominators – what have been my intention to discuss here.

The piece hitherto not mentioned is the *Ponteio* 47, a music that presents greater contrast when compared to the other numbers of Fifth Book of Ponteios. Following, I will append some analytical considerations on this piece by means of final remarks, and to highlight another interesting aspect of Guarnieri compositional thought (see ahead). These conclusive words are guided by the following question: what principle makes the *Fifth Book of Ponteios* coherent?

Ponteio 47 is structured in chains of intervals built in ascendant and descendant fifths, respectively played by left and right hands. Because the tempo is fast and the duration of notes is short (only sixteenth notes), the piece sounds like a *perpetuum mmobile*. Belkiss Mendonça, emphasizing Guarnieri nationalistic inspiration, claims, "the fast movement of equal values and little apart intervals are typical from the genre embolada⁵" (Mendonça 2001, p.404).

⁵ Embolada is musical genre typical from northeast side of Brazil. Its main characteristic is an improvised melody built in very quick values. The meaning of the word refers to that messiness aspect, because due the quite fast way of singing, obsessively linking one phrase to another, the words are barely understood.



-



Figure 14: *Ponteio* 47, measures 14 – 21. Chromatic sequence and the melodic fragments amid the uninterrupted flow of sixteenths

The displaced accents and articulations, amid different meters, bring variety to music, besides allowing to perceive little melodic phrases in the middle of a continuous flow of sixteenth notes (see, for instance, the sequences of accented notes on right hand E, D#, E, C, A and E, D#, E, B, G in measures 16 to 19). Alongside these melodic fragments, one can perceive the afore mentioned diatonic and chromatic sequences used as starting points for the movement shaped in intervals of fifths (for example, the notes accented on left hand C, Db, D, Eb, E, F in measures 14 - 15). The use of those sequences provides a structural closeness with other *Ponteios*. Figure 14 shows those aspects.

Considering the design of densities in the *Ponteios*, an interesting aspect emerges. Figure 15 shows a sonogram extracted from a *Ponteio 41* record played by the Brazilian pianist Laís de Souza Brasil⁶. The sonogram horizontal axe represents the time of the piece, and its vertical axe indicates sound frequency range. Some bars numbers are indicated in upper line. On the bottom, the symbol of crescendo gives an idea about density increase; moments of greater intensity have thicker lines. By looking at the sonogram, it is also possible to note a compositional design structured in three segments, which get denser, acquire intensity until reach the culmination point, and then decrease until the last measure. The culmination point stands approximately on the golden section of the music. When focusing over the big picture formed by the piece, it is evident

⁶ I extracted all sonograms here displayed from a remastered version released by Funarte (Brazilian Foundation of Arts) in 2001. That remastered version used the original phonograms recorded by EMI Odeon in 1979, an album titled *50 Ponteios* composed by Camargo Guarnieri and performed by Laís de Souza Brasil.



_

an arch form projected throughout the piece. Similarly, observing the succession of small melodic phrases juxtaposed to compound the whole, the same arch form will appear outlined into those small phrases.

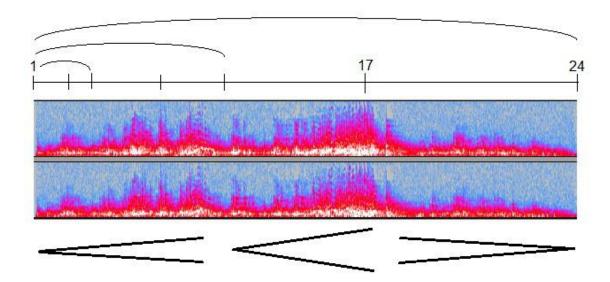


Figure 15: Ponteio 41, sonogram of the work

It is possible to note those same features in other *Ponteios*. Figures 16 and 17 exemplifies *Ponteios* 42, 48, and 50 in which are also noticeable the formal likenesses displayed on the horizontal axes of sonograms, with the obvious exception of the duration of each piece.

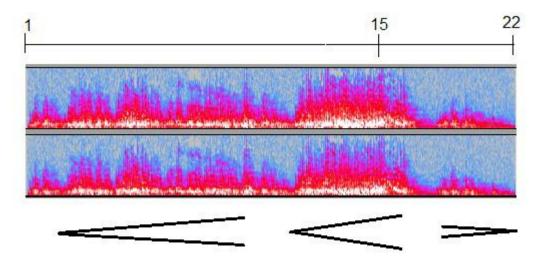


Figure 16: *Ponteio* 42, sonogram of the entire work



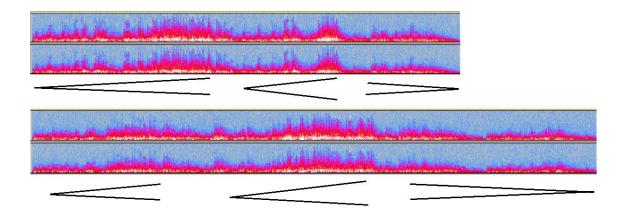


Figure 17: Ponteio 48 (image above) and 50 (image below), sonograms of the works

As informed at beginning, the Fifth Book of Ponteios comprises 10 pieces of music named Ponteio differentiated according to their respective numbers. I understand Ponteio 47 as the most contrasting piece in comparison to other numbers of Fifth Book of Ponteios, and this contrast permits some unfolding regarding compositional strategies, which are in synchronization to those aspects commented about sonograms. The 10 Ponteios follow a planned variation of their particular tempos. This perception occurs not only in reason of the metronomic tempo stated in the score, but mainly because the specified indication of character given by Guarnieri. Along with, the note values prompt us to perceive the pieces under the parameters of quickness or slowness. That gradual shift of tempos among the *Ponteios* is arranged by means of slight adjustments of speed from one piece to another. First, there is an increment of speed; then, the tempo decreases a little bit. Again, the speed increases until reach fastest tempo exactly on *Ponteio* 47, after which, the tempos are made gradually decrease until get the very slow tempo assigned for the last Ponteio of the Fifth Book (see Figure 17). In this way, the order of *Ponteios* along the book delineates an arch form similar to those arches above analyzed, what discloses an interesting aspect of Fifth Book general structure. Besides revealing the compositional coherence of Fifth Book, this characteristic could also be used to substantiate an interpretation of the whole cycle of 10 *Ponteios*, therefore understood as a unity.

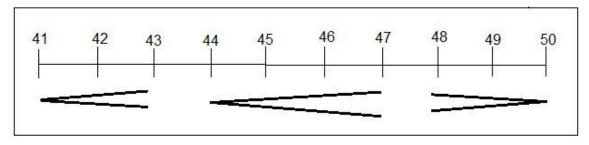


Figure 18: Structure of 10 *Ponteios* analyzed in function of tempo shift



MUSICA THEORICA

References

- 1. Berger, Arthur. 1963. Problems of Pitch Organization in Stravinsky. *Perspectives of New Music*, Vol. 2, No. 1, pp. 11-42.
- 2. Karchin, Louis. 1990. Pitch Centricity as an Organizing Principle in "Speculum Speculi" of Charles Wuorinen. *Theory and Practice*, Vol. 14/15, p. 59 82.
- 3. Kleppinger, Stanley V. 2011. Reconsidering Pitch Centricity. *Theory and Practice*, Vol. 36, p. 65–109.
- 4. Matschulat, Josias. 2011. *Gestos musicais no ponteio n° 49 de Camargo Guarnieri: análise e comparação de gravações*. Dissertação de Mestrado, UFRGS. Available at: https://www.lume.ufrgs.br/bitstream/handle/10183/29422/000777400.pdf?sequence=1
- 5. Mendonça, Belkiss C. 2011. A obra pianística. In: Silva, Flávio (org.). *Camargo Guarnieri: o tempo e a música*. Rio de Janeiro: Funarte, p. 401-422.
- 6. Moraes, Pedro M. de; Castro Gustavo de; Pitombeira Liduino. 2013. Procedimentos composicionais utilizados no *Ponteio* N° 2 de Pedro Miguel a partir da modelagem do *Ponteio* N° 12 de Camargo Guarnieri. *Per Musi*, No. 27.
- 7. Persichetti, Vincent. 1961. *Harmonia no Século XX*. (trad. 2012). São Paulo: Via Lettera.
- 8. Schoenberg, Arnold. 1911. *Harmonia*. (trad. Marden Maluf, 1999). São Paulo: Edunesp.
- 9. Silva, Flávio (org.). 2001. *Camargo Guarnieri: o tempo e a música*. Rio de Janeiro: Funarte.
- 10. Tarquinio, Daniel Junqueira. 2006. O 1º Caderno de Ponteios para piano de Camargo Guarnieri: uma concepção da totalidade da obra. *Ictus*, 07, p.34-64.
- 11. Verhaalen, Marion. 2001. *Camargo Guarnieri Expressões de uma vida*. (trad. Vera Silvia Camargo Guarnieri). São Paulo: Edusp.