

**Manifestations of a Diagonal Dimension  
in Quasi-Melodic Elements of Sonoristic Music:  
*Incantation of the Freezing Haze* for flute solo by Andrius Maslekovas**

**Annotation**

This article addresses the issue of the application of the elements of melodic nature in music that is centered on the development of sound quality. It focuses on a particular use case scenario, when these *quasi-melodic* elements are not treated as contradictory to attributes of sound quality. This use case scenario is rather common in solo compositions for melodic instruments by composers who are known for their interest in timbre and other attributes of sound quality. This article analyzes the phenomenon of a diagonal musical dimension – an interstitial auditory state between horizontal and vertical dimensions that cannot be separated into horizontal and vertical components. This unique state creates a favorable environment for unfolding the potential of sound quality within the elements of melodic nature. One of the key notions discussed in this article is the one of sonic intensity, which is a measure of sound quality that consists of a variation between timbral dimensions (attack quality, harmonicity, brightness), loudness and temporal dissonance (see Stockhausen 1959). Lastly, the composition for flute solo *Incantation of the Freezing Haze* (2013) by Andrius Maslekovas is being analyzed in order to illustrate the alternatives of constructing diagonal sonic structures and employing them in the structure of the piece.

**Keywords:** attack quality, brightness, diagonal, flute, harmonicity, horizontal, intensity, loudness, *quasi-melodic*, solo, sonoristic, sound quality, structure, temporal dissonance, timbre, vertical.

Melody and sonoristic music are two notions that rarely come together. In fact, melody, which essentially is based on the sequences of pitches, might be considered as an antipode to timbral development that is present in most cases of sonoristic music. However, melody is not a simple mechanical process, or aesthetic attribute, but rather an archetype that tends to manifest itself even in very hostile environments. In case of sonoristic music, its dehiscence is very well observed in solo compositions for melodic instruments.

In music theory melody is usually attributable to a horizontal musical dimension and vice-versa. However, compositional practice suggests that in sonoristic music melody (as an archetype) is not bound to a single horizontal dimension, but can easily gain certain qualities that alters its perception to be interpreted as vertical or even diagonal. This paper aims to discuss the phenomena of the diagonal musical dimension and observe its manifestations in elements of sonoristic music that are stimulated by the melodic archetype.

This paper presents a more detailed view on the diagonal dimension that was only briefly addressed in my publication *Vertical and Horizontal Sonoric Structures as Constructional Elements of Sonoristic Music* (Maslekovas 2014) and may be considered as an addition to the aforementioned article.

**1. Vertical and horizontal dimensions**

In order to understand the concept of diagonality and a diagonal musical dimension it is necessary to briefly discuss another two musical dimensions that are present in this theory – horizontal and vertical musical dimensions. In the most common sense we tend to interpret the horizontal dimension as melody and the vertical dimension as harmony. However, musical dimensions are more cognitive rather than structural notions, thus they are notions of a significantly broader sense than just harmony and melody. Verticality and horizontality are two fundamental categories, as described by Rosch (1975, 1978). **Horizontality** is to be understood as the spreading out of different exemplars within the same unit in which the category is still identifiable no matter how big of a deviation from the original model occurs. **Verticality**, on the other hand, specifies relationships between categories, which leads to the idea of the hierarchy of subordinate levels.

It becomes evident that harmony and melody are just one of a few possible manifestations of verticality and horizontality respectively. The definition of horizontality made by Rosch is so accurate and general that it perfectly fits the manifestations of this dimension in sonoristic music, however verticality is not nearly so obvious. Rosch defined three hierarchical levels of verticality: the **superordinate**, the **basic**, and the **subordinate** levels. At the highest or **superordinate** level, the category is defined by its function. The intermediate or **basic** level contains the greatest number of specimens having common attributes. They belong to the functional category but remain independent of one another. The lowest level, the **subordinate** is made up of all imaginable variations of the specimens from the basic level.

Manifestations of verticality in sonoristic music are very close to what is described as a **basic** level of categorization. The idea of the **basic** level of categorization in listening to music may be conceived of in terms

of different cues<sup>1</sup> being abstracted within the same work. Each of these cues will engender its own relationships of horizontality. They will each have their own function and create their own particular auditory image yet share a common reference: the style of the work. However, the relationship with horizontality might be weakened in purely vertical sonoristic music, meanwhile in cases where the horizontal dimension is a clear priority, while the vertical dimension can manifest itself on a subordinate level<sup>2</sup>.

In sonoristic music horizontal and vertical dimensions manifest themselves via horizontal and vertical sonoric structures respectively. As it was discussed in my previous paper (Maslekovas 2014), there are three main criteria for both of these dimensions to be linked to any textural structure in sonoristic music.

- A textural structure produces/possesses horizontal sonoric values in a given period of time if its cues are being abstracted from the shift in its **integrity**<sup>3</sup>, **duration** and/or the frequency of a tone or cluster, to which we will refer in a simplified manner and label it as **pitch**. These three criteria indicate **changes in continuity**. This is the main criteria of horizontal sonoric structures.
- A textural structure produces/possesses vertical sonoric values in a given period of time if its cues are being abstracted from the shift in its **range**<sup>4</sup>, **width**<sup>5</sup> and/or **density**<sup>6</sup>. These three criteria indicate **changes in sound quality**. This is the main criteria of vertical sonoric structures.

## 2. Sonoric intensity

In sonoristic music the array of vertical auditory values is significantly expanded in comparison with its tonal counterpart. Changes in sound quality are no longer achieved solely by harmony or intervallic density, but also due to changes in loudness and timbral attributes of the sound.

Timbral attributes can play a crucial role in changes in sound quality of sonoristic music. However, timbre itself is a multidimensional category. It cannot be described by a single criteria and there are countless subjective characterizations that are aiming to describe timbre, such as *bright, dark, rich, harsh, soft* etc. Shlomo Dubnov marks out four most relevant criteria for describing timbre:

- **Brightness**. Brightness is one of the main dimensions in the description of timbre, and is important for judgments of similarity. It represents the *centroid* of the distribution of spectral energy.
- **Spectral flux**. This is another dimension in the description of timbre but it is not well defined. Spectral flux stands for the synchrony of onset and fluctuations in time of the harmonics. There is however no commonly accepted method for calculating this property.
- **Harmonicity**. This parameter distinguishes between “harmonic spectra” (eg. vowels and most musical sounds), inharmonic<sup>7</sup> spectra (eg. metallic sounds) and noise (spectra that vary randomly in frequency and time). In other words this feature represents the degree of the definability of pitch due to sound partials being integer multiples of the fundamental frequency.
- **Attack quality**. Attack quality relates to the initial stage in sounds envelope when the pitch is not well defined and it represents the degree of noise present at this stage (Dubnov 1996: 8).

We believe that the variations of values within inner dimensions of timbre determine the most significant variable for distinguishing vertical sonoric values; we will refer to it as the **sonoric intensity** of the

<sup>1</sup> “A cue is a kind of conspicuous point that becomes fixed in memory by virtue of its relevance and by repetition. What might constitute a cue depends on the cultural and historical provenance of a given piece” (Deliège and Mélen 1997: 390). In Western music, since the 15th century until the end of common tonal practice cues are being abstracted primarily from motivic elements. However, in later periods these are more and more frequently substituted by other musical elements. In case of sonoristic music that would be characteristic timbre, orchestration, specific tessitura, a certain cluster range or anything else that defines a specific sound quality of a certain sounding object.

<sup>2</sup> It is common for composers to have no intentions to exploit one of the discussed dimensions and focus exclusively either on the vertical or horizontal dimension. In the first case scenario most of the cues are being abstracted from the changes in the vertical dimension, therefore the horizontal musical dimension is being cognitively pushed to a background. In the second case, the majority of cues are being abstracted from the changes in the horizontal dimension, therefore the vertical dimension is being cognitively pushed to a background and becomes totally subordinate to the horizontal dimension. In any of these cases the dimension that is being cognitively pushed to a background despite being the permanent part of the auditory field might not be a significant part of a compositional idea and/or structure.

<sup>3</sup> A number of formations can fall into the concept of integrity. It could be such playing techniques as *vibrato, tremolo, frullato, bisbigliando*, trills of two independent pitches, rhythmical variations of a continuous sound, etc.

<sup>4</sup> **Range** being determined by relative pitch and/or time-span.

<sup>5</sup> **Width** being determined by the interval between the highest and the lowest pitches.

<sup>6</sup> **Density** being determined by intervallic consistency and timbral characteristics.

<sup>7</sup> Sounds that have overtones which are not harmonics of the fundamental.

sound<sup>8</sup>. Sonoric intensity is to be considered similar to any secondary musical parameter<sup>9</sup> of sound quality that cannot be expressed in a scalar manner, i.e. two different sonoric intensities can only be compared to each other using relative amounts such as “much of” or “not much of”, and “more of” or “less of” (see Snyder 2000: 195–196).

**Attack quality** is the most obvious value in determination of sonoric intensity. The more noise the attack possesses, the longer its decay – the more noticeable the parameter of timbre becomes in the auditory field. As a result, the more noticeable the timbre is, the more intense is the perception of it. It is fairly similar when it comes to **harmonicity**. The less definable the pitch is the more “colliding”/dissonant overtones there are in the spectrum of the sound, which are perceived as noise. Therefore, sonoric intensity is reversely proportional to the definability of pitch. However, the impact of harmonicity is more evident in adjacent sonoric structures, rather than in a continuous timbral shift. This happens because of the specific nuances of playing techniques that are usually employed in the process of emphasizing harmonicity (such as *sul ponticello*, for string instruments, *airy* sounds for wind instruments, harmonics, etc.). These techniques, used for altering the harmonicity of a continuous sound or a passage results in a considerable loss in loudness compared with notes that are being played in a regular way.

**Loudness** is one of the most important parameters in describing the quality of the sound. According to Mārtiņš Viļums, the cognition of vividness of the sound source and qualitative value also depends on the level of the loudness and inner dynamics of the sound (articulation of loudness). Deviations in loudness can emphasize or suppress the information that is spread by sound source (Viļums 2011: 65). It is a key element in the perception of overall acoustic intensity (as in physics) and is equally important in the perception of sonoric intensity as is timbre itself. Loudness can affect the perception of timbre intensity in two ways:

- as the overall vividness of the sound,
- as articulation.

As the overall vividness of the sound it affects the perception of a single element and can codetermine the sonoric intensity of it in a context of adjacent elements. As articulation (eg. *crescendo*) it can affect the shift of sonoric intensity either within a single element, or within a set of elements (eg. gesture).

A very important attribute of loudness is that it can increase or suppress the information that is spread by a sound source. In this case it can enhance or diminish the effects of any dimension of timbre and consequently alter the overall sonoric intensity. A good example would be harmonics of strings and woodwinds. Despite their harmonicity and brightness being higher compared with notes played in a regular manner, the amount of noise in their attack is significantly lower, as well as their overall vividness. That makes harmonics to be perceived as of a lower sonoric intensity than a note of the same pitch played in a regular way.

**Brightness** represents how high is the spectral centroid of the sound. The higher is the centroid the brighter and more distinct is the timbre. Its influence is heavily dependent on loudness as well as a relative **height** of pitch. According to Roger E. Bissel, higher pitches are perceived as more vivid and consequently are perceived as more intense. Lower pitches are to the contrary, perceived as less intensive, but “heavier”, as they gain allusion to physical weight (Bissel 1999: 74–75). This unique attribute in certain cases can alter the perception of sonoric intensity, as “heavier” lower pitches can be interpreted as more intense than “lighter” higher ones. This is true in certain circumstances, when other criteria of sonoric intensity tend to suppress the vividness of pitch height, for instance, higher pitch is significantly more quiet (**loudness**), or has significantly less noise in its **attack** phase, or has significantly lesser **harmonicity**. That makes the relative pitch height the weakest criteria of sonoric intensity, as it can be suppressed by the rest.

However all the aforementioned criteria often affect the perception of sound quality simultaneously. Therefore different levels of each criteria may cause different levels of sonoric intensity.

The last criteria that can significantly alter sonoric intensity is **temporal dissonance**, which defines the level of complexity in the metro-rhythmic organization that, according to Stockhausen (1959), is one of the key elements in depicting tone colour. For the sake of simplicity and feasible extent of this article we can make a bold statement, based on Stockhausen’s *harmonic phase-spectrum* theory, that the more complex the metro-rhythmic organization the bigger sonoric intensity is created.

<sup>8</sup> Sonoric intensity of the sound in this paper should not be confused with acoustic intensity, which is an SI unit being measured in the watt per square meter (W/m<sup>2</sup>). Acoustic intensity, as the sound power per unit area, is an effective tool for measuring sound quality in laboratory conditions; however, it is extremely rarely used in compositional practice of acoustic music. Thus, we tend to establish the term of sonoric intensity to serve as a similar notion, which would reflect the compositional idea rather than a precise value, which might not necessarily be an exact result of composers’ intentions.

<sup>9</sup> As described by Snyder (2000).

### 3. Diagonal dimension and diagonal sonoric structures

**Diagonal dimension** in music is a rather philosophical phenomenon. It is best described by Deleuze when he makes parallels between music by Boulez and the manner of works by Proust. It is described as a “manner in which noises and sounds detach themselves from the characters, places and names to which they are first attached in order to form autonomous “motives” that ceaselessly transform themselves in time, diminishing or augmenting, adding or subtracting, varying their speed and their slowness” (Deleuze 1986. In: Murphy 1998: 70).

Deleuze presents the idea that such a variety is developed in the autonomous dimension of time. He calls it a “block of duration”, a “ceaselessly varying sonorous block”. “And the autonomous dimension, which is not pre-existent and is drawn at the same time as the block varies, is called a diagonal in order to better mark the fact that it is reducible neither to the harmonic vertical nor to the melodic horizontal as pre-existent coordinates” (ibid.).

The **diagonal musical dimension** is an interstitial auditory state between horizontal and vertical dimensions that sometimes manifests itself as an independent textural element and herewith sonoric structure. We will refer to these as diagonal sonoric structures. However, diagonal sonoric structures are not a mere mechanical combination of simultaneously sounding vertical and horizontal structures, they cannot be separated into horizontal and vertical components, i.e. it acquires its vertical and horizontal values not in a mechanical, but in a conceptual process. The best illustration of diagonal structures in western classical music (as proposed by Deleuze) is a cadenza. It is a short episode that simultaneously carries vertical and horizontal auditory values.

In sonoristic music the diagonal dimension gains a more significant role in the act of musical composition than it had in tonal music. It can appear in any texture of the composition and serve either as a conceptually independent dimension, or as a conceptual medium between horizontal and vertical dimensions that encompasses all of their attributes.

We can distinguish four main meta-models of the diagonal musical dimension that carries the formation and development of diagonal sonoric structures:

- Descending and decreasing,
- Ascending and decreasing,
- Ascending and increasing,
- Descending and increasing (Fig. 1).

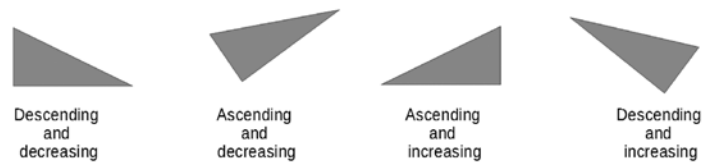


Figure 1

These meta-models can form diagonal sonoric structures by themselves, or in combination with each other. We will call them **diagonal structures of discreet and composite formation**, respectively. Diagonal sonoric structures of **discreet** formation are very insular and integral and often manifest themselves as short episodes. As they are linear structures, as well as structures of ascending or descending intensity, they reach their peak or bottom in a rather short period of time. That causes certain limitations in terms of their duration. The **composite** formation of diagonal structures can form highly complex structures that feature both – horizontal (linear) and vertical (qualitative) development (Fig. 2). Thus they have the potential to extend in a longer period of time, or even shape a continuous fluctuating texture.



Figure 2

Now we will try to look into some of the diagonal structures in “Incantation of the Freezing Haze” for flute solo by Andrius Maslekovas and analyze the formation of their sonoric intensity. We would like to stress here that changes in timbral attributes displayed in the following schemes are not

based on acoustic spectrograms of an actual recording of the piece, but rather on generic attributes of each of the employed playing techniques. The reason behind this choice is that the performance of such techniques requires an extreme precision which is almost impossible to achieve and any misinterpretation by a performer can significantly alter the data, for instance a single misuse of a tongue could result in a much harsher attack quality than intended by the composer and can potentially distort the view of the schema behind the segment. Thus, we believe that determining sonoric intensity by generic attributes of playing techniques is more reliable as far as the composer’s original intentions are concerned.

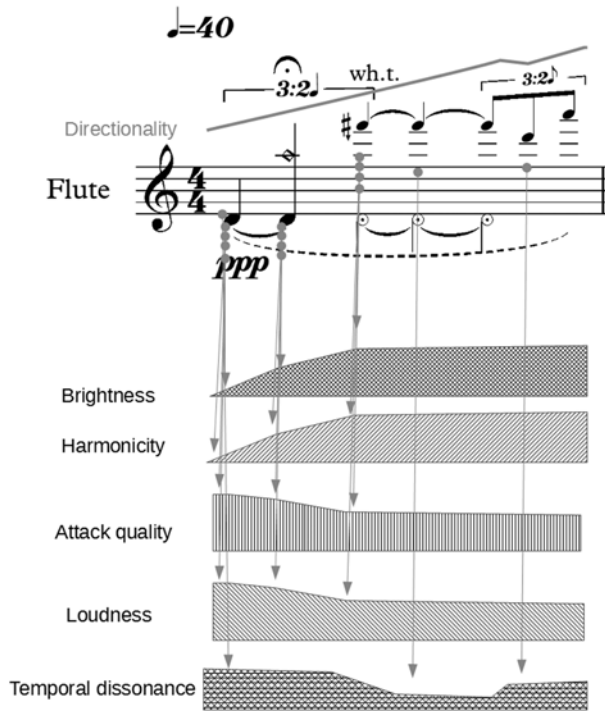


Figure 3

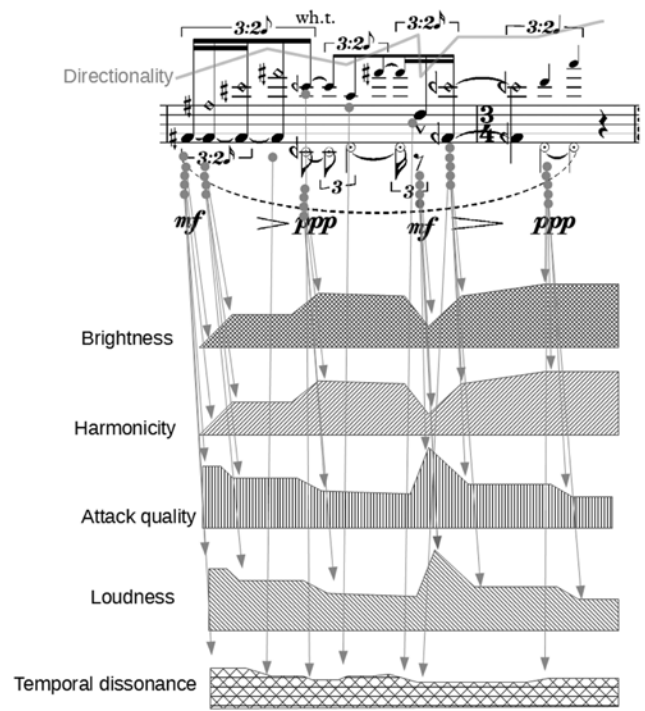


Figure 4

If we look at the first bar of the piece (Fig. 3) we can see a melodic ascendance shown as *directionality*. Below the core we can see a gradual increase in brightness and harmonicity, but also a gradual decrease in the amount of noise in attacks and overall loudness of the sounds. In this case loudness and shift in attack qualities overshadow harmonicity and brightness. Meanwhile the melodic ascendance, which is very much dependent on brightness does not produce a significant increase of intensity, as brightness is being suppressed by other parameters. Thus, the allusion to physical weight comes into action and higher notes are being perceived as *lighter* and, as a result, less intensive. The whole structure is being perceived as a **discreet diagonal ascending and decreasing** sonic structure.

The **diagonal structure of composite** formation manifests itself beautifully in bars 23–24 (Fig. 4). We can see a quasi-melodic line that constantly changes its direction, its sound quality is also constantly changing: the first note is being played in the usual manner, next three notes as harmonics and the following three as whistle tones. Then the process is repeated while altering the durations. We can see fluctuations in all the parameters of sonic intensity within the segment.

We can notice that in both of the examples the changes in all the dimensions of sonic intensity occur at the same moment (with some exceptions in temporal dissonance). This is a common but not an obligatory case. If we look at the next example (Fig. 5) we can see that changes in different dimensions of sonic intensity occur at different points. A very important moment of this example is how the *diminuendo* affects different dimensions of sonic intensity. It decreases the loudness, and consequently helps harmonicity and attack quality to gain significance in the auditory field.

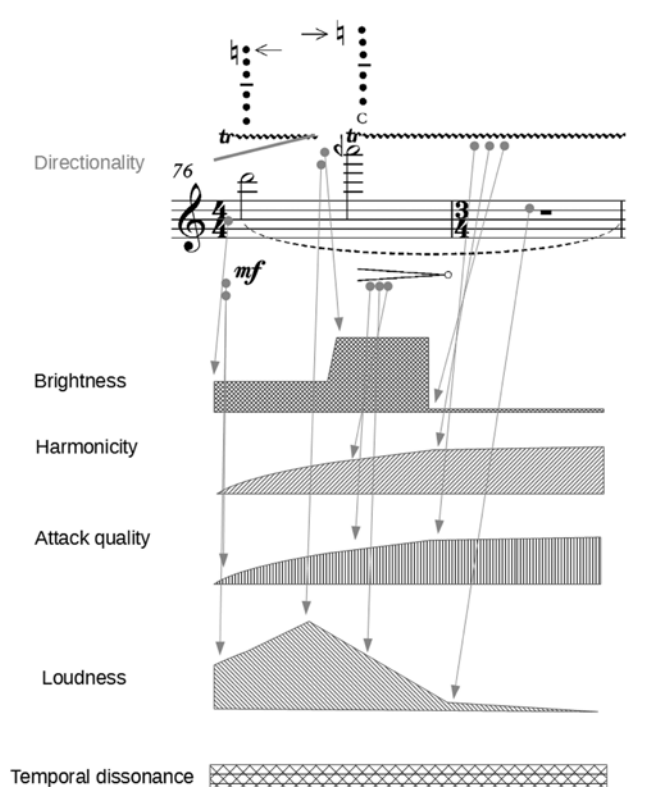


Figure 5

#### 4. Diagonal structures within in a composition

In this section we will briefly discuss how the diagonal dimension manifests itself in the realms of an actual musical composition. “Incantation of the Freezing Haze” was composed addressing the issue of the application of vertical and horizontal dimensions in compositions for melodic instruments. It aims to explore the depth of sound qualities and expose vertical attributes of the sound while keeping close to horizontal/melodic nature of the instrument. The diagonal dimension and diagonal sonoristic structures are employed here as a primary material, that ensures a degree of fusion between horizontal and vertical qualities. However, the level of fusion tends to vary, as some sonoristic structures tend to be perceived as “possessing more vertical qualities than others” and vice versa, i.e. each diagonal sonoristic structure has an individual balance of vertical and horizontal values due to various combinations of *Gestalt* principles and other cognitive aspects of music. Differently balanced diagonal sonoristic structures become a significant part in the construction of the form of this particular piece.

The pitch organization of the piece is based on the harmonic spectrum of D3. At the beginning of the piece the depth of sound qualities are explored via quasi-melodic passages that consists only from the first seven harmonics from the spectrum. That results in a perception of verticality that is scattered over certain time-spans. During the first segment of the piece (bars 1–24) a diagonal dimension is employed as a tool of cognitive indetermination between horizontal and vertical dimensions, as all musical material is in a constant balancing between these two realms (Fig. 6).

As more harmonics from the given spectrum are gradually introduced, the intervals between pitches become narrower and linear continuation highlights itself more evidently since Bar 25. Manifestations of a diagonal dimension here are primarily employed as microsonoristic<sup>10</sup> articulations that help quasi-melodic elements to expatiate over a mere horizontal linear direction. The diagonal dimension adds constant fluctuations of sonoristic intensity in each quasi-melodic element, however it does not suppress their linear continuation and the melodic origin of the musical material remains more evident than in the first segment. An important moment of this segment occurs in Bar 32, as the balance between the vertical and horizontal dimensions within the structures changes from the dominance of the horizontal dimension, to the dominance of the vertical dimension via a sudden expansion of vertical attributes of the sound and an alteration of a linear direction in a way that contradicts the *Gestalt* principle of Good Continuation. We tend to call this transition a **diagonal shift** (Fig. 7).

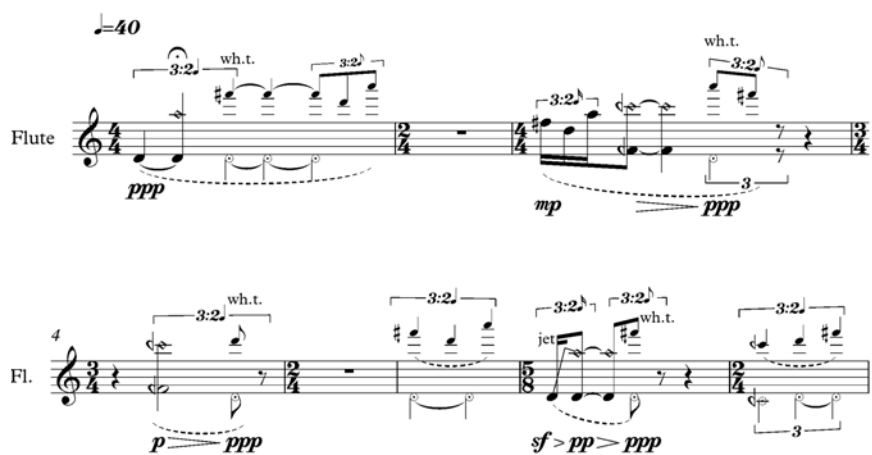


Figure 6

microsonoristic<sup>10</sup> articulations that help quasi-melodic elements to expatiate over a mere horizontal linear direction. The diagonal dimension adds constant fluctuations of sonoristic intensity in each quasi-melodic element, however it does not suppress their linear continuation and the melodic origin of the musical material remains more evident than in the first segment. An important moment of this segment occurs in Bar 32, as the balance between the vertical and horizontal dimensions within the structures changes from the dominance of the horizontal dimension, to the dominance of the vertical dimension via a sudden expansion of vertical attributes of the sound and an alteration of a linear direction in a way that contradicts the *Gestalt* principle of Good Continuation. We tend to call this transition a **diagonal shift** (Fig. 7).

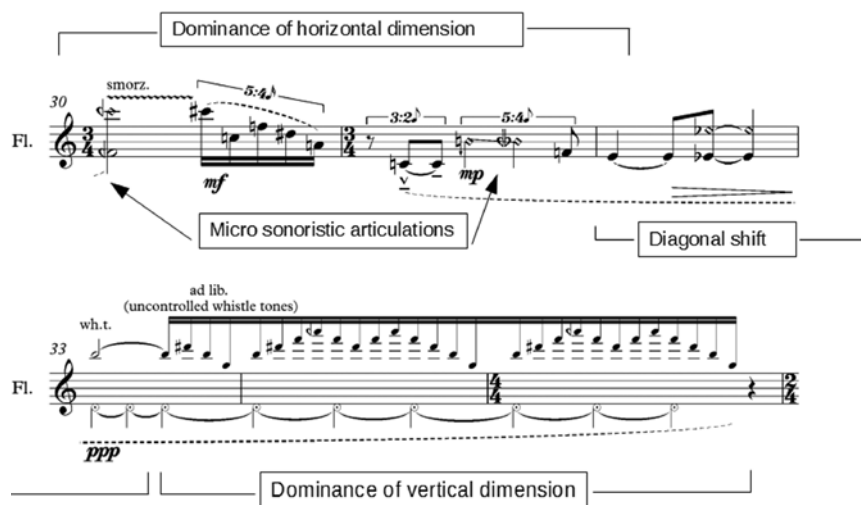


Figure 7

<sup>10</sup> Term established by M. Viļums (see Viļums 2011: 168–170).

The third big section (bars 36–70) explores the variety of microsonoristic articulations in the diagonal structures with highly emphasized horizontal values with a few minor diagonal shifts at bars 42–43 and 56.

The fourth section (bars 71–89) is constructed as two massive diagonal shifts. The first transformation being from the dominance of the vertical dimension, manifested by long notes of constantly shifting timbral attributes and timbral trills (*bisbigliando*), via diagonal shift, created by adding intervals and silent trills during the rests to the same structures, to the dominance of the horizontal dimension, created by substituting the long notes with passages. The second transformation is done backwards. From the dominance of the horizontal dimension, via diagonal shift, created by prolonging the long notes, reducing the length of passages and adding silent trills over the rests to create a shift of timbral attributes, to the dominance of the vertical dimension expressed by a field of uncontrolled whistle tones (Fig. 8).

The figure displays a musical score for Flute 1 (Fl.) across two systems of staves. The first system covers bars 68 to 76, and the second system covers bars 80 to 89. The score is annotated with various musical terms and dynamic markings. In the first system, bars 68-73 are labeled 'Dynamically uncontrolled whistle tones' and 'Dominance of vertical dimension', featuring 'poco meno mosso' and dynamics from *pp* to *f*. Bars 74-76 are labeled 'Dynamically uncontrolled whistle tones' and 'Dominance of horizontal dimension', with dynamics from *mf* to *f*. The second system, bars 80-89, is labeled 'Dynamically uncontrolled whistle tones' and 'Dominance of horizontal dimension' (bars 80-86) and 'Dynamically uncontrolled whistle tones' and 'Dominance of vertical dimension' (bars 87-89). Dynamics range from *mf* to *ppp*. Annotations include 'pizz.', 'tone and air', 'overblow', and 'ad lib.'. A note at the bottom right states '\* trill silently during the rests'.

Figure 8

In the fifth section (bars 91–124) a constant and rapid diagonal shift is exploited by combining rapid changes in sonic intensity and wide intervals between pitches with a fast linear motion and narrow quasi-melodic intervals (Fig. 9).

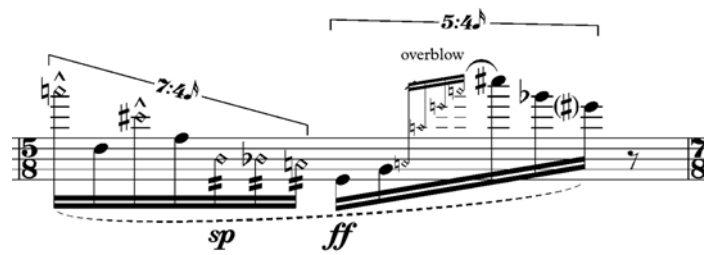


Figure 9

The last section (bars 124–145) displays sonic structures that are no longer diagonal, but purely vertical and purely horizontal. This is achieved via quasi-melodic intonations and rapid passages for the horizontal dimension, and long notes, multiphonics and fields of uncontrolled whistle tones for the vertical dimension. While a diagonal structure appears only in the last bar of the piece (Fig. 10).

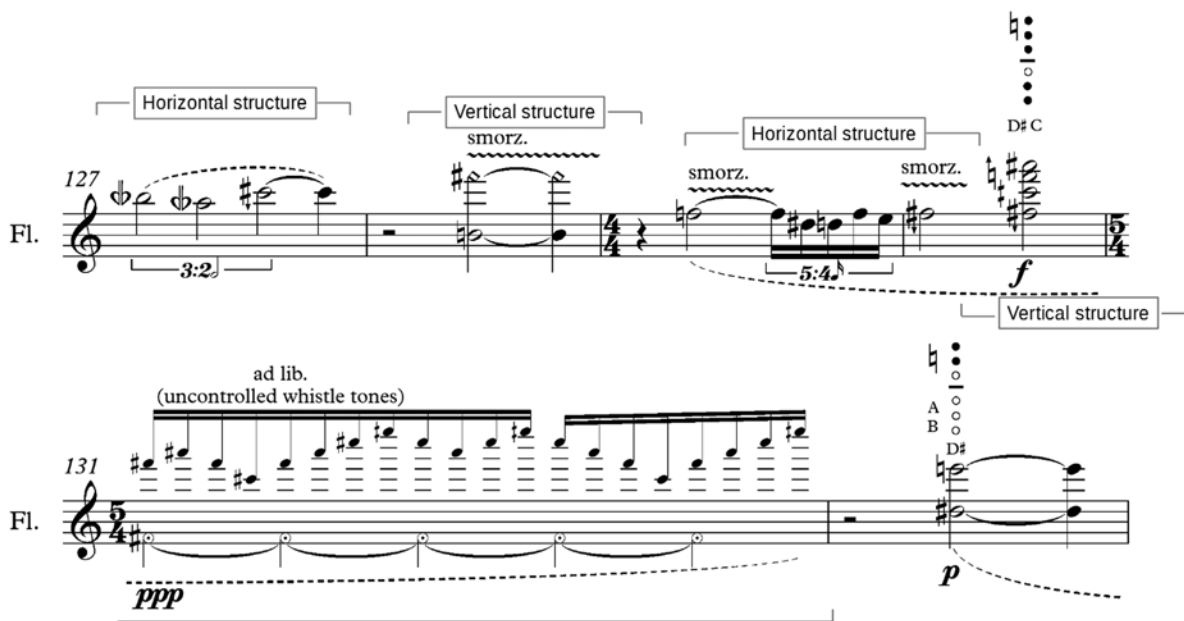


Figure 10

The texture of the piece consists of two base models of diagonal structures. The first one consists of slightly larger intervals (lower harmonics of the series), and is attributed to softer timbre (harmonics, whistle tones, air sounds etc.). It produces slightly more vertical values than the second one. The second one consists of narrower intervals (higher overtones of the series) and is attributed to sharper timbre with more noise in the attack envelope (key clicks, *quasi-pizzicato*, tongue ram etc.). Each of the base models has its own line of structural transformations that are represented in a scheme (Fig. 11).

There are two kind of confluences of these base models throughout the piece. They both encompass different elements from different iterations of Base model 1 and Base model 2. The key difference is in their formation. The first confluence is developed by combining the elements of different base models in a horizontal way, i.e. their attributes are perceived in a linear way. In this particular case this effect is achieved by combining



**Textural base model 1**

**Horizontal confluence**

**Vertical confluence**

**Textural base model 2**

Musical score for 'Textural base model 1' and 'Textural base model 2'. The score is written in 3/8 time and consists of two parts.   
**Textural base model 1** (left side) includes staves with dynamic markings *ppp*, *mf*, *mp*, and *mf*. It features performance instructions such as 'wh.t.', 'ad lib. (uncontrolled whistling tones)', and 'overblow'.   
**Textural base model 2** (right side) includes staves with dynamic markings *p*, *mf*, *ff*, *sp*, and *f*. It features performance instructions such as 't.r.', 'key clicks', 'overblow', and '\* trill silently during the peaks'.   
 Two large grey arrows labeled 'Horizontal confluence' and 'Vertical confluence' point from the two models towards a central point, indicating the relationship between the two textures.   
 The score includes various musical notations such as triplets, slurs, and specific rhythmic values (e.g., 3:2, 5:4, 7:4).

Figure 11

long notes with timbral trills (*bisbigliando*), that carries material from the first base model, and transforming the trill into a percussive key noise during the rests that carries cognitive ties with the second base model. The second confluence is constructed by combining the elements from the base models in a vertical way. It is achieved by exploiting larger intervals that are associated with Base model 1 during a rapid linear movement that is associated with Base model 2, as well as adding other attributes that produce cognitive links to Base model 1, such like air sounds, overblow, etc.

These textural base models have their unique roles in each of the previously discussed sections of the piece and consequently in the realms of musical form (Fig. 12).

Segment	I	II	III	IV	V	VI
Dominant textural base model	Base model 1	Base model 2	Base model 2	Horizontal confluence	Vertical confluence	Base model 1 Base model 2
Dominant perceptual balance of vertical and horizontal values in diagonal structures	V	H → V	H	V → H → V	H V	V H

Figure 12

### Conclusion

This paper is centered around one particular piece, which demonstrates a sophisticated alternative in dealing with quasi-melodic material and focusing on sound quality at the same time. Its two main notions of sonic intensity and the diagonal dimension help us understand how these two contradictory poles can be merged into one entity, which can be used as primary compositional material. The melodic nature of musical material (which in this particular case comes from the nature of the instrument itself) is inseparably merged with changes of timbral attributes (brightness, harmonic, attack quality), loudness and temporal dissonance. Combination of changes within these parameters, which we refer to as a sonic intensity, in combination with the material of melodic nature, creates a unique musical dimension which is neither horizontal nor vertical but rather diagonal.

Constructional patterns which arise in this diagonal musical dimension are formed on the impact of the melodic realm and are manifestations of certain constructional archetypes. The amount of variables that may influence the formation of diagonal sonic structures is very rich and carries a lot of potential in their development and structural organization. Therefore the use of a diagonal musical dimension and diagonal sonic structures is fairly widespread as compositional principles among contemporary composers, who are interested in operating the sound quality. Thus, in our belief, these aforementioned notions could be used for compositional, or even deconstructional purposes, as they are meant to represent composer's intentions and give a perspective of certain alternatives when it comes to compositional strategy. However, due to a plethora of possibilities in construction of diagonal sonic structures and especially their structural organization, it is hardly adaptable as a universal deconstruction tool. Hence we would like to think of this theory as a revelation of certain compositional perspective that could provide useful research or inspirational material.

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**Diagonaliosios dimensijos apraiškos kvazimelodiniuose sonorinės muzikos elementuose:  
Andriaus Maslekovo *Incantation of the Freezing Haze* fleitai solo**

**Santrauka**

Straipsnyje gvildinama melodinės prigimties elementų panaudojimo skambesio kokybe operuojančioje muzikoje problema, kai melodinės prigimties elementai nėra traktuojami kaip sonoriškumo priešprieša. Tokie kompoziciniai sprendimai itin dažni kompozitorių, kurių kūryboje yra aiškiai išreikštas dėmesys skambesio kokybei, kūriniuose melodiniam instrumentams solo. Straipsnyje nagrinėjama diagonalioji muzikos dimensija – nedalomas vertikalių ir horizontalių muzikinės medžiagos savybių lydinys, dėl kurio melodinės prigimties dariniuose susidaro palankios galimybės skleistis skambesio kokybės potencialui. Itin svarbi yra šiame straipsnyje vartojama sonorinio intensyvumo sąvoka. Sonorinis intensyvumas – tai skambesio kokybės matas; jis gali būti apibūdinamas tokiais pažymiminiais, kaip garsumas, tembro dimensijos (šviesumas, garso atakos kokybė, harmoniškumo laipsnis) ir trukmių disonansas (žr. Stockhausen 1959).

Straipsnyje nagrinėjamas Andriaus Maslekovo *Incantation of the Freezing Haze* fleitai solo (2013) – kūrinys, kuriame sąmoningai plėtojamos vertikalios kvazimelodinių darinių savybės. Šiuo kūriniu iliustruojamos diagonalijų sonorinių struktūrų darybos ir jų struktūrinio organizavimo alternatyvos.