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Musical Intellect - Structure and Dimensions

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Abstract – **We use the system of signs – musical notation – in order to preserve and re-create a musical work of art. A certain level of musical intelligence is needed to successfully work with musical notation, since two of the activities, related to the system of signs – writing down the aurally perceived music and singing from sheet music – are beyond the abilities of people, who possess a very low degree of one of the subcomponents of musical intelligence – pitch (the so called tone deafness). Musical intelligence includes the abilities mode sense, methro-rhythm sense, musical auditory notions and the derivative of these three abilities sense of polyphony. These skills are needed for one to exercise the musical activities: perception, which has its sensory, intellectual and emotional sides; performance, requiring sensitivity, empathic and artistic skills, the ability of interpreting sheet music quickly, accurately and aesthetically well, instrument or vocal technical skills, knowledge of musical theory and aesthetics, the ability to construct a faithful concept for an artistic performance, stage presence, self-control; and composing, which requires sensitivity, empathic abilities, knowledge of musical theory and aesthetics and creativity.**

Keywords – **Music, Musical Abilities, Musical Activities, Musical Intelligence, Musical Notation.**

I. Introduction

As humans were getting to know the world around them, they, in order to better adapt to it and to be able to modify it, started using complex systems of signs and symbols. These helped people communicate with each other, to preserve and pass on their knowledge, expanding and advancing it. Thus, two types of systems for communication and self-expression emerged in the course of the vast history of mankind – based on signs and based on symbols. One sign system, used to this day, is letters – the written signs of language; another one is numbers. The letters of different alphabets and the digits all have a clear and specific meaning – letters represent the sounds of human speech, digits – specifically defined values, quantities.

Symbol systems, which include facial expressions, movements, sounds, are not universal, but are inherent to a specific group of people and intelligible to that group. A given symbol system is applicable in a definite moment and reflects transient relations. The symbol system does not communicate specific knowledge, rather than the attitude towards it. While with the sign system we record and share permanent relations, acquired knowledge, the symbol system serves as a supplement – it relates emotional state, personal attitude towards subjects and events. This gives a reason to expect that science would use more often sign systems, and the arts – symbol systems. Of course, it is not possible to have a clear distinction, since verbal arts, like poetry and prose, use a sign system, through which they express emotional states, the attitude of the person towards the described events, etc., while psychology takes into consideration "body language" (facial expressions, gestures, poses), meaning in this science symbolic systems have great importance and are a subject of research.

II. The Musical Sign System and its Relation to Musical Intellect

Music uses its own, unique sign system to re-create the emotional world of man. Unlike other sign systems, however, for example digits, each of which always holds one specific meaning, every note invariably has two meanings – pitch, defined by the frequency of the vibrations of sound waves, travelling through space; and value, which is a temporal category. The complexity of deciphering (reading) sheet music comes from the fact that the temporal and pitch characteristics of the tone, designated by a specific note, build very diverse relations with each other (a tone with a certain pitch could have many different durations, a tone with a specific duration can be of all the varied pitches). Additionally, the pitch, as well as the duration of the tone, designated by the specific note, has to be performed with the maximum accuracy, because even the slightest change in pitch or in the duration of the given tone, also changes the logic of the musical thought, its semantic meaning. For example, if in a simple melody in a major mode – with the sound line "c – d – e – f – g", the tone "e" is performed slightly lower, then the melody, written in major, will be heard in minor, which seriously alters its coloring. A similar problem appears with the duration correlations, which have to be re-created accurately. Thus, in a melody in the time signature $^{3}_{4}$, starting with the rhythmic group ♪. 𝅘𝅥𝅯 followed by two equal quarter notes, if the first group is not performed correctly, the melody will lose its energy. When playing sheet music on a string instrument, the intonation accuracy is of extreme importance, because the correct sound pitches are not pre-defined, the way it is with the keys of the piano (with each key, a specific tone pitch is set), but depend on the precision of the performer. With keyboard instruments, the difficulty in deciphering musical notation consists in the following: even though it is easier to find the specific tone frequency of each sound, the performer has to simultaneously re-create the contents of several textural planes, because the clavier texture is polyphonic. Thus, the performer is responsible for the logical flow of the sound horizontal – melodies, as well as for the vertical – the logic of the stability and instability modal functions or supporting and non-supporting sound structures (assonances). Furthermore, the score for the right and for the left hand is written (noted) in a different clef, i.e. depending on the clef used, the meaning of a specific note is often different for each hand. When deciphering a verbal text, we use stereotypes, which allow us to register and comprehend with a single glance the

meaning of the word. When reading sheet music, one also uses pre-defined stereotypes, established in the practice of the instrumentalist; these stereotypes are related to: the type of melodic movement (conjunctive, disjunctive, repetitions), parallel movement of two voices (for example, octave or third doubling) or type of chord formation – triads, four-note chords. The particular tone pitches, however, between which the above-mentioned relations arise, are different in the individual works; the duration for which a specific type of movement continues is also distinct; each of the listed "patterns" can be combined in a specific texture (particular musical matter) with other voices that do not participate in the specified model of movement, but are subject to another "rule". Remarkable in that relation is the fact that, while verbal texts can be translated to different languages, and thus the information they hold can be understood and used by people, who do not speak the source language the text was written in, musical "text" cannot be translated, it is unique, singular. Melodies of the same intonation style, even in the different works of the same composer, can be similar, presenting common traits, but they are not the same. The most characteristic features of the musical sign system are these:

– Encoded in this system is information about the frequency and the duration of each tone.

– The sign system in music is used to relate emotional content, to which the listener reacts, perceiving it as an emotional experience and not so much as knowledge.

– Musical information enriches the emotional culture of the receiver of the tonal art and their spirit.

To learn the two universal sign systems – letters and digits, i.e. for a person to develop the skills to use them to their desire in order to self-express themselves or to solve specific problems, is possible at a medium level of intelligence. The scope of learning, i.e. the level and speed of grasping the elements of this system and of working with them is in a direct correlation with the intellectual properties of the individual mind. Acquiring, however, the musical sign system is determined not only by the presence of certain intellectual abilities (the word "intellectual" here is used in its traditional sense), but also of the presence of an acute pitch. While the comprehension of the temporal correlations of tones is achieved on the basis of the regular intellectual abilities, the perception of the pitch relations in a musical thought is controlled by the presence of a certain threshold of sensibility of the pitch, i.e. working with the sign system "notation" requires, apart from intelligence in the general sense, yet another quality.

One of the main characteristics of intellectual activity is comprehension, i.e. identifying the main, leading aspect, the essence of the regarded object or the understanding, respectively, the knowledge about that object. The more clearly and accurately the key features are distinguished and differentiated from the particular ones (random, single, specific only to a certain object), the higher the level of intellectual activity. Another feature of this highly organized activity is the speed of processing and extracting the specific knowledge. Resultant of these two features is also the third one – adequacy of the reaction of response.

In the musical act of perception (the lowest of musical activities), these three features have a specific manifestation. When listening to music, the mind of the recipient undergoes complex processes of finding familiar patterns – intonational cores, rhythmic groups, meters, structural elements, which allows the individual to comprehend the new musical structure. The familiar in the newly perceived object (unknown music) is being sought and found, this serves as a basis for its understanding. If the listener has become aware of the new structure – musical thought, this will now allow them to discern it from other perceptions (other tonal works), i.e. to recognize it as familiar. In this way the newly acquired music is added to the musical dictionary – Asafyev speaks of "vocabulary" [1] – and in its turn starts to serve as a reference point for other perceptions. Characteristic to musical perception is the following: the listener recognizes the base melody even in different circumstances – for example, if it is performed on a different musical instrument (with a different timbre), which means the recipients can understand the new object, acknowledging the changed condition. The solid and certain knowledge of the melody provides the ability for it to be re-created through voice – regardless the fact, that when it has been initially heard, it may have been performed on a musical instrument, i.e. the recipient is able to ignore the timbre characteristics, which on its part gives way to the main property – musical logic. At its core, it is a structure, built from tone pitches and tone durations. In the given example, we observe the following specific features:

– The recipient assesses which timbre is more suitable for the performance of the specific melody (which timbre more appropriately reflects the emotions, embedded in it), because it, aside from its musically logical structure, has also an emotional semantic content. Additionally, the recipient can determine how accurately in intonation and rhythmic sense the melody has been re-created, i.e. can apply a criterion to assess their own performance of the melody.

– The following characteristic of musical perception is very important – for all types of intellectual activity, the speed of "comprehension" and reaction to the object depends on the responsiveness of the brain processes of the individual person. In music perception, however, the musical flow passes through time with its own methro-rhythm and tempo. This means that the recipient tracks the object – its exposition, its movement at the strictly specific time. Rhythm with its unique features is an important means of expression in music; it is perceived and realized in the process of its unfolding in time. This means that the speed of musical reactions depends on the object being observed, while the recipient follows and gets to know it not only as per the reactivity of their nervous processes, but to a great extent according to the movements of the object in time.

Another specific feature of intellectual activity is related to the possibility to "encode" the acquired knowledge. In this, of significant importance is the usage of reliable

"ciphers" – a set of means, signs, signals, adapted to the essence of the specific knowledge – they will allow for it to be adequately (without losing or distorting the information) re-created when it is deciphered. Commonly accepted sign systems are used in this intellectual activity (according to Jean Piaget), which have proved their efficiency in the course of the thousands of years they have been used and perfected. And while the two types of sign systems – alphabetic and numeric – are applied in different areas of human knowledge, the musical sign system – notation – has its application solely in musical activities. Also, while the alphabetic and the mathematical sign systems can be learnt to a different degree, notation cannot be, even to a basic level, learnt by everyone. The reason for this is that the main characteristic of musical hearing – pitch, varies greatly between different individuals. There are people who possess the "absolute" pitch. This ability consists of recognizing the tone frequency, without any reference points, i.e. the one who possesses this category of auditory sense will always identify that they are hearing, for example, the sound "A", regardless of when, where or what the origin of the tone is (the source of the sound does not even have to be a human voice, nor a musical instrument). This is valid for recognizing also all of the tones from the whole register of the musical system. With the experience gained, one develops a certain degree of tolerance – for example, the tones in what range of frequencies (pitches) around 440 hertz could be considered to be "A's". Those who possess absolute pitch have no problem in recognizing the tones in a sequence, in which there are no modal inclinations and with a complex interval organization. The presence of a good sense of polyphony in addition allows the listener to name the tones of a randomly performed chord. All of this shows that absolute pitch is the ability to freely and accurately understand tone frequencies. Many musicians and psychologists have pondered over this unique ability, but its underlying mechanisms have not yet been unveiled. On the opposite pole are people whose pitch can be described as "tone deafness" [10]. These people can only identify, i.e. register as different tone pitches only those that differ by at least two and a half tones. They, of course, cannot learn notation (specifically, they could not be able to deal with encoding – writing down the music they are hearing, and with singing the contents of sheet music, but it would not be impossible, if very hard, for them to play a music score on a musical instrument, even though with mistakes sometimes, which they would not be able to recognize themselves), because one of the meanings of a specific note – the pitch of the tone it represents is incomprehensible for them.

As was already clarified, specifically defined abilities are needed in order to learn the musical sign system; and professional occupation with music requires a high level of development of the set of these abilities. In relation to this, the American psychologist and Professor in Cognitive science, Howard Gardner, speaks of musical intelligence. According to Gardner, "musical intelligence is related to a person's ability to perform, compose and appreciate different musical patterns" [2, p. 44]. In practice, these are the three main musical activities. They require the presence of the basic musical abilities in the individual – mode sense, methro-rhythm sense and musical auditory notions, as well as their derivative sense of polyphony.

Accepting Howard Gardner's theory of multiple intelligences, I will try to present in more details the structure of musical intelligence and to outline the borders of each of its components (to point out the highest level, which can be found in professional musicians, and I will speak about the lowest level of manifestation of each of the components, when that level is specific).

III. Musical Abilities

A. Mode Sense

Since human language is not spoken only at a specific tonal height, but has clear frequency variations – intonations, which reflect the underlying emotions in speech, it can be supposed that the invention of communication became the reason for the development of the sensitivity to tone pitch.

Mode sense has as a basis the following talents (talents are inherent, abilities are subjects to developing):

– Pitch hearing through which we register the frequency of a tone, we are hearing, as well as the difference between tone frequencies. This is a primary talent, needed for the development of the mode sense. The highest level of the pitch hearing is absolute pitch, which I already discussed above. The ones, gifted with absolute pitch, do not need to compare tone heights in order to find each subsequent tone in a sequence (melody). This means that they do not rely on logic, determined by the modal organization of the melody. For that reason they encounter specific difficulties with encoding (writing down) music and need to additionally study the rules of using the symbols for alteration, i.e. even at the highest possible level of inherent talent, the absolute pitch has room for improvement. Those, gifted with absolute pitch, learn these rules, similarly to studying correct spelling. In this sense, I must clarify, that the highest level of pitch hearing does not on its own equal a high level of development of the mode sense. The ability mode sense has to be cultivated through focused activities for the acquirement of the skill to find logic in a tone sequence (this has to be acquired not only by the gifted with absolute pitch, but by all musicians). The good relative pitch, which can be acquired through systematic activities, allows for confident navigating through the logic of tonal sequences, but with a given reference point. The lowest level of the pitch hearing is the already described tone deafness.

- Timbre hearing, through which we identify the specific sounds of individual voices and musical instruments. A high level of the timbre hearing is essential for conductors, who have the task to carefully build the balance of the density of the sound of the different instruments in the orchestra, to identify which one of all the instrumentalists is intonating inaccurately, to use efficiently the different variants of articulation to give greater texture to the individual orchestral planes, in order to enhance the impact of the music. Acute timbre hearing is a quality,

possessed also by some people with weak or impaired vision, since the timbre hearing allows them to identify unmistakably familiar people by their voices. This circumstance prompts us to suppose that timbre hearing can be trained.

- Dynamics hearing, through which we identify the loudness of sound and the changes in sound saturation. A good dynamics hearing is of significant importance for performing music, but it is especially necessary primary in the work of sound directors, hence the "ceiling", the highest manifestation of this talent – the lowest differential threshold should be probably sought namely amongst the best sound directors.

For the development of the sense of mode, most important is the presence of pitch, while the timbre and dynamics hearings are supplementary.

B. Methro-rhythm Sense

Methro-rhythm Sense is the ability to perceive and perform a specifically organized in stressed and unstressed beats and sounding in a specific tempo sequence of different in duration tones.

The methro-rhythm sense has at its core the musical ability metro-rhythmic hearing. A good level of this ability is especially effective for the skill of performance of musicians of percussion instruments, since in many of the instruments from the percussions group, the metro-rhythm is the main means of expression, i.e. the impact of the performance is based mainly on the recreation of metro-rhythm. The application of the musical means of expression agogics, in the interpretation, as well as the guidelines in some works of art for changes in tempo in the duration of the piece – contrasts in the tempo, gradual changes in the tempo, return to the initial tempo after a change – make the accompanist with a high level of metro-rhythm sense especially valuable, able to immediately recognize the intentions of the soloist in regard to the metro-rhythm and to keep up a synchronous performance.

C. Musical Auditory Notions

Musical auditory notions are acquired in the process of musical education of the person, but apart from the richness of the acquired reserve of musical auditory notions (which, although it cannot be measured in the separate individual, since there is no way of taking into account all musical auditory notions, acquired through involuntary memorization, can be considered a quantitative feature), this ability has also qualitative factors. Those are:

– The reliability of storing memorized works, intonations, rhythms, assonances and their logical sequences, the ability of long-term and efficient memorization of the work learnt. At the highest level, the durability and accuracy of storing musical works of art in the memory can be found in soloists and conductors, performing in concerts, who have a vast stage experience and need to keep in their memory a very extensive volume of concert repertoire, to which they constantly add new opuses. Professor Lily Atanasova, who taught me piano lessons, had a huge reserve of musical auditory notions, consisting of mostly piano and chamber music. During each lessons, she listened, without looking at the sheet, to all pieces of music we were performing and was able to correct even the most minute and hardly noticeable error.

– Speed and depth in understanding the meaning of the music heard depend on the ability of comparing what was heard with the templates, existing in the memory reserve. The speed, with which the great Hungarian piano player and composer Ferenc Liszt could comprehend unfamiliar music and, regardless of the complexity of the score, then perform it logically and impressively, remains without a rival.

– Speed of memorization. Famous for his incredible speed and accuracy of memorizing music was the renowned German piano player Walter Gieseking, who, in the airplane, on his way to the next recital, without a piano, having only the sheet music, learnt by heart the works that he was to perform.

– The quality of the musical auditory images varies also in regard to the detail of the mental image. Detail provide, for example, the ability to mentally "listen" to a given melody, with a specific timbre, in a strictly defined register, with marked articulation, even with the specific for a given instrument effects (for example when using the right pedal of the piano). For polyphonic music, the detail helps us re-create mentally the textural elements of the work with the predefined combinations of different instruments of the orchestra. The same detail allow us to "retell" – to mentally play out a piece, we are preparing for a concert performance, checking the reliability and the stability of the formed mental image.

– The flexibility of musical auditory notions provides us with the ability to mentally change the characteristics of the way a certain musical element sounds, to compare these characteristics and to choose the most suitable, to imagine the sound of the whole (even several different versions of sounding), to remember some of the especially valuable "finds". This is required of the performer and the conductor, in order to build their own interpretational concept. This flexibility also allows the composer to create their opuses, drawing from their own reserve of musical notions, which will include more and more own elements with the development of professional qualities and gaining of experience. In this way, starting from the period of inevitable imitation they gradually manage to form their own individual style of composing, and later – to perfect it. In this sense, it can be expected that the author, who has developed their own artistic vision at an early stage, would have the most flexible musical auditory imagery. In this regard, the brightest example among the tonal artists is Mozart, whose earlier works are distinguished by an unusual maturity and originality. In a different aspect, an incredible flexibility is characteristic also for the musical auditory notions of J. S. Bach, who, using the rules of his predecessors and his the contemporary styles, brought the composing techniques through his own works to incredible and unreached by other authors heights, building a perfect polyphony, an immense treasure of the sound vertical and graceful in their elegance musical forms.

D. Polyphony Sense

The polyphony sense – the differentiated perception of

simultaneously sounding tones is a derivative musical ability, resulting from the interaction between three basic abilities:

– Perceiving the movement of simultaneously resounding melody lines as logical, of chord sequences as functionally organized and of the specific sound of tonal matter (the texture) depends on the sense of mode.

– The methro-rhythm sense takes part in the intricately structured act of perception, because the passing of the polyphony flow in time is strictly organized.

– Each auditory experience – a result of the realization of the varied in depth (phonism) and modal inclinations (functionality) assonances and of the simultaneously resounding melody lines enrich the musical auditory reserve, which registers the perceived polyphonic sequences as memorized or as new ones that are to be added to the already known.

This musical ability is most highly developed in opera and orchestral conductors, because of the need to follow and appraise in relief each textural plane of the organized in a complex manner polyphonic matter and to lead the sound balance of the varied performing groups with their different tasks in achieving the shared sound. Most undeveloped (but with possibilities of improvement) is the polyphony sense of the performers on single-voice instruments and of singers, who have not had any experience with vocal or instrumental ensembles.

IV. Musical Activities

A. Perception of Music

Musical intellect is also related to the successful exercising of the musical activities, determined by musical abilities. The act of perceiving music is accessible to the widest range of people, since practicing this activity at an average level does not require professional training. In that case, at the "lowest threshold" of the ability of practicing this activity stand people, who, having listened to a given piece, can only express whether they like it or not, without being able to point out arguments and without being affected by its emotional impact. This statement leads us to specify what abilities are needed to fully perceive a tonal work of art. Perceiving music includes the ability to "understand" the piece heard, to grasp its emotional contents, as well as to assess the qualities of the musical work and its performance. According to the Bulgarian researcher, Penka Mincheva, [5] the full perception of music has two aspects:

– A sensory aspect, which consists of the adequate and precise work of the sensory aparatus;

– Intellectual aspect. The accurate and detailed perception of a musical image is the basis of the understanding of its logic and structure, which results in the comprehension and understanding of the music heard;

– Emotional aspect. Realizing the form and the processes in it, gives us the opportunity to fully experience emotionally and aesthetically the work.

In this sense, at the highest level of successful performance of the act of perceiving music we will find the most notable musical critics, because understanding, based on solid knowledge of musical theory, of the subtleties and depth of the form and processes of the work, provides them with a new quality of aesthetic experience, and through it – with the ability to give a reasoned assessment, made through the mind and the heart.

B. Performance of Music

The successful music performance requires the presence of different skills.

- The skill to fully embody the musical image. Apart from the successful functioning of the three components for music perception – sensory, intellectual and emotional, the performer has to possess also the quality of artistry, because they are expected not only to experience the musical opus, but to also relate to the audience the logic and feelings it is comprised of.

– The skill to read the notation quickly, accurately and in an aesthetically pleasing way. Naturally, we cannot expect of every performer, right from the moment of familiarizing themselves with it, to have a detailed idea of the way a musical piece would sound in a concert environment, but the first impression of the work is very important for the formation of a performer's view of the work and it has to contain, even still not in detail, an aesthetically correct understanding of its emotional contents. Here I again can point to accompanists, as an example of a developed ability to especially quickly get familiar with an unknown score, because they have to learn a new accompaniment in a very short period of time, even to perform it a prima vista on the stage. Not the accompanist, however, is considered the best in this regard. Famous in the history of the piano art is the example of Liszt, who could perform at first glance any type of music, in the correct tempo, without "skipping" some of the voices (not playing some elements of the musical texture is a common practice in accompanying) and especially impactful. We don't know of any other instrumentalist after him to have had this ability developed at such a high level.

– Technical skills. The upper limit of technical skills of performers cannot be measured, because a given performer is better in one kind of technique, while another performer is talented in a different one. Besides that, these skills constantly improve. It would be sufficient to mention the great Italian violinist, Niccolò Paganini, whose performances were considered as unmatchable, even supernatural, "diabolic", his capriccios, the performances of which earned him this definitions, have inspired generations of musicians, but today they are within the capabilities of every good violinist.

– Erudition in musical theory and musical esthetics. Not only empathic and technical skills are needed to re-create faithfully the artistic idea of the composer. It is important that the performer should have preparation on the subjects, related to, for example, musical forms. It is known that embedded in the structure of a piece is the principle of the development of the musical image. For example, in a theme with variations, the main character – the theme – will be enhanced with new features, new qualities will be added to it, it will be observed from different angles, it will be put into different situations; the ternary form with a contrasting middle partition represents symmetry, i.e. we

can expect it to be a static form; the sonata depicts two contrasting characters, they usually in conflict, after which they are brought together or one of them is affirmed. The performer of music has to known the principles of constructing musical texture – homophonic, polyphonic, heterophonic, to known the systems of modal organization, of genre definition. The interpreter has to also get familiar with the specifics of the time period, in which the author of the studied piece has worked, the style category, he belongs to, to search for information about the musical aesthetic preferences of the composer, of his image as a performer, if he is also one. On the basis of this erudition, the talented interpreter can build their own well-grounded concept of the way the music work should sound.

– On the basis of the above-described skills and knowledge, combining them, functions also the ability to unveil the artistic intentions of the author and to build a faithful artistic performance concept for the work being rehearsed. Possessing the highest degree of this ability of course are the greatest music interpreters, but who of them exactly will be considered the best is a matter of personal preferences of each individual listener.

– Stage presence. This is that elusive trait of musical interpreters and actors, who make the audience hold their breath, listening or watching intently to their performance, leaving no option of interpreting the given artistic image in any other way. In history, famous for capturing the attention and emotions of all of his listeners in a unique and powerful way was Anton Rubinstein.

- Self-control. This ability – control over the quality of the achieved sound, keeping the attention on the musical work, which is being learnt and presented in front of an audience, self-control during the concert performance itself – is developed through focused and persistent exercises. The ability of self-control is also presented at the highest level in the practice of the world renowned performers. In my opinion, the Bulgarian pianist Alexis Weissenberg was remarkable in his self-control.

C. Composing Music

– The sensitivity and ability of immersion. To be able to re-create experiences and feelings as sound matter, the composer has to gather a sufficient reserve of vivid enough such experiences and feelings, so they can "trigger" the artistic impulse in him. This means that the author of music has to possess sensitivity, reactivity and empathic abilities, similar to the ones presented by the performer and the sensitive listener.

– Preparation in musical theory and musical aesthetics. To pour down all thoughts, impressions and feelings (content) into an adequate and understandable to the users form, the composer also has to possess musical erudition, because, as I've mentioned above, the form of the work of art is an especially valuable guideline that the author leaves for the other two subjects in tonal art – the performer and the listener.

– Creativity. It is of special importance to the composer. They have to invent a way to artistically present the perceived reality, of their thoughts, ideas and feelings. The most basic example of such an activity is onomatopoeia. Counting with a limited range of means for the imitation of a particular sound (timbre capabilities of the musical instrument the music piece is written for), the composer has to find a suitable method, through which to make the sound being imitated identifiable by the performers and listeners. Naturally, artistic representation of the reality is not limited to the onomatopoeic expression, the process of creating something new is very complicated and includes a wide variety of mediatory connections with the "original image". Such a relation is the depiction through music, developed to supreme aesthetical levels by the impressionists and practiced also by the newer authors. Another mediatory connection with the original is the expression through musical means of the emotional attitude towards it. Since there is a certain regularity in the professional development of tonal artists – in the earlier periods of their composing endeavors they use a very wide range of methods to present their ideas, while in the later stages of their work, they create in a notably more laconic way, with a smaller range of techniques, but often those pieces are brilliantly understandable and moving (i.e. they have already mastered the way of expressing themselves, they do not need such a wide variety of means of expression), it can be expected that the highest, most pure form of creativity of composers could be sought in their later works. A similar opinion was expressed by the renowned Russian writer, L. N. Tolstoy, whom I quote from memory: "a person first writes in a simpler and poor way, after that – complicatedly and poorly, then – complicatedly and well, and finally – he writes simply and well".

V. Conclusion

From all that has been said here, it becomes clear that musical intellect is a complicated, multi-component system, manifested within an extremely wide range; its different elements can be in a different state even in the same person.

Since the level of each of the components of musical intelligence can be further improved through persistent work, while it could also degrade, the musically intelligent person is responsible for their abilities (even for this, because not everybody possesses them in a sufficient degree) and has to work daily to perfec

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Krasimira Georgieva Fileva-Ruseva was born in Varna, Bulgaria, 08. 02. 1960. I graduated from the Musical School of Secondary Education "Dobrin Petkov" – Plovdiv with a golden medal and from the State's Musical Academy "Professor Pancho Vladigerov" – Sofia. In 1996, I defended a dissertation "Limiting the Stage Distress" and received the scientific title "Doctor of Psychology".

I work in the Academy of Music, Dance and Fine Arts – Plovdiv, where since 2014 I am a Associate professor of Piano – as a compulsory instrument. I have performed in concerts in Bulgaria, the Czech Republic, Greece. I have a total of 133 scientific publications, published in Bulgaria, Russia, the USA, Ukraine, Turkey. I am an author of the textbook for university students "Methods of Teaching Piano" Plovdiv, Plovdiv, Bulgaria, Europe2011, 291 pages, of the monographs "Structural Principles in the Works for Piano of Dimitar Nenov", "Articulations and Timbre Effects" Plovdiv, Plovdiv, Bulgaria, Europe 1998, 65 pages. I take part in an author collective for creation of textbooks for music for the Bulgarian general education schools.

My awards are:

Golden medal for excellent learning

A diploma for best science research in the section Pedagogical Sciences of Trakia University – Stara Zagora, Bulgaria, Europe – 29. 09. 2005

"Best article award" by the International Journal of Humanities and Social Sciences – My paper - The unusual sounding and dramaturgy in the piano works of D.Nenov. Announced one of the best papers of the journal for 2013